

Annual Report

1998-99



JADAVPUR UNIVERSITY

CALCUTTA-700032

INDIA

Annual Report

1998-99

[Handwritten signature]
Date 10.9.02
Serial No. 7525(2)



REFERENCE BOOK
No. 154/10/02



NOT TO BE LENT OUT

JADAVPUR UNIVERSITY

CALCUTTA-700032

INDIA

NOT TO BE LENT OUT



REFERENCE BOOK
Not to be lent out

CONTENTS :

1. Foreword
2. The Court
3. The Council
4. Officers
5. Finance Committee
6. Members of the Tender Committee
7. Members of the Building Committee
8. Members of the Development Committee
9. Members of the Faculty Council for PG & UG Studies in Arts
10. Members of the Faculty Council for PG & UG Studies in Engg. & Tech.
11. Members of the Faculty Council for PG & UG Studies in Science
12. Introduction
13. University News
14. A brief resume of the Faculty Departments of :
 - (a) Arts
 - (b) Engineering & Technology
 - (c) Science
15. Schools & Centres

Foreword

I am happy to announce that the Annual Report 1999 of Jadavpur University is going to be published after a lapse of about ten years. In the Annual Report 1998-99 we have tried to give a broad overview of the activities of the different Departments, Schools and Centres of the University. Despite the best efforts there may remain some inadequacies for which I apologise.

I take this opportunity to thank all concerned for their kind cooperation and help, in particular to Dr. C. C. Biswas, for his willingness to shoulder most of the work without feeling overburdened.

24 December 1999

A. N. Basu
Vice-Chancellor

The Court

Members of the Court

(As on 01.12.1998)

Chancellor :

Dr. A.R.Kidwai
Hon'ble Governor of West Bengal

Vice- Chancellor :

Prof. Dr. Asoke Nath Basu

The Secretary, (ex-officio)

Government of West Bengal,
Higher Education Department
University Education Branch,
Bikash Bhavan (6th floor)
Salt Lake City, Calcutta -91
(Office: 337- 8573) (ex-officio)

The Joint Secretary,

Government of West Bengal,
Finance Department, Bikash Bhavan
Salt Lake City, Calcutta -91
(Office: 337- 6783) (ex-officio)

Representative of Govt. of India,

Ministry of Human Resource Development
(Technical Education)
Shastri Bhavan, New Delhi -110002
Fax : (011) 3389375

President,

West Bengal Council of Higher Secondary
Education(ex-officio)
Bikash Bhavan ,Salt Lake City, Calcutta -91
(Office: 334- 5541)

President,

West Bengal Board of Secondary Education
Education (ex-officio)
77/2, Park Sreet, Calcutta -16
(Office : 29-2580)

Deans of Faculty Councils :

(Ex - officio)
Prof. Dr. A.K. Banerjee
Dean, Faculty of Arts
Prof. Dr. S.K. Sanyal
Dean, Faculty of Engineering & Technology
Prof. Dr. R.G. Bhattacharya
Dean, Faculty of Science

Principal of affiliated colleges

(Ex-officio)
Dr. (Mrs.) Jharna Sen Gupta
Principal, Smt. J. D.Birla Institute of Home Science

Principal

Jadavpur Vidyapith College of Education
N.C.E. Bengal, Calcutta -32
(Office : 473-5245)

Members : (Ex-officio)

Prof. Dr. Monindra Mohan Chakraborty
President, N.C.E., Bengal
Prof. Dr. Samiran Chaudhuri
Chairman ,Institute of Engineers (India),
W.B. State Centre
Nominee, AICTE
Indra Gandhi Indoor Stadium Complex
Indraprastha Estate, New Delhi -110002
Fax : (011) 337-8491

Teachers Elected

Faculty Council of Arts :

Dr. (Mrs.) Bijoya Goswami
Prof. Dr. Debesh Chandra Chakraborty
Prof. Dr. Goutam Kumar Basu
Shri Parimal Debnath
Prof. Dr. (Mrs).Supriya Chaudhuri

Faculty Council of Engineering & Technology :

Sri Dipak Kumar Bandyopadhyay
Prof. Dr. Siddhartha Datta
Prof. Subhas Dutta Gupta
Prof. Dr. Tapas Kumar Datta.
Shri Tarun Kanti Naskar

Faculty Council of Science :

Prof. Dr. Asit Bandyopadhyay
Dr. Bidhan Chandra Roy
Dr. Dipendranarayan Bandyopadhyay
Prof. Dr. Kripasindhu Chaudhuri
Dr. Swadesh Ranjan Raychaudhuri

Teachers Elected from Affiliated Colleges :

Ms. Krishna Mazumdar
**Nominated Members of W.B. Legislative
Assembly**
Shri Robin Deb, M.L.A.

Founder - Donors'(Nominated) :**Representatives :**

Shri Samir Ch. Vasu Mallik
Dr. Subhrangshu Kanta Acharya

Nominees of the Chancellor

Dr. Subimal Sen
Prof. Prabir Kumar Roy Choudhury

National Council of Education,Bengal**Representatives**

Dr. (Ms.) Arati Basu Sengupta
Shri Bimal kanti Sarkar
Shri Himendu Biswas
Shri Sudhir Chandra Ganguly

Officer - Elected

Sri Kanchan Kumar Basu Thakur

Nominated by the State Govt.

Shri Malay Bilas Bhattacharyya
Shri Prasanta Das Gupta
Shri Rathin Sen

Elected Registered Graduates :

Shri Asish Kumar Ghosh
Shri Baidyanath Mandal
Dr. Dilip Kumar Chakraborty
Shri Kallol Mazumder
Dr. Madhabendra Nath Mitra

Shri Puranjit Mukherjee
Shri Shantonu Goswami
Smt. Shyamali Gupta
Smt. Sudeshna Chatterjee
Shri Sunil Madhab Sinha Roy

Research Scholar - Elected

Dr. Dipak Kesh

Non - Teaching Staff Elected :

Shri Prasanta Kumar Banerjee
Shri Rathindra Nath Guin
Shri Swapan Kumar Ghosh

Regular Students Elected :

Abdul Kafi (Department of Bengali)
Smt Kakali Mukherjee (Department of History)
Shri Satyaki Banerjee, (Dept. of Prod. Engg.)
Shri Shamik Sarkar, (Department of Mech. Engg.)
Taslim Arif, (Department of Mathematics)
Smt. Papiia Chowdhury, (Department of Physics)

Students Elected from Affiliated Colleges :

Smt. Bhaswati Saha (J.V.C.E.)

Registrar :

Shri Rajatkumar Bandyopadhyay

Council

Members of the Executive Council
(as on 01.12.1998)

Ex-officio Members :

Prof. Dr. Asoke Nath Basu, Vice- Chancellor

Deans of Faculty Councils

Prof. Dr. A.K. Banerjee, Dean, Faculty of Arts
Prof. Dr. S.K. Sanyal, Dean, Faculty of Engineering & Technology
Prof. Dr. R.G. Bhattacharya, Dean, Faculty of Science

The Secretary :

Government of West bengal, Higher Education Department, University Education Branch

The Joint Secretary :

Government of West bengal, Finance Department, Bikash Bhavan

President :

West Bengal Council of Higher Secondary Education

Members :

Prof. Arunabha Nanda
Shri Dipak Kumar Bandyopadhyay
Dr. Gautam Gupta
Prof. Dr. Kripasindhu Chaudhuri
Prof. Mihir Ranjan Bhattacharya
Prof. Dr. Nimai Chandra Das
Shri Partha Pratim Biswas
Dr. Swadesh Ranjan Raychaudhuri
Dr. Sugata Hazra
Shri Taurin Kanti Naskar

Six Persons other than Teachers, Students and Non-Teaching Staff :

Shri Rabin Deb, M.L.A.
Shri Kallol Mazumder
Shri Malay Bilas Bhattacharyya
Shri Shantonu Goswami
Smt. Shyamali Gupta
Dr. Dipak Kesh

Representative of Affiliated Colleges :

Dr. (Mrs.) Jharna Sen Gupta

Officer-Elected :

Shri Kanchan Kumar Basu Thakur

Non - teaching Staff (Representatives):

Shri Prasanta Kumar Banerjee
Shri Swapan Kumar Ghosh

Students-Elected (Representatives):

Abdul Kafi, (Department of Bengali)
Shri Satyaki Banerjee, (Department of Production Engg.)

Nominated by the Chancellor :

Prof. Prabir Kumar Roy Choudhury

Registrar :

Shri Rajatkumar Bandyopadhyay

Officers :

Officers of the University :
(As on 10.12.1998)

Chancellor :

Dr. A.R.Kidwai
Hon'ble Governor of West Bengal

Vice-Chancellor :

Prof. Dr. Asok Nath Basu

Deans :

Faculty Councils Arts :

Prof. Dr. A.K. Banerjee

Engineering & Technology :

Prof. Dr. S.K. Sanyal

Science :

Prof. Dr. R.G. Bhattacharya

Registrar :

Shri Rajatkumar Bandyopadhyay

Deputy Registrar :

- i) Shri Kanchan Kumar Basu Thakur
- ii) Shri Dilip Kumar Bhattaharyya (on lien)
- iii) Shri Subir Chandra Chakraborti

Asst. Registrar :

- i) Shri Tamonash Chakraborti
- ii) Dr. Chandi Charan Biswas

Controller of Examinations :

Dr. Pradip Kumar Sengupta

Asst. Controller of Examinations :

- i) Dr. (Mrs.) Bhaswati Mitra (on lien)
- ii) Shri Birendra Nath Banerjee

Finance Officer :

Shri Gour Krishna Pattanayak

Accounts Officer :

- i) Ajoy Kumar Bhattacharya
- ii) Shri Gourchand Chatterjee

Audit Officer :

Vacant

Chief Librarian :

Shri Ramkrishna Saha

Librarian :

- i) Shri Manilal Murmu
- ii) Shri Pradip Chaudhuri

Associate Librarian :

Dr. Dipak Kumar Ray

Dean of Students :

Dr. Susil Kumar Chakraborti
Director of Youth Welfare
Vacant

Officer of Placement & Training :

Shri Subratra Mondal

Development Officer :

Shri Sibatosh Bagchi

University Engineer :

Shri Biresh Chandra Sinha

Assistant Engineer :

Shri Aloke Sanyal

Principal Scientific Officer :

Shri Radhaballav Bhar (offg.)

Senior Scientific Officer :

Shri Radhaballav Bhar

Scientific Officer :

Shri Sailendra Nath Pal

Secretary, Faculty Councils :

Arts :

Smt. Nandita Bhattacharya

Engineering & Technology :

Dr. Bijanbihari Pal

Science :

Dr. Monoranjan Khan

Director, Adult, Cont. Edn. & Ext. Centre. :

Shri Asoke Bhattacharya

Asst. Director, A.C.E. & E.C.

Dr. (Mrs.) Tandra Mitra (offg)

Project Officer :

Dr. (Mrs.) Tandra Mitra

Analyst :

Dr. Badal Bhattacharya

Micro Analyst :

Shri Ranjit Kumar Pal

Medical Superintendent :

Dr. Kamal Datta

Director of Physical Instruction :

Vacant

Documentation Officer :

Smt. Nandini De

Research Officer (Women's Studies) :

Smt. Sarbani Goswami

Heads of Departments Under Faculties

(as on 10.12.1998)

Faculty of Arts :

Dean :

Prof. Arun Kumar Banerjee

Bengali-

Dr. Uday Kr. Chakraborty

Comparative Literature -

Dr. (Smt.) Subha Chakraborty-Dasgupta

Economics -

Prof. Harendra nath Sur

English -

Prof. Dr. (Mrs.) Malini Bhattacharya

Film Studies-

Prof. Mihir Ranjan Bhattacharya

History -

Dr. (Ms.) Mahua Sarkar

International Relations -

Prof. Dr. (Ms.) Suchita Ghosh

Philosophy -

Dr. (Ms.) Shefali Moitra

Physical Education -

Shri Parimal Debnath

Library & Information Science -

Prof. Amitabha Chatterjee

Sanskrit -

Prof. Dr. Bhabani Prasad Bhattacharya

Faculty Council Of Engineering & Technology :

Dean -

Prof. Dr. Shyamal Kanti Sanyal

Architecture -

Prof. Samaresh Mukherjee

Chemical Engineering -

Prof. Dr. Subhas Basu

Civil Engineering -

Prof. Dr. Nitindra Nath Som

Construction Technology -

Sri Partha Pratim Biswas

Computer Science & Engineering -

Prof. Dr. Pradip Kumar Das

Electrical Engineering -

Prof. Dr. Samiran Chaudhuri

Electronics & Tel. Engineering -

Prof. Dr. Achintya Kumar Mukherjee

Food Tech. & Biochem. Engineering -

Dr. Pratap Chakraborty

Instrumentation Engineering -

Shri Rajib Bandyopadhyay

Mechanical Engineering -

Prof Dr. Sukriti Ranjan Bhattacharyya

Metallurgical Engineering -

Dr. Prasanta Kumar Dutta

Pharmaceutical Technology -
Prof. Dr. Saroj Kr. Ghosal

Power Plant engineering -
Sri Amar Nath Sanyal

Production Engineering -
Dr. Subir Kumar Sanyal

Printing Engineering -
Prof. Dr. Alok Kr. Ghosh

Faculty of Science :

Dean -
Prof. Dr. Ramgopal Bhattacharya

Chemistry -
Prof. Dr. Kumar Kanti Mahalanobis

Geol. Science -
Prof. Dr. Pradip Kumar Bose

Life Science & Bio-Technology -
Prof. Dr. Asru Kumar Sinha

Mathematics -
Prof. Dr. Nimai Chandra Das

Physics -
Prof. Dr. Sankar Sengupta

Inter disciplinary Courses of Study -
M. Phil. : (Environmental Science)
M. Tech.: (Energy Science & Engineering)
Master of Bio-Medical Engineering -
M.Sc. : (Electronics)

Affiliated Institutions -
J.D. Birla Institute of Home Science
Jadavpur Vidyapith, N.C.E. Bengal
Master of Business Administration
Course under N.C.E. Bengal, Calcutta -32

Schools Of Studies :

1. **Archaeological Dating -**
2. **Bio.Science & Engineering -**
3. **Energy Studies -**
4. **Education Technology -**
5. **Environmental Studies -**
6. **Int.Relations & Strategic Studies -**
7. **Material Science & Technology -**
8. **Media Communication & Culture -**
9. **Oceanographic Studies -**
10. **Water Resources Studies:**
11. **Women's Studies -**

Finance Committee :

1. Prof. A.N Basu, *Vice-Chancellor*
2. Prof. Dr. A.K. Banerjee, *Dean Faculty of Arts*
3. Prof. Dr. S.K. Sanyal, *Dean Faculty of Engineering & Technology*
4. Prof. Dr. R.G. Bhattacharya, *Dean Faculty of Science*
5. Prof. K.S. Choudhuri, *E.C. nominee*
6. Shri Rajatkumar Bandyopadhyay, *Registrar*
7. Shri S.Bagchi, *Development Officer*
8. Shri G.C. Chatterjee, *Accounts Officer*
9. Shri G.K. Pattanayak, *Finance Officer*
10. Shri M.B. Bhattacharyya, *E.C. nominee*

Tender Committee :

- | | |
|---|--|
| 1. Prof. S.K. Sanyal, Dean/FET | Invitee |
| 2. Prof. Sukha Ranjan Saha (Philosophy) | 1. Shri A.Sanyal. AE |
| 3. Prof. Somnath Ghosh, CE | 2. Shri B. Sengupta,SAE |
| 4. Dr. Siddhartha Datta, Chem.Engg. | 3. Shri T. Dasgupta,SAE |
| 5. Shri Swapan Ghosh, Purchase | 4. Shri Dilip Ghosh, Overseer |
| 6. Shri Birendra Nath Ghosh | 5. Shri P.K. Bhattacharjee,W/S. |
| 7. Shri Baidyanath Mondal | 6. Shri Somdeb Mukherjee |
| 8. Shri Sunil Madhav Sinha Roy | 7. Shri Gopal Dev. Karmakar,S.L.Campus |
| 9. Dr. Keshab Bhattacharya,EE | 8. Shri Ashoke Aich.SAE/MM |
| 10 Shri B.C. Sinha.U/E | 9. Shri S.K. Mazumder, E/Maint. |
| 11. Shri S.Bagchi. Dev.Officer | |
| 12. Shri G.K. Pattanayak, Finance Officer | |

**Composition of the Building Committee
Constituted as per guidelines of the U.G.C.**

1. The Vice-Chancellor, Chairman
2. The Superintending Engineer,
3. The Chief Architect, Govt of West Bengal
4. Representative of City Planning and Development Committee of the University
5. The Finance Officer
6. The Registrar, Secretary
7. The University Engineer
8. Representative, user Department
9. The Head, Department of Civil Engineering
- 10 The Head, Department of Electrical Engineering

**The Members of the Planning & Development Committee
Constituted in terms of J.U.Act. 1981 for Four years 1998-2002**

1. The Vice-Chancellor, Chairman
2. The Dean, FET
3. The Dean, Arts
4. The Dean, Science
5. Prof Mihir Ranjan Bhattacharya
6. Sri Partha Pratim Biswas
7. Dr. Subhrangshu Acharyya
8. Sri Pannalal Sikdar
9. Sri Arun Kumar Gupta
10. Sri Prasanta Kumar Banerjee
11. Sri S. Bagchi, Development Officer
12. The Registrar
13. The Finance Officer
14. The University Engineer
15. Dr. Subrata Pal
16. Dr. Biswajit Chatterjee
17. Prof. Sanoj Kumar Pal
18. Prof. Siddhartha Datta
19. Prof. Somnath Ghosh
20. Prof. Swapan Kumar Sarkhel

Invitee

1. Sri A. Sanyal, Assistant Engineer
2. Sri B. Sengupta, Sub-Assistant Engineer
3. Sri T.R. Datta Gupta ,,
4. Sri Dilip Ghosh, Overseer
5. Sri P.K. Bhattacharyya, Const. Supervisor
6. Sri Somdeb Mukherjee
7. Sri Gopal Dev. Karmakar, Sub-Assistant Engineer
8. Sri Ashoke Aich, Sub-Assistant Engineer(Mech.)
9. Sri S.K. Mazumder, Sub-Assistant Engineer.(Elec.)

Members of the Faculty Council for PG and UG Studies in Arts :

1. Vice-Chancellor
2. Dean, Faculty Council of Arts

1. Bengali :

- a) Head of the Department
- b) Prof. Pinakesh Chandra Sarkar
- c) Dr. Achinta Biswas
- d) Dr. Sampa Chaudhuri

2. Comperative Literature :

- a) Head of the Department
- b) Prof. Manabendra Bandyopadhyay
- c) Prof. Kabita Panjabi
- d) Dr. Suchorita Chattopadhyay

3. Economics :

- a) Head of the Department
- b) Prof. Debesh Chandra Chakraborty
- c) Sri Biswajit Chatterjee
- d) Dr. Gautam Gupta

4. English :

- a) Head of the Department
- b) Prof. Sukanta Chaudhuri
- c) Sri Amal Dasgupta
- d) Dr. Nilanjana Gupta

5. Film Studies :

- a) Head of the Department
- b) Prof. Mihir Ranjan Bhattacharyya
- c) Sri Moinak Biswas
- d) Sri Sanjoy Mukhopadhyay

6. History :

- a) Head of the Department
- b) Prof. Chittabrata Palit
- c) Dr. Anuradha Chanda
- d) Dr. Nupur Dasgupta

7. International Relations :

- a) Head of the Department
- b) Prof. Arun Kr. Banerji
- c) Sri Tridib Ghosh
- d) Smt. Anjali Ghosh

8. Lib. & Inf.Sc.:

- a) Head of the Department
- b) Prof. Amitabha Chatterjee
- c) Sri Krishnapada Majumder
- d) Smt. Chaitali Dutta

9. Philosophy :

- a) Head of the Department
- b) Prof. Tusar Kanti Sarkar
- c) Dr. Amita Chatterjee
- d) Dr. Krishna Roy

10. Physical Education:

- a) Head of the Department
- b) Sri Parimal Debnath
- c) Sri Gopal Chakraborty

11. Sanskrit:

- a) Head of the Department
- b) Prof. Rabisankar Banerjee
- c) Dr. Sarbani Ganguly
- d) Dr. Bijoy Goswami

12. Principal :

Jadavpur Vidyapith College of Education

13. Nominated by the V.C.

- a) Prof. Binoy Bhusan Choudhury
Dept. of History, Calcutta University

- b) Prof. Bikash Chakraborty
Department of English,
Visvabharati University, Santiniketan

Members of the Faculty Council for P G & UG studies in Engineering & Technology

1. Architecture :

- a) Head of the Department
- b) Prof. Alope Nath Das
- c) Prof. Samaresh Mukherjee
- d) Sri Tapas Kumar Bhattacharyya

2. Civil :

- a) Head of the Department
- b) Prof. Nitindra Nath Som
- c) Prof. Amal Kanti Misra
- d) Sri Saraj Mandol

3. Chemical :

- a) Head of the Department
- b) Prof. Shyamal Kati Sanyal
- c) Prof. Siddhartha Datta
- d) Sri Avijit Bhowal

4. Comp.Sc. & Engg.

- a) Head of the Department
- b) Prof. Suranjan Ghosh
- c) Sri Debasish Saha
- d) Sri Debesh Kumar Das

5. Construction Technology :

- a) Head of the Department
- b) Prof. Tathagata Ray
- c) Sri Partha Pratim Biswas
- d) Sri Kaushik Bandyopadhyay

6. Electrical Engg.:

- a) Head of the Department
- b) Prof. Samiran Chaudhuri
- c) Prof. Sanoj Kumar Pal
- d) Sri Kesab Bhattacharya

7.E.T.C.E.:

- a) Head of the Department
- b) Prof. Ajit Kumar Mandal
- c) Sri Pranab Kumar Banerjee
- d) Sri Bhaskar Gupta

8. F.T.B.E.:

- a) Head of the Department
- b) Prof. Sankar Kumar Mukherjee
- c) Sri Parimal Chattopadhyay
- d) Sri Utpal Ray Chaudhuri

9. Instrumentation :

- a) Head of the Department
- b) Prof. Kalyan Kr. Ray
- c) Sri Bivas Dam
- d) Sri Kumardeb Banerjee

10. Mechanical :

- a) Head of the Department
- b) Prof. Ardhendu Bhattacharya
- c) Sri Sankar Prasad Chaudhuri
- d) Sri Amitava Sarkar

11. Metallurgy :

- a) Head of the Department
- b) Prof. Manoj Kumar Mitra
- c) Sri Gopesh Chandra Das
- d) Sri Siddhartha Mukherjee

12. Pharm. Tech. :

- a) Head of the Department
- b) Prof. Arunabha Nanda
- c) Sri Sunil Kumar Mandal
- d) Sri Sanat Kumar Basu

13. Power Plant :

- a) Head of the Department
- b) Prof. Subhas Dutta Gupta
- c) Sri Amitava Datta
- d) Sri Bireswar Majumdar

14. Production :

- a) Head of the Department
- b) Jyotirmoy Saha
- c) Sri Balendra Nath Lahari
- d) Sri Ajoy Kumar Dutta

15. Printing :

- a) Head of the Department
- b) Prof. Samar Bhattacharya
- c) Smt. Swati Bandyopadhyay
- d) Sri Arun Kiran Pal

16.Nominated by V.C. :

a) Prof.Asoke Kr. Mukhopadhyay
Professor of Applied Physics
Dean,F.E.T.,Calcutta University
92,A.P.C. Roy Rod,Calcutta - 700009

b) Prof. Bibekananda Das
Dept. of Chemical Technology
Calcutta University
92,A.P.C. Roy Rod,Calcutta - 700009

17. The Vice-Chancellor.

18. The Dean, F.E.T.

19. Invitee :

a) Prof. B.P. Chattopadhyay
Co-ordinator, P/T (Evn.) Engg.
Course(C.E.)

b) P.K. Chattopadhyay
Jt.Co-ordinator, P/T (Evn.) Engg.
Course(E.E.)

c) Dr. P. K.Bose
Jt.Co-ordinator, P/T (Evn.) Engg.
Course(M.E.)

d) The Controller of Examinations

Members of the Faculty Council for P G & UG Studies in Science

1. Vice-Chancellor & Chairman
2. Dean, Faculty of Science & Vice Chairman

3. Chemistry :

- a) Head of the Department
- b) Prof. R.G. Bhattacharyya
- c) Prof. Lakshmi Narayan Dutta
- d) Dr. Kausik Das

4. LifeSc.& Bio-tech.:

- a) Head of the Department
- b) Prof. Sukumar Chattopadhyay
- c) Prof. Asru Kumar Sinha
- d) Dr. Subrata Pal

5. Geology :

- a) Head of the Department
- b) Prof. Prasanta Bhattacharyya
- c) Dr. Sugata Hazra
- d) Dr. Nibir Mandal

6. Mathematics :

- a) Head of the Department
- b) Prof. Nemaï Chandra Das
- c) Prof. Kripasindhu Chaudhuri
- d) Prof. Arun Kumar Ghosh

7. Physics :

- a) Head of the Department
- b) Prof. Dipak Kr. Ghosh
- c) Dr. Kushalendu Goswami
- d) Dr. Anandamoy Manna

8. Principal, J.D. Birala Inst. of Home Sc.
11, Lower Radwan Street, Calcutta - 20

9. Dr. (Mrs.) Reba Mukherjee
J.D. Birala Inst. of Home Sc.

10. Prof. Kamakshya Prasad Ghatak
Dept. of Electronics Csience
University College of Science
92,A.P.C. Roy Rod,Calcutta - 700009

11. Prof. Subhas Chandra Basu
Department of Applied Mathematics
University College of Science
92,A.P.C. Roy Rod,Calcutta - 700009

Introduction

Jadavpur University, during its forty-four years of existence, has been able to establish itself as one of the premier research and teaching universities of the country. With the inclusion of the Jawahar Devi Birla College of Home Science and (Jadavpur) Vidyapith under its concern, the University is committed to further the cause of research and development. A brief resume of the various activities and achievements of each of the departments of the university might be able to prove that the university has established for itself a reputation for academic excellence and rigour both in teaching and research within a sympathetic and supportive ethos.

Just forty-four years old, J.U. is still a young university, so to say. Yet, with its enthusiastic atmosphere and willingness to explore new ideas, it has its own dynamism; it attracts the better section of applicants from the Joint Entrance Examination and other public examinations, by virtue of the excellent academic opportunities provided by the university, for the approach to teaching in J.U. is such that helps the students not only to develop their skills, performances and knowledge in their specific subject area, but also to build up a sense of self-confidence.

With its primary purpose of achieving, and subsequently maintaining, such a high academic standard, Jadavpur University, quite naturally, has been able to secure grants and aids from such funding authorities as the G. O. I (Govt of India), Govt. of West Bengal, the U.G.C. AICTE; MHRD; CSIR; DST; BRNS; DAE; DRDO; ISRO; DOE; ICMR; DRDL; DBT; ARDB; Public Trusts, Industries and personal grants as well. Apart from contributing generously to the developmental projects, these funding sources have also provided as large a sum as Rs. 323.93 lakh as research grant for various projects under the university teachers. This constitutes the largest sum received by any university in Eastern India.

The postgraduate and undergraduate studies in J.U. are undertaken as taught courses, the majority of which begin in July /August each year. The number of students pursuing undergraduate and postgraduate studies in the university is at present 8833, that can be classified as follows :

Faculty of Arts :	3231 students
Faculty of Engg. & Technology:	3881 „
Faculty of Science:	1321 „

Strength of regular teaching staff:	779
Strength of regular non-teaching staff:	1590
Strength of regular officers:	40

From the above data, teacher - student ratio stands at - 1 : 11.34
non-teaching staff- student ratio stands at - 1 : 5.96

officer -student ratio is insignificant
Of the total budget of the university :

Man-power consumes -	72.77%
Teaching expenses consume -	4.59%

Students amenities consume -	4.27%
Periodicals & Journals consume -	3.18%
Research head consumes -	6.24%
General Administration consumes -	4.41%
Repair & maintenance consume -	4.54%

Total **100%**

Laboratory expenses for each student per year :

Faculty of Engg.&Technology	Rs. 1067.29
Faculty of Science	Rs. 2049.98

Research expenses for one teacher per annum :

Faculty of Arts	Rs. 864.84
Faculty of Engg.& Technology	Rs. 3101.41
Faculty of Science	Rs. 51801.14

Contingency expenditure per student per annum is at Rs. 554.16 per student for the faculty of Engg.& Technology, Rs.451.55 per student for the faculty of Science and Rs. 118.23 per student for the faculty of Arts.

Expenditure on Periodicals and Journals is at Rs.2348.99 per student for the faculty of Engg.& Technology, Rs.2991.13 per student for the faculty of Science and Rs. 2182.78 per student for the faculty of Arts.

Admissible expenses on Field work/Survey Camp for the Departments of Geology, Civil Engg., and Construction Engineering has been worked out at Rs.250 per student. Admissible amount for Educational Tour of students of departments also has been worked out Rs.250 per student assuming that the tour/fieldwork/survey camp is organised within West Bengal and the number of accompanying teacher-guide should be one for thirty students.

During the session 1998-99, the university received the following grant :

Grants from the State Govt.	Rs. 4110.14 (lakh)
Grants from the U.G.C.	Rs. 893.93 „

Total : **Rs. 5003.53 (in lakh)**

Income from students (fees & others)

Faculty of Arts	Rs.395700
Faculty of Engg.& Technology	Rs. 507900
Faculty of Science	Rs. 161780

Total : **Rs. 10,65,380**

Ratio of income from Govt. and student = 0 : 213

That means Govt. (State+G.O.I.) had to provide a subsidy of 99.787% to keep the total expenditure of the university flowing.

The U.G.C. has accorded an approval of Rs. 600.50 lakhs under the 9th Plan with the following break-up :

Faculty:	Phase I	Phase II
Faculty of Engg.& Technology	265.00	130.00
Faculty of Arts	53.00	26.00
Faculty of Science	80.00	46.50

Against the above approval, the U.G.c. has released two instalments amounting to **Rs.120.10 lakh upto 30.9.98 towards the first phase allocation as below :**

Faculty of Engg.& Technology	Rs. 79.00 lakh
Faculty of Science	Rs. 41.10 lakh
Total :	Rs. 120.10 lakh

The university has also received grants under 9th Plan as per the following :

a) A.I.C.T.E.	Rs. 62,23,000
b) D.S.A. Programme	
i) Mathematics :	Rs. 23,08,857
ii) Sanskrit :	Rs. 1,40,000
iii) Int.Relations :	Rs. 4,40,000
iv) Comparative literature :	Rs. 2,65,349
c) CAS Programme	
i) Geology :	Rs. 35,00,000
d) U.G.C.	
i) Mathematics :	
ii) Economics :	Rs. 75,00,000
iii) Env.Sc.	
e) U.G.C. INFLIBNET	Rs. 1,72,000
f) U.G.C.	
National Board of Higher Mathematics	Rs. 1,95,000

The university received Rs. 3,02,175.00 for QIP Non - Plan grants during the financial year 1998-'99

In the 43rd Annual Conference there were a total of 217 recipients of the Ph.D degree. The faculty wise distribution of it stands as follows :

(A)	
a) Ph.D (Arts)	36
b) Ph.D (Engineering)	20
c) Ph.D (Pharmacy)	07
d) Ph.D (Science)	154

(B) Total recipients of M.Phil degree were 54 and the department wise distribution stands as follows :

i) Bengali	07
ii) Comparative Literature.	01
iii) Economics	07
iv) English	05
v) History	08
vi) Int.Relations	12

vii) Philosophy	02
viii) Sanskrit	02
ix) Env.Sc.	---

(C) Recipients of M.A. degree(1997-98,combined together)

i) Bengali	130
ii) Comparative Literature	100
iii) Economics	94
iv) English	118
v) Film Studies	34
vi) History	139
vii) Int.Relations	79
viii) Philosophy	81
ix) Sanskrit	29
x) M.lib& Inf.Sc.	09

(D) Departmentwise distribution of the number of successful recipients of Master of Engineering (1997-'98,combined)

i) Chemical Engineering :	07
ii) Civil Engineering :	21
iii) Computer Sc.& Engineering :	30
iv) Electrical Engineering :	18
v) E&T.C.E. Engineering :	18
vi) Mechanical Engineering :	15
vii) Metallurgical Engineering :	03
viii) Pharmacy Tech.	24
ix) Production Engineering :	05
x) M.B.A. '96	53
xi) M.C.A.	36
xii) Bio-Medical	07
xiii) M.Tech.(FT.B.Ch.E)	01
xiv) M.Tech.(Energy Sc.)	09
xv) M.Tech (Bio-Tech)	13

(E) Departmentwise distribution of the number of successful recipients of Master of Science (1997-'98, combined)

i) App. Geology	20
ii) Chemistry	37
iii) Mathematics	75
iv) Physics	56
v) Home Science	04

(F) Bachelor of Arts - : Departmentwise distribution of the number of successful recipients:

i) Bengali	42
ii) Comparative Literature	35
iii) Economics	43 (05 for 1997)
iv) English	52 (04 for 1997)
v) History	45
vi) Int.Relations	12
vi) Philosophy	37 (02 for 1997)
vii) Political Science	43 (01 for 1997)
viii) Sanskrit	05
ix) B.Lib.& Inf.Sc.	29
x) B.Ed.(Physical)	49 (for 1997)
xi) B.Ed.	23 (for 1997)

(G) Bachelor of Engineering - : Departmentwise distribution of the number of successful recipients:

i) Architecture Engineering :	20
ii) Chemical Engineering :	68
iii) Civil Engineering :	118
iv) Computer Sc.& Engineering :	50
v) Construction Engineering :	13
vi) Electrical Engineering :	113
vii) E& T.C.E.Engineering :	44
viii) Instrumentation Engineering:	09
ix) Mechanical Engineering :	126 (01 for 1997)
x) Metallurgical Engineering :	18
xi) Pharmacy Tech.	50
xii) Power Plant Engineering :	10
xiii) Printing Engineering :	10
xiv) Production Engineering :	32
xv) B.Tech.(F.T.B.E.)	14
xvi) B.Tech.(I.E.E.)	21

(H) Bachelor of Science - : Departmentwise distribution of the number of successful recipients:

i) Chemistry	24
ii) Geological Science	26
iii) B.Ed.(HomeSc.)	13
iv) B.Sc.(Home Sc.)	99
v) Mathematics	33
vi) Physics	34

Convocation

The Annual Convocation is perhaps the greatest occasion in the calendar of the University. The academic performance and excellence of a whole year are brought into focus on this day. The 43rd Annual Convocation was held as usual with pomp and grandeur.

Dr. Karan Singh graced the occasion as the Guest - in -Chief. In his speech he had reminded the young recipients of their duty to build an ideal "Indian Nation" in the glorious tradition of sacrifice and nobility of the greats of Bengal.

He particularly emphasized our indebtedness to the National Council Of Education, Bengal, in those stormy days of struggle for Independence. Most of the students, he observed, who came out of this idealised institution, proved that they were more than mere professionals. He paid his eloquent tributes to Dr. Triguna Sen - the soul of Jadavpur University. Dr. Singh blessed the students and reminded them that it was a matter of great honour and pride to be a university student, but to be a student of Jadavpur University was special because it carried the sacred legacy of the stormy petrels of the National Council of Education, Bengal.

News

The Government of India has established a Multimedia Training and Development Research Centre at the School of Education Technology with a DOE contribution of Rs. 1,12,97,000 as a part of the activity under National Information Infrastructure action agenda. The First instalment of Rs. 58,90,000 has already been received on 1st April, 1998

In brief, the Objectives of the Resource Centre, Jadavpur University are as follows :

- 1) Development of standardised curricular structure along with national course materials.
- 2) Development of subject specific multimedia CBT.
- 3) Training in multimedia content creation of persons, who may:
 - i) Impart training to others at 2nd tier institutions or
 - ii) Act as producer/entrepreneur or
 - iii) Seek employment in content creation industry.
 - iv) Franchise training to selected organisations.
 - v) Develop methodology for productive tools and customized templates.
 - vi) Create and maintain a multimedia object library and a local repository.
 - vii) Engage in R & D in multimedia content creation process.
 - viii) Provide consultancy.

The School of Bio-Science and Engineering of Jadavpur University has developed a HA - coated Titanium Dental implant. In order to make the implantation available to common people at a reasonable cost, non - coated new titanium implant has been developed and is under clinical trial.

To generate awareness on Intellectual Property Right (IPR) and Patent application among the academic/engineering and research community, a work shop on Patent Promotion

Awareness was organised on June 20 1998 at Jadavpur University. Participants from all over India, representing Government organisations, Industries, Educational and Research Institutions attended the workshop.

As a part of the programme under the Mobility of Industrial Personnel(MIP), almost every department of the Faculty of Engineering and Technology organised special lectures by Industry personnel for undergraduate students.

A very prestigious Memorandum of understanding (MOU) has been executed between the National Research Development Corporation (NRDC), Department of Scientific & Industrial Research, New Delhi and Jadavpur University through Industry Institution Partnership Cell (IIPC) for licensing and commercialisation of invention/technologies/process development at Jadavpur University including patenting and copyrighting in India and abroad.

The Department of Computer Science & Engineering organised a National Workshop on Distributed Computing on January 7 &8 1999 at the Amitabha De Memorial Hall, Department of Computer Science and Engineering, Jadavpur University.

In Collaboration with the Bureau of Standards, New Delhi, Jadavpur University organised "Educational Utilization Programme" on Standardization and Quality Systems" from 28th to 29th January, 1999

Co- Curricular activities :

The Annual Sports of Jadavpur University that was held in February, 1999 failed to achieve its usual popularity and success primarily due to unexpected and unusual weather conditions. A heat wave scorched Calcutta, the diurnal temperature rising as high as 39°C which, according to the temperature- records, is unprecedented. As a result, participants in the various events suffered exhaustion prior to performance and the attendance of the spectators was very poor. All these went together to mar the usual enthusiasm and festivity of an otherwise gala event.

Like other universities of international acclaim all over the world, J.U. acknowledges the importance of sports and leisure for the students. It provides the students with clubs and societies. The students themselves run these clubs and societies thereby learning in the process the art of organization, administration and leadership. The university can boast of several achievements in the field of co-curricular activities. Two members of the J.U. Photographic Club have had their photographs accepted at the All-India Inter-Club Salon, organised by the Federation of Indian Photography. Furthermore, two other students had their photographs exhibited at the Tenth National Photo Contest, organised by the Information and Broadcasting Ministry, Government of India. Again, at the 21st All India Salon, organised by the Photographic Club, J.U., the students had put up an excellent performance, both in the students' category as well as in the open category. On the other hand members of the Mountaineering and Hiking Club have organized an expedition to the Barasgiri glacier and scaled Mount Sritidhar in Beaskund glacier.

During this period, the Film society organised two Film Festivals with retrospectives of Chaplin and Utpal Dutta, respectively.

The Science club organised Tech-Fair on Science & Technology which had been a

big crowd puller. The University Geeti-Samsad won the first prize at the West Bengal Youth Festival. In the East Zone the interUniversity youth Festival sponsored by AIU one of the members of the Geeti-Samsad won a Silver Medal in western solo song.

The Drama club organised a number of street plays. They were highly praised by the critics for their performance at the Vidyasagar Mela.

The Art and Literary Society brought out its halfyearly publication **Sandhi** which give enough evidence of the creative potential of the students.

The Debate and Quiz Forum organized a seminar on the consequences of Nuclear Tests of India. They were the runner up in the Quiz contest at the East Zone Youth Festival organized by the AIU at Santiniketan.

Dr. R.N.Joardar, Reader, Department of Physics, obtained experimentally the first ever reactor data of deuterated liquid methanol at elevated temperature, done at Dhruva Reactor, BARC, Mumbai.

Dr. A.Konar, of the Department of Electronics is a recipient of this year's AICTE accredited "Young Scientist Award". Prof. H.Saha is a recipient of this year's National Award given by the Solar Energy Society of India.

Dr. Bijan Sarkar of Production Engineering has been selected for "Bharat Gourav Award" of IIFS, New Delhi. Prof S.R. Deb has received Certificate of Excellence from AICTE Research and Development Bureau, New Dehli.

For the project "Robotics and intelligent Manufactory" under TAPEC scheme.

Building complex of Emerging Areas of Studies & Impact Project Guest House

During the 8th plan Jadavpur University was provided with an assistance of Rs. 80 Lakhs by UGC for development of teaching and R&D activities in the emerging areas of Oceanography, Environmental Science and M.Sc. programme in Electronics and an amount of Rs. 55 Lakhs was sanctioned by Govt. of India for the building of IMPACT project office, classrooms, laboratories and guest house. A building complex for Emerging Areas of Studies and the IMPACT project guest house was opened by the Hon'ble Minister of Higher Education, Prof. Satyasadhan Chakravarty and the Hon'ble Minister of Power, Renewable Energy Resources, Science & Technology, Prof. Sankar Kumar Sen, Govt. of West Bengal, on 19th March, 1998.

University Campus Wide Network

It is indeed a proud privilege for the University that a modern sophisticated communication system is going to be established in the campus. The University has decided to set up campus-wide Computer Network based on the latest ATM technology, the first of its kind in the eastern region, with fibre optics backbone, with the financial assistance of AICTE.

The network will facilitate the following :

- i) To connect all departments of the campus with the library for efficient dissemination of knowledge and organised retrieval of information from the library.
- ii) To connect all departments of the campus with the INTERNET and ERNET facilities.
- iii) As an outcome of the above computational facilities the University will be inter-connected so that infrastructure can be gainfully utilised.

The University has selected IBM collaboration since IBM is a pioneer in ATM Technology and active member in the ATM forum, and has already placed the final order.

School of Education Technology

School of Education Technology (SET) has been selected by the Department of Electronics, Govt. of India to establish the '**Multimedia Training & Development Resource Centre**' at a cost of Rs. 1.13 Crores. The Resource Centre has started functioning since April, 1998 on the 3rd Floor of Jupiter Building, Jadavpur University. This Resource Centre has been dedicated to the memory of Prof. Triguna Sen and named as '**Triguna Sen Memorial Multimedia Training & Development Resource Centre**'. The resource centre has developed a course curricular structure along with necessary course materials in the area of '**Multimedia Development Technology**'. The first 5 week fulltime course on '**Multimedia Development Technology**' has been started on November 9, 1998. The participants from different parts of India are attending the Course.

Project Impact :

This is a pilot project designed to improve the skill and competence of persons to cater to the need of Electronics & Computer industry. It also aims to improve the quality of technical education with the help of advanced environment of learning and exposure to industrial orientation. The project is jointly supported by the G.O.I., World Bank, and Swiss Development Corporation (S.D.C.) of the Government of Switzerland.

It is being implemented in 32 Participating Institutions (PIS) consisting of 14 Engineering Colleges, 12 Polytechnics and 6 C.E.D.T.s, since July 1991. Five premiere institutions, viz, Jadavpur University, IIT Mumbai, IIT Delhi, IISc. Bangalore and NCE Bangalore have been acting as Resource Centres (RCS) of the project, providing professional support to the PIs. The Project Implementation unit is located at the Department of Electronics (DOE), G.O.I., New Delhi.

To support the Project, the financial contributions are coming from the following:

Govt. of Switzerland through SDC Grant-in aid -	16.2 million
World Bank loan	8.0 million
G.O.I.	2.6. million
	{all in U.S. dollar}

Jadavpur University Research Centre received Rs. 55laks for civil work, Rs. 1.25 crores for equipments and softwares and 1.10 crores for other expenses.

Emerging Areas :

Computer Application Programme at the Department of Physics :

The U.G.C. in its letter No. F13-24(SA/Com/COSIST) dt.28.01.94 approved the scheme for a period of 5 years with a non-recurring grant of Rs. 8 lakhs towards cost of Hardware/Room preparation, soft ware, consumables, Software/Maintenance, Technical Assistance. So far the University has received a recurring grant of Rs. 2.50 lakhs for the scheme.

M.Sc.in Electronics(under Physics Department, Faculty of Science , Jadavpur University).

The two-year M.Sc. course in Electronics under the UGC scheme of courses in Emerging Areas with an intake of 10 students per session from 1997-98, has started. The course aims to generate manpower in the field of Electronic Sciences to suit the requirements of

academic and research institutions and industrial setups engaged in manufacture and maintenance of electronic products. The Department of Physics would act as the resource centre for the programme at present till a new department is granted autonomy.

The course is divided into two parts, part I and part II.

- (a) Mathematical and computational methods of electronics
- (b) Electronic Circuits
- (c) Elements of classical and static Meahanics
- (d) Electromagnetic Fields and Plasma Electronics
- (f) Elements of Quantum Mechanics
- (f) Physics of semiconductor Devices
- (g) Material Science & Technology
- (h) Net work Analysis and Synthesis.

Three Practical Papers from :

- (i) Computer Science & Applications, (ii) Electronic Circuits , (iii) Materials & Devices,
- (iv) Integrated circuit, (v) Fault diagnosis and maintenance.

Part - II

- (a) Quantam Electronics, (b) Physics of semi conductor Devices, (c) Optoelectronics,
- (d) Microwave Electronics , (e) Electronic circuits, (d) Integrated Circuits and Technology,
- (e) Electronic communication, (f) Electronics of Microprocessor and Microcomputer

Practical papers consisting

- (i) Microwave optoelectronics, (ii) Microprocessor (iii) Communication system and a design project are also included .

The eligibility for admission to the course is at least 60% Marks in B.Sc.(Hons.) in Physics/Electronics with Mathematics. Beside releasing Rs.7,19,819 and Rs. 27,744 for the session 1997-98 and 1999-2000 respectively, the U.G.C. has sanctioned one post of Professor and two posts of Lecturer for this course.

The University Councelling Cell :

This cell is a unique addition in the university in the year 1995. At present it is working jointly under the leadership of Dr. M.N. Mitra and S.Basu. Infrastructural facilities to the cell are being provided by the Philosophy department of this university. Each and every one among the staff members including their kin and the students of this university are free to receive benefit from the cell. The aims and objectives of the cell are the following :

- 1) To identify and enable in solving problems of adjustments,
- 2) To deal with crisis situations,
- 3) To develop support system,
- 5) To enhance interpersonal relationship amongst different groups and individuals,
- 6) To deal with problems related to neurosis, alcoholism, drug addiction, family adjustmet issues, different phobias which include examination phobia common among the students.
- 7) To deal with personal and exceptional phychological problems.

DSA Programmes in the Faculty of Arts :

The Faculoty of Arts has eleven Departments of which as many as six Departments have been selected by the U.G.C. for the Special Assistance programme under the DSA/CAS Scheme. The Departments which had DSA Programmes during the year under review are: English, Comparative Literature, Economics, International Relations, Sanskrit & Philosophy. All these Programmes functioned smoothly during the year 1998-99 and organised seminars and lectures. A number of publications have also been brought out under the auspices of the DSA Programmes in the different Departments.

The Special Assistance Programme of the Department of Philosophy was reviewed during the year and the U.G.C. decided to raise the status of the Special Assistance Programme to that of a Centre for Advance Studies (CAS).

The following Refresher courses were held in 1998-99 in the Faculty of Arts :

1. Economics:

(a) Mathematical Economics and Econometrics.

Co-ordinator : Smt Arpita Dhar, 22-12-98 to 14-01-99

(b) Development Economics and Indian Economics Analysis

Co-ordinator : Dr. Malabiha Roy, 03-03-99 to 24-03-99

2. English:

(a) Encounters : Colonial and Post - Colonial

Co-ordinator : Dr. Nilanjana Gupta, 09-11-98 to 01-12-98

(b) Literature and Thought : 1660-1789

Co-ordinator : Dr. Amlan Dasgupta, 01-02-99 to 26-02-99

3. Philosophy:

(a) Philosophy of Science, Co-ordinator : Dr. Chhanda Gupta and Dr. Ratna Dutta Sharma, 04-01-99 to 25-01-99

(b) Philosophy of Language, Co-ordinator, Dr. Indrani Sanyal 08-02-99 to 01-03-99

4. Sanskrit:

(a) Dharmasastra and Arthasastra, Co-ordinator : Dr. Manabendu Banerjee and Dr. Prodyut Kr. Dutta, 29-12-98 to 20-01-99

5. School of Women's Studies :

(a) Women Studies : Issues, concepts and methods, Co-ordinator : Anuradha Chanda, 24-11-98 to 17-12-98

6. Bengali:

(a) Medieval Bengali language & Literature :

Co-ordinator : Dr. Achinta Biswas and Dr. Satyabati Giri, 02-11-98 to 26-11-98

(b) Modern Bengali Literature :

Co-ordinator : Dr. Pinakesh Chandra Sarkar and Dr. Roy, 30-11-98 to 22-12-98.

7. Comparative Literature:

(a) Comparative Literature in India : Theory of Method

Co-ordinator : Dr. Sucharita Chattopadhyay and Dr. Ipsita Chanda, 08-02-99 to 01-03-99

In addition to the above refresher courses the U.G.C. in its letter dated, 4th July & 28th August letter No. F23-1/98(ASC/ER and F 23-41/91(ASC/ER) respectively, approved refresher courses in the following Departments:

i) Geology : one, ii) Food & Bio-Chem. Engg. : two, iii) History : one, iv) Electronics Science : one, v) Electronics & Telecommunication : one, vi) Physics : one, vii) Oceanography : one viii) Film Studies : one.

Refresher courses :

The U.G.C. in its letter No. F 23-1/98(ACS/ER) dated. 4th July, 1998 accorded approval for conducting Refresher courses in the following Department.

1. Geology : one
2. English : two
3. Library & information Sc. : two
4. Philosophy : two
5. Sanskrit : one
6. Economics : two
7. School of Women's Studies : one
8. Food & Bio-Chem. Engg. : two
9. Comparative Literature : one
10. Bengali : one

11. Mathematics : one

12. Management : one

The U.G.C. in its letter No. F 23-41/91(ACS/ER) dated. 28.8.98 intimated that the proposals in the disciplines of History, Electronic Science, Electronic & Telecommunication, Physics, Oceanography and Film Studies are under active consideration.

Ninth Plan Period :

During the last five years of the 8th Plan period the curricular activities of the University were able to achieve an allround modernized development. As a research institution as well, the University has already claimed an honourable seat among its counterparts in the State. During the last five years the University has successfully executed a number of Research and Development Projects worth more than Rs. 15 crores. The 9th Plan Period is expected to see a significant number of projects relating to environmental and contemporary social needs.

A. The broad spectrum proposals of the 9th plan are as detailed below :

1. Modernizing, strengthening and extension of the existing departments.

2. Introduction of new courses.

3. Improvement of teaching & learning process.

4. Developing interactions with industries.

5. Encouraging academic and administrative reforms.

6. Development of infrastructural facilities.

B. Thrust areas of the 9th Plan Period :

1) Creation of Faculty for interdisciplinary studies.

2) Creation of Management Faculty.

3) Strengthening of existing programmes and creation of new areas of multi-disciplinary studies.

4) Introduction of courses of various levels on Information Technology.

5) Accelerating the activities of Women's Studies and introduction of post graduate level courses on women studies.

6) Development of courses of Oceanography with special emphasis on coastal zone management

7) Establishment of a language centre.

8) Extension of activities of Continuing Education Programme through Adult & Continuing Education Centre.

9) Extension of Instruction Material Development Programme in the form of Multimedia, Computer Aided Instruction, Web-based courseware for Open learning through School of Education Technology .

INTERNET

The University is going to have a campus-wide Computer Network based on ATM technology, with fibre optics backbone, the first of its kind in Eastern India.

Aims of the Network :

i) To connect all departments of the campus with the library for efficient dissemination of knowledge and organized retrieval of information from the library.

ii) To connect all the departments of the campus with INTERNET and ERNET facilities. The University has selected IBM collaboration since IBM is a pioneer in ATM Technology and active member in the ATM forum and has already placed the final order.

In consonance with the guidance of the UGC for the 9th Plan, Jadavpur University has chosen to undertake schemes as per the following :

- 1) Emerging Areas and Innovation Programmes
- 2) Career Orientation Courses
- 3) Physical Education & Sports
- 4) Incentive Schemes for Implementing Reforms
- 5) Production of University-level Books
- 6) Academic Staff College
- 7) Special Assistance Programme in Humanities
- 8) Increase utilization of Unassigned Grants.
- 9) Special awards for outstanding research work.
- 10) Widening the facilities of Seminars and Conferences.
- 11) Utilization of retired teachers in Educational Administration.
- 12) Modernization of Teaching.
- 13) Enlargement of the base area of Women's studies
- 14) Enlargement of the base area for Adult and Continuing Education.
15. Emerging Area (Special) thrust on :
 - (i) Population Education
 - (ii) Campus Development
 - (iii) Resource Mobilization
 - (iv) Removal of Obsolescence
 - (v) USIC

The UGC has already sanctioned (tentatively) an amount of Rs. 6.005 crores, out of which Rs. 2.055 crores for Arts and Science Faculties and Rs. 3.95 crores for Engineering & Technology Faculty as Development Assistance during this Plan Period [vide letter Nos.F7-4/96(CPP-II) dt.03.12.97 and F 57-497(T) dt.21.01.98 for Jadavpur University, which was one of the three highest allocations for the state universities.

Financial support during 9th Plan Period :

Subject	Sanctioned	1997-98	1998-99	1999-2000
Arts & Science :				
(a) Books & Journals	Rs. 1,00,00,000	Rs. 10,10,000	Rs.20,00,000	Rs. 20,00,000
(b) Equipments	Rs. 1,05,00,000	Rs. 10,54,000	Rs. 21,000	Rs. 21,00,000
Engineering & Technology:				
(a) Books & Journals	Rs. 1,70,00,000	Rs. 17,00,000	Rs.34,00,000	Rs. 43,00,000
(b) Equipments	Rs. 2,25,00,000	Rs. 22,50,000	Rs. 45,00,000	Rs. 45,00,000

Additional Posts sanctioned under Emerging Area 1999-2000 by the State Government :

- | | | |
|----|----------------------------------|---|
| A. | Mathematical Modelling : | Reader - 1 |
| B. | Environmental Science, M.Phil. : | Professor - 1, Reader - 2, |
| C. | School of Oceanography Studies : | Professor - 1, Reader - 1, Lecturer - 3 |
| D. | Ocean Development : | Lecturer - 1, |

BENGALI

The Bengali department in the Faculty of Arts, J.U., that was established in 1956, is highly acclaimed as a distinguished department of teaching and research, the reputation being enhanced by the fact that since its inception, the department has had as its teachers, some of the luminaries of Bengali literature, such as? (names)

However, being a vernacular department, it is unable to secure grants from the central funding bodies nationwide.

Nevertheless, the Bengali department has a large and thriving community of post-graduate & undergraduate students taking the modular courses offered by the university as is evident from the following table :

Courses Offered Students Accommodated (per year).

(1) B.A.Hons	----	44
(2) P.G.	---	60 (day section)
(3)P.G.	---	60 (evening section)
(3)M. Phil.	-----	15
(5) Ph.D.	-----	

Specialization (P.G. Level) : Old and Medieval Literature, Rabindra Sahitya, Modern Bengali Literature, Linguistics.

The department also provides consultancy services for facilitating language communication in the eastern region for major industries. It has the capacity to develop special regional language versions for industrial software.

(1) Total funds allocated for the department during the 9th plan period for extension/development and opening of new curricula including Interdisciplinary Courses are the following :

(a) Equipment :

U.G.C. 9th plan grant : 1st Instalment—Rs. 15000.00

(Overhead Projector)

U.G.C. 9th plan grant: 2nd Instalment — Nil

Total Rs. 15000.00

(b) Books :

U.G.C. 9th plan grant: 1st Instalment —Rs. 60,000.00

U.G.C. 9th plan grant: 2nd Instalment —Rs. 30,000.00

Total : Rs 90,000.00

(2) Number of projects running in the department :

One minor project under Dr. Achintya Biswas

Name of the Project : Development of Bengali Script in Bengali Manuscripts (16th - 18th Century A.D.)

Funding Authority : U.G.C. (unassigned grants)

Value of Project : Rs. 20000.00

Tenure : 2 years

(3) Number of Seminars Organised :

(i) One National Seminar on Michael Madhusudan Dutt, held in March 1998.

(ii) Two day seminar and three-day exhibition on the life and works of the poet Jibanananda Das.

The seminar was held on March 22 and 23, 1999. Among the participants were famous poets like Joy Goswami, Bhumendra Guha and Ranjit Das. The exhibition held was unique in the sense that rare exhibits like all first edition copies of Jibanananda Das's books, old periodicals like Kallol, Purbasha, Kabita, original manuscripts of Jibanananda's poems, stories, diaries and letters were shown to the public. The exhibition earned high acclaim by scholars, poetry-lovers and the press alike.

(4) The Department organised two Refresher Courses. The first course (held in November 1998) concentrated on the Medieval Bengali Literature. About 15 students participated in the course. The second course (held between 15.02.99-08.03.99) emphasised on Modern Bengali Literature. About 30 students participated in this course.

(5) Number of Books published by the teachers of the department :

(i) Prof. Pinakesh Chandra Sarkar edited collection of 23 old Bengali plays. Its title is "Harano Diner Natak".

Publisher : Sahitya Samsad, Calcutta. Published in January 1999.

Dr. Basabi Roy edited the first volume of plays by Kshirode Prasad Vidyavinod. Its title is "Kshirode Prasad Natak Samgraha", Vol. 1. Publisher : Sahitya Samsad, Calcutta. Published in January 1998.

(iii) Dr. Achintya Biswas composed three books:

(a) Advaita Malla Burman O Titas Ekti Nadir Nam

Publisher : Ratnavali Prakasan, Calcutta, Feb. 1998.

(b) Rabindranather Itihas-Chetana -- Publisher : Vrinda Bak, Calcutta . January 1999.

(c) Bharater Chithi : Pearl Buck/ Dey's Publishers :

Katha Shilpa, Calcutta, January 1999.

Edited one book :

(d) Sada Hawa : Advaita Malla Burman, 2nd ed., Vrinda Bak, Calcutta, January 1999.

(iv) Sri Amitava Das composed one book entitled 'Kabita O Pathak', published by Sri Aurobindo Publication, Calcutta, August, 1998.

(6) Number of Research Papers/Articles published by the teachers of the department :

(a) Prof. Dr. Pinakesh Chandra Sarkar published the following articles :

(i) 'Smritir Darpaney.' An article on the prose-memoirs written by the poet Subhas Mukhopadhyay, published in a collection entitled 'Subhas Mukhopadhyay : Katha O Kabita', Deys' Publishing, Calcutta, Feb. 1998.

(ii) 'Jibanananda ; Chithir Darpaney', an article on the letters written by Jibanananda Das, published in 'Anushtup', Jibanananda Special Number, Jan., 1999.

(iii) 'Sanjoy Bhattacharya-er Gitikabita', an article on the lyric poems of Sanjoy Bhattacharya, published in 'Parikatha', December 1998.

(b) Dr. Achintya Biswas, Reader, published the following papers :

(i) Kavi Lochandaser Jivan Sankranta Tathya Bichar, 'Bangla Bibhagiya Patrika', Jadavpur University, 1997-1998.

(ii) Andhakarer Antare: Tarashankarer Upanyase Nimnabarger Manush', 'Parichaya', Calcutta, Tarashankar Special Number, July, 1988

(iii) 'Anagata Kalbaisakhir Prarthana : Tarashankarer 'Chaitali Ghurni', Ajker Sabhyata, Dhaka, May-July, 1998.

(iv) Galpakar Nazrul Islam, 'Phalakshirsa', 1999.

(v) 'Jibananander Chokhe Nazrul Islam : Ekti Punarmulyayan', Nazrul Parishad Partika, 27.1.99

(vi) 'Bharatiya Lokakatha Kimbadantite Jatibhed : Dandwa O Samanyayer Chesta', Kalyani University, Departmental Journal, Dept. of Folklore 6-7 February 1998.

(vii) 'Kavial Bijay Sarkarer Rachanai Punya Ebang Tar Patabhumi', Atayeb, September 1998.

(viii) Manab-Bidyar Ek Prajnaban Pathik : Maniklal Singha, Ajker Yodhan, Rupnarayanpur, Burdwan, July 1998.

(ix) 'Dhrubanakshatrer Ingit: Uttar Upanibeshi Byabastha O Charuchandra Sanyaler Rajbangshi Sandhan', Nabanna, Vol. 9, October 1998.

(x) 'Jatiya Abhipraya o Itihas : Rabindranather Itihas Chetana', Katha Sahitya, Vol. 49, no. 7, April- May 1998.

(xi) 'Ar Ek Arambher Kathamukh, Biswayan o Biswabyapi Nimnabarger Katha', Rabisasya, October 1998.

(xii) 'Manabdhikar : Biswa Paristhiti O Amra', Digidarshan, February 1999.

(xiii) 'Bangabhanger Ardha- Shatak: Phire Dekha', January 1999.

(c) Sri Amitava Das, Lecturer, published the following papers :

(i) 'Bakspando O Kabitar Pathak' in ' Journal', Faculty of Arts, Vidyasagar University, 1998.

(ii) 'Swagato Kabir Byaktigato Pathak' in ' Banga Batayan' ed. Durgdas Chattopadhyay, Calcutta, 1998.

(7) Seminars / Conferences / Symposia / Workshops attended by teachers :

(a) Dr. Satyabati Giri attended a national seminar on Comparative Literature, organised by Department of Bengali, Banaras Hindu University in February 1998.

(b) Dr. Uday Kumar Chakraborty participated in a National Symposium on Computational Linguistics: Prospects and Implications, organised by Linguistic Research Unit, Indian Statistical Institute.

(c) Dr. Achintya Biswas attended an International Seminar at Centre for Advance Studies in Humanties, Dhaka (Bangladesh) on February 22-24, 1998. The name of his paper was ; 'Gokanghat, Adwaita Mallabarman o Titas Ekti Nadir Naam'.

Attended a national seminar in the 19th session of the Indian Folklore Congress (Jan 18-20, 1999), organised by Central Institute of Indian Languages, Mysore, held in Calicut University, Kerala. Paper presented : ' Folklore and Tradition of Bengali Boat Manufacture' (with special reference to Balagarh, Hooghly).

Attended a national seminar on Michael Madhusudan Dutt organised by the Department of Bengali, Jadavpur University on 31.3.98. Paper Presented ; ' Madhusudaner Prahasan : Phire Dekha'.

Attended a national conference on 'Religions of the People of India' , organised by the Department of Philosophy, J.U. on 20.11.98. Paper presented ; ' Banglar Pratibadi Lokadharm'.

Attended a seminar as Resource Person in the second U.G.C. sponsored Refresher Course for College and University teachers, organised by the Department of Bengali in March 1999, paper presented: 'Bangla Sahitye Abahelita Manush'.

(d) Prof. Pinakesh Chandra Sarker attended two seminars as a Resource Person in a Refresher Course in Bengali, organised by Academic Staff Collage, University of Calcutta on 10.3.1998, papers presented : (i) Modern Bengali Poetry : Its Definition and Identity, (ii) The First Phase of Modernism in Bengali Poetry : 1910-1930.

Attended two seminars as Resource Person in a Refresher Course organised by Academic Staff College, University of Burdwan on 26.6.1998, paper presented: (i) Tagorean Bengali Poetry, (ii) Bengali Poetry in the Forties and Fifties.

(8) Number of Teachers :

Male : 8

Female : 8 (including one part-time Teacher)

(9) Composition of Teachers :

Lecturer : 1

Senior Lecturer: 5

Reader : 8

Professor : 1

One post of Reader is lying vacant at present.

Professors :

1. Dr. Pinakesh Chandra Sarker, M.A. (Cal) Ph, D. (J.U.)

2. Vacant.

Readers :

3. Dr. (Miss) Maitrayee Chaudhury, M.A. (Beng. & Sans.) Ph, D. (J.U.)

4. Sri Bibhuti Bhusan Ray, M.A. (J.U.)

5. Mrs Rekha Moitra, M.A. (Comp. Philology & Beng., Cal)

6. Dr. (Mrs.) Satyabati Giri, M.A. Ph. D. (Cal)

7. Dr. (Mrs.) Basabi Roy, M.A. Ph. D. (J.U.)

8. Dr. Tapobrata Ghosh, M.A. Ph. D. (Cal)

9. Dr. Achintya Biswas, M.A. Ph. D. (Cal)

10. Dr. Uday Kumar Chakraborty, M.A. Ph, D. (Cal) (Head of the Department)

Lecturer (Senior) :

Mrs. Sarmila Basu Datta , M.A. (J.U.)

Mrs. Sampa Chowdhury, M.A. (Cal).

Dr. Soumitra Basu, M.A., Ph.D. (J.U.)

Lecturer :

Miss Dipanwita Basu, M.A. (J.U.)

Teachers with their specialisation :

Professor : SPECIALISATION ;

1. Linguistics /Drama

2. Rabindranath /Modern Bengali Literature.

Reader :

3. Vaisnava Philosophy & Literature.

4. Modern Bengali Literature
5. Linguistics.
6. Medieval Bengali Literature.
7. Drama / Modern Literature.
8. Rabindranath.
9. Medieval Bengali Literature /Folklore Studies.
10. Linguistics.

Comparative Literature :

The department of C.L. was started in the year 1956 and enjoys the reputation of a distinguished department to offer a subject which is distinctly unique not only in India, but also in Asia.

For the last two decades, the department has widened its sphere of learning to all important Indian languages for comparative studies.

It also exerts special emphases on African, Latin American and Australian Literature that are otherwise neglected in the taught programmes of the major departments of the Indian Universities.

The department of Comp. Lit. is renowned for its originality nationwide and serves as an exemplary model for other Universities as well. It seeks to incorporate a wide range of subjects and issues under its purview an approach which is highly conducive for a multi-lingual, pluri-religious country like India.

The faculty members of this department has had the presence of such personalities like Buddhadeva Bose, Sudhindranath Dutta, Naresh Guha, Alokranjan Dasgupta, Pranabandhu Dasgupta, Manabendra Bandyopadhyay, Amiya Dev, Subir Roychowdhury and Nabaneeta Dev Sen.

The department attracted educationists from abroad like Father Robert Antoine, Father Pierre Fallon of the Society of the Jesuits and David J. McCutcheon, who have proved themselves as prolific Bengali scholars despite their foreign origins.

The courses offered by the department and the annual student intake is given below :

- (1) B.A. (Hons.)--50 , M.A. --68 , M.Phil -- 15 , Ph.D.

Specialization offered :

U.G. level -- Comparative Literature, 50 marks for Tamil

P.G. level -- Comparative Literature, Area of Studies -- Bangladeshi and Latin American Literature.

The department has been supported by the Special Assistance Programme by U.G.C. since 1987.

Activities under DSA Programme in 1998-99:

An International Seminar on literature of Bangladesh was held in the Department on Feb. 1999.

Books published, i) Dr. Bijoya Das: Bibliography of Bengali Literature Translated into South Indian Languages.

ii) Dr. B.Das (ed.)

Four Ballads from South India, (in press).

iii) Dr. K.Panjabi (ed.) :

Seminar Proceedings of Nostalgia for the Future Literature of Latin America.

iv) Dr. I. Chanda :

Manifestoes of Modernist Poetry : Tracing the *Charit* as a Genre, [in press]

The department hosted the first UGC sponsored Refresher Course "Comparative Literature in India: Theory and Practice", between 8th Feb. and 1st March, 1999.

Professors :

1. Dr. Nabaneeta Dev Sen, M.A. (J.U. et Harvard), Ph.D. (Indiana), Fellow of the Royal Asiatic Society.

2. Sri Manabendra Bandyopadhyay, M.A. (J.U. et Toronto)

3. Sri Swapan Kumar Majumdar, M.A. (J.U.) (on lien)

Readers :

4. Dr. Subha Chakravarti-Dasgupta, M.A. Ph. D. (J.U.),

5. Dr. (Ms.) Sucharita Chattopadhyay, M.A. (Cal), Ph.D.(J. U.)

Lecturers (Senior) :

Dr. (Mrs.) Bijoya Das , M.A. (Tamil & English), (Madurai) , Ph.D. (J.U.)

Dr. Sibaji Bandyopadhyay, M.A. , Ph.D. (J.U.) (Head of the Deptt.)

Dr. (Ms.) Kavita Punjabi, M.A. (J.U.), Ph.D. (Cornell)

Lecturers :

Dr. (Ms) Ipsita Chanda, M.A. (R.U.), Ph.D. (J.U.)

Sri Avik Majumdar, M.A. (J.U.)

Sri Suman Ghosh, M.A. (J.U.)

Teachers with their specialisation :

Name:

1. Dr. Nabaneeta Dev Sen,

2. Sri Manabendra Bandyopadhyay,

SPECIALISATION :

Epic Studies / Women's Writing / Bhakti Poetry

/ Comparative Literature Studies.

Translation Theory & Practice / Literatures of Africa, Latin America and East Europe / Contemporary Indian Literature

3. Sri Swapan Kumar Majumdar, / Children's Literature
Comparative Literature Studies / Translation Studies /
Indian Classical and Medieval Literature / Contemporary
Indian Theatre.
4. Dr. Subha Chakravarti-Dasgupta, Popular Literature / Comparative Literature Studies /
Reception Studies / Women's Writing.
5. Dr. (Ms.) Sucharita Chattopadhyay, Science Fiction / European Renaissance Studies.

Economics:

The department of Economics, established in the year 1956, is recognised nationwide for its importance in the teaching excellence and prospective research activities.

Prof. Amartya Sen, the Welfare Economist and Nobel Laureate, began his career both as a teacher and a research scholar in the Department of Economics, J.U.

The teaching and research activities of the department in different fields have impressed the U.G.C. and consequently it has helped the department to set up a Centre for Regional Economic Studies under the Special Assistance Programme in 1987.

The courses of study offered by the department and the annual intake of students are as follows:

(1)	B.A.(Hons.)	--	50
(2)	M.A.	--	70
(3)	M. Phil	--	10
(4)	Ph.D.	--	

The Centre for Regional Economic Studies of the department has completed the second phase of the UGC's DSA Programme in January 1999. The department, very likely will be accorded the status of Centre for Advanced Studies by the U.G.C.

A very important seminar on "Issues in West Bengal Economy" was held in May 1998. It was funded by the DSA Centre for Regional Economic Studies.

The Ministry of Environment, Government of India, has identified the department as an affiliated nodal department for extending teaching and research programme in Environmental Economics, under the World Bank aided programme. Dr. Joyashree Roy has been nominated by the Board of Studies of the department as the nodal person for this programme.

Among the various projects undertaken by the teachers of the department under alternative schemes in the current session, the project on "Farm Productivity in West Bengal" by Dr. B. Moitra and Dr. B. Chatterjee in collaboration with Prof. P. Bardhan (University of California, Berkley) and Prof. D. Mookherjee (University of Boston) last year is nearing completion. The project received a fund of Rs. 7 lakhs from the McArthur Foundation.

The university is expected to receive from the State Government for the year 1999-2000, the deficit amount of Rs. 89,38 100.00 for the running cost of the department.

Books edited by the teachers of the department :

(1) **Biswajit Chatterjee (ed.)** : Economic Liberalisation in India, Allied Publishers Ltd., and DSA Centre for Regional Economic Studies, Dec 1998.

Articles and Monographs written by the academic staff of department:

(2) **Biswajit Chatterjee & H. N.Sur (ed.)**

Regional Dimensions of Indian Economy, Allied Pubs, Ltd. and DSA., Centre for Regional Economic Studies, Dec. 1998.

(3) **G. Gupta & J. Roy (ed.)** : Environmental Economics in Indian. Concepts and Problems. Allied Pubs. Ltd, and DSA Centre for Regional Economic Studies, Dec 1998

(4) **Debjani Sarkar and Nilanjana Sengupta** : Industrial Development of West Bengal, Regional Disparities in West Bengal : A Social and Economic Profile, Published by Institute for Studies in Social and Economic Development, Calcutta 1998.

(5) **B.Chatterjee & A.Karmakar** : Multinational Enterprises in Economic Development : A Critical Appraisal in Multinational Corporation in India, R.B.S.A. Publishers, 1998.

Name:

Professors:

1. Dr. Dilip Kumar Halder

2. Dr. (Mrs) Debjani Sarkar

3. Dr. (Ms) Jaba Guha

4. Dr. Manas Ranjan Gupta

5. Dr. Debesh Chandra Chakraborty

6. Sri Harendra Nath Sur

Readers:

1. Dr. Ranjit Ranjan Das
(Re-employed since 1.09.96)

2. Dr. (Mrs) Susmita Rakshit

3. Dr. Animesh Chakraborty
(Re-employed since 1.12.99)

Qualifications:

Specialisation:

M.A., Ph. D. Transport Economics / Urban and
Regional Economics / Public Economics

M.A., Ph. D. Economics, of Education / Industrial
Economics.

M.A., Ph. D. Women's Studies / Economics of Educa-
tion.

M.A., Ph. D. Development Economics / Economic
Theory.

M.A. Ph. D. Demography / Economics of Energy /
Input-Output Analysis / Regional Eco-
nomics.

M.Sc. Quantitative Economics / Statistics &
Econometrics.

M.A. Ph.D. Demography / Economic History.

M.A., Ph.D. International Trade / Urban Economics

M.A., Ph.D. Public Finance / Industrial Economics.

4. Sri Bipul Malakar	M. Stat.	Regional Economics / Applied Economics
5. Sri Lakshman Mandal	M.A.	Indian Economic Problems / Monetary Economics.
6. Dr. Ajitava Roy Chowdhury	M.A., Ph.D.	Development Economics/ International Trade / Econometrics.
7. Dr. Tuhin Kumar Das	M.Sc. Ph.D.	Computational Methods / Optimisation Technique / Energy Economics
8. Sri Biswajit Chatterjee	M.A.	Development Economics / International Economics / Macro-economics
9. Dr. (Mrs) Joyashree Roy	M.A., Ph.D.	Energy Economics/Environmental Economics/ Optimisation Techniques / Computational Methods / Input-Output Analysis.
10. Dr. Gautam Gupta.	M.A., Ph.D.	Environmental Economics / Classical Political Economy
11. Mrs. Basabi Bhattacharyya	M.A.,	Financial Economics / International Economics / Human Development.
12. Dr. Bhaswar Moitra	B.A., M.S. Ph.D	Development Economics / Theoretical & Applied Micro-economics.
13. Dr. Rajat Acharyya	M.Sc. Ph.D.	International Trade / Industrial Organisation / Open-Economy/ Macro-economics.

Lecturer :(Senior)

Mrs. Sunanda Roy , M.A. (Cal)

Lecturers :

Mrs. Arpita Dhar, M.A. (Cal).

Dr. (Mrs.) Malabika Roy , M.A. (Cal), Ph.D. (ISI).

Sri Jugaratan Barman, M.A. (N.B.U.)

English

The establishment of the department in the year 1955 was primarily aimed at providing language and humanities teaching to students of technology. But rapidly it has developed into a full-fledged prestigious department for the study of English as literature and associated European languages, the interaction of European and Indian literature and culture and cultural studies . At the time of granting DSA status the report of the visiting UGC team described it as one of the best English Departments of the country.

The achievements and potentiality of the department was formally recognized when it became the first English Department in the country to be granted SAP Programme by the UGC. Phase I of the DSA Programme ran from 27, Nov., 1991 to 26 Nov., 1996. After favourable review, Phase II commenced on April, 1997.

The department has specialist teachers in all major areas and periods of English Literature. Several of them are experts in various other European languages and literatures, many areas of Indian literature and culture, and other subjects of arts, in relation to literature.

The formal thrust areas designated under the programme are :

1. Renaissance Studies, 2. Nineteenth-Century Studies. 3. Twentieth-Century Studies, 4. Translation Studies.

Twentieth-Century Studies is a new thrust area added in Phase- II of the Programme . The other three areas were part of Phase I.

The total strength of students taken annually for the taught courses are specified below:

1. B. A. (Hons)	44+3=47
2. M.A.(day)	60
2.a) M.A. (Evening)	50
3. M. Phil	15
4. Ph.D.	--

The department also has undertaken a teaching programme of English or an equivalent Humanities course to 360 students each year who belong to the other departments of the Faculty of Arts, and 700 students each year in the Faculty of Engineering and Technology.

There are 24 official posts for the faculty members that are at present occupied by:

1. Three Professors, 2. Six Readers and 3. Fifteen Lecturers. Of these one post of Professor and one of Reader was made available under Phase I of the DSA Programme.

A brief resum of the teachers during 1998-1999 is as follows :

Prof. Sukanta Chaudhuri addressed the Conference of the Association for Commonwealth Literature and Language Studies at Kualalumpur in Dec. 1998 as a plenary speaker. He is the general editor of the Oxford Tagore Series of English translations from the works of Rabindranath Tagore.

Prof. Malini Bhattacharya is on the editorial board of the Collected Works of

Manik Bandopadhyay, published by the West Bengal Bangla Akademi. She is also the Vice President of the Folk and Tribal Cultural Centre, W. Bengal and the Director of the School of Women's Studies of the University.

Prof. Supriya Chaudhury, Dr. Swapan Chakroborty and Dr. Ananda Lal of the department are among the other contributors to the Oxford Tagore Series.

Dr. Indrani Halder has set up Jadavpur University Society for American Studies in 1997. The Society has organized various programmes this year.

Sm. Malabika Sarkar is the Founder Director of the Centre for Studies in Romantic Literature, Calcutta, and a member of the John Bunyan Society of Canada.

Dr. Ananda Lal is the editor of the Oxford Companion to Indian Theatre, currently under preparation. He is the consultant and contributor to the Microsoft, London, Project Encarta. He addressed a seminar on Rabindranath at the University of Connecticut in Sept. 1998.

Dr. Nilanjana Gupta led a team of teachers from the department in preparing a textbook for General English for the students of all faculties of Jadavpur University. This book: English for [Macmillan, 1998] is being used not only in Jadavpur but at other Universities as well.

Dr. Abhijit Gupta is the Indian Representative for the Annual Bibliography for the History of the Printed Book and Libraries, Koninklijke Bibliotheek, Netherlands.

Prof. Sukanta Chaudhuri, Prof. Supriya Chaudhuri, Dr. Swapan Chakravorty and Dr. Amlan Dasgupta are four of the six contributors to a literary column Text and Pretext in the New Straits Times, Kuala Lumpur.

The department retains its link with the CALIBNET system, centered at the Regional Computer Centre on the University Campus and affording on-line information about the resources of Calcutta libraries as well as e-mail facilities. The university is planning centralized e-mail, internet and intra-net facilities through VSNL.

The department has begun to acquire CD-ROMS so far chiefly relating to Shakespeare and Victorian Novels to enhance the multi-media facilities being set up in terms of the DSA grant.

Building grant

The UGC has sanctioned Rs.5.00 lakhs for the department as Building Grant (non-recurring) during Phase II of the DSA Programme. It has been proposed to utilize this amount by: (a) extending the premise of the department at first floor level to provide larger premises of the departmental library and, (b) renovating part of the ground floor premise for an audio-visual room.

Books & Journals :

The department fully utilized the DSA Recurring Grant, and also made purchases from other sources including part of the grant offered under the 9th plan.

A total of 83 volumes of journals have been purchased from the DSA grant and 45 from other sources. A large number of books were received as gifts from the American Center, and 5 books were purchased with a personal donation from Sm. Arundhati Chanda, a former student.

The total number of books in the departmental library including gifts and special collections, is approximately 8,200. There are approximately 20,000 volumes in the Central Library relating to this subject. The university obtains 51 journals on the subject : 10 national and 41 international.

Refresher Courses :

1. A refresher course on Encounters ; Colonial and Post-colonial was held in the department from 9.11.98 to 1.12.98 Dr. Nilanjana Gupta as Course Director, there were 15 participants, of whom 5 were from West Bengal and the others from Bihar, Orissa, Assam and Karnataka
2. The department conducted its second Refresher Course on "Literature and Thought, 1680- 1789" between 1st and 24 Feb., 1999. 16 participants completed the course, 6 of them were from W. Bengal and the others were from Bihar, Orissa, Assam, Manipur and Meghalaya. In attempting to cover the period from the Restoration to the French Revolution, the course reviewed important developments earlier in the century and tried to relate them to the period in question. Dr. Amlan Das Gupta acted as the Co-Ordinator of the Course and Sri Pratap Pandey of the Department of English, Jamia Milia Islamia, New Delhi acted as an outstation Resource Person.

Visiting Faculty :

The department invited the following distinguished academics as DSA Visiting Fellows :
1 Dr. Aniket Jaaware of the University of Pune visited the department from Nov 1, to 24, 1998. During his stay he lectured on : Modern Critical Theory, Translation Theory, and Phenomenology. Dr. Jaaware also delivered a faculty lecture on Marathi Dalit Poetry.

2. Dr. Tejaswini Niranjana of the Centre for Studies in Culture and Society, Bangalore, visited the department from 17 - 30 Nov. 1998. She addressed the post graduate students on the History and Language of Caribbean Literature. She also held talks and discussions on Post-colonialism and the Politics of Language.

3. Prof, Sisir Kumar Das of the University of Delhi paid a visit from 3-16 Jan. 1999. He provided lectures on Translations and classical literature, especially Greek. He delivered a faculty lecture on the Translation of Shakespeare in Indian Languages and addressed several lectures to the P.G. students on the literature of classical Greece, especially Greek Tragedy and Aristotle's Poetics.

Seminars :

(1) A one-day National Seminar on '1798 : A Celebration' was held on 18 Dec 1998 with Sm.Malabika Sarkar as Convenor. Sm.Sati Chatterjee delivered the keynote address,

'1798 : Two hundred Years After'. She drew attention not only to the major cultural landmarks set up in 1798, but also the wide range of current scholarship on the Romantics, including Feminism and New Historicism.

Dr. Rimi B. Chatterjee described in her paper. The Rights and Wrongs of Women in 1798. Feminism before Wollstonecraft and After?"

(2) A two day seminar on 'The Black Experience in American Literature, Art, and Culture' was organized by the Jadavpur University Society for American Studies on 21 and 22 December, 1998. The keynote address was delivered by the Fulbright Fellow, Dr. Rena Fredan. She spoke on the complex nature of inter-ethnic relationships and the ambiguities it creates in literature. Suddhashil Sen discussed on 'Negro Sprituals and Its Roots in Slavery'.

Dr. Mukul Sengupta spoke on the " The Afro American Women's Presence in Femisist Movement". Subhasree Tagore spoke on the 'White Writers' Portrayal of the Black Experience', with reference to Eugene O' Neil.

(3) A 3 - day National Seminar on the "Aspects of the Renaissance" was held from 7- 9 January, 1999.

Prof. Sukanta Chaudhuri was the Seminar Director with Dr. Amlan Das Gupta as Joint Director.

Dr. Sharmistha Panja of Delhi University urged for 'A New Look at Sir Sidney'. Dr. Gautam Sarma of Cotton College, Guwahati talked on the endings of Shekespearean tragedies. Sm Subha Mukherjee of Gonville and Caius College, Cambridge, spoke brilliantly on 'Adultery in the Early 17th Century', and illustrated a reading of Thomas Heywood's "A Woman Killed With Kindness." Prof. Sailendra Kumar Sen (Retd. from Presidency College) presented a paper on 'Shakespeare's Use of Theatrical Imagery'.

List of publications by the teachers of the English Department during the period of April 1998 - March 1999 :

Prof. Malini Bhattaharya :

On Putul Nacher Itikatha, [History of Puppet Dancing] of Manik Bandyopadhyay, Desh, 23 January, 1999 (in Bengali).

Prof. Sukanta Chaudhuri:

Ulyssers-er Abhijan, Desh, 30 January, 1999

Dr. Sheila Lahiri Choudhury :

'Indian Response to D.H. Lawrence' in World Response to D.H., Lawrence (Tokyo, 1999)

Dr. Indrani Halder :

'The Writer as Artist, The Artist as Writer' in Special Tagore Number, West Bengal, Dec, 1998, Vol XI, No. 10-11, pp. 47-53.

Lecturers (Senior) :

Dr. (Mrs.) Aparajita Nanda, M.A., Ph.D. (J.U.)

Sri Prodosh Bhattacharya, M.A. (Cal), M.Phil., M.Litt. (Oxon.)

Lecturers :

Ms. Chandreyee Niyogi, M.A. (J.U.)

Sri Santanu Biswas, M.A., (J.N.U.)

Ms Paramita Chakravarti, M.A. (Cal), M.Phil (Oxon)

Professors:

1. Dr. Sukanta Chaudhuri

M.A., D. Phil.

Renaissance, Translation Studies, Urban Studies.

2. Dr. (Mrs) Malini Bhattacharyya

M.A., D. Phil.

Romantic Literature, 19th Century Critical Theory, Women's Studies, Culture Studies,

3. Dr. (Mrs) Supriya Chaudhuri

M.A., D. Phil.

Renaissance Studies, Critical Theory Myth and Narrative, Women's Writings.

Readers:

1. Miss Jyotsna Bhattacharyya

M.A., D. Phil.

Drama: George Bernard Shaw, Oscar Wilde, Robert Browning.

2. Dr. (Mrs) Shelia Lahiri Choudhuri

M.A., D. Phil.

D.H. Lawrence, 19th Century Fiction, 19th Century American Literature.

3. Sri Arup Kumar Rudra

M.A.,

19th and 20th Century Studies, Romantic Studies.

4. Dr. (Mrs) Indrani Haldar

M.A., D. Phil.

20th Century studies, American Literature.

5. Dr. (Sm) Shanta Datta

M.A., D. Phil.

19th and 20th Century Studies.

6. Dr. (Mrs) Malabika Sarkar

M.A., D. Phil.

Renaissance Literature (specially Milton) and Romantic Literature.

7. Dr. (Mrs) Shova Chattopadhyay

M.A., D. Phil.

19th and 20th Century English Fiction and 20th Century American Fiction.

8. Dr (Mrs) Sajni Kripalani-Mukherjee

M.A., D. Phil.

Medieval Eng. Literature, Victorian Literature, (especially fiction).

9. Dr. Swapan Kumar Chakravorty

M.A., D. Phil.

Renaissance Literature, Early Modern English Drama, Literary Theory, History of the Book.

10. Dr. Ananda Lal

M.A., D. Phil.

Drama, Translation, Tagore Studies.

11. Dr. Indira Chowdhury

M.A., D. Phil.

19th and 20th Century Studies, Cultural Studies, Women's Studies.

12. Dr. Amlan Das Gupta

M.A., D. Phil.

John Milton, Renaissance Studies, History of Christianity, Classical European Literature.

13. Dr. (Mrs) Nilanjana Gupta

M.A., D. Phil.

Modern Fiction, Popular Culture.

Film Studies :

This department is the latest addition in the Arts Faculty of Jadavpur University. The venture probably is first of its kinds in the whole of the subcontinent. The onus behind the seed of this department lies in an accidental speech delivered by the great master and doyen of Indian Film, Satyajit Ray in 1980, when he came to receive D. Litt degree from the University. The existence of Film Studies and government-run institutions like Nandan and Rupayan provided further stimuli behind the idea of Film Studies as an academic subject. The department is now looking up and the outflowing nourishment that it receives from the Film and Television Institute of India, Pune, The Satyajit Ray Film and Television Institute, Calcutta, and the National Film Archive, Pune, will go a long way to build it up as a frontier discipline of studies.

Film Studies is now receiving the serious attention as an academic discipline almost all over the world. The department proposes to respond to the richness of both artistic achievements in the medium and of the critical and theoretical literature regarding Cinema that has accumulated over the years. Both Indian Cinema and Cinema of the Third World received well-balanced attention in the curriculum. An elementary acquaintance with the process of film-making has also been made a part of the curriculum.

The department is devoted to the cause of developing an indigenous notion of Film Studies with extra emphasis on international perspective as well.

Jadavpur University is the first university in India to offer this Masters Degree programme on Film Studies, a department that happens to be the latest addition in the Faculty of Arts, J.U. In fact a regular M.A. degree in film academics as offered by J.U. is perhaps the only of its kind, in the entire South - East Asia.

Film academics is already a serious and popular branch of study all over the world, particularly in the West, keeping in tune with the academic programmes of the foreign universities. The Film Studies Department of Jadavpur University has developed a syllabus that is constituted by cinema and other forms of cultural manifestations as well, such as painting, literature and drama. Moreover, the taught programme is not confined to the limits of Indian Cinema, but has a wide range covering the history, theory and aesthetics of the European (Soviet, Italian, Scadinavian, French etc) Cinema, of the Far East (China & Japan), Hollywood Cinema, Latin American & Third World Cinema.

The syllabus also incorporates a considerably large area on Communication & Media Studies. Apart from these, an elementary acquaintance with the process of filmmaking is also made a compulsory part of the M.A. programme.

The department has already attracted the attention of eminent film & theoretical scholars like Frederic Jameson of the Duke University, U.S.A., Nicholas Dirks of the University of Michigan, U.S.A., David Hannan of Monash University, Australia; renowned film personalities such as Girish Karnad, Kumar Sahani, Shyam Benegal, U.R. Ananthamurthy, Adoor Gopalakrishnan, Suresh Chhabria, Vivan Sundaram, N. V. K. Murthy and others.

The members of the Faculty have remarkable contributions to various cine-journals, magazines and other publications concerning cinema and allied topics. They have attended and participated in Seminars, and Conferences on Cinema and Television in India and abroad. A Development journal has been published during the current financial year. A national seminar entitled, "Reading Indian Cinema : Contemporary Perspectives" was organised

from November 26-28, 1998, which was attended by film scholars and research fellows from all over the country .

Some of them participated in the Seminars by reading out papers on the current projects they are working at.

The National Seminar not only reflected the issues and topics that are under contemporary critical concern among the cine-scholars of the country, but has also been able to build up a new sensitivity, a new awareness and a fresh interest in cinema among the buffs, the students and teachers of Film Studies as well that of the other departments of the University as well.

The courses of study offered and the strength of students are listed below :

Course	Students per year
1.M.A.	30
2. Phd.	---

The department of Film Studies does not conduct undergraduate programme on the honours level but offers it as a subsidiary subject to the students of B.A. (Hons).

History:

The department that started its academic career with just one student in the undergraduate level, on the very first year of its coming into existence in 1956, has now developed into a prestigious faculty with excellent achievements in the fields of teaching and research.

The department can boast of a rich legacy of eminent faculty members such as Prof Nemai Sadhan Bose and Prof. Sushobhan Sarkar. Of the faculty members, Prof, Nemai Sadhan Bose and Prof.Pratul Chandra Gupta were to become the Vice-Chancellors (respectively) of Viswa Bharati, Santiniketan.

The courses offered by the department and the total strength of students per year is as follows :

Courses offered	Total no. of students per year
1. B.A.(Hons)	45
2. M.A.(day)	70
3. M.A. (evening)	60
4. M.Phil	15
5. Phd	

At present following specializations are offered in the P.G.level :

Philosophy of History, Modern European Political Thought and nine special paper groups comprising two papers each from : Ancient Indian History, Medieval Indian History, Social History of Modern India, Economic History of Modern India, India and Her Neighbours ; History of the U.S.A., Social and Political Movements in 19th and 20th Century Europe; Social History of Science & Technology, and African History.

Books and papers by the teachers of the department :

C. Palit, Nana Subhas Chandra, (Various Activities of Subhas Chandra), Vision, Calcutta, March 1998.

C. Palit : 'Dr. Mahendra Lal Sircar o Ganamukhi Vigyan' in Aparajita Basu (ed.) : Vigyan o Prajukti Vigyaner Itihas, Bangiya Vigyan Parishad, March, 1998.

C. Palit : 'Jatiya Anaikyer Aitihisik Patabhumika', in Swadhinata Andolan O Swadhinottar

Bharat, Jatiya Granthagar Karmi Samiti, Sept. 1998.

C. Palit : 'Asiar Pariprekshite Subhas Chandra', in Deshanayak Subhaschandra, Vol. I. and Swadhinatar Udgata Bagmi Subhaschandra, Ibid, Vol II, National Council of Education, Bengal, Calcutta, July and January, 1998-99.

Papiya Chakravarty, " World-View of a Religious Liberal : A Case Study of Rev. J. T. Sunderland, Quarterly Review of Historical Studies, 1998.

Papiya Chakravarty, "From Consensus to Confrontation : Religion and Identity in the 19th Century", The Quaterly Review of Historical Studies, March, 1998.

Nupur, Dasgupta, "Of Metals and Men : Looking into the Handicraft Tradition of the Chalcolithic Culture in Central India." The Journal of the Asiatic Society, Cal 1998.

Nupur Dasgupta : "The Role of Ethics in the Development of Political Authority in Early India, " Journal of History, Jadavpur University, 1997-1998.

Nupur Dasgupta : "Evolution of Early Farming Cultures in the Indian Subcontinent," The Journal of the Asiatic Society (in press).

Amit Bhattacharya, : Science, Technology, Medicine & Environment in India: Historical Perspective, Bibhasa, Calcutta, August, 1998.

Amit Bhattacharya, : 'Samajtantrik Chin, Mahan Sarbohara Sanskritik Biplab O Mao Xe Dong : Ekti Alochona' in Bartaman Lokayatck, 1999.

Shukla Das : "Concept of Divinity of the Monarch Under the Guptas : Review," Kalyan Bharati, Vol. 2, March 1999.

Shukla Das : "Forest Policy of the Mauryas: An Ecological Perspective", The Quaterly Review of Historical Studies, March, 1999.

Shukla Das : "Some Highlights of the Caraka Samhita : A Reappraisal", Kalyan Bharati, May 1999, Vol. 3.

Mahua Sarkar, : "Regionalism and Environment, " accepted for publication, Indian History Congress, Patiala, Dec. 1998.

Mahua Sarkar : "Poaching and the Preservation Laws in India, In the Context of Environment" (in Bengali) in the Annual Conference of Paschimbanga Itihas Samsad, 24-26 Jan; 1999, accepted for publication.

Kunal Chattopadhyay, : "Women in Asiatic Drama", Journal of History, Jadavpur University, 1998.

Jayanta Sengupta : "Agrarian Movements and Gandhian Leadership : Aspects of Congress Politics in Orissa in the 1920s & 30s". R.C. Misra et al, eds. : Politics & Society in Modern Orissa: Essays in Honour of Professor B.C. Roy (New Delhi: Starting Publishers, forthcoming in 1999).

Jayanta Sengupta : "Liberalisation, Development & Democracy. Identity Politics in Orissa in the 1990s", 'in Niraja Gopal Jayal and Sudha Pai(eds.) : The State, Market, and the Politics of Identity: Challenges to Indian Democracy in the 1990s. Sage, New Delhi, 1999.

Jayanta Sengupta ; "Princes, Prajamandals and Partition: Congress Politics and the Rajas of Orissa, 1937-1949, in Indian Historical Review, March, 1999.

Jayanta Sengupta: "Nation on a Platter? Class, Culture, and Cuisine in Colonial Bengal", in Jahar Sen et al. (eds.): Essays in Honour of Professor Amalesh Tripathi, K.P.Bagchi, Calcutta, 1999.

Directory of Professors & Readers as on 01.01.1999

NAME	QUALIFICATIONS	FIELD OF SPECIALISATION
Professors:		
1. Dr. Chittabrata Palit	M.A., Ph. D.	(a) Modern India (Bengali Social Cultural Economic), (b) History of Science & Technology in India, (c) U.S.A., (d) South-East Asia.
2. Dr. Pranjal Kumar Bhattacharya	M.A., Ph. D.	Modern India (Diplomatic and Indian Freedom Movemrnt, (2) British History 16th-17th Centuries, (3) Industrial Revolution .
3. Dr. Debaprasad Chowdhuri,	M.A., Ph.D.	(a) Frontier History, (b) Philosophy of History.
Readers:		
1. Dr. (Mrs) Papiya Chakravorty,	M.A., Ph. D.	Socio-Political & Socio-Cultural History of Modern India/Bengal.
2. Sri Bimal Kanti Ghosh	M.A.	Modern Indian History.
3. Dr. (Mrs) Anuradha Chanda	M.A., Ph. D.	19th and 20th Century Indian History.
4. Dr. Amit Bhattacharyya	M.A., Ph. D.	Modern India.
5. Dr. (Miss) Sukla Das.	M.A., Ph. D.	Ancient India.
6. Dr. (Mrs) Mahua Sarkar	M.A., Ph. D.	Modern India/Bengal Socio-Cultural History/ Judicial Hist./Law and Environment.
7. Dr. Kunal Chattopadhyay	M.A., Ph. D.	Europe with special reference to Russia.
8. Dr. Ranjan Chakraborty	M.A., Ph. D.	Social and Economic History of Modern India..

International Relations:

J.U.'s department of International Relations established in 1956 is reputed for its outstanding excellence in teaching and research-promotion activities in the diverse aspects of international relations and politics.

Courses:

B.A.Hons (Political Science)

M.A. (International Relations)

M.Phil (Do)

Special papers offered as part of the M.A. course include South Asia, South-East Asia, West Asia, Central Asia, Asia Pacific and North America, West Europe and Russia. Three European languages: French, German and Russian are taught as part of the M.A. course. The U.G.C. has accorded DSA status to the department in 1986-87 which has recently been renewed for a second term.

Student Strength / Course	Annual intake
U.G.	50
P.G.	68
M.Phil	10
P.h.d.	--

Total : 128

In the 9th plan the department has received from the U.G.C. a grant of Rs. 7,68, 000 lakhs under the following heads :

- (1) Visiting Faculties --80,000
- (2) Field work-- 1,50,000
- (3) Seminar etc.--1,90,000
- (4) Teaching etc. 60,000
- (5) Contingency--40,000
- (6) Adv. Com 50,000
- (7) Transcription -- 60,000
- (8) Publication--25,000
- (9) N/R and other items - 13,000
- (10) Equipment, Books etc.--100,000

Teaching Staff:

Professor --	5
Reader --	8
Sr. Lecturers --	3
Lecturer --	9

Total : 25

Schools and Centres under the department :

- (1) School of International Relations and Strategic Studies,
- (2) Centre for Refugee Studies

Seminars / Conferences organised at the Dept. of International Relations.

1. A National Seminar : On ' India After Pokhran II : Towards A New Milleninum', on Feb, 25-27, 1999, under the auspices of DSA programme.
2. A Seminar on 'India at the End of the 20th Century :Retrospect and Prospect', on March 19-20, 1999.

Books Published:

1. Sanjukta Banerjee Bhattacharyya and Rochana Das, (eds):Perspectives on India's North East (Bibhasa, 1998).
2. Dr. Debi Chatterjee: 'Ideas and Movements Against Caste in India '(Pintograph Publisher, Calcutta, August 1998).
3. Prof. Arun Kr. Banerjee (ed). 'Security Issues in South Asia; Domestic and External Sources of Threats to Security (Minarva, Cal,1998).
4. Images and Obsessions : "India and Pakistan" in Surjit Mansingh (ed) : Indian and Chinese Foreign Policies in a Comparative Perspective (Radiant, for Nehru Memorial Museum and Library, New Delhi, 1998).

Articles published

- Dr. Sanjukta Bhattacharya: (1) 'Regional Security, Threat, Perceptions and Subnationalism : India, Sri Lanka and the Tamil Ethnic Issue' in Arun Kr. Banerjee, (ed.) Security Issues in South Asia : Domestic and External Sources of Threats to Security (Minerva, 1998).
- Dr. Debi Chatterjee: (1) " Democracy in India, Some Reflections ("Bharatiya Sanjukta Chintan"), Journal of the Indian Academy of Social Science, July-December, 1998.
- Sri Shibashis Chatterjee: (1) "The State in International Relations Reconsidered"International Studies (J.N.U. and Sage, New Delhi), Vol, 35, No, 3, July- Sept 1998, pp 269-294.
- (ii) "The Third World Economic Insecurity in the Post-Cold -War Era", Asian Studies (Netaji Institute For Asian Studies, Calcutta, Vol, XVI, No. 2, July- December 1998, pp 95-121.
- (iii) "International Relations Theory : In Search of Alternative?" Jadavpur Journal of International Relations, Vol III, No. 1,1997 (Published 1998), pp 49-76.
- (iv) "Chinese Threat : Need for an Urgent Debate", Mainsteam (New Delhi), Vol. 2 May, 1998, pp27-29.

Prof. Suchita Ghosh:

- 1 Thailand's Foreign Policy Towards Vietnam and Cambodia and ASEAN Reactions : An Example for SAARC".

Chapter 8, part II, book entitled ASEAN and South Asia, A Development Experience edited by Baladas Ghoshal, (Sterling, New Delhi 1998).

2. "Change and Persistence in Bangladesh-China Relations (1971-1996)", Administration Communication and Society, Vol 2, January - June 1998.

Anindya Jyoti Majumder.

'অন্তর্ প্রতিযোগিতা, ও অন্তর্সম্বরণ ও নিরস্ত্রীকরণ' রাধারমণ চক্রবর্তী সম্পাদিত 'সমকালীন আন্তর্জাতিক সম্পর্ক' (পশ্চিমবঙ্গ রাজ্য পুস্তক পর্ষৎ, ১৯৯৯)

Prof Arun Kr, Banerjee,

'সমকালীন পশ্চিম এশিয়া: আঞ্চলিক সমস্যা, যুদ্ধ ও শান্তির প্রয়াস' রাধারমণ চক্রবর্তী সম্পাদিত, 'সমকালীন আন্তর্জাতিক সম্পর্ক', (পশ্চিমবঙ্গ রাজ্য পুস্তক পর্ষৎ, ১৯৯৯)

2. 'Images and Obsessions : India and Pakistan' in Surjit Mansingh, India and Chinese Foreign Policies in Comparative Perspective Radiant, (for Nehru Memorial Museum and Library), New Delhi 1998.

International Conference/ Workshop:

1. Sri Anindya Jyoti Majumdar

Attended International Workshop on Defence, Technology and Co-operative Security in South Asia held in Shanghai, China in September 1998.

2. O.P.Misra

Presented a paper on 'Protecting the Displaced : International Response and Institutional Arrangement' at the International Conference on IDPs, organised by Refugees and Migratory Movement Research Unit, Dhaka, Bangladesh.

3 Presented a paper on ' Evolution of a Restrictive Regime : The US Refugee Policy in the 1990s, at a Conference organised by Bangladesh Association for American Studies and USIS, Dhaka, March 12-16, 1999.

4. Presented a paper on 'Lhot Sampa Refugees :Issues in Forced Migration & Repatriation' at a Seminar on Indo-Nepal Ties, Centre for Nepal Studies, Benaras Hindu University, March 26-27, 1999.

3. Prof. Arun Kr.Banerjee

Visited Israel for a week in May, 1998 under the auspices of the Indo-Israel Cultural Exchange Programme and interacted with academics, officials, members of Parliament and journalists, besides participating in an International Seminar.

Dr. Tridib Chakraborty

1. Paper entitled ' India and ASEAN: A Historical Overview', presented at the National Seminar on " Fifty Years of India's Relations with South and South East Asia," held on 23-24 February 1999 in the Department of South and South East Asian Studies, Calcutta University.

Dr.Sumita Sen

1. Presented a paper titled 'Human Rights and the Responsibility of the State', at the Indian Social Science Congress held in Gandhigram Rural Institute, Tamilnadu, in March 1999.

Prof. Arun Kumar Banerjee

1. Delivered the keynote address at a National Seminar on 'Place and Co-operative Security in South Asia', organised by Pondicherry University, on 5-7 Feb, 1999.

2. Presented a paper on "Management of Water Resource in South Asia", at a Seminar on "Regional Co-operation in South Asia and India" ,held at the India International Centre, New Delhi, December 10-12, 1999.

Dr. Purusottam Bhattacharya

Joint Director, SIRSS,J.U.

Articles in Current Affairs Journals:

"The Nuclear Policy of the Vajpayee Government : A Journey into Nowhere", Mainstream (New Delhi), May, 1998.

"West Europe : Quest for Integration", in Radharaman Chakrabarti, ed., Contemporary International Relations.(West Bengal State Book Board, January 1999) (In Bengali).

Seminars Attended :

1. Presented paper on "Enlargement of the European Union : Implications for India ", at an international conference on "European Studies in Independent India", organised by Goa University, on 12-14 March, 1999.

2. Presented a paper on "European Union and South Asia" at an international conference on "Europe and South Asia : 500 Years", organised by the Institute of Social Science (New Delhi) at Calicut & Cochin, 16-20 May, 1999.

3. Presented a paper on "France and India : A Perspective on Their Foreign Policy Perceptions and Bi-lateral Relations", at an International Conference on "France and the Developing World", organised by the School of International Studies, Pondicherry University in October, 1998.

5. Presented a paper on "South Asian Security Issues : The European Response" at a national seminar organised by Pondicherry University on 5-7 February, 1999.

6. Presented a paper on "European Union and India : Evolution of a Partnership in Economic Co-operation in the Indian Ocean Region" at a national seminar on "Regional Co-operation in the India Ocean Region : Trends and Perspectives " organised by the Centre for Area Studies, Osmania University, on 11-13 February, 1999.

S. No.	NAME	QUALIFICATIONS	FIELD OF SPECIALISATION
(1)Professor:			
1.	Dr. Arun Kumar Banerjee	M.A.Ph.D.	Strategic Studies, Indian Foreign Policy and West Asia, South Asia.
2.	Dr. Jyotirmoy Banerjee	M.A.Ph.D.	Strategic Studies, German Super Power Relations, Indian Foreign Policy.
3.	Dr. Gautam Kumar Basu	M.A.Ph.D.	International Political Economy,Development Studies with Emphasis on Privatisation and Liberlisation, Enviromental Diplomacy.
4.	Dr. (Miss) Suchita Ghosh	M.A.Ph.D.	South and South-East Asia
5.	Dr. Malabika Banerjee	M.A.Ph.D.	South Asia.

(ii) Readers :

NAME	QUALIFICATIONS	FIELD OF SPECIALISATION
1. Dr (Mrs) Debi Chatterjee	M.A.Ph.D.	Indian Political Thought , Public Administration, South-Africa.
2. Dr (Mrs) Purabi Roy	M.A.Ph.D.	Russian Language.
3. Dr Rabindra Sen	M.A.	South - East Asia.
4. Dr. Purushottam Bhattacharyya	B. Sc. Econ (London) M. Phil Ph. D.	Europe, Regional Integration.
5. Dr. Om Prakash Misra	M.A.Ph.D.	Asia Pacific, United Nations Refugee Studies, Regional Integration.
6. Dr.(Mrs) Anjali Ghosh	M.A.Ph.D.	South-East Asia- Pacific, State Politics
7. Dr (Mrs) Sucheta Ghosh	M.A.Ph.D.	South Asia.
8. Dr (Mrs) Sanjukta Bhattacharyya	M.A.Ph.D.	United States, Third World.
9. (Mrs) Anuradha Mukherjee	M.A.Ph.D.	French Language.

Library and Information Science :

This department was inducted to the Arts Faculty of Jadavpur University in the year 1964 and till 1984

it conducted only B. Lib. and Inf. Science Course of one year duration From 1985 onwards, the department started a full time Masters Degree course and B. Lib & Inf. Science is offered as an evening course of 1½ years duration.

Course-wise student intake annually :

Course	Annual intake
U.G.	55
P.G.	15
Total	70

Teaching staff after P.P. and M.P.

Professor	1
Reader	1
Sr. Lecturer	
Lecturer	5
Total:	7

The department conducted two UGC sponsored Refresher Courses on "Modernisation of Library and Information Service" from March 26 to April 24 and Nov. on 28, 1998.

The department jointly organised with the Indian Association of Special Libraries and Informations Centres (IASLIC) and the Bengal Library Association, a one day Seminar on "50 Years of Library & Information Services in West Bengal" on August 9, 1998, to commemorate the birth anniversary of S.R. Ranganathan, the doyen of Library Movement and father of Library and Information Science in India.

Professor:

Name:	Qualification	Field of Specialisation
1. Sri Amitabha Chatterjee,	B. A. Dip. Lib Sc. (B.H.U.) M.Lib. Sc.(Delhi) (Head of the Department)	Knowledge Organisation /Information Retrieval

Lecturer (Senior):

Lecturer :
Sri Krishnapada Mazumdar, M. Sc. Lib.& Inf. Sc(J.U.) LL.B (Cal)
Sri Sunil Kumar Chatterjee, M. Sc. Lib.& Inf. Sc(B.U.) A.I.S.(INSDOC)
Mrs. Chaitali Dutta, B.Sc.M.Lib.Sc.(Cal)
Sri Udayan Bhattacharya, B.Sc.(Cal), M. Lib & Inf. Sc.(J.U.)

Philosophy:

The department of Philosophy, J.U. was established. in 1964. The renowned Prof Gopinath Bhattacharya had been the first Head of the Department of Philosophy and under his guidance, the best scholars of the country were recruited as the faculty members of the department . As a result, from the very beginning of its existence, this department was already situated at the height of flourishing excellence.

The department introduced a strikingly innovative syllabus, unique of its kind, with an equal emphasis on the Indian and Western branches of Philosophy. Such a syllabus along with the adoption of new methods of teaching, marked a wide departure from the practices of the existing universities other than the J.U.

Recognising formally the outstanding achievements of the Department of Philosophy, the U.G.C. awarded it with the financial assistance of the SAP in 1977; and the department was also identified as the Centre of Advanced Study in Philosophy from April, 1985 to December, 1997.

Thrust Areas :

1. Theory of Knowledge and Reality (Indian and Western)
- 2 Logic and Language (Indian & Western)
- 3 Ethics, Religion, Social & political Philosophy (Indian & Western)
4. Philosophy of Mind(Indian & Western)

New Thrust Area :

Knowledge, Reality and Value : An Interpretative Approach

Courses of study offered and student intake per year

1. B.A.(Hons) 45
2. M.A. 75 (day)
50 (Eve.)
3. M. Phil 15
4. Ph.D.

Specialization in the P.G. Level :

1. Social and Political Philosophy
- 2 Indian and Western Logic
- 3 Vedanta

In addition to the above two more specializations have been added :

1. Comparative Religion
2. Philosophy of Cognition.

Every year at the M. Phil level new optional courses are offered from the contemporary perspectives in some of the following areas :

1. Hermeneutics - East and West
2. Freud and Religion
3. Literature : Essentialism and its Reaction
4. Some Facets of Rationality
5. Some problems of Quantification
6. Nature of Man and Mind in some Psychotherapeutic Approaches
- 7 Applied Ethics
- 8 Buddhist Theory of Inference
- 9 Comparative Religion
10. Conceptual Schemes
- 11 From Form to Difference
- 12 Definition of Knowledge and the Gettier Problem
- 13 Some Issues Concerning *Sabda Pramana*
- 14 Realism : Popper, Peirce and Putnam

15 Cognitive Science and Philosophy of Artificial Intelligence

16 The Principle of university of Morality

17 Paradoxes and Problems of Identity

Total money allocated for the department during the 9th Plan period for development and extension of curricula etc. ; Rs. 53,44,914/

Development grant received from the university in the current year is as follows:

Periodicals and Journals : Rs. 3,46,470

Educational Tour : Rs. 23,760

Research Expenses : Rs. 13,870

Contingency : Rs. 34,842

Seminar : Rs. 5,028

Publication of Journals : Rs. 25,745

National Scholarship : Rs. 21,863

The department has undertaken a considerably new project of counselling. With the help of eminent researchers in this area, the department has opened Counselling Cells for the students to discuss their problems in the form of psychological counselling and career counselling. If this project gains enough popularity among the student community of the university, it would certainly be of a great benefit to those students who are enmeshed in the malignance of the enervating tensions that prevail in almost all the spheres of contemporary life. The department further encourages discussions and seminars on such topics as the growing restlessness, frustration and disbalance in human life against the given physical & mental environment of stress & strain.

At present a project has been undertaken by Dr. M.N.Mitra on environmental issues. A student has been registered under the guidance of Dr. S. Moitra for Phd. Programme on the topic of Eco- Feminism.

Potentiality of Industrial Collaboration:

The resources of the department can be utilized for human resource development. Philosophies of Science, Technology, and Management Sciences can also be developed through fruitful co-operation between the department and industry.

Resource Generation:

The department is involved in human resource training and extension activities but on a non-remunerative capacity. The department has generated for the university an amount of Rs. 60,000.00 as royalty from publications in the last five years.

Emerging / Hi-Tech/ Priority Area Generated :

The University Grants Commission has awarded a programme in the innovative interdisciplinary area of Cognitive Science jointly with the Centre for Knowledge-based Systems, the School of Education Technology and the Department of Philosophy as the nodal body.

National / Nodal Character of the Department:

The department has been working as an All India Centre since 1977 and is sharing all the responsibilities within the ambit of CAS stipulations. The members of the Faculty have frequently been invited to act as Resources Persons in Seminars, Symposia, Conferences and Refresher Courses both within the country and abroad. The number of teachers who have participated in International Conference is 7 and in National Level Conferences is 16 - during the current phase. Five teachers have visited foreign Universities to participate as Resource Persons.

(1) Professors:

Name	Qualification	Field of Specialisation
1. Sri Prodyot Kr, Mukhopadhyay	M.A	Logic, Indian Philosophy (Nyaya)
2. Dr. Tushar Kanti Sarkar	M.A., P.R.S., Ph.D. (Cal) Ph. D. (Waterloo)	Philosophy of Science, Philosophical Logic, Jainism.
3. Sri Hironmoy Banerjee	M.A.	Social philosophy, Philosophy of language and Philosophy of Mind, Philosophy of Logic and language
4. Dr, Kalyan Kumar Sengupta	M.A, D.Phil.	Philosophy of Language, Philosophy of Mind & Aesthetics, Phenomenology of Existentialism.
5. Dr Sukharanjan Saha	M.A, D.Phil. Tarkatirtha	Indian Philosophy.
6. Dr. Tapan Kumar Chakrabarti	M.A, D.Phil.	Indian Philosophy.
(ii) Readers		
1 Dr (Mrs) Krishna Roy	M.A, Ph.D	Social & Political Philosophy, Phenomenology & Existentialism
2. Mrs. Sutapa Saha	M.A,	Logic, Philosophy of language, Epistemology.
3. Dr.(Mrs) Jolly Ghosh	M.A, Ph.D	Ethics & Epistemology
4. Dr Tirthanath Bandyopadhyay	M.A, Ph.D	Ethics, Philosophy of Action
5. Dr (Miss) Shefali Moitra	M.A, Ph.D	Field of Specialisation > Philosophy of lan- guage, Ethics and Feminist Studies
6. Mrs. Srilekha Datta,	M.A,	Indian Philosophy
7. Dr (Mrs) Chhanda Gupta	M.A, D.Phil. P.R..S.	Philosophy of Science, Natural & Social Meta- physics
8. Dr (Mrs) Amita Chatterjee	M.A, D.Phil.	Logic (Indian and Western) Analytical Philoso- phy of Mind and Cognitive Science.
9. Dr Madhabendra Nath Mitra	M.A, D.Phil. (Rochester)	Philosophy of Language, Logic, Indian and Western Ethical and Psychological issues
10. Dr (Mrs) Indrani Sanyal	M.A, D.Phil.	Logic, Ontology, Philosophy of Language
11. Dr (Mrs) Ratna Datta Sarma	M.A, D.Phil.	Indian Philosophy
12. Dr (Mrs) Madhumita Chattopadhyay	M.A, M.Phil.	Logic, (Western Buddhist Logic)

Physical Education:

Jadavpur University initially started the B. Ed. course (Physical Education) through Jadavpur Vidyapith College of Education in order to prepare trained teachers of Physical Education for Secondary schools of W. Bengal. Threafter in 1990, the university took over the course and started a full fledged Department in the year 1990. In 1994 the university started offering P.G. course, leading M.A. (Phy Ed.), initially for the professionals working in the field of Physical Education and sports.

Course of study offered by the department:

Bachelor of Edn. (Phy Edn.) :	6
Master of Edn. (Phy Ed.) :	30

Sanskrit :

This department came into existence in August, 1950 with Prof. Ramaranjan Mukherjee as the Head of the Department. During his tenure, the department claimed reputation for teaching and research excellence. Prof. Mukherjee later jointed the Burdwan University as its Vice-Chancellor.

The departement was accorded with the distinction of SAP by UGC . It has been chosen to offer Refresher Courses with a further proposal to open a Centre for Indology.

The department offers the following courses and the total student strength per year is given below:

Course	Annual student intake
U.G.	40
P.G.	60
M.Phil.	15
Total:	115
Teaching staff after P.P.& M.P.s	
Professor	2
Reader	7
Sr. Lecturer	3
Lecturer	2
Total:	14

The UGC Refresher Course was conducted by the Department of Sanskrit from 26.12.97 to 15.1.98. The emphasis was on the area of "Vedic Studies and Paninian System of Sanskrit".

The Course Co-ordinators were Dr. Nandita Banerjee and Dr. Bijoya Goswami. About 50 teachers from various colleges and universities of West Bengal and other parts of the country participated.

Prof. B. P. Bhattachaya delivered lecture on 'Vedic Tradition : Symbol of Indianness' at a National Seminar on " Indian Tradition of Vedic Knowledge and Indian Freedom Struggle", organised by Sitaramdas Onkarnath Sanskrita Siksha Samsad from Jan 11-12, 1998.

Professors:

1. Dr. Bhabani Prasad Bhattacharyya, M.A. (Cal), Ph. D. (J.U.) Kavya Vedatirtha (Head of the Department)
2. Dr. Rabisankar Banerjee, M. A. (Cal), Ph. D. (J.U.)

Readers:

3. Dr. (Mrs) Nandita Banerjee, M.A.Ph.D. (J.U.)
4. Dr. Himansu Narayan Chakravorty, M.A.Ph.D. (J.U.)
5. Dr. Manabendu Banerjee, M.A (Cal), Ph.D. (J.U.)
6. Dr. (Mrs) Bijoya Goswami, M.A., Ph.D. (J.U.)
7. Dr. (Mrs) Sarbani Ganguly, M.A. (Cal), M. Phil., Ph.D. (J.U.)
8. Sri Avijit Ghosh, M.A. (Poona)
9. Dr. Prodyot Kumar Datta, M.A., Ph.D. (Cal)

Lecturers : (Senior)

- Mrs. Piyali Praharaj, M.A., M. Phil. (Cal)
 Mrs. Durgavati Banerjee, Kabya-Vykarantirtha
 Dr. (Mrs) Lalita Sengupta, M.A. (Cal), Ph. D. (J.U.)

Lecturers :

- Dr. (Mrs.) Devarchana Sarkar, M.A., Ph. D. (Cal).

Part-time Lecturers :

- Dr. (Mrs.) Santi Banerjee, M.A., Ph. D. (Cal).
 Dr. (Mrs.) Krishna Bhattacharya, M.A., Ph. D. (Cal).

SPECIALISATION :

1. Vedic Studies.
2. Literature and Poetics.
3. Indian Philosophy, Specially Nyaya and Buddhist Logic
4. Vedanta System of Philosophy
5. Epigraphy / Literature & Vastu Sastra
6. Literary Criticism and Indian Linguistics.
7. Indian Philosophy / Literary Criticism
8. Veda & Linguistics
9. Veda and Vyakarana (Panini)

ARCHITECTURE :

Since its beginning as a constituent department in the Engineering Faculty in the year 1965, only 'Bachelor of Architecture' was the course that was offered for teaching. The Master of Architecture course in "Housing & Urban Design" had its start from the year 1981.

Courses of study offered and the capacity of the annual intake of students are as follows:

B.Arch. : 7

M.Arch. : 8

Ph.D. (Engg.) : Specialization offered

B.Arch. Building Design — Construction

M.Arch. Housing & Urban Design

Ongoing project : "Integrated Planning for Rural Development"

Principal Investigator : Prof. M.D. Chatterjee

Funding authority : Ministry of Rural Areas & Employment, G.O.I.

Value: Rs. 3.83 lakhs

Title of the Project : "CAADP", P.I. : Sri Somen Chakraborty,

Sanctioning Authority—M.H.R.D.

Value: Rs. 8,00,000

Sri Chakraborty of the department published "Is Vastu Really a Science", Indian Institution of Architects, Sept. 1998. Sri S.Chakraborty participated in International Seminar on "Lightning in Bangladesh", organised by the Institution of Engineers, 29-31, January, 1999. Prof. S.K. Rakshit, Sri S.Chakraborty, Sri T.K.Bhattacharyya and Prof. S.Mukherjee participated in the National Workshop & Seminar on Heritage Buildings organised by the Indian Institute of Architects, West Bengal Chapter, during 26-28 Feb., 1998.

Consultancy Services Available :

Consultancy services for building planning, design, estimation, repair & maintenance are available in the Department of Architecture.

Teachers & their Specialisation :**Professors :**

1. Prof. Tarun Kumar Chattopadhyay, B.Arch., (Cal) Dip. T.P. (Birmingham), M.R.T.P. (Lond), A.I.T.P. (India), A.I.I.A.
2. Prof. Monidip Chatterjee, B.Arch. (Cal), M.S., Planning (Wisconsin), A.I.I.A., F.I.T. P. (India), M.A.P.A. (U.S.A.)
3. Prof. Kshitindra Nath Pathak, B.Arch, (Cal), M.Arch. (Roorkee), A.I.I.A.
4. Prof. Samaresh Mukherji, B.Arch, (Cal), D.R.T.P. (Cal), M.Arch. (J.U.), F.I.I.A., F.I.S.E.
5. Prof. Samir Kumar Rakshit, B.Sc., B.Arch, (Cal), M.Arch. (J.U.), Cert. on Housing (N.B.O., New Delhi), A.R.C. (Rome)
6. Prof. Alope Nath Das, B.Arch, (Cal), M.R.T.P. (Cal)

Readers :

7. Sri Debaprasad Sarkar, B.Arch, (Cal), M.Arch. (I.I.T.), A.I.I.A., F.I.V., D. R.T. P. (Cal), Cert. of Cons. Management (I.I.T.)
8. Sri Somen Chakraborty, B.Arch, (Cal), D.R.T.P. (Cal), M.Arch. (J.U.), A.I.I.A. (India), M.I.E. (India) (Head of the Department)

SEX :	SPECIALISATION
1. Male	Town Planning/Housing/Housing Urban Planning/Architecture.
2. Male	Urban and Regional Planning and Development
3. Male	Computer Aided Design in Architecture/Landscape Architecture/Construction
4. Male	Forms in Architecture/Lowcost Permanent Structures & Housing
5. Male	Housing Sociology/Architectural Conservation
6. Male	Pure Architecture
7. Male	Building Constructional Techniques/Estimate/Quantity Survey/Valuation
8. Male	Computer Application in Architecture/Housing/Statistical Survey and Analysis of Date.

CIVIL ENGINEERING

Since its establishment in 1956, the department has earned a high degree of excellence and reputation, both at the national and international levels. It can boast of the fact that more than 10,000 graduates of this department are successfully situated at positions of responsibility, honour and respectability all over the world. Apart from teaching and research, the department organizes seminars, symposia, short-term course etc. and provides consultancy and testing services to the industry in different projects of national importance. The course of study offered by the department and annual intake of students :

Course	Annual intake
1. B.C.E. (U.G. Course)	57
2. M.C.E. (P.G. Course)	31

Total:	88

Specialization Offered in U.G. Level :

1. Structural Dynamics 2. Bridge Engineering, 3. Advanced Soil Engineering, 4. Advanced Foundation Engineering, 5. Remote Sensing, 6. Solid and Gaseous Management, 7. Water Supply Engineering, 8. Advanced Transportation Engineering.

Specialization Offered in P.G. Level :

1. Structural Engineering. 2. Geotechnical Engineering. 3. Environmental Engineering. During the 9th plan period the department received Rs. 4.50 lakhs for extension, development, opening of new curricula including interdisciplinary courses - at present 12 projects/schemes are running in the department.

Name of the Project	Principal Investigator	Funding Authority	Value (Rs.)
1. Development of HPC suitable for nuclear industry.	Prof. B.Sengupta	BARC	12 Lakhs
2. Impact resistance, permeability, temperature effect and ductility of FRC.	Prof.S.N.Ghosh	AICTE	7.5 Lakhs
3. Piles under cyclic load	Prof. R.D. Purkayastha	AICTE	5 Lakhs
4. Wind effect on structures	Prof. B.Sengupta	AICTE	9 Lakhs
5. Underground Construction in soft ground.	Prof. N.Som	Ministry of Water Resources,G.O.I.	11.52 Lakhs
6. Pavement design and evaluation for rural urban roads	Prof. N.Som	AICTE	9 Lakhs

7. Improvement of strength and ductility of recycled aggregate concrete	Prof. S.Mondal	AICTE	5 Lakhs
8. Conservation and harvesting of rain water for management of drinking water scarcity in parts of sub-Himalayan, West Bengal.	Prof. R.K. Dasgupta	Ministry of Rural Development, Govt. of India	4.7 Lakh
9. Bank erosion of some rivers of West Bengal and possible remedial measures	Prof. S.C. Das	DST	4.8 Lakhs
10. Study of water resolutilisation of flood damage assessment of Mahanada Basin in India by remote sensing.	Prof. B.N. Ghosh	Ministry of Water Resources,G.O.I.	12.62 Lakhs
11. Ground Improvement Project.	Prof. N.Som.	MHRD	10 Lakhs
12. Special Assistance Programme	Prof. N.Som	UGC	50 Lakhs

During the year there were about 30 publications of papers/articles in reputed journals.

The teachers of the department participated in :

(i) Sixth US National Conference on Earthquake Engineering, Seattle, Washington, USA, 1998, attended by Dr. D.Chakraborty.

(ii) National Seminar on Performance Enhancement of Concrete by Flyash, Slag, Silica fume and Chemical Admixture at New Delhi, 1998 attended by Dr. I.Roy.

(iii) National Symposium on "Recent Trends in Geophysical Exploration" at Chennai, 1998, attended by Dr. B.Basu.

(iv) National Seminar on "Emerging Areas of Applicable Mathematics" at Calcutta, 1998, attended by Dr. B.Basu.

(v) Indian Geotechnical Conference, 1998 at New Delhi, attended by Dr. N.Som, Dr. R.D. Purkayastha, Dr. S.P.Mukherjee, Sri R.B. Sahu.

Professors :

- Dr. Bholanath Ghosh, B.E.(Cal), M.C.E. (J.U.), Ph.D. (J.U.), MIE., MIS., M.Soc. C.E.(France)
- Dr. Subhas Chandra Das, B.Tech. Hons. (I.I.T.), M.C.E., Ph.D. (J.U.), F.I.E. (India), M.I.G.S.
- Dr. Bratish Sen Gupta, B.E.(Cal), M.C.E., Ph.D. (J.U.), F.I.E.(India), M.I.S.E.T., M.E.A.R.O.P.H., M.I.C.I., M.I.W.E.
- Dr. Nitindranath Som, B.C.E. (J.U.), D.I.C., Ph.D. (Lond), F.I.E. (India), M.I.G.S., M.I.S.S.M.E.E. (Lond) (Head of the Dept.)
- Sri Kalyanmoy Ghosh, B.E.(Cal), M.C.E. (J.U.), A.F.I.E. (India)
- Sri Ratan Kumar Das Gupta, B.Tech. Hons. (I.I.T.), M.C.E., Ph.D. (J.U.) P.G.Dip. Hydrology (Padova, Italy), F.I.E. (India), M.I.S. (Ind), M.I.A.H., M.W.R.S. MISTE
- Dr. Sakti Ranjan Bhattacharyya, M.C.E., Ph.D. (J.U.), F.I.E., F.A.E., M.I.S., M.I.G.S., I. Struct. E.
- Dr. Alak De, B.Sc., M.C.E., Ph. D. (J.U.), F.I.E., (India), M.I.P.H.E., M.I.A.E.M., M.I.S.
- Dr. Rabindra Das Purkayastha, B.C.E. (J.U.), M.Tech., Ph.D. (I.I.T.) F.I.G.S., F.I.E. (India), M.I.S.S.M.F.E. (Lond)
- Sri Amal Kanti Misra, M.C.E. (J.U.), M.I.A.E.M. (Ind), M.I.P.H.E. (India)
- Dr. Bishnupada Chattopadhyay, M.C.E. (J.U.), Ph.D.(U.K.), A.M.A.E., A.M.I.E., A.M.I. Struct.E
- Sri Kollol Kumar Ghosh. B.E. (Cal), M.C.E. (J.U.)

13. Dr. Somnath Ghosh, B.C.E. (J.U.), M.Tech, Ph.D. (IIT) , MIE (India)

Readers :

14. Sri Phalguni Bhattacharyya, B.E. (Cal), M.C.E. (J.U.), M.I.G.S.
15. Sri Tapan Kumar Mitra, M.C.E. (J.U.)
16. Sri Amitava Gangopadhyay, B.E. (Cal), M.C.E. (J.U.), M.I.E. (India)
17. Sri Sankar Chakrabarti, B. C.E. (J.U.) , M.Tech.. (I.I.T.) , M.I.E. (India), M.I.G.S.
18. Dr.Indrajit Roy, M.C.E. (J.U.) , Ph.D. (I.I.T.) , M.I.E. (India)
19. Sri Sibapriya Mukherjee, M.C.E. (J.U.) , A.M.I.E.(India), M.I.G.S.
20. Sri Somnath Mukherjee, B.E. (Cal), M.Tech. (I.I.T.)
21. Sri Sibnath Chakraborty, M.C.E. (J.U.) , M.I.E. (I) , M.I.P.H.E.(India).
22. Dr. Saroj Mandal, M.C.E., Ph.D. (J.U.)

Lecturers : (Senior)

- Sri Arup Guha Neogi, B.E. (Cal), M.C.E. (J.U.)
Sri Ramendu Bikash Sahu, M.C.E. (J.U.) , A.M.I.E. (I) , M.I.G.S.

Lecturers :

- Sri Swapan Kumar Mukhopadhyay, M.C.E. (J.U.) , M.I.A.E. (I)
Dr. Sudipta Ghosh, M.C.E., Ph.D.(J.U.) , M.I.G.S.,M.I.E. , M.I.S.S.M.F.E.(Lond)
Dr. Dipankar Chakraborty, B.CE. (J.U.) , M.Tech. (I.I.T.), Ph.D.
Dr. Biswajit Basu, B.C.E.(J.U.),M.Tech.,Ph.D.(IIT Kanpur)
Sri Anupam Debsarkar, B.C.E.(J.U.),M.C.E.(J.U.)

Teachers with their Specialisation :

SEX : SPECIALISATION

Professor :

- | | |
|-----------------|---|
| 1. Male | Structural Engineering & Remote Servng |
| 2. Male | Soil Mechanics & Foundation Engineering |
| 3. Male | Structural Engineering. |
| 4. Male | Soil Mechanics & Foundation Engineering |
| 5. Male | Structural Engineering |
| 6. Male | Hydrology |
| 7. Male | Structural Engineering |
| 8. Male | Environmental Engineering. |
| 9. Male | Soil Mechanics & Foundation Engineering |
| 10. Male | Environmental Engineering. |
| 11. Male | Structural Engineering |
| 12. Male | Structural Engineering |
| 13. Male | Structural Engineering |
| Reader : | |
| 14. Male | Soil Mechanics & Foundation Engineering |
| 15. Male | Structural Engineering. |
| 16. Male | Environmental Engineering. |
| 17. Male | Soil Mechanics & Foundation Engineering |
| 18. Male | Structural Engineering. |
| 19. Male | Soil Mechanics & Foundation Engineering |
| 20. Male | Environmental Engineering. |
| 21. Male | Environmental Engineering. |
| 22. Male | Structural Engineering. |

COMPUTER SCIENCE & ENGINEERING :

Established in 1988, the department of Computer Science & Engineering is just 11 years old. Nevertheless, within this short span of time , it has been able to win acclaims and reputation for itself both for excellent teaching and research activities. The lucrative nature of the stream itself that assures of sound financial career to its students is also one of the impotant factors of its success of popularity within such a short period of its existence. Emergence of Computer Science into a full-fledged department has supporting background of the history of computer culture of the university. Electronic digital computers were started being operated in the university in the early sixties. In the year 1966, the 2nd generation general purpose computer was commissioned in collaboration with Indian Statistical Institute. The Computer Science and Engineering Department at present is an instance of success story and far-sightedness of the academicians of the university. The department has already turned into a premiere centre of learning and research in the country. It has attracted the best of merits but can accommodate only 400 of them in the different slots of learning it has organised.

Apart from distinguished and efficient academicians, the success story of computer learning depends invariably on the up-to-date and well-equipped laboratories. The department can obviously boast of the well-trimmed laboratories, like : (1) Alpha Laboratory, (2) Digital Laboratory (3) Impact Laboratory (4) Magnum Laboratory (5) Microprocessor Laboratory (6) PC Laboratory.

Courses offered and annual intake of students :

- | | |
|--|----|
| 1. B.C.S.E.(Bachelor of Computer Science & Engineering) : | 57 |
| 2. M.C.S.E. ((Master of Computer Science & Engineering) : | 31 |
| 3. M.C.A. (Master of Computer Application) : | 40 |
- Ph.D.

(Specialisation offered) :

- 1). AI, Pattern Recognition, 2). Biomedical Signal Processing, 3). Computer Networks and Computer Architecture, 4). Expert System, 5). Fault Tolerant Distributed System, 6). Image Proccession, 7). Optimization Techniques, 8). Parallel Processing, 9). VLSI Design Automation.

Collaborative Projects :

- (1). A collaborative programme has been undertaken jointly by the department with the R.K. Mission Blind Boy's Academy, Narendrapur, entitled BRAILSCRIPT (Brail Reproduction Aid for Indian Language & English with Semi Automatic Computer Recognition of In-Joint Printed Text).
- (2). The department as Project IMPACT is collaborating with CMC Ltd with a fund of Rs. 3.00 crores for the expansion and developmental activities, the department is receiving generous funding from different funding authorities, e.g;

AICTE :	24.8 Lakhs
DRDO:	14.3 Lakhs
ISRO:	7.65 Lakhs

A National Workshop on Distributed Computing was held in the department during 7- 8 January, 1999. It was attended by computer personnel and academicians from all over the country.

10. Special Distinction of Honours/Awards etc. Received by the teacher(s)

1. Dr. Debashis Saha:
 - *AICTE Career Award
 - *SERC Visiting, Scientist Fellowship from DST.
 - *Qualcomm Award for Best Paper in ICWPC, Mumbai
 - *Distinguished Reviewer, IEEE COMPUTER Society, USA
2. Sourav Dutta:
 - *Dr. Rajendra Prasad Memorial Gold Medal for Best Paper in the Indian Engineering Congress
 - *Senior Member, IEEE, USA.
 - *ITU Fellowship
3. Number of projects/Schemes running in the department at present: 6
 - a. Names of Projects/Schemes, their funding, authorities and the value of each project scheme and the name(s) of P 1(s) are given below:
 1. Title: "Storage, Retrieval and Understanding of Video for Multimedia Applications"
 - Funding Agency : AICTE
 - P I : Prof. (Mrs.) M. Nasipuri
 - Value : Rs. 11 Lakhs
 2. Title: "Development of Fuzzy Logic Technology for Interpretation of Bio-Medical Signal"
 - Funding Agency : AICTE
 - P I : Prof. D. K. Basu
 - Value : Rs. 8.80 Lakhs
 3. Title: "Software Kernel for Ultra-reliable Launch-vehicle Program Design"
 - Funding Agency : ISRO
 - P I : Prof. P.K. Das
 - Value: Rs. 7.65 Lakhs
 4. Title: "Fault Tolerant Launch Vehicle"
 - Funding Agency : DRDO
 - P 1 Shri C .Mazumder
 - Value: Rs. 14.13 Lakhs
 5. Title: "Microimage"
 - Funding Agency : AICTE
 - P 1 : Dr. A Kar
 - Value: Rs. 5 Lakhs.

6. Title : "Centre for Microprocessor Application Training, Education & Research".
 - Funding Agency : MHRD
 - Co-ordinator : Prof. D.K.Basu.
 - Value :

Professors :

1. Dr. Dipak Kumar Basu, M.E.Tel.F., Ph.D. (J.U.)
2. Dr. Mohit Kumar Roy, M.Sc. (Cal), Ph.D. (J.U.)
3. Dr. Debabrata Ghosh Dastidar, M.Sc. (Cal), Ph.D. (Cal)
4. Dr. Rana Datta Gupta, M.E.Tel.E., (J.U.), Ph.D. (J.U.& Brunel)
5. Sri Swapan Kumar Ray, M.Tech. (I.I.T., Kanpur)(Head of the Dept.)
6. Dr. Pradip Kumar Das, M.E.Tel.E., Ph.D. (J.U.)
7. Dr. Bijan Bihari Bhaumik, M.E.Tel.E., Ph.D. (J.U.)
8. Dr. Suranjan Kumar Ghose, M.E.Tel.E., Ph.D. (J.U.)
9. Dr. Mita Nasipuri, M.E.Tel.E., Ph.D. (J.U.)
10. Dr. Atal Chaudhuri, M.E.Tel.E., Ph.D. (J.U.)
11. Dr. Swapan Bhattacharya, M.Tech., M.B.A., Ph.D. (Cal)

Readers :

12. Sri Shovonlal Kundu, M.E.Tel.E., (J.U.)
13. Sri Chandan Majumdar, M.E.Tel.E., (J.U.)
14. Dr. Sivaji Bandyopadhyay, M.C.S.E. Ph.D. (J.U.)
15. Dr. Uday Kumar Chakraborty, M.E.Tel.E., Ph.D. (J.U.)
16. Dr. Susmita Sur-Kolay, B.E. (I.I.T.), Grad. Program (MIT), Ph.D. (J.U.) (on lien)
17. Dr. Debesh Kumar Das, M.E.Tel.E. Ph. D. (J.U.)
18. Dr. Mahantapas Kundu, M.E.Tel.E., Ph.D. (J.U.)
19. Dr. Debashis Saha, M.Tech., Ph.D. (I.I.T., Kharagpur),
20. Dr. Samiran Chattopadhyay, M.Tech., (I.I.T., Kharagpur), Ph.D. (J.U.)

Lecturers (Senior) :

- Dr. Avijit Kar, M.Sc., Ph.D. (I.I.T., Kharagpur)
- Dr. Anupam Sinha, M.E. (I.I.Sc.), Ph.D. (J.U.)

Lecturers :

- Dr. Chittaranjan A. Mondal, M.Tech. (I.I.T., Kharagpur)
- Ms. Mandira Chakraborty, M.C.S.E. Ph.D. (J.U.)
- Ms. Nandini Mukherjee, M.C.S.E. (J.U.)
- Ms. Susmita De, M.Tech. (I.I.T., Bombay)
- Sri Sourav Kumar Datta, M.C.S.E. (J.U.)
- Ms. Anasua Bhowmik, M.E. (I.I.Sc.)
- Sri Jamuna Kanta Sing, M.Tech., (I.I.T., Kharagpur)

SEX:

1. Male.
2. Male.
3. Male.
4. Male
5. Male
6. Male.

SPECIALISATION :

- Bio-medical Signal Processing/Image Processing/Expert Systems
- Software Engineering
- Computer Software
- Hardware & Software
- Computer Network & Computer Architecture
- Parallel Processing/Fault-tolerant Distributed Systems/Parallelisation of Sequential Programs

- 7.Male. Parallel Algorithm & Architecture/Interconnection Networks/Fault-tolerant Systems
- 8.Male. AI Architectures/Computer Communication Network.
- 9.Female. Bio-medical Signal, Processing, Image
- 10.Male. Fault Detction/Fault Tolerant Parallel and Distributed Computer Architecture.
- 11.Male Database/Distributed Systems/Software Engineering.
- 12.Male. Theory of Computer Science/Parallel Processing
- 13.Male. AI, Theory of Computer Science/Parallel Processing
- 14.Male. Computer Processing of Indian Languages/Data-base Computer Architecture
- 15.Male. Genetic Algorithms.
- 16.Female. VLSI Design Automation
- 17.Male. Fault-tolerance of Digital Circuit/Logic Synthesis
- 18.Male. Knowledge Based Bio-medical Signal & Image understanding.
- 19.Male. Computer Communication Networks/Optical & Mobile Centre
- 20.Male. Discreet & Computational Geometry.

CHEMICAL ENGINEERING :

The department of Chemical Engineering came into existence with blessings of Acharya P.C. Roy as a distinct branch of Engineering in the year 1921. Under the academic leadership of Prof. H.L. Roy and Prof. Banerwar Dass, the academic course of Chemical Engineering was offered for the first time in the College of Engineering and Technology, Bengal which happens to be the predecessor of Jadavpur University. This department is one of the oldest department of Chemical Engineering of the world.

Course of Study offered and the annual intake of students :

B.Ch.E.	70
P.G.	19

Total : 89

Ongoing Projects :

Title of the Projects	P.I.	Value	Funding Authority
Project on Essential Oil Recovery W.B.	Prof. S.K.Sanyal	Rs.75,500	Govt.of
DSACE/SAP II Phase	Prof. S.K.Sanyal	Rs. 150,000	U.G.C.
Pervaporation Technique	Dr. M.Bandyopadhyay	Rs. 5,00,000	AICTE
Studies on Recovery of Base Metal Recovery of Precious Material	Prof. S.K.Sanyal	Rs. 5,00,000	CSIR
Arodes line...Hydrometal	Dr. S. Dutta	Rs. 6,00,000	AICTE
Liquid Membrane Technology in Industrial Waste Water Treatment	Prof. S.K,Sanyal	Rs. 5,50,000	AICTE

Professors :

1. Dr. Asit Kumar Mitra, B.Sc. (Hons.) (Cal), B.Ch. E. (J.U.), M. Tech., Ph. D. (I.I.T.), M.II.Ch.E.
2. Dr. Salil Kumar Ghosal, B.Sc.(Hons.) (Cal), M.Ch. E., Ph. D. (J.U.), Spl.Dip. Ch.E.(Karlsruhe)
3. Dr. Subhas Chandra Roy, B.Ch. E. (J.U.), M.S. (Illinois), Ph. D. (J.U.), AM. IChE., M.I.E.(India)
4. Sri Gopal Krishna Biswas, B.Tech. Hons., (I.I.T.), M.Ch.E.(J.U.), M.I.I. Chem. E., F.I.C.C. (Dean, Faculty Council of Engg.&Tech.)
5. Dr. Shyamal Kanti Sanyal, M.Tech., Ph.D. (Cal), M.I.E.(Ind)
6. Dr. Satabdinath Sen, B.E., M.Tech. (I.I.T.), M.Sc., L.L.B. (Cal), Ph.D. (I.I.T.), C.E.(I)
7. Sri Prabhu Dayal Agarwal, B.Sc. (Cal), M.Ch.E. (J.U.), Spl. Dip. Ch.E. (Karlsruhe), A.M.I.I.Ch.E. (Head of the Dept.)
8. Dr. Subhas Basu, B.Ch. E. (J.U.), M. Tech., Ph. D. (I.I.T.), A.M.I.I.Ch.E.
9. Dr. Tapas Kumar Dutta, M.Ch.E., Ph.D. (J.U.), M.I.I.Ch.E.
10. Dr. Pinaki Bhattacharyya, M.Ch.E., Ph.D. (J.U.), M.I.I.Ch.E., A.M.I.E. (I)
11. Sri Siddhartha Datta, M.Ch.E. (J.U.), A.M.I.E. (India)

Readers :

12. Dr. Nitai Chandra Mukhopadhyay, B.Ch. E. (J.U.), M. Tech.(I.I.T.), Ph.D. (Moscow), A.M.I.I.Ch.E.
13. Sri Prabir Kumar Sarkar, B.Sc. (Cal), M.Ch.E. (J.U.), M.I.I.Ch.E.
14. Sri Alakananda Mukherjee, M.Ch.E. (J.U.), M.S. (Rochester)
15. Sri Maran Chandra Saha, M.Ch.E. (J.U.), M.I.I.Ch.E.
16. Dr. (Mrs.) Madhusree Bandyopadhyay, M.Ch.E., Ph.D. (J.U.)

Lecturers (Senior) :

- Sri Nilava Sen, M.Ch.E. (J.U.)
 Dr. Chandan Guha, M.Ch.E., Ph.D. (J.U.)
 Dr. Debashis Putatunda, B.Tech., M.Tech., Ph. D. (IIT)

Lecturers :

- Sri Prasanta Kumar Banerjee, B.Ch. E. (J.U.), M. Tech., (I.I.T.), A.M.I.E., A.M.II.Ch.E.
 Dr. Avijit Bhowal, B.Ch. E. (J.U.), M. Tech., (I.I.T.), Ph.D. (J.U.)
 Dr. Chiranjib Bhattacharyya, B.Ch. E. (J.U.), M. Tech., (I.I.T.), Ph.D. (J.U.)
 Miss Kajari Kar Gupta, B.Ch. E. (J.U.), M. Tech., (I.I.T.)
 Sri Chanchal Mondal, M.Ch.E. (J.U.)
 Dr. Debashis Roy, M.Ch.E. (J.U.), Ph.D. (J.U.)

Teachers of with their specialization :

SEX SPECIALISATION

Professor:

- 1.Male. Reaction Engg./Thermodynamics/Project Engg./Pollution Control
- 2.Male. Transfer Process.
- 3.Male. Modelling/Transport Phenomena
- 4.Male. Energy Engg./Petroleum Refinery Engg./Coal Processing Technology/Bio-Mass Energy Conversion Systems
- 5.Male. Polymer Science & Engg./Membrane Separation Process
- 6.Male. Furnace Technology/Combustion Engg./Energy Transfer.
- 7.Male. Energy & Mass Transfer.
- 8.Male. Computer Aided Design/ Simulation/Mineral Dressing & Mechanical Separation.
- 9.Male. Transport Process/Computer Aided Design/Pollution Control.

10.Male	Reaction Engineering/Biotechnology
11.Male.	Mass Transfer/Modern Separation Process/Environmental Pollution Control.
Reader:	
12.Male	Chemical Engineering/Mass,Heat & Momentum Transfer
13.Male.	Process Dynamic & Control.
14.Male.	Chemical Engineering.
15.Male.	Fluidization.
16.Female.	Membrane Separation Process/Hydrometallurgical Separation Process

CONSTRUCTION ENGINEERING :

The department is comparatively new, being established as late as in 1989. It was concurrently set up with the second campus of the university in Salt Lake. The primary aim of the department is to impart application - oriented education to undergraduate students to equip them to reach their full potential to the purposes of Construction Management. Construction Management (including Computer Applications), Construction Plant and Machinery, Concrete Technology, Materials & Process of Construction, Repair & Rehabilitation of Structures are the principal subjects of study as offered by the syllabus of the construction technology at Jadavpur University. The department is now developing as a centre for soil, material & concrete testing including NDT and for industrial institute interaction in the fields of Construction Management, Repair and Rehabilitation of Structures etc.

Course of study and annual student intake :

Bachelor of Const. Technology : 35

Professor :

1. Sri Tathagata Roy , B.E., L.L.B. (Cal), F.I.E (India)

Readers :

2. Sri Subhajit Saraswati, B.E. (Cal) , M.Tech (I.I.T) , M.I.E. (India), M.I.G.S., MICI.
3. Sri Partha Pratim Biswas, BCE, MCE, ME (JU), MIGS, MICS, AMIE. (Head of the Dept.)

Lecturers :

Sri Sayan Nandi, B.CE, M.Sc. (Engg) (England) , C.Engg., AMIE., C.Engg.
M.I. Const.E (England)

Sri Kaushik Bandyopadhyay, M.C.E. (J.U.)

Sri Debashis Bandyopadhyay, B.C.E. (J.U.), M.Tech (IIT, Kharagpur)

Teachers with specialization :

SEX	SPECIALISATION
1.Male.	Engineering Contracts
2.Male.	Geotechnical Engineering/Concrete Technology
3.Male.	Geotechnical Engineering

ELECTRICAL ENGINEERING :

Previously belonging to the College of Engineering and Technology, N.C.E. Bengal, Electrical Engineering is one of the oldest departments of J.U. being established in the year 1921. Over the years it has grown into a department of the national repute of being one of the best Elec. Engg. dept. of the country.

The department is basically structured around eleven different sectional laboratories that together form the nucleus or the core unit in the development process undertaken by the department.

1. Electrical Measurement & Instrumentation Laboratory, 2. Control System Laboratory, 3. Illumination Engineering Laboratory, 4. Powersystem Laboratory, 5. Electrical Drives Laboratory, 6. High Voltage Laboratory, 7. Power System Simulation Laboratory, 8. Control Systems Laboratory, 9. AI Laboratory, 10. Simulation and Modelling Laboratory, 11. Bio-Medical Instrumentation and Fibre Optics Instrumentation Laboratory.

In recognition of its high academic standard, the department was selected successively by USA for DSA programme, followed by COSIST funding, finally the department was elevated to the status of Advanced Studies.

The department has completed first phase of CSA Programme. In recognition of its success, the UGC has granted Rs.85.00 lakhs to the department in the year 1998 for undertaking Phase -II CAS. AICTE has also granted two projects in 1998, i) MODROB Project — “Modernisation of Electrical Engineering Laboratory” and a R&D Project—“Impulse Fault Diagnosis in Power Transformers by Pattern Recognition Technique.” Another important Project, “Control low verification and Validation of Indian Light Combat Aircraft(Phase -II) has been granted by the Aeronautical Development Agency, Bangalore. The department as in earlier years is carrying out testing and consultancy work and earned an amount of Rs.10 Lakhs for the university.

The department as usual offers the following course and the annual student intake is given on the R.H.S.

1. B.E.E.	102
2. M.E.E.	25
3. Ph.D.	

The department also runs 5 year Part-time Evening Degree -course with an intake of 30 students per year.

Specialization offered for P.G. Level :

1. Electrical Measurements and Instrumentation, 2. High Voltage Techniques, 3. Advanced Topics in Power Systems, 4. Electrical Machines, 5. Control Systems Together with Software Engineering, 6. Distributed Computer Control, 7. Optical Techniques and Fibre Optics in Instrumentation, 8. Modelling & Simulation, 9. Bio-instrumentation.

Specialization offered for U.G. Level :

1. Advanced Control Theory and Computer Control Engineering, 2. Digital Instrumentation and Advanced Measurement Techniques, 3. Energy Conversion Techniques and Computer Aided Design of Electrical Machines. 4. Computer Application in Power Systems, 5.

Advanced Control Theory and Computer and Control Engineering.

The department possess more than 70 PCs in different laboratories, with version 486, Pentium Processor and Sun Workstation in all the major laboratories.

Also available: (i) RTI - 815 Analog I/O and Digital I/O board, (ii) Programmable DC standard voltage current generator. (iii) Complete Integrated Image Processing system with series 151 image processing modules, (iv) Optical power Meter. (v) 6.5 digit digital multimeter, (vi) 100 MHz digital storage oscilloscope, (vii) Optical sensors, laser source, (viii) 1.1 GHz Frequency Counter/Timer, (ix) 24-channel PC Based Logic Analyser, (x) Digital Signal Processing Subsystem (xi) 4 -trace storage Oscilloscope. (xii) Transducer and Instrumentation Kit, (xiii) Marx Generator - 1.4 MV, 16-19 KWP (xiv) High Voltage supply Transformer - 250 KV/125 KVA

Teachers participated in the National and International Seminars/Workshops etc. during the period :

Prof. T.K. Ghoshal

i) National Systems Conference 1997, held in February 1998, Hyderabad. Delivered Invited Lecture and was Session Chairman.

ii) National Systems Conference 1998, held in December 1998, Calicut. Delivered Invited Lecture and was Session Chairman.

Dr. S. Mukhopadhyay

Delivered a Lecture on "Status of Permanent Magnet Biased Magnetic Current Limiter", at Hitachi Works Ltd., Hitachi, Ibaraki, Japan, April 21, 1998.

Prof. S.K. Biswas

i) Participated at the National Workshop on Power Electronics at the Indian Institute of Science, Bangalore, during July 23-24, 1998.

ii) Participated at the IEEE PEDES '98. -International Conference at Perth, Australia, 30 Nov. - 3 - Dec. 1998.

Dr. S. Mukhopadhyay

i) 7th Joint MMM-Intermag Conference, San Francisco, USA, Jan 6-9, 1998.

ii) 2nd International Conference on Linear Drives for Industrial Applications (LDIA'98), Tokyo, Japan, April 8-10, 1998.

iii) 2nd International Conference on Electrical Engineering (ICEE'98) Korea, July 21-25, 1998.

iv) 43rd International Conference on Magnetism and Magnetic Material, Miami, USA, Nov. 9-12, 1998.

Prof. Sujay Basu:

i) Delivered a lecture on "Economics of Renewable Energy", Renewable Energy Congress, Kalyani University, 18-19 January 1999.

ii) Delivered a lecture on "Recent Nuclear Explosion", Rabindra Bharati University, Calcutta, 11 March 1999.

iii) Chaired session on Energy, People's Technology Congress, FOSET, Calcutta 10-12 February 1999.

Dr. A. Mukherjee:

"Japan and Career in Technical Education" invited talk to IEEE Calcutta Chapter, held on 5.12.1998, Calcutta.

*** Foreign visitors visited under Cultural Exchange Program during the specified period

Prof. Warren Julian, University of Sydney., Australia, visited Illumination Engineering Laboratory on 28.11.1998.

Special Distinction of Honour/Awards etc received by the teachers :

Prof. T.K. Ghoshal: National Systems Gold Medal presented by Systems Society of India on 11 December, 1998 at REC, Calicut.

Prof. T.K. Ghoshal and his team comprising of Prof. A.K. Roy (Retired), Prof. S.K. Goswami, Prof. K. Datta and Prof. G. Das - DRDO Academic Excellence Award for 1998 for outstanding contribution in evolution of Guidance and Control Algorithm for Flight Vehicles announced by Ministry of Defence, Govt. of India, on 25 January, 1999.

Dr. S. Chakravorty: has been elected Secretary of the IEEE, Calcutta Section.

Prof. S.K. Biswas: as invited to be the Session Chairman at IEEE PEDES'98 at Australia for the sessions : (1) Industrial Power Conversion (Inverters) (2) Industrial Power Conversion (AC/DC Converters). Prof. Biswas was elected to be the Secretary for the IEEE Industry Application Society, Calcutta Chapter. He was elected as a member of the Executive Committee of the IEEE, Calcutta Section, and also elected as a member of the Executive Committee of the IETE, Calcutta Section.

Ms. S. Sadhu: Sir Thomas Ward Memorial Medal from Institution of Engineers, India, for the year 1998.

Sri Arabinda Das: received the award 'The Union Ministry, of Energy, Department of Power Medal' in the 12th Indian Engineering Congress, organised by the Institution of Engineers (India).

List of Publication (from Jan. 1998 to March 1999).

1. S. Chakravorty and P.K. Mukherjee, "Capacitive - resistive field calculation in and around HV bushings by boundary element methods", IEEE Trans. On DEI, Vol.5, No.2, pp 237-244, 1998.

2. S. Chakravorty, "Charge Simulation Method : A Critical Overview", Journal of the IE(I), Vol.78, Pt, EI, pp 210-214, 1998.

3. P.K. Sarkar, S. Munshi and S.N. Mukhopadhyay, "On Some Aspects of Performance of Glynne's Bridge", Journal of IE(I), ET Division, Vol.79, Sept. 1998, p8.

4. A. Chatterjee, S. Munshi and A. Rakshit, "A Knowledge Based System to Guide the Measurement of Electrical Circuit Parameters", Journal of IE(I), ET Division, Vol.79, Sept. 1998, p.21

5. N. Mondal and S. Munshi, "Linearisation of Thermistor Characteristic Using Log Amplifiers", Accepted for publication in the forthcoming issue of the Journal of IE(I), ET Division.

6. G. Das, K. Datta, S. Goswami, T.K. Ghoshal, "Structured Design Methodology of Missile Autopilot-II, IE(I) Journal-EL, Vol. 79, May 1998, pp 28-34.

7. P. Bhattacharjee, D. Saha, A. Mukherjee, M. Maitra "A Practical Approach for Location Area Planning in a Personal Communication Services Network-, Multiaccess, Mobility and Teletraffic for Wireless Communications", Oct. 21- 23, 1998, George Washington University, Washington D.C. (MMT'98).

8. A. Mukherjee, P. Bhattacharjee, D. Saha, M. Maitra, "Load Balancing of Mobile Catching Centres in the Design of a Personal Communication Services Network", Advanced Simulation Technologies Conference, 1999, April 11-15, Hyatt Islandia, San Diego,

- California (ASTS'99). (Accepted for presentation).
9. M. Maitra, A. Mukherjee, D. Saha, "Hierarchical Design of a PCN for cost minimization, International Wireless and Telecommunications Symposium 1999 (IWTS'99), Malaysia (Accepted for presentation at IWTS'99 to be held from 17-21 May).
 10. S.K. Biswas, C. Chakraborty, B. Basak. and D.P. Sengupta, "Performance analysis of an asymmetrical phase converter fed induction motor", IEEE Trans on Industry, Applications, Vol-34, No.5, pp 1049-1058, Sept/Oct. 1998.
 11. P. Mukherjee, B. Majumdar and S.K. Biswas, "A single switch high power factor battery charger", Proc. of IEEE PEDES'98, Perth, Australia. Dec. 1998, pp 111-116.
 12. B. Majumdar, P. Mukherjee and S.K. Biswas, "A new ground gate lateral power MOSFET structures for synchronous rectification in dc/dc converters", Proc. IEEE PEDES'98, Perth, Australia, Dec. 1998, pp 318-323.
 13. B. Majumdar, P. Mukherjee and S.K. Biswas, "Design and implementation of a PWM rectifier using MCT for AC motor load", Proc. IEEE PEDES'98, Perth, Australia, Dec. 1998, pp 610-615.
 14. B. Majumdar, P. Mukherjee, and S.K. Biswas, "A transformer less single switch ballast for operating compact fluorescent lamps from batteries", Proc. IEEE/PEDES'98, Perth, Australia, Dec. 1998, pp.689-693.
 15. Sujay Basu et al, 'Energy Storage for Grid Connected Intermittent Bulk Electricity Generation', ICOESTS 99, Indore, 1- 4 Feb. 1999.
 16. Sujay Basu et al., "Commercialisation of the Wind Electricity the Challenges Ahead" Accepted for National Wind Energy Conference, MACT, Bhopal, 3-6 Mar., 1999.
 17. Sujay Basu et al., 'Wind Electricity Generation in Sunderbans Area : A Potential Assessment', West Bengal Science Congress, 26 Feb. 1999.
 18. Sujay Basu et. al., 'Wind Electricity Generation in India - the Desired Steps', Communicated to Energy Policy.
 19. Sujay Basu et al., 'Development of a Mini-biogas Digester for Lighting in India', Accepted for publication in Energy, 99.
 20. A. Mukherjee, S.C. Mukhopadhyay, M. Iwahara, S. Yamada and F.P. Dawson, 'A Numerical Method for Analyzing- a Passive Fault Current Limiter Considering Hysteresis', IEEE Trans. On Magnetic, Vol.84, No.4, July 1998.
 21. A. Mukherjee, S.C. Mukhopadhyay, M. Iwahara and S. Yamada, 'Transient Simulation of a Transformer Core Demagnetization Scheme', Journal of Magnetism Society, Japan, Vol.22, No.4-2, 1998.
 22. A. Mukherjee, S.C. Mukhopadhyay, M. Iwahara, S. Yamada and F.P. Dawson, 'Switching Characteristics of Passive Fault Current Limiter Taking into Account Hysteresis of Core for Varying Power Factor of Load', The Institution of Electrical Engineers, Japan, MAG- 98-11.
 23. S.C. Mukhopadhyay, A. Mukherjee, M. Iwahara, S. Yamada and F.P. Dawson, 'Investigation of Performances of PM Biased Current Limiting Reactor Using Steel Core' Proc. The 7th Joint MMM Intermag Conference, San Francisco, Jan 6-9, 1998.
 24. 'A Novel Numerical Method for Analysis of Passive Fault Current Limited Considering Hysteresis', *ibid.*
 25. S.C. Mukhopadhyay et al., Minimization of Control Current by suitable no of slit

- fabrication in Flywheel Plate of a Repulsive Type Magnetic Bearing', Proc. of 2nd LDIA, April 8-10, 1998, Tokyo, Japan, pp 313-316.
26. S.C. Mukhopadhyay, et al., "Field Analysis of a Bearingless Machine', Proc. of 2nd LDIA, April 8-10, 1998 Tokyo Japan, pp 309-312.
 27. S.C. Mukhopadhyay et al., 'Desirable Parameter Identification for the Implementation of Ideal Passive Fault Current Limiter', Proc. of 2nd ICEE July 21-25, 1998, Korea pp 669-672.
 28. S.C. Mukhopadhyay et al., 'Control current minimization, radial disturbance attenuation in repulsive type magnetic bearing systems', Proc of 2nd ICEE, July 21-25 1998, Korea pp 371 - 374.
 29. S.C. Mukhopadhyay et al., 'Design of a Low cost Magnetic Bearing System and its H[∞] Control', International Journal on Non-linear Systems, IOS Press, Netherlands, pp 741-744, 1998.
 30. S.C. Mukhopadhyay, et al., 'Flux Distribution and Analysis of a Fault Current Limiter based on Permanent Magnet and Ferrite Core', International Journal of COMPEL, Vol.18, No. 1,2,3, pp 232-238, 1998.
 31. S.C. Mukhopadhyay, et al., 'Permanent Magnet Configuration for Improved Radial Disturbance Attenuation Characteristics in Repulsive -Type Magnetic Bearing', International Journal of COMPEL, Vol.18, No.1,2,3, -1998, pp 290-295.
 32. S.C. Mukhopadhyay et al., 'A Perfect Passive Fault Current Limiter Base on Permanent Magnet and Saturable Cores', International Journal on Non-linear Systems, IOS Press, Netherlands, pp 349-352, 1998.
 33. S.C. Mukhopadhyay, et al., 'Temperature Distribution in Cage-Rotor Induction Motors using Hybrid Thermal Model', Journal of Applied Physics, USA, July, 1998, pp 6668-6670.
 34. S.C. Mukhopadhyay, et al., 'A Novel Numerical Computation of Performances of Passive Fault Current Limiter', IEEE Trans. On Magnetism, July 1998, pp 2036-2038.
 35. S.C. Mukhopadhyay, et al., 'Comparative Studies of Levitation and Control Performances of Two Types of Repulsive Type Magnetic Bearings', NASA Publications, May 1998, pp 396-409.
 36. S. Mazumder, K. Ray, et al., 'Data Communication Network for a Traction Drive System. accepted for publication in IE(I)EL Journal.
 37. S. Mazumdar, S. Radhakrishna, B. Ghosh, 'Lighting Energy Management : Case Study, of a Street Lighting Installation', at National Seminar on Recent Trends in Energy Efficient Lighting Systems, Vidisha, Feb. 1999.
 38. S. Chowdhury, Dr. S.P. Chowdhury and Dr. S. Choudhuri, 'Automatic Generation Control Techniques for Present Demands of Interconnected Power Systems', Journal of IE(I), Vol. 78, March 1998, pp 219-224.
 39. S. Chowdhury, Dr. S.P. Chowdhury and Dr. S. Choudhuri, 'A Computer Software for Estimation of Transfer Function of Linear or Quasi-Linear Systems from Operating Data', accepted for publication in the journals of IE(I) and presented in annual paper meeting of IE(I) held on Nov. 22, 1997.
 40. S. Chowdhury, Dr. S.P. Chowdhury and Dr. S. Choudhuri, 'Software for Estimating the

Approximate Impulse Response of a Linear or Quasi-Linear System from its Transfer Function Polynomial', accepted for publication in the journals of IE(I).

41. S. Chowdhury, Dr.S.P. Chowdhury and Dr. S. Choudhuri, 'Advanced Digital Load Frequency Control with Unknown Deterministic Power Demand for Interconnected Power Systems', accepted for publication in the journals of IE(I).

42. T.Ghose, S.K. Goswami &, S.K. Basu, 'Solving Capacitor Placement Problem in Distribution Systems Using Genetic Algorithms', International Journal of Electric Machines and Power Systems, Vol.27, Nov.4, 1999 (paper no. 5548).

43. S.K. Goswami, T. Ghose & S.K. Basu, 'A New Algorithm for Optimal Planning of Radial Distribution System', Journal of IE(I) Vol.78, March 1998.

44. T. Ghose, S.K. Goswami, & S.K. Basu, 'Solution of Capacitor Placement Problem in Distribution Systems Using Modified Genetic Algorithm,' Journal of IE(I), Vol.79, Feb. 1999.

6. Number of Projects/Scheme running in the Department at present:

(a) Names of Projects/Schemes, their Funding Authorities and the value of each Project/ Scheme and the names of P.I.s.

Sl. No	Name of Project	Funding Agency,	Value Lakh	P.I.
1	Impulse Fault Diagnosis in high voltage transformers by Pattern Recognition Technique	AICTE	9.00	Dr.S.Chakravorti
2	CLAW IV&V Project Ph-I	Aeronautical Development Agency, (Ministry of Defence) Govt. of India, PB 1718,Bangalore	30.00	Prof. S.K.Goswami
3	CLAW IV&V Project Ph-II	Do	10.00	Prof. S.K.Goswami

Professors :

1. Dr. Prasanta Kumar Mukherjee, M.E.E., Ph.D. (J.U.), F.I.E. (I), F.I.E.E.(Lond), S.M.I.E.E.E. (U.S.A.)
2. Dr. Sanjoy Kumar Basu, B.Sc., D.I.I.Sc. (E.T.), M.E.E., Ph.D. (J.U.), M.I.E.E. (U.K), F.I.E. (I), M.I.I.S.T. (I)
3. Dr. Jaladhi Ratan Biswas, B.Sc., B.E. (Cal), M.E.E., Ph.D. (J.U.), F.I.E. (I), SMIEEE (USA)
4. Dr. Shyamal Kumar Ghosh, B.Sc. Hons., M.Tech. (Cal) , M.E.E., Ph.D. (J.U.), FIE (I), M.I.I.S.T.(I)
5. Dr. Shyamal Kumar Goswami , M.E.E., Ph.D. (J.U.)
6. Dr. Samiran Choudhuri, M.E.E., Ph.D. (J.U.) , F.I.E. (I) , F.I.I.S.T. (I) (Head of the Dept.)
7. Sri Sujay Basu, M.Sc., (Tech.) (Cal), M.E.E.(J.U.), F.I.E. (I), M.I.E.E.E. (U.S.A.) , F.I.S.I.E.
8. Sri Dilip Kumar Das, B.Sc.(Engg.) (Ranchi), M.E. (Cal)
9. Dr. Nirmalendu Chatterjee, M.E.E., Ph.D. (J.U.), F.I.E. (I), S.M.I.E.E.E.(USA)

10. Dr. Rupendranath Chakraborti, B.Sc.Hons., B.Tech., M.Tech. (Cal), M.E.E., Ph.D. (J.U.), F.I.E. (I), M.I.I.S.T. (I)

11. Dr. Tapan Kumar Ghosal, M.E.E., (J.U.) , Ph.D. (Comfield) , M.I.I.S.T. (I), F.I.E.T.E. (I)

12. Dr. Pradip Kumar Bhattacharjee, M.E. E. (J.U.), Ph.D. (U.S.S.R.)

13. Dr. Saroj Kumar Pal, M.E.E., Ph.D. (J.U.), M.I.I.S.T. (I)

14. Dr. Tapas Kumar Basak, M.E.E., Ph.D. (J.U.), M.I.E.(I), M.I.I.S.T. (I)

15. Sri Pranab Kumar Chattopadhyay, M.Tech. (Cal), M.E.E. (J.U.), M.I.I. S.T. (I), F.I.E. (I)

16. Dr. Kalyan Kumar Datta, M.E.E., Ph.D. (J.U.), M.I.I.S.T. (I) ,M.I.E. (I)

17. Dr. Sujit Kumar Biswas, B.E.E. (J.U.) , M.E., Ph. D.(I.I.Sc), S.M.I.E.E.E. (U.S.A.) , M.I.E. (I), F.I.E.T.E. (I)

18. Sri Gourhari Das, M.E.E. (J.U.), M.I.E.E.E. (U.S.A.)

19. Dr. Anjan Rakshit, M.E.E., Ph. D. (J.U.), M.I.E.(I), M.I.E.E.

Readers :

20. Dr. Chinmoy Kanti Roy, M.E.E. (J.U.), Ph.D. (J.U.), M.I.E. (I)

21. Dr. Ashoke Kumar Ganguly, M.E.E., Ph.D. (J.U.), M.I.E.(I)

22. Sri Nirmal Kumar Deb, M.E.E. (J.U.), M.I.I.S.T. (I)

23. Sri Sudhindranath Mukhopadhyay, M.E.E. (J.U.) , M.I.E. (I) ,M.I.I.S.T. (I)

24. Dr. Abhijit Mukherjee, M.E.E., Ph.D. (J.U.), M.I.E. (I), M.I.I.S.T. (I)

25. Dr. Swapan Kumar Goswami, M.E.E., Ph.D. (J.U.) M.I.E. (I)

26. Dr. Shibaji Chakraborty, M.E.E., Ph.D. (J.U.), M.I.E. (I), M.I.E.E.E. (U.S.A.)

27. Dr. Mrs. Saswati Majumdar, M.E.E., Ph.D. (J.U.), M.I.E.(I), M.I.S.L.E.

28. Mrs. Mita Datta, B.E.E. (J.U.), M.Sc. (Engg.) (Lond), DIC, MIE (I)

29. Sri Keshab Ch. Bhattacharyya, M.E.E. (J.U.), M.I.E. (I), M.I.E.E.E.

30. Dr. Shyamapada Chowdhury, M.E.E., Ph.D. (J.U.), M.I.E. (I), MIIST(I)

31. Sri Madhab Roy, MEE (J.U.)

Teachers with their specialization :

SEX:

1. Male.
2. Male.
3. Male.
4. Male.
5. Male.
6. Male.
7. Male.
8. Male.
9. Male.
10. Male.
11. Male.
12. Male.
13. Male.
14. Male.
15. Male.
16. Male.
17. Male.

SPECIALISATION:

1. High Voltage.
2. Power System.
3. High Voltage.
4. Measurements.
5. Control System.
6. Power System.
7. Machines.
8. Machines.
9. High Voltage
10. Power System.
11. Control System.
12. Power System.
13. Machines.
14. Measurements.
15. Power System.
16. Control System.
17. Machines.

18.Male.	Control System.
19.Male.	Measurements.
Reader:	
20.Male.	High Voltage.
21.Male.	Machines.
22.Male.	Machines.
23.Male.	Measurements.
24.Male.	High Voltage.
25.Male.	Power System.
26.Male.	High Voltage.
27.Female.	Illumination.
28.Female.	Measurements.
29.Male.	High Voltage.
30.Male.	Power System.

ELECTRONICS & TELE COMMUNICATION ENGINEERING :

This department was established (1957) shortly after the College of Engineering and Technology, Jadavpur, was given recognition of full-fledged university in the year 1955. It is one of the best teaching and reasearch centres with widespread reputation, both within and outside the country. Several students who have passed out successfully of this department are holding very important positions even at the NASA,U.S.A.

Courses of study and the annual intake of students are given below :

1. B.E.Tel.E.	58
2. M.E.Tel.E.	25
Total	83

Teaching Staff :

Professor	10
Reader	11
Lecturer	7

Research facilities are available mainly on the following fields :

- a) Computer Engineering, b) Communication Engineering, c) Control Engineering, d) Electron Devices.

The department in the process of its development built up well-equipped laboratories for research and advanced studies. A brief survey of them are given below :

1. VLSI CAD Laboratory,
2. AI&Expert System Laboratory,
3. Device Fabrication and Modelling Laboratory,
4. Photovoltaics Laboratory,
5. Image Processing Laboratory,
6. Circuit & System Design Laboratory,
7. Microstrip Communication Laboratory,
8. Fibre Optic Communication Laboratory,
9. Digital Communication Laboratory,
10. Micro-Electronics Laboratory.

The department has undertaken as many as 16 Government aided research projects with a total grant Rs. 1.6 crores. Like the previous year, this year too, the teachers of the department have published more than 50 papers in National and International Journals. The list of

publications include topics on Neuro-computing, Knowledge Engineering, Fuzzy Sets and Logic, Image Understanding, Fibre Optic Communication and Devices, Device Modelling Fabrication, Solar Photo Voltaics, Micro-trip, Antenna and Circuits and Systems.

This year, a centre for consolidation of further development and research activities in the field of Integrated Circuits and Devices designated "IC Design and Fabrication Centre" has been set up in this department.

Recently, the department has also started three new laboratories :

1. Electronic Design and Automation(EDA) Laboratory,
 2. Digital Signal Processional Laboratory,
 3. Robotic and Vision Laboratory,
- offering the students challenging opportunities to prove their worth on the frontiers of modern technologies.

Some of the ongoing Projects in the department :

Title of the Project	P.I.	Value	Sanctioning Authority
1. Centre for Microprocessor Application	Prof. D. K. Bose	Rs. 61,66,546	G.O.I.
2. I.C. Design & Fabrication,	Prof. H. Saha	Rs. 7,50,000	D.S.T.
3. Thin SILCon Solar Cell,	Prof. H. Saha	Rs. 16,50,000	G.O.I.(NC)
4. Career Award Scheme,	Dr. D.Saha	Rs. 2,50,000	A.I.C.T.E.
5. A.I.C.T.E., Emeretus Fellowship	Prof. M.K. Mukherjee	Rs. 80,000	A.I.C.T.E.
6. Body Mounted Antenna	Prof. S.K. Choudhury	Rs. 10,99,988	G.O.I.
7. I.C. Design & Fabrication Centre	Prof. H. Saha	Rs. 1,60,000	D.S.T.
8. I.C. Design & Fabrication Centre	Prof. H. Saha	Rs. 1,26,000	U.G.C.
9. Fibre Optic Neturked Pollution Monitoring	Dr. Ashim Kar	Rs. 16,50,500	A.I.C.T.E.

Professors :

1. Dr. Manujendra Nath Roy, .M.E. Tel.E., Ph.D.(J.U.)
2. Dr. Santosh Kumar Choudhury, M.E. Tel.E., Ph.D.(J.U.)
3. Dr. Ajit Kumar Mandal, M.Tech., Ph.D. (Cal)
4. Dr. Debidas Mukhopadhyay, M.Tech., Ph.D. (Cal)
5. Dr. Ashok Kumar Nath, M.Sc. (Tech.), D.Phil. (Cal)
6. Dr. Achintya Kumar Mukherjee, M.Tech (Cal) ., Ph.D. (L.U.T., U.K.) (Head of the Deptt.)
7. Dr. Rabindranath Nandi, M.E. Tel.E., Ph.D.(J.U.)
8. Dr. Hironmoy Saha, M.Tech.(Cal), Ph.D. (J.U.)
9. Dr. Alok Kumar Das, M.E. Tel.E., Ph.D.(J.U.)
10. Dr. Anup Kumar Bandyopadhyay, M.E. Tel.E., Ph.D.(J.U.)

Readers :

11. Dr. Pranab Kumar Banerjee, M.E. Tel.E., Ph.D.(J.U.)
12. Dr. Asim Kar, M.E. Tel.E., Ph.D.(J.U.), Ph.D (Wales)
13. Sri Samir Kumar Sarkar, M.E. Tel.E. (J.U.)
14. Dr. (Mrs.) Shibani Das, M.E. Tel.E., Ph.D.(J.U.)
15. Dr. Dipak Ranjan Poddar, M.E. Tel.E., Ph.D.(J.U.)
16. Sri Kalyan Kumar Mallik, M.E. Tel.E. (J.U.)
17. Dr. Salil Kumar Sanyal, M.E. Tel.E., Ph.D.(J.U.)
18. Dr. Bhaskar Gupta, M.E. Tel.E., Ph.D.(J.U.)

19. Dr. Amit Konar, M.E. Tel.E., M.Phil. (Env. Sc.), Ph. D. (J.U.)

Lecturers :

Dr.(Mrs.) Itri Saha-Mishra, M.E. Tel.E. (J.U.), Ph.D.(J.U.)

Smt. Sheli Murmu, B.E.Tel.E.(J.U.)

Dr.(Mrs.) Chayanika Bose, M.Tech. (C.U.), Ph.D. (Tech.) (C.U.)

Smt. Asmita Saha, M.Tech. (IIT, Kharagpur)

Teachers and their specialization :

SEX:

1. Male.
2. Male.
3. Male.
4. Male.
5. Male.
6. Male.
7. Male.
8. Male.
9. Male.
10. Male.
11. Male.
12. Male.
13. Male.
14. Male.
15. Male.
16. Male.
17. Male.
18. Male.
19. Male.

SPECIALISATION:

1. Microwave Engineering/ Antenna.
2. Microwave Engineering/ Antenna.
3. Artificial Intelligence/Control
4. Device/VLSI
5. Control/AI/Image Processing
6. Communication & DSP
7. Instrumentation/Control.
8. Device/Photo Voltaics/VLSI
9. Opto-electronics.
10. Computer.
11. Communication
12. Opto-electronics.
13. Communication
14. Device.
15. Microwave/Antenna
16. Telematics/Microwave
17. Communication & DSP
18. Microwave/Antenna
19. Computer/AI/Robotics

FOOD TECH. & BIO-CHEM. ENGINEERING :

In the sixties, the world was experiencing the wave of 'green revolution' entailed with a serious demand for extending science and technology in the fields of agriculture and preservation of food. To keep up the needs of the day, Jadavpur University established the Department of Food Technology and Bio-Chem. Engineering in the year 1964.

To begin with the department provided only the B. Tech course whereas the M.Tech course was initiated 3 years later. Biochemical Engineering is very significant area of study, because the food industry which play significant role in the production and marketing of agricultural products is based on organic living materials. The department provides modernized facilities freezing, canning, extrusion, preservation by fermentation, fermentative production of enzymes, chemicals and antibiotics, processing of cereals, legume and oil seeds.

To cope up with the latest developments, the department maintains contact with both national and international agencies and researches.

Course of the studies offered and annual intake capacity :

- | | |
|---|----|
| 1. B.Tech.(Bachelor of Food Tech. & Bio-Chem Engg.) | 17 |
| 2. M.Tech.(Master of Food Tech. & Bio-chem Engg.) | 8 |
| 3. Ph.D. | |

The department is in the 2nd phase (1996-2000) of DSA assistance, $\frac{3}{4}$ the fund value for this period is Rs. 40 Lakhs.

Specialization offered for U.G. level :

1. Plant operations, maintenance and safety,
2. Packaging technology,
3. Computer application in fermentation,

Specialization offered for P.G. level :

1. Cereal Process Engineering,
2. Fruit and Vegetable Technology,
3. Dairy Engineering,
4. Protein Technology.

Interdisciplinary Subjects :

1. Environmental Engineering,
2. Genetic Engineering,
3. Enzyme Engineering,
4. Cryogenics,
5. Advanced Purification Process,
6. Transport Phenomena.

Industry - Department Collaborative Projects :

1. Extracted Food (Reckitt & Colman)
2. Bio - Testiliser (IFFCO)
3. Osmo-Dried foods (FOSET),
4. Ricebran Stabilisation (Sarada Rice Mill),
5. Modified Atmosphere storage (Bridge & Roof).

The department received Rs. 1.51 Lakhs each in two phases during the 9th plan period for extension/department etc.

Department of Biotechnology (G.O.I) offered a Grant of Rs. 37.00 lakhs for Lactice Acid Bacteria Studies.

Seminar :

Dr.(Mrs) R.Choudhury participated in an International Seminar organized by DAAD, Germany during the period from May 2, 1997 to July 31, 1998.

Prof. R. Reimart, Dean, Faculty of Chemical Engineering of the University of Karlsruhe, Germany delivered a lecture on 27th Feb. 1999.

The department organised National Workshop on Storage and Transportation of Fruits and Vegetables on 27th March, 1998 and Annual Research Seminar on 6.4.98.

Some of the Ongoing Projects/Schemes in the Department :

Name of the Scheme	P. I.	Value	Funded by
1. Fermentative production of lipase and immobilization of the pure enzyme.	Dr.P.Chattopadhyay	Rs.5.14 Lakhs	DST,GOI
2. Fermentative production of xylanase	Do		UGC,DSA
3. Development of membrane tech for fruit juice concentration	Sri A.K.Ghosh Dr. R.Chakraborty Sri U.R.Chaudhuri	Rs.11.0 Lakhs	AICTE
4. Continuous extrusion cooking effects on structural, rheological and functional characteristics for different food products.	Dr.P.Chattopadhyay		UGC,DSA
5. Separation and precipitation of aminoacids from fermentation broths.	Dr.(Mrs.)R.Chakraborty	Rs.3.01 Lakhs	AICTE

Number of Research Papers,Articles,Books etc. published by the teachers of the department:

P. Chakraborty

Physico-chemical properties of extruded aquatic food, Vol.45.No. 2,1998.

Extruded feed and food from oilseeds, Oils and Fats Review,Vol.11,No.1,1998.

Extrusion Technology in Food, Processed Food Processing,Processed Food Vol.1,9,1998.

Application of Biotechnology in Molasses based and Allied Industries Trends and Prospects, Wisdom Publishing House, New Delhi ,1998.

H.Gangopadhyay

Storage and Transportation of Fruits and Vegetables under Modified Atmosphere,1998.

Professors :

1. Sri Birendranath Srimani, *M.Ch.E. (J.U.), M.S. (Cornell)*
2. Dr. Sankar Kumar Mukherjee, *M.Sc., M.Tech.(J.U.), Ph.D. (Cal)*
3. Dr. Parimal Chattopadhyay, *M.Tech., Ph.D. (J.U.)*

Readers :

4. Sri Hiranmoy Gangopadhyay, *M.Tech. (J.U.), P.G. Dip. (Netherlands)*
5. Dr. Amit Kumar Mukhopadhyay, *M.Tech., Ph.D. (J.U.)*
6. Sri Amit Kumar Ghosh, *M.Tech., M.E. (J.U.)*
7. Dr. Pratap Chakraborty, *M.Tech., M.S(Sask, Canada) , Ph.D. (J.U.)*
8. Sri Utpal Roy Choudhuri, *M.Ch.E. (J.U.) , AMIE (India)*
9. Mrs. Runu Chakraborty, *M.Ch.E. (J.U.) , AMIE (India)*
- 10 Dr. (Mrs.) Ranjana Chowdhury, *M.Ch.E., Ph.D. (J.U.)*

Teachers and their specialization :

SEX

Professor:

1. Male.
2. Male
- 3.Male.

Reader :

- 4.Male.
5. Male
- 6.Male.
- 7.Male.
- 8.Male.
- 9.Female
10. Female

Specialization :

Chemical Engineering
Fermentation Technology
Biochemical Engineering

Food Technology.
Biochemical Engineering
Biochemical Engineering
Food Technology/Food Biotechnology
Chemical Engineering
Chemical Engineering
Chemical Engineering

INSTRUMENTATION ENGINEERING :

Established in the year 1966, this department is now functioning from the second campus of the University, at Salt Lake.

The department at present is conducting two undergraduate courses.

1. B.Tech. in Instrumentation & Electronics Engineering and, 2. B.E.in Instrumentation Engineering. The first course began since 1966 and the second one from 1989 and the M.Tech course began from 1991.

Specialization in the U. G. Level Offered:

1. Power Electronics, 2. Process Control, 3. Circuits and Systems Instrumentation, 4. Control and Drives, 5. Semiconductor Sensors, 6. Biomedical Instrumentation, 7. ASIC Design.

The department received from the UGC Rs. 3.5 lakhs for equipments and Rs. 1.15 lakhs for library books as the first phase grant under 9th plan period.

Two important projects are running under Prof. D.C. Patranabis.

Project: Design and Implementation of an Optimal Controller for Strap-down Gyroscopes. Directorate of Training and Sponsored Research (DTSRR), Ministry of Defence, is supporting the programme with a fund of Rs. 9.06 lakhs.

For the second project ; Modernisation of Departmental Laboratories, A.I.C.T.E provided a fund at Rs. 8.00 lakhs.

During the current year, the teachers of the department published 12 papers and 2 books.

Composition of teachers :

1. Two Professors 2. Four Readers and 3. Six Lecturers (3 Male and 3 Female)

a) The Jadavpur University Students' Chapter of Instrument Society of America is formed with 89 student members.

b) The department in collaboration with Indian Statistical Institute has been awarded to hold the Asian Fuzzy Systems Conference in the year 2002.

Professors :

1. Dr. Dipak Chandra Patranabis, *M.Sc. (Tech), Ph.D.(Cal)*
2. Dr. Kalyan Kumar Roy, *M.Tech. (IIT, Kanpur) , Ph.D. (J.U.),*

Readers :

3. Dr. Subhankar Bandyopadhyay, *M.E. Tel.E., Ph.D. (J.U.)*
4. Dr. Ardhendu Ghoshal, *M.Tech. (Cal), Ph.D. (J.U.)*
5. Sri Rajib Bandyopadhyay, *M.E. Tel. E. (J.U.) (Head of the Deptt.)*
6. Dr. Bivas Dam, *M.E. (I.I.Sc.) Ph.D. (J.U.)*

Lecturers :

- Sri Kalyan Majumdar, *M.Tech. (J.U.)*
Sri Rajani Kanta Mudi, *M.Tech. (Cal)*
Sri Kumardeb Banerjee, *ME.Tel.E. (J.U.)*
Dr. Bhaswati Goswami, *M.Tech., Ph.D. (Cal)*
Ms. Karabi Biswas, *B.Tech. (I.I.T,Kharagpur)*
Dr. Ratna Ghosh, *B.Tech.,Ph.D. (I.I.T., Kharagpur)*

Teachers and their specialization :

Sex:	Specialisation
Professor:	
1. Male	Process Instrumentation/Process Control
2. Male	Power Electronics/Soft Computing.
Reader:	
3. Male	Process Instrumentation
4. Male	Semiconductor Sensors.
5. Male	Process Control
6. Male.	I.C. Design/ Electronics Circuits.

MECHANICAL ENGINEERING :

Functioning since 1906, this is one of the oldest departments that was established under The National Council of Education, Bengal. During those days of freedom struggle, several luminaries who graduated from this department served as industrialists, fulfilling the nationalist aspirations at the same time. At present it is the largest department in the Faculty of Engineering. Several of the teachers are engaged in research activities under D.R.D.O., Ministry of Defence, and several other modernisation projects. The department can boast of its modern Workshop. With all modern machineries including NC and CNC machines are catering to the need of all the specializations. The teachers of the department are actively associated with different bodies like National Test House, Regional Testing Centre, Department of Science & Technology, Centre and State Ministry of Environment & Forests, Ministry of Water Resources, DVC and with different public organizations.

The department runs following courses with students annual intake below given:

B.M.E.	102
P.G.	25
Ph.D.	-

Total 127

Apart from these, the department runs interdisciplinary P.G. Programmes on Applied Mechanics & Hydraulics and Water Resources Engineering. From the department the following Schools /Centre originated

1. School of Water Resource Engineering,
2. School of Bio-Science & Engineering
3. Centre for Quality Management Systems

Ongoing Projects :

Title of the Project	P.I.	Value	Sanctioning Authority
1. Regional Centre, National Afforestation, and Eco-Development	Prof . B. Bose	Rs. 50, 05,508	M.E.F
2. Information Data Base on Available Resources	Dr. P. K. Bose	Rs. 8,80,000	AICTE

3. Tribiological studies of different parts at variable environment	Dr. A. Bhattacharya	Rs. 8,00,000	AICTE
4. Design and Dev. of Agricultural ...etc.	Dr. T.K. Saha	Rs. 6,00,000	Do
5. R/P Project	Dr. P.K. Bose	Rs.5,000	Do
6. Scale Effects in a Mixed Flow Pump	Dr.T.K.Saha	Rs.3,70,000	Ministry of Water Defence
7. Neptune III	Dr. B.Bose Prof. S.Pal & A.K. Bhattacharya	Rs. 3,50,000	D.R.D.L.
8. Studies on Molecular Mechanism of Bacterial Resistance.	Dr. S. Pal	Rs. 1,47,000	CSIR
9. Abetment of Pollution	Dr. P. K. Bose	Rs. 5,00,000	AICTE
10. On Water Resources : Development of W. Bengal	Prof. B.Bose,	Rs. 6,01,658	Ford Foundation New Delhi

Professors :

1. Dr. Ajit Kumar Pal, M.M.E. (J.U.), M.Sc.(Tech.), Ph.D. (Manchester)
2. Dr. Ananta Krishna Pal, M.M.E., Ph.D.(J.U.), A.M.I.E. (India), F.A.E. (India), M.E.P.S.I.
3. Dr. Madhusudan Bhattacharyya, B.M.E., Ph.D. (J.U.), Dip. Prod. E.. (Manchester), M.I.E. (India), F.A.E. (India) M.I.S.N.T, M.I.S.T.E.
Dr.Pankaj Kumar Ghosh, B.Sc.(Cal),M.M.E. Ph.D.(J.U.)
4. Dr. Rajendra Narayan Banerjee, B.M.E. (J.U.), Ph.d. (Volgograd), FIE (I)
5. Dr. Ardhendu Bhattacharyya, M.M.E., Ph.D. (J.U.)
6. Dr. Sukrit Ranjan Bhattacharyya, B.M.E., B.E.E., M.M.E., (J.U.), Ph.D.(Salford), F.I.E.(India),F.A.E.(India) (Head of the Deptt.)
7. Dr. Brahma Prosad Chatterjee, M.M.E., (J.U.), M.I.E., M.A.E. (India)
8. Dr. Samir Kumar Saha, M.M.E., Ph.D. (J.U.), F.I.E. (India), Mem. S.E.S.I. (India)
9. Dr. Sukhendu Kumar Ghosh, B.Sc., (Cal), Dip. Ing. (W. Berlin), Dr. Ing. (W.Berlin), F.A.E. (India), MISTE
10. Dr. Tapan Kumar Chattopadhyay, M.M.E., Ph.D. (J.U.), AMIE (I), Mem. SIGMAZI (USA)

Professors (attached to M.E. Department) :

11. Dr. Balaram Bose, M.M.E.,(J.U.), Ph.D. (Southampton), F.A.E. (India), F.I.A.H., M.I.W.R.A. (Professor of Water Resources Engineering)
12. Dr. Subrata Pal, M.M.E., Ph.D. (J.U.), .A.S. M.E.,(Fellow), M. BIOMECH (U.S.A.) F.I.E.(I) (Professor of Bio -Engineering)

Readers :

13. Sri Arunesh Kundu, M.M.E. (J.U.)
14. Sri Soumendra Nath Pal, M.M.E. (J.U.)
15. Sri Dipak Kumar Banerjee, M.M.E. (J.U.)
16. Sri Pradip Kumar Banerjee, M.M.E. (J.U.)
17. Sri Nagendra Nath Das, B.Sc. (B.U.), B.Tech. (I.I.T., Kgp.), M.M.E. (J.U.)

18. Sri Arun Kumar Bhattacharyya, M.M.E. (J.U.)
 19. Sri Kamallesh Majumdar, M.M.E. (J.U.)
 20. Sri Sankar Prosad Choudhury, B.E. (Cal), M.M.E. (J.U.)
 21. Sri Sukumar Roy, M.M.E. (J.U.), M.A.E. (India)
 22. Dr. Swapan Kumar Chakraborty, M.M.E. (J.U.), Ph.D. (Salford)
 23. Sri Amar Kumar Banerjee, (Workshop Superintendent), B.M.E. (J.U.)
 24. Sri Subhas Chandra Roy, M.M.E. (J.U.), M.A.E. (India)
 25. Dr. Timir Kanti Saha, M.M.E. (J.U.), Ph.D. (I.I.Sc.)
 26. Dr. Probir Kumar Bose, B.E. (B.U.), M.M.E. (J.U.), Ph.D. (I.I.T., Bombay)
 MIE (I), MIW, MAE (I), MISE, MISVM (I), M.Comb I (USA)
 27. Dr. Simul Banerjee, M.M.E. (J.U.), Ph.D. (I.I.T.)
 28. Sri Ashutosh Bhattacharyya, B.M.E. (J.U.), M.E. (B.U.)
 29. Dr. Prabir Kumar Ghosh, B.M.E., Ph.D. (J.U.), M.E. (Cal.)
 30. Sri Subodh Kumar Saha, M.M.E. (J.U.)
 31. Sri Gadadhar Das, M.M.E. (J.U.)
 32. Dr. Amitava Sarkar, B.E. (Cal), M.E. (Thermal Engg.), M.E. (Prod. Engg.) (Cal), Ph.D. (I.I.T., Madras), A.M.I.E. (India)
 33. Sri Tarun Kanti Naskar, M.M.E. (J.U.)
 34. Sri Gautam Nandi, M.M.E. (J.U.)
 35. Sri Sadhan Kumar Ghosh, M.M.E. (J.U.)
 36. Sri Debabrata Roy, M.E. (Cal)
 37. Dr. Sankar Dhar, B.E. (Cal), M.Tech. (I.I.T., Kanpur), Ph.D. (I.I.T., Kanpur),
 38. Sri Pradip Kumar Pal, M.M.E. (J.U.)
 Reader (Engineering Economics)
 39. Sri Samar Chandra Mondal, MME (J.U.)
 40. Sri Santosh Kumar Poddar, M.Com. (Cal), A.C.I.M.A. (Lond),
 41. Dr. Sujit Ghosal, MME (J.U.), Ph.D. (I.I.T., Kharagpur)
Lecturers : (Senior)
 Sri Debasish Roy, M.E. (Mech) (N.B.U.), M.M.E. (J.U.)
 Sri Asis Kr. Majumdar, M.M.E. (J.U.)
 Dr. Sumanta Neogi, BME (J.U.), M.Tech. (IIT, Kgp.), A.M.I.E. (India) Ph.D. (I.I.T., Madras)
 Dr. Swarnendu Sen, M.M.E. (J.U.), Ph.D. (J.U.), A.M.I.E. (India)
 Sri Gautam Majumdar, B.E. (Cal), M.Tech. (B.U.)
 Dr. Subhashis Ray, BME (J.U.), ME (I.I.Sc.), Ph.D. (I.I.T., Bombay)
 Sri Ranajit Kumar Chakraborti, B.M.E. (J.U.), M.Tech. (IIT, Kgp.)
 Sri Gautam Pohit, B.M.E. (J.U.), M.S. (Akron, U.S.A.)
 Dr. Dipankar Sanyal, BME (J.U.), ME (I.I.Sc.), Ph.D. (I.I.T., Kanpur)
 Sri Saikat Mookherjee, BME (J.U.), ME (IISc, Bangalore)
Lecturers :
 Sri Monoj Maitra, M.M.E. (J.U.)
 Sri Abhijit Datta, BE (Cal), M.M.E. (J.U.)
 Dr. Sujit Ghosal, M.M.E. (J.U.), Ph.D. (IIT)
 Sri Dipten Misra, M.M.E. (J.U.)
 Sri Sandip Das, BME (J.U.), M.Tech. (IIT, Kanpur)
 Sri Prabir Kumar De, M.M.E. (J.U.)
 Sri Amit Karmakar, BME (J.U.), ME (IISc, Bangalore)
 Sri Avijit Mukherjee, B.E. (Cal), M.Prod. E. (J.U.)
 Sri Dipak Laha, M.E. (Cal), M.Tech. (IIT, Kanpur)

- Sri Kashi Nath Saha, M.M.E. (J.U.), M.A.E. (India)
 Sri Asish Bandyopadhyay, M.M.E. (J.U.), M.I.E. (India), M.A.E. (India)
 Sri Krishna Chandra Das, M.M.E. (J.U.)
 Sri Arunava Chanda, M.M.E. (J.U.)
 Sri Achintya Mukhopadhyay, B.M.E. (J.U.), M.E. (IISc.)
 Sri Sudipta De, B.E. (Cal), M.Tech. (I.I.T., Kharagpur)
 Sri Lakshman Hazra, M.E. (Cal), M.Tech. (I.I.T., Kharagpur)
 Sri Sanjib Acharya, M.E. (Cal)
 Sri Snehamoy Majumder, M.M.E. (J.U.)
 Sri Argha Nandi, BME (J.U.), ME (IISc, Bangalore)
 Sri Somenath Bhattacharyya, MME (J.U.)
 Sri Rajat Subhra Sen, BME (J.U.)
 Sri Prasanta Sahoo, BME (J.U.), M.Tech. (IIT)
 Sri Snehangshu Mandal, BME (J.U.), M.Tech. (IIT, Kanpur)
 Sri Buddhadeb Oraon PGDIE
 Sri Abhra Roy, M.M.E. (J.U.)
 Sri Pabitra Balida, M.E. (Cal).

Teachers with their Specialisation :

SEX:	SPECIALISATION:
1. Male.	Production.
2. Male.	M/C Design.
3. Male.	M/C Design/Welding
4. Male.	Production/Management.
5. Male.	Production/CAM.
6. Male.	Fluid Mechanics & Hydraulics.
7. Male.	Applied Mechanics.
8. Male.	Thermal Sciences/Solar Energy.
9. Male.	M/C Design.
10. Male.	Applied Mechanics/CAD.
11. Male.	Water Resources.
12. Male.	Biomedical Engineering.
Reader:	
13. Male.	Applied Mechanics.
14. Male.	Fluid Mechanics.
15. Male.	Production Engineering.
16. Male.	M/C Design.
17. Male.	Heat Power.
18. Male.	Fluid Mechanics & Hydraulics.
19. Male.	Applied Mechanics.
20. Male.	Production.
21. Male.	M/C Design.
22. Male.	Production.
23. Male.	Production.
24. Male.	M/C Design.
25. Male.	Fluid Mechanics & Turbo Mechines.
26. Male.	Thermal Power.

27. Male. Production.
 28. Male. Heat Power.
 29. Male. Production.
 30. Male. Heat Power.
 31. Male. Applied Mechanics.
 32. Male. Heat Transfer/Energy Conversion.
 33. Male. M/C Design.
 34. Male. Production.
 35. Male. Production/TQM
 36. Male. Applied Mechanics.
 37. Male. Applied Mechanics.
 38. Male. Production.
 39. Male. M/C Design.
 40. Male. Engineering Economics.
 41. Male. Fluid Mechanics.

METALLURGICAL ENGINEERING :

The dept. of Mett. Engineering was established in 1956 with the purpose of imparting excellent training to students who would be able to join several industries as qualified engineers, dealing with the production and processing of metals and alloys including foundries, rolling mills and fabrication shops. The focus of post graduate degree is mainly fixed to train qualified metallurgical engineers for state of art technologies at different Indian metallurgical industries.

Courses run by the department and the annual intake of students is shown on the R.H.S.

1. B. Met. E. - 24
2. M.Met. E. - 10
3. Ph.D. -

The department receives grants from MHRD, DST, DAE and Dept. of Culture, CSIR, AICTE W.B.S.T., ARDB for different Projects of national importance.

Ongoing research projects include Bio-batching of sulphides, Diffusion Bonding of Al and Steel, Solvent Extraction of Gallium, Corrosion Fatigue of wire rod steel etc. totalling about Rs. 25.00 lakhs.

The department extended its expertise to some outside organizations in the form of testing consultancy, and HRD Programmes. Notable among them are CMWSA, SIST, ESAB India Ltd. GPIL, Hind Motors.

An important national level workshop was held successfully in the department. An industry relevant open house discussion on "Emerging Steel Technology" was organised in 1998 where a senior scientist from Pench Steel Corporation U.S.A. interacted with senior personnel from top steel producers and consultants of India.

School of Material Science and Technology has originated from this department :

Facility for Consultancy Services:

1. Heat Treatment, 2. Mechanical Testing, 3. Corrosion & Stress Corrosion testing,
4. Foundry, 5. Welding,

Dr. Badal Bhattacharya, Scientific Officer, attached to the department is engaged with extensive research works. He has already produced one Ph.D., another has been submitted and four registered under him.

Papers published :

1. Continuous separation of hexavalent chromium in a packed bed of Fly-Ash Pellets -B. Bhattacharya et. al, Chem Engg. Technol. pp. 15-21, No. 1, 1998
2. Determination of cadmium, chromium, iron, zinc, and selenium in urine after extraction with tri-iso-octylamine by Atomic Absorption Spectroscopy. B. Bhattacharya, Second National Workshop, Feb. 10-12, 1999, Central Pollution Control Board, Govt. of India, Delhi.
3. Temporal Variability of Selenium in Biotic and Abiotic Matrices in the East Coast of India, B. Bhattacharya et. al. Proceedings of the International Conference on Environmental Sciences, ICES '98, Dec. 2-4, 1998, Regional Research Laboratory, Trivandrum.

Ongoing Project :

Title of the Project	P.I.	Value	Authority
1. "Glass Metal"	Prof. M. Mitra	Rs. 10,00,000	AICTE
2. "Steel and its characteristic"	Dr. T.K. Pal	Rs. 5,50,000	DST
3. IIF - R4 Projects	Dr. Prasanta Dutta	Rs. 30,000	IIS
4. "Modernisation of Atomic Absorption Spectroscopy Laboratory and Training Manpower"	Dr. Badal Bhattacharya	Rs. 5.00 lakhs	AICTE
5. Recovery of Gallium from Sodium Aluminate during Extraction of Aluminium from Bauxite Ore by Solvent Extraction Technique Using High Molecular Weight Wet Amines"	Dr. Badal Bhattacharya	Rs. 6.61 lakhs.	DST GOI

Professors :

Sri Bireswar Chakravorty, M.E. (Cal), M.I.I.M., F.I.E.
 Sri Asoke Kumar Ghosh, M.E. (Cal), M.I.I.M., F.I.E.
 Sri Bimal Chaudhuri, M.E. (Cal), M.I.I.M., F.I.E.
 Dr. Prodyot Kumar Mitra, M.Tech. (I.I.T.), Ph.D. (J.U.)
 Sri Monoj Kumar Mitra, M.Tech. (I.I.T.), M.I.I.M.

Readers :

Dr. Siddhartha Mukherjee, B.E. (Nagpur), M.Tech. (I.I.T.), Ph.D. (J.U.), A.M.I.I.M.
 Dr. Gopesh Chandra Das, B.Sc. (Tech.), M.Tech., Ph.D. (I.I.T., Kanpur), L.M.M.R.S.I.
 Dr. Tapan Kumar Pal, B.E. (Met), M.Tech. (B.U.), Ph.D. (I.I.T.), L.M.I.I.W., L.M.I.I.M., M.I.E. (I)
 Dr. Prasanta Kumar Datta, M.Met. E., Ph.D. (J.U.) (Head of the Department).
 Dr. Dinabandhu Ghosh, B.Met.E. (J.U.), M.Tech. (I.I.T.), Ph.D. (U.S.A.) A.M.I.I.M.

Lecturers : (Senior)

Dr. Subir Paul, M.Tech. (I.I.T.), Ph.D. (J.U.)
 Sri Pravash Chandra Chakravorty, M.Met. E. (J.U.)

Teachers with their Specialisation :

SEX:	SPECIALISATION:
1. Male.	Thermodynamics and Kinetics.
2. Male.	Magnetic Materials/NDT/Alloy Development.
3. Male.	Laser Material Processing/Distant Education on Energy.
4. Male.	Corrosion/Environmental Failure/Physical Metallurgy.
5. Male.	Fatigue/Physical Metallurgy Naho-Composite.
Reader:	
6. Male.	Kinetics of Metallurgical Reactions/Sol-Gel Processing/Process Development.
7. Male.	Ceramics/Sol-Gel Processing of Naho-Composite
8. Male.	Welding/Metallurgy/Corrosion.
9. Male.	Solidification/Foundry/Modelling.
10. Male.	Thermodynamics and Kinetics of Metallurgical System.

PHARMACEUTICAL TECHNOLOGY :

This department came into being in the year 1963, as the only one of its kind in Eastern India at that time.

The department offers the following courses of studies :

1. B. Pharm
2. M. Pharm
3. Ph.D.

Student intake as per course is given below:

- | | |
|-------------|----|
| 1. B. Pharm | 70 |
| 2. M. Pharm | 25 |
| 3. Ph.D. | |

Total : 95

The department enjoys the convenience of having /possessing laboratories. Some of them are:

1. Pharmaceutical Chemical Laboratory,
2. Pharmaceutics Laboratory
3. Pharmaceutical Engineering Laboratory
4. Microbiology Laboratory
5. Pharmacology laboratory
6. Pharmacognosy Laboratory

Special equipments available are ;

1. UV - Spectrometer
2. Melter Balance
3. Gas Chromatograph
4. Dissolution Apparatus
5. HPL
6. Ultracentrifuge.Cold Centrifuge

7. Electrophoresis
8. Zyophiliser

Facility for consultancy services :

1. Quality Control Tests for SSI Units
2. Selected Basic Drugs and Chemicals as well as Pharmaceutical Formulations
3. Herbal Drug
4. Animal Testing Facilities
5. Toxicity Studies

Seminar :

The department organised an Indo-Hungarian Symposium on 'Application of Biotechnology in Chemical & Pharmaceutical Industries from 13 to 14 Nov, 1998 under the sponsorship of DST,GOI, New Delhi. Both in teaching and research, the department has created a strong legacy. The areas of research cover wide range which include design of new drugs and drug delivery systems, industrial pharmacy, biotechnological applications, microbial applications for the preparation of new antibiotics, design of new herbal medicines, enzymes, co-enzymes and other pharmaceutical chemicals etc. The faculty members are in touch with different Chemical Industries both in West Bengal and in other states.

Ongoing Projects :

Title of the Project	P.I.	Value	Funding Authority
1. Management of Arsenic Toxicity by Selenium etc.	Dr. M. Chatterjee	Rs. 1,91,000	DST (W.B.)
2. Bio-chemical Histopathological and Cytogenetical Studies on Cadmium (CD) in Different Tissues, of Mice	Dr. M. Chatterjee	Rs. 49,600	ICMR
3. Beta Carotene, Helpful or Harmful Evaluation of Biochemical Liver Carcinogenesis	Dr. M. Chatterjee	Rs. 1,57,52	CSIR
4. Standardisation of Computerised Vibrating Capillary Apparatus to Prepare Microcapsules	Prof. T. K. Pal	Rs. 1,21,000	UGC
5. Pharmacological Studies of.... medicinalDrugs	Dr. T.K. Chatterjee	Rs. 2,54,780	
6. Chemoimmuno therapeutic studies, on Cancer ...Preparation of Vaccine.	Dr. T. Jha	Rs. 1,20,000	UGC
7. Phenothiazines as Unique Non Antibiotic Drug Endowed with Antimicrobial Property	Dr. (Mrs.) S. Ghosh Dastidar	Rs. 60,000	UGC
		+ one JRF	

Professors :

1. Sri Bijan Kumar Gupta, M.Pharm. (Andhra), F.I.C.
2. Dr. Arun Uday De, M.Sc.(Tech.), D. Phil. (Cal).
3. Dr. (Mrs.) Malaya Gupta, M.Sc., D. Phil. (Cal), F.I.C
4. Dr. (Mrs.) Sujata Ghosh Dastidar, M.Sc.(Cal), Ph.D. (Bombay)
5. Dr. Sadhan Kumar Dutta, M.Sc., (Dacca), .Ph.D. (Pharm) (J.U.), F.I.C.

6. Sri Arunabha Nanda, M.Ch.E. (J.U.), LM.II.Ch.E., M.A.E.

Readers :

7. Dr. (Mrs.) Manjushree Pal, M.Pharm. (Andhra), Ph.D. (J.U.), F.I.C.
8. Dr. Bishnupada Saha, B.Pharm. (Raj), M.Pharm., Ph.D. (J.U.), F.I.C.
9. Dr. Saroj Kumar Ghoshal, M.Pharm.(Andhra), Ph.D.(J.U.), F.I.C.(Head of the Deptt.)
10. Dr. (Mrs.) Chandana Sen Gupta, M.Pharm., Ph.D. (J.U.)
11. Dr. Sanat Kumar Basu, M.Pharm., Ph.D. (J.U.), F.I.C.
12. Dr. Upal Kanti Majumder, M.Pharm., (B.H.U.), Ph.D. (J.U.), F.I.C.
13. Dr. Tapan Kumar Pal, M.Ch.E., Ph.D. (J.U.), M.II.Ch.E.,
F.I.E. (India), MNYAS (U.S.A.)
14. Dr. Jayanta Kumar Gupta, M.Pharm. (B.H.U.), Ph.D. (J.U.), F.I.C.
15. Dr. Malay Kumar Chatterjee, M.Sc., Ph.D. (Cal), D.Sc. (J.U.)
M.R.Sc., C.Chem. (London)
16. Dr. Asish Kumar Nag Choudhury, M.Sc., Ph.D. (Cal)
17. Dr. Sunil Kumar Mandal, M.Sc., Ph.D. (Cal)
18. Dr. Amal Kumar Banerjee, M.Pharm., Ph.D. (J.U.), A.I.C.,
A.M.I.I.S.T., Dip in Biotech. (Japan)
19. Dr. Biswanath Sa, M.Pharm., Ph.D. (J.U.)

Lecturers : (Senior)

- Dr. Tanmoy Bera, M.Pharm., Ph.D. (J.U.)
 Dr. (Mrs.) Jasmina Khanam, M.Pharm., Ph.D. (J.U.)
 Dr. Tarun Jha, M.Pharm., Ph.D. (J.U.), F.I.C.
 Dr. Lakshmi Kanta Ghosh, B.Pharm., M.Pharm.; Ph.D.

Lecturers :

- Dr. Subhash Chandra Mandal, M.Pharm. (J.U.), A.I.C.

Teachers with their Specialisation :

SEX:

SPECIALISATION:

- | | |
|-------------|---|
| 1. Male. | Pharmaceutics. |
| 2. Male. | Pharm.Chemistry. |
| 3. Female. | Pharmacology. |
| 4. Female. | Microbiology |
| 5. Male. | Pharm. Chemistry. |
| 6. Male. | Pharm.Engineering. |
| 7. Female. | Pharm: Chemistry. |
| 8. Male. | Pharm: Chemistry. |
| 9. Male. | Pharmaceutics/Biopharmaceutics & Pharmaco Kinetics. |
| 10. Female. | Pharm.Chemistry. |
| 11. Male. | Pharmaceutics. |
| 12. Male. | Pharm. Chemistry. |
| 13. Male. | Pharm. Engineering. |
| 14. Male. | Pharm. Chemistry. |
| 15. Male. | Bio-Chemistry. |
| 16. Male. | Pharmacology. |
| 17. Male. | Microbiology. |
| 18. Male. | Pharmaceutics. |
| 19. Male. | Pharmaceutics. |

POWER PLANT ENGINEERING :

This department is only ten years old (1989) in the Faculty of Engineering & Technology. The aim of it is to produce specialised engineers in the field of Power Plant Engineering. The course contains power plant related subjects starting from coal feeding to power generation.

Degree offered and the annual student intake :

At present the department offers only the Bachelors degree in Power Plant Engineering with an annual intake of 39 students. The department intends to begin the post graduate(taught) course from the next academic session of 1999-2000, which is however, subject to the approval of the AICTE.

The department can boast of highly equipped laboratories like :

1. Basic Engineering Laboratory, 2. Combustion Laboratory, 3. Computer Laboratory,
4. Electrical Machine Laboratory, 5. Fluid Laboratory, 6. Heat Transfer Laboratory, 7. Power Transfer Laboratory, 8. Prime Mover Laboratory.

Ongoing Project :

Title	P.I.	Value	Sanctioning Authority
Studies in Pressurised CFB	Dr. P.K. Halder	8,80,000	AICTE

Professor :

1. Sri Subhas Datta Gupta, M.M.E. (J.U.)

Readers :

2. Sri Amar Nath Sanyal, M.E. (Cal), M.I.E. (I)
- Dr. Prabir Kr. Halder, B.E.(Cal), M.Tech..(I.I.T.), Ph.D.(Tuns), Asso.Mem. A.S.M.E.(head of the Dept)
3. Sri Niladri Chakraborty, M.M.E. (J. U.) (on lien)
4. Sri Amitava Datta, M.M.E. (J.U.)
5. Dr. Bireswar Majumdar, M.M.E. (J.U.), Ph.D. (I.I.T., Delhi)
6. Sri Amitava Gupta, M.Tech.(IIT, Kanpur)

Lecturers :

- Ms. Mausumi Basu, M.M.E. (J.U.)
 Sri Ranjan Ganguly, B.P.P.E. (J.U.)

Teachers with their specialisation :

SEX:

SPECIALISATION :

- | | |
|----------|---|
| 1. Male. | Heat Power |
| 2. Male | Electrical Machines and Power System. |
| 3. Male. | Electrical Machines/Cryogenics. |
| 4. Male | Thermal Engineering(Combustion) |
| 5. Male. | Fluid Machines & Machines |
| 6. Male | Nuclear Control & Instrumentation Power |

PRODUCTION ENGINEERING :

This department, established in 1980, is comparatively young but has already been able to earn national and international reputation for itself especially during the late 70s. Since then there has been rapid advance in manufacturing technology, with computer controlled process and management information systems that effectively enhance a specialized training in manufacturing and production that cater to the growing requirements of industries both in India and abroad.

Courses of studies offered by the department and the capacity of each class are as follows:

1. Bachelor of Production Engineering.	38
2. Master of Production Engineering.	10+3(Sponsored students)
3. Ph.D.	

In the 9th Plan Period (Phase I), Grants Received:

Grants on Equipment	1.5 Lakhs
Grants on Books	1.0 Lakhs

In the 9th Plan Period (Phase II), Grants Received:

Grants on Equipment	1.5 Lakhs
---------------------	-----------

Total 4.00 Lakhs

Amount for the grants on Books is yet to be decided.

Ongoing Research & Projects :

Title	P.I.	Funding Authority	Amount in Lakhs
1. Machine Vision and Robot Application	Prof. S.R. Deb	UGC	Rs. 5.00
2. Centre for Advanced Study (CAS)	Prof. S.K. Sorkhel	UGC	Rs. 37.45
3. Flexible Quality Engg. Systems.	Prof. S.K. Sorkhel	AICTE	Rs. 11.00
4. Performance of Electro-chemical Discharge Machining (ECDM) System During Machining of High Tech Ceramics.	Dr. B. Bhattacharyya	UGC	Rs. 2.00
5. Robotised Flexible Assembly System for Industrial Applications.	Sri S.K. Debnath	AICTE	Rs. 6.00
6. Application of Electro-chemical Machining (ECM) System in Microscopic Domain	Dr. B. Bhattacharyya	AICTE	Rs. 7.00
7. Development of IE Modules within the Framework of Production Engineering	Sri R. Bhattacharyya	AICTE (TAPTEC)	Rs. 9.50

Professors :

1. Dr. Satyaranjan Deb, M.M.E., Ph.D. (J.U.), F.I.E., C. Engg. (I) Member CSI, Member IIE., Fellow, W.B. Acad. of Sc. & Tech.
2. Dr. Swapan Kumar Sorkhel, M.M.E., Ph.D. (J.U.), F.I.E. C. Engg. (I) Member, New York Acad. of Sc., USA.
3. Dr. Jyotirmoy Saha, M.M.E., Ph.D. (J.U.), M.I.E., Member, ISTE.
4. Dr. Sanat Kumar Mukherjee, M.M.E., Ph.D. (J.U.), I.I.M. (Cal) F.I.E., C. Engg. (I), Fellow FII, Prod. E, (Member IIM,) Member, ORSI, M.IAPQR, FSAEST (on lien)

Readers :

5. Sri Subir Kumar Sanyal, M.M.E. (J.U.), M.I.E. (Head of the Department)
6. Dr. Balendra Nath Lahiri, B.Tech., M.Tech. (Cal), Ph.D. (J.U.), M.I.E.
7. Dr. Bijoy Bhattacharyya, B.Tech. (Mech.) (Calicut), M.Prod.E., Ph.D. (J.U.), M.I.E., C.Engg. (I)
8. Dr. Bijan Sarkar, M.Prod.E., Ph.D. (J.U.), AMIE (I), MSRE (I), C.Engg. (I), MISTE, MORSI.
9. Dr. Ajoy Kumar Dutta, ME. Tel E, Ph.D. (J.U.), MIE.
10. Sri Subir Debnath, B.M.E. (J.U.), M.Tech. (I.I.T., Kgp)

Lecturers : (Senior)

Sri Ranjan Bhattacharyya, M.Prod.E. (J.U.)

Lecturers :

Dr. Shankar Chakraborty, B.Sc. (Tech.), M.Prod.E., Ph.D. (J.U.), AMIE, C.Engg. (I)

Sri Souren Mitra, BME, M.Prod.E. (J.U.), AMIE., C.Engg. (I), MISTE (I)

Sri Biswanath Doloi, B.E., M.Prod.E. (J.U.), AIE. (I), MISTE (I)

Teachers with their specialisation :

SEX:

1. Male.
2. Male
3. Male
4. Male.
5. Male
6. Male
7. Male
8. Male
9. Male
10. Male

SPECIALISATION :

Robotics/CAD/CAM/CIM/Production Engineering
 Adv. Manufacturing Technology (Non-Traditional & Precision Machining, F.M.S etc.)/
 Quality Engg./Maintenance Engg. & Tero-Technology/Industrial Engg. & Computer Applications.
 Manufacturing Science/Automation/CNC Machines/Robotics/Computer Integrated Manufacturing (CIM).
 Operation Research/Financial Management/New Technology/Behavioural Science/Ergonomics.
 Engineering Graphics/ Computer Graphics/CAD-CAM/Tribology/Artificial Intelligence.
 Non-traditional Machining/Ergonomics/Design
 Adv. Manufacturing Technology (Non-Traditional Machining (NTM) Processes/Machine Tool Systems/Production Management.
 Tribology/Reliability/Terotechnology/Operations Management.
 Computer Applications/Robotics/Robot Sensor and Vision.
 Robotics.

PRINTING ENGINEERING :

Although Printing Technology is becoming increasingly important, both in the country and abroad as an academic discipline, the fact that the subject of printing could be included in the Faculty of Engineering was never thought of in India until it was established in Jadavpur University in 1988. The department at present is offering the Bachelors degree in Printing Engineering and annual intake of students is 20.

The department was quick to established the modern infrastructural facilities:

1. Book Printing Laboratory, 2. Graphic Reproduction Laboratory, 3. Quality Control & Material Laboratory, 4. Computer Laboratory, 5. Packaging Laboratory, 6. DTP/PTS Laboratory, 7. Electrographic Laboratory, 8. Mechanical System Laboratory, 9. Equipments for Colour Scanner, 10. Platemaking Laboratory, 11. Letter Assembly Laboratory, 12. Line & Halftone Process Laboratory, 13. D.T.P. Packaging available.

The Department possesses very strong potentiality for consultancy services, particularly in Printing & Packaging/Publishing & allied Pollution Control.

Title	Ongoing Project : P.I.	Value	Funding Authority
Waste Utilization in the Form of Printing/ Packaging Material	A.N.Ghosh	Rs. 11,00,000	AICTE

Professor :

1. Dr. Samar Bhattacharyya, M.E.E., Ph.D. (J.U.), F.I.E (India)
2. Dr. Alok Kr. Ghosh, B.E. (N.B.U), Ph.D. (J.U.), M.I.E. (I), M.I.I.S.T., C.Engg. (Head of the Deptt.)

Reader :

3. Dr. Arun Kiron Pal, M.M.E., Ph.D. (J.U.), M.I.E. (India)
4. Dr. (Ms.) Swati Bandyopadhyay, B.Ch.E., Ph.D. (J.U.)

Teachers with their Specialisation :

SEX:	SPECIALISATION:
1. Male	Electronic Publishing System/Computer Graphics/Software Engineering
2. Male	Electrophotography/Packaging/Waste Utilisation.
3. Male	Rheology/Fluid Mechanics/Packaging/Printing Machines.
4. Female	Non-Conventional Energetic Power/Ink-Technology/Colour Technology.

Chemistry :

The department of Chemistry was founded in the year 1956 and since then it has steadily developed into a leading centre of research and teaching in Jadavpur University. It has acquired the status of being chosen for the DSA and COSIST Programmes of the U.G.C. The areas of taught courses and research that comprise this department include Organic, Inorganic, Physical, Analytical & Theoretical branches of Chemistry.

Number of seats for various course of studies are as follows :

(1)	(B.Sc.)	:	60
(2)	M.Sc. (Day)	:	35
	M.Sc. (Evening)	:	35
(3)	Ph.D.	:	--

Total sanctioned teaching positions are 61 with the following break-up :

Professor	1	Reader	32
Sr. Lecturer	3	Lecturer	15
Male	47	Female	3 (11 posts)

Number of ongoing Research/Schemes : 29

(a) U. G. C. : 3, (b) C.S.I.R. : 19, (c) D.S.T.: 6, (d) D.S.T. (W.B.): 1,

Besides receiving Rs. 50 lakhs for DSA Programme, the department has received a central assistance of Rs. 2.80 lakh from U.G.C. during 9th plan for different developmental projects.

The Centre for Surface Science was established in the year 1995 under the Chemistry Department of the University with Prof. S. P. Moulik as its Director/ Co-ordinator. A research project on "Energetic Surface Chemical and Photo-Chemical Studies on Self Organising Systems" has been sanctioned by the DST (G.O.I.) with a financial assistance of Rs. 46.10 lakhs. The activities of this Centre for the specified period of 1998-99 were significant, and were directed towards surfactant behaviours in solution formation of miscelles, reverse miscelles and micro-emulsions as well as surfactant polymer interaction. The investigations were primarily made on thermodynamic, kinetic and photochemical aspects of self-organising systems.

Kinetics of surfactant interaction with protein and DNA were also tested/ experimented with the results were published in different journals—both national and international

Research areas cover mainly on the following fields of the different branches of Chemistry.

Inorganic Chemistry

(1) Synthetic Inorganic Chemistry with special reference to structural analysis, redox aspects and catalysis, (2) Organometallics with special reference to their uses, (3) Kinetic and mechanistic studies on reactions relevant to photosynthesis, (4) Metal complexes with small molecules as ligands with reference to their (5) Solid State Chemistry, (6) Bio-Inorganic

Chemistry.

Analytical Chemistry:

- (1) Environmental Studies,
- (2) Trace and Ultra Trace Analysis including Environmental Pollutants.

Organic Chemistry :

Various aspects of Synthetic, Organic, Organometallic Chemistry, Organic Photo Chemistry, Hetrocyclic Chemistry and Drug Analysis.

Several monographs like the Comprehensive Heterocyclic Chemistry.

Physical Chemistry :

Under this section, there are about ten research projects funded by Central and State government organisations. Nearly 25 research fellows are associated with the projects. Research works concern most current topics like; Photo-Chemical Conversion of Solar Energy and Storage, Low Temperature Absorption and Flush Photolysis, Photophysical Phenomena in Micillar and Reverse Micillar Environment, Excited State Proton Transfer Reactions, Liquid State Statistical Mechanics, Photo- induced Surface Modified Molecular Rate Processes, Molecular States of Semiconductor Molecules, Absorption Phenomena, Monte-Carlo Simulation, Thermodynamics of Miscelles and Microemulsion, Surfactant Biopolymer Interaction, Kinetics of Electron Transfer Reactions, Solvation and Prolonation / Deportation Energetics of Ionic and Non-Ionic Solvents, Transfer Energetics of Nucleic Acids, Development of Lead-Acid Battery etc.

Ongoing Project

Title	Project Incharge	Dept.	Value	Sanctioning Authority
Field Trial of Filter Tablets for Arsenic Removal from Ground Water.	Dr. Dipankar Chakraborty	Chemistry	Rs 400,000	C.S.I.R.
Arsenic Contamination in Ground Water Along Palaeo Meander Belt of the Ganga Brahmaputra Delta. Geological and Geochemical Studies from Borehole Samples in Parts of West Bengal	Dr. Dipankar Chakraborty	Chemistry,	Rs. 2,00,000	C.S.I.R.
Chemistry of Ruthenium and Osmium Synthesis Characterization and Reactivity.	Dr. S. Bhattacharya		Rs. 2,00,000	C.S.I.R.
Oxidative Behaviour and Relative Reactivities of Biologically Active	Dr. K.K. Sengupta		Rs. 5,00,000	C.S.I.R.

Organic Molecules Towards Gold (iii) Compounds

Synthesis, Characterization Magnetic-Co-ordination Compounds	Dr. Samiran Mitra	Rs. 186,000 + one Proj. Asst.	U.G.C.
Organometallic Bridged Cage-type Cluster Compounds of Transition Metals.	Dr. R. L. Dey,	Rs. 13.38 lakhs,	D.S.T.
Photo-induced Electron Transfer Reaction in Galvanic Cell.	Dr. S .C. Bhattacharya,	Rs. 186, 400,	DST (WB)
Photo Physical Studies of Dyes in Reverse Miceller System.	Dr. S.C. Bhattacharya	Rs.575,000/ +one R.A.	C.S.I.R.
Enantio Selective Synthesis of Cyclopropanes Aziridynes and Oxiranes using Carbohydrate as Chiral Auxiliaries.	Dr. Rina Ghosh	illegible	C.S.I.R.
Proline the micro-heterogeneous environments through studies of the Excited State photophysics, and photo Chemistry.	Dr. N. Chattopadhaya	Rs. 2,25,000 + one R.A.	C.S.I.R.
Oxo-Peroxo and oxopoly metalates: Synthesis, structure and uses in the catalytic oxidation of organic compounds.	Prof. R.G. Bhattacharya	7 lakhs	C.S.I.R.
Metal Sulphur aggregates and Clusters	Prof. R. G. Bhattacharya	3.5 lakhs	G.O.W.
Oxo-and peroxo metalates and catalysis	Prof. R. G. Bhattacharya	3.5 lakhs	Do

Physical Chemistry : Professor:

1. Dr. Benoy Bhusan Bhowmik, M. Sc., D. Phil. (Cal). Ph. D. (London).D. Sc. (London).
2. Dr. Kalyan Kali SenGupta, M. Sc., D.Phil (Cal), Ph. D. (Lond), D. Sc. (Lond)
3. Dr. Satya Priya Moulik, M. Sc., D. Phil. (Cal), D. Sc. (Cal)

SEX: SPECIALISATION:

1. Male Physical Chemistry / Photo Chemistry.
2. Male Professor Physical Chemistry / Chemical Kinctics
3. Male Professor Physical Chemistry / Surface Chemistry.

Readers:

4. Dr. Pronab Kumar Bhattacharya, M. Sc., (Cal), Ph. D. (J.U.)
5. Dr. (Mrs.) Leena Rudra, M. Sc., Ph. D. (J.U.)
6. Dr. Subhash Chandra Bera. M. Sc., Ph. D. (J.U.)
7. Dr. Dilip Kumar Bhattacharyya, M. Sc., (Cal). Ph. D. (Howard)
8. Dr. Pratik Kumar Sen, M. Sc., Ph. D. (Cal)
9. Dr. Subhash Chandra Bhattacharyya, M. Sc., (B.U.). Ph. D. (J.U.)

Lecturers (Sr.)

- Dr. Kaushik Das, M.Sc., Ph.D. (J.U.)
 Dr. Swapan Kumar Bhattacharyya, M.Sc., Ph.D. (J.U.)

Lecturers :

- Dr. Nitin Chattopadhyay, M.Sc., (Cal) , Ph.D. (J.U.)
 Dr. Kalyan Kumar Das, M.Sc.,(B.U.) , Ph.D. (J.U.)
 Dr. Biplab Bhattacharjee , M.Sc., (J.U.) , Ph.D. (IISc.)

Teachers with their specialisation :**SEX:****SPECIALISATION:**

- | | |
|-----------|---|
| 4. Male | Physical Chemistry / Photo Chemistry / Surface Chemistry. |
| 5. Female | Physical Chemistry |
| 6. Male | Physical Chemistry / Surface Chemistry. |
| 7. Male | Physical Chemistry / Theoretical Chemistry. |
| 8. Male | Physical Chemistry |
| 9. Male | Physical Chemistry |

INORGANIC CHEMISTRY**Professors :**

10. Dr. Ramgopal Bhattacharyya, M. Sc., (Cal), Ph. D. (J.U.) (Dean, Faculty of Science)
11. Dr. Bidhan Chandra Bhattacharyya, M. Sc., (Dacca), Ph. D. (J.U.)
12. Dr. Sabooj Kumar Bhowal, M. Sc., (Cal), Ph. D. (J.U.)

SEX:**SPECIALISATION:**

- | | |
|----------|---|
| 10. Male | Inorganic Chemistry /Co-ordination Chemistry /Metal Nitrosyls/
Bioinorganic Chemistry |
| 11. Male | Inorganic Chemistry / Cordination Chemistry / Solution Chimistry /
Stereo-chem. Aspects. |
| 12. Male | Inorganic Chemistry / Polarography. |

Reader:

13. Dr. Bidhan Chandra Roy, M. Sc., Ph. D. (J.U.)

14. Dr. Arun Kumar Mukherjee, M. Sc., Ph. D. (J.U.)

15. Sri. Satya Ranjan Saha, M. Sc., Ph. D. (Cal)

16. Dr. (Mrs.) Gouri Bhowal, M. Sc., Ph. D. (Cal)

17. Dr. Ranjan Kumar Datta, M. Sc., (Cal), Ph. D. (Detroit)

18. Dr. Asit Kumar Sarkar, M. Sc., Ph. D. (Cal)

19. Dr. Sailesh Chandra Saha, M. Sc., (Dacca). Ph. D. (J.U.)

20. Dr. Dulal Chandra Bera, M. Sc., (Cal), Ph. D. (J.U.)

21. Dr. Dipankar Chakraborty, M. Sc., Ph. D. (J.U.)

22. Dr. Rupak Ranjan Roy, M. Sc., Ph. D. (J.U.)

23. Dr. Manju Bikash Saha, M. Sc., Ph. D. (J.U.)

24. Dr. Suprakash Lahiri, , M. Sc., Ph. D. (J.U.)

25. Dr. Dilip Kumar Bose, M. Sc., (J.U.) L.L.B.(Cal),

26. Dr. Rupendranath Banerjee, M. Sc., (I.I.T.), Ph.D.(Cal),

27. Dr. Samiran Mitra, M. Sc., Ph. D. (Cal)

28. Dr. Rajiblal De, M. Sc., Ph. D. (K.U.), Dr. rer. nat. (FR.G.)

29. Dr. Samaresh Bhattacharyya, M. Sc., Ph. D. (J.U.)

Lecturers :

- Dr. Subrata Mukherjee, M.Sc.,(Cal) , Ph.D. (J.U.)

SEX:**SPECIALISATION:**

- | | |
|------------|--|
| 13. Male | Inorganic Chemistry / Analytical Chemistry. |
| 14. Male | Inorganic Chemistry / Metals Complexes. |
| 15. Mal | Inorganic Chemistry / Co-ordination Chemistry. |
| 16. Female | Inorganic Chemistry / Electro Chemistry. |
| 17. Male | Inorganic Chemistry / Theoretical Chemistry. |
| 18. Male | Inorganic Chemistry / Co-ordination Complexes. |
| 19. Male | Inorganic Chemistry / Metal Complexes |
| 20. Male | Inorganic Chemistry / Metal Complexes |
| 21. Male | Inorganic Chemistry / Environmental Chemistry. |
| 22. Male | Inorganic Chemistry / Metal Complexes |
| 23. Male | Inorganic Chemistry / Metal Complexes |
| 24. Male | Inorganic Chemistry / Analytical Chemistry. |
| 25. Male | Inorganic Chemistry / Environmental Tech./ Analytical Chemistry. |
| 26. Male | Inorganic Chemistry / Chemical Kinetics. |

27. Male Inorganic Chemistry / Preparative Chemistry.
 28. Male Inorganic Chemistry
 29. Male Inorganic Chemistry

ORGANIC CHEMISTRY

Professors:

30. Dr. Kumar Kanti Mahalanobis, M. Sc., Ph. D. (J.U.) (Head of the Department)

Readers:

31. Dr. Chiraranjan Ghosal, M. Sc., Ph. D. (Cal)
 32. Dr. Ashoke Kumar Sarkar, M. Sc., Ph. D. (J.U.)
 33. Dr. Subhagato Chatterjee, M. Sc., (J.U.), D. Phil. (Cal)
 34. Dr. Laksmi Narayan Dutta, M. Sc., D. Phil. (Cal)
 35. Dr. Swadesh Ranjan Roy Choudhury, M. Sc., (Cal), Ph.D.,(I.I.T.)
 36. Dr. Gopal Chandra Banerjee, M. Sc., (Cal), Ph. D. (J.U.)
 37. Dr. Ashok Kumar Mallik, M. Sc., Ph. D. (Cal)
 38. Dr. Somnath Ghosh, M. Sc., Ph. D. (Cal)
 39. Dr. Soumitra Sen Gupta, M. Sc., (J.U.) Ph. D.(Florida, USA)

Lecturer (Senior):

- Dr. (Ms.) Rina Ghosh, M.Sc. Ph.D. (J.U.)

Lecturer :

- Dr. Sanjoy Bhar, M.Sc.,(Cal), Ph.D. (J.U.)

SEX: SPECIALISATION:

30. Male Organic Chemistry / Nuclear Magnetic Resonance.
 31. Male Organic Chemistry
 32. Male Organic Chemistry
 33. Male Organic Chemistry
 34. Male Organic Chemistry
 35. Male Organic Chemistry/ Synthetic Organic Chemistry
 36. Male Organic Chemistry/ Synthetic Organic Chemistry/Search for New Reagents
 37. Male Organic Chemistry
 38. Male Organic Chemistry
 39. Male Organic Chemistry

MATHEMATICS :

This department is an important constituent of the Faculty of Science since 1956, the year when it was established. With its proficiency in taught programmes and strong research projects of national and international excellence it has made significant contributions in the study of Mathematics in the country.

	Student intake per year
(1) B. Sc.(Hons.)	75
(2) M Sc.(day)	60
(3) M Sc.(evening)	60

Total 195

It offers Computer Science as a special paper both in the U.G. and P.G. levels. Other Special Papers offered at the P.G. level are : (1) Solid Mechanics, (2) Fluid Mechanics, (3) Bio-Mathematics, (4) Mathematical Physics.

Total teaching positions:

Professor	5
Reader	14
Sr. Lecturer	7
Lecturer	7
Total :	43

During the current financial year the Department received a grant of Rs. 50.00 lakhs from the UGC for the ongoing DSA Programme.

Under the COSIST Programme a sum of Rs. 32.50 lakhs was received from the U.G.C.

Besides the U.G.C. approved a sum of Rs.7.75 lakhs for introducing an inter-disciplinary course, 'Mathematical Modelling of Ecological and Environmental System'.

Dr. S. Chakravorty is conducting a DAE Project: 'The Application of Ashtekar Variables in Quantum Cosmology and the Role of Loop Formalism.'

Forty-one research papers were published by the Faculty Members in the national and international journals.

Prof. K.S. Choudhuri has been elected Fellow of the Institute of Mathematics and its Application, U. K.

Dr. Subenoy Chakraborty has been elected Senior Associate of IUCAA, Pune, for the period of 1998-2001.

Professors:

1. Dr. Amitava Chakraborty, M. A. (Cal), Ph. D. (J.U.)
2. Dr. Paresh Chandra Bhakta, M. Sc., D. Phil. (Cal)
3. Dr. Biswanath Chakraborty, M. Sc., (Cal), Kandidate Nauk (Moscow)
4. Dr. Kripasindhu Chowdhury, M. Sc., Ph. D. (Viswa Bharati)
5. Dr. Bikash Ranjan Das, M. Sc., Ph. D. (J.U.), Ph. D. (Glasgow)
6. Dr. Rukmini Raman Giri, M. Sc., Ph. D. (J.U.)
7. Dr. Asim Ranjan Sen, M. Sc., (Cal)
8. Dr. Ashok Kumar Ray, M. Sc., Ph. D. (Cal), LFIBA (U.K.)
Dr. Tarun Kumar Mukherjee, M. Sc., (Cal) Ph. D. (Arkansas)
9. Dr. Nema Chandra Das, M. Sc., Ph. D. (J.U.) (Head of the Department)
10. Dr. Amiya Bhusan Roy, M. Sc., (Cal), D. Phil. (B.U.), K.I.M.A.
11. Dr. Santosh Kumar Kundu, M. A. (Rajshahi), Ph. D. (J.U.)
12. Dr. Arun Kumar Ghosh, M. Sc. (J.U.) Ph. D. (Viswa Bharati)

Teachers with their specialisation :

SEX:	Profession	SPECIALISATION:
1. Male		Non-linear Solid Mechanics/ Theoretical Elasticity / Theoretical Seismology
2. Male		Functional Analysis / Real Variables/ Topology / Non-linear & Dynamic
3. Male		Non-linear Dispersive Waves Rotating Frames/ Plasma Mechanics / Laser Plasma/Interaction.
4. Male		Fluid Dynamics/Waves and Wave Resistances/Operational Research/ Bio-Mathematics.
5. Male		Thermo-Elasticity/ Elasticity.
6. Male		Piezo-Electricity / Magnet-Elasticity / Bio-Mathematics.
7. Male		Fluid Mechanics / Oceanography.
8. Male		Differential Geometry.
9. Male		Solid Mechanics / Numerical Analysis/ Computer Programming.
10. Male		Bio-Mathematics / Graph-Theory / Dynamical Systems / Operational Research / Mathematical Chemistry.
11. Male		Measure Theory / Order Spaces / Multifunctions.
12. Male		Non-Newtonian Fluids.

Readers:

13. Sri Netai Chandra De. M. Sc., (Cal)
14. Dr. (Mrs.) Bandana Goswami. M. Sc., Ph. D. (J.U.)

15. Dr. (Mrs.) Gourisri Dutta, M. Sc., Ph. D. (J.U.)
16. Dr. Ashis Kumar Pal, M. Sc., Ph. D. (J.U.)
17. Dr. Aloke Kumar Sengupta, M. Sc., Ph.D. (J.U.)
18. Sri Narayan Chandra Chakraborty, M. Sc., (Cal)
19. Dr. Kiron Chandra Das M. Sc., Ph. D. (I.I.T., Kharagpur)
20. Dr. Ramaprasad Bandyopadhyay, M. Sc., Ph. D. (J.U.)
21. Dr. Manojit Gupta, M. Sc., Ph. D. (J.U.)
22. Dr. (Mrs) Iva Basu, M. Sc., Ph. D. (J.U.)
23. Dr. Dipankar Roy, D.Sc. (Cal)
24. Dr. Tapasendra Basu, M. Sc., Ph. D. (J.U.)
25. Dr. Subenoy Chakraborty M. Sc., Ph. D. (Cal)
26. Dr. Prakash Chandra Mali, M. Sc. (Cal), Ph. D. (J.U.)
27. Dr. Pradip Kr. Sen, M. Stat (ISI), Ph.D (Chicago)
28. Sri Himadri Sekhar Sarkar, MSC (J.U.)

Lecturers (Senior) :

- Dr. Pradip Kumar Sen, M.Stat. (I.S.I.), Ph.D. (Chicago)
 Dr. Indrajit Lahiri, M.Sc., Ph. D. (K.U.)
 Dr. (Mrs.) Susmita Sarkar, M.Sc. (Cal), Ph. D. (J.U.)
 Dr. Ashis Kumar Sarkar, M.Sc., M.Phil., Ph. D. (J.U.)
 Dr. (Mrs.) Swapna Debnath, M.Sc., Ph. D. ((Cal)
 Dr. Krishnendu Mukherjee, M.Stat. (ISI), M.Tech., Ph.D. (ISI)

Lecturers :

- Dr. Sagnik Sinha, M.Stat. (ISI), Ph.D. ((J.U.)
 Dr. (Miss.) Sudeshna Banerjee, M.Sc., Ph. D. ((Cal)
 Dr. Subhas Chandra Mandal, M.Sc., Ph. D. (N.B.U.)
 Sri Pratulananda Das, M.Sc. (Viswa Bharati)
 Sri Narayan Chandra Majee, M.Sc. (J.U.)

Teachers with their specialisation :

SEX:	SPECIALISATION:
13. Male	Relativity
14. Female	Wave and Wave Resistance
15. Female	Wave and Wave Resistance
16. Male	Piezo-electricity / Thermo-Piezo-electricity/ Semi-Conductors/ Operations Research.
17. Male	Elasticity.
18. Male	Fluid Dynamics
19. Male	Functional Analysis

20.Male	Astrophysics / Plasma Physics.
21.Male	Electro-Mechanical Interactions in Solids
22.Female	Wave and Wave Resistance
23. Male	Relativity / Mathematical Physics.
24.Male	Operations Research
25.Male	Atomic Ionisation & Scattering.
26.Male	Pattern Recognition & Image Processing.
27.Male	Statistics
28.Male	Functional Analysis and Topology.

PHYSICS :

Over the years, the department has developed into a significant Centre of academic activities involving different branches of Physics. It has acquired distinction as a Centre of Advanced Studies and Research in both theoretical and experimental Physics.

The department offers the following taught courses and the corresponding student strength in each of them are as follows:

	Annual intake	Total student strength
(1) B. Sc.(Hons.)	65	185
(2) M Sc.(day)	36	75
M Sc.(evening)	35	105
M. Sc. (Electronics Ph.D.)	10	10
Total : 146		375

In the undergraduate course, a compulsory subsidiary subject on Computer Science has been introduced.

The Emerging Area Programme:

The programme has been offered by UGC to introduce the following three courses:

- Computer Application as special paper
- Atmospheric Science as special paper
- M. Sc. (Electronics)

Total Teaching positions in the department

Professor	10
Reader	22

Sr. Lecturer	7
Lecturer	12

Different Centres of Research:

(a) Condensed Matter Physics: It was introduced in the year 1990 to strengthen research and advanced studies in Condensed Matter Physics.

Incidentally, the thrust of the COSSIST Programme has also been identified as Condensed Matter Physics, The area in which research work is being conducted are:

(1) Supersonic Conductors, (2) Composites, (3) Polymers, (4) Surface Physics, (5) Colour Centre, (6) Disorder Materials, (7) Fractals, (8) Theories on Metals and Alloys, (9) Super Conductivity, Magnetic and Electronic Properties, (10) Statistical Mechanics, (11) Studies in Bio-membranes, (12) Liquid Crystals and Liquids, (13) Theories and Numerical Experiments on Divergent Series, (14) Simulation Studies, (15) Viscous Fingering, (16) Functional Problems of Physics etc, (17) Instrumentation at Low Temperature and Signal Processing.

The High Energy Physics Division has an active group of workers in theoretical and experimental fields. The laboratory is equipped with Bubble Chamber, Scanner and Emulsion Detectors with semi-automatic scanning and measuring microscope (including image analysis system). This laboratory took part in international collaborative research programme with CERN, FERMILAB and CNRS (France) and it works on Hardon and Heavy Ion Physics including QGP Signature, Monopole Search and Fractal Properties of Ionisation and Fragmentation Process.

Cosmic Ray Hut: This hut was developed to measure the ground cosmic ray and to study asymmetries during early sixties. It is intended to preserve it as a demonstration centre for the students.

Sky Watching Programme: An optical telescope of six inch diameter is kept on the top floor of the Physics building and a new room is being constructed to house it properly. Physicists of the department and from the neighbouring organizations watched and collected data on Hale Bopp Comet recently.

Informations on Plasma Studies and Relativity and Cosmology Research Centre are separately included along with other Centres and Schools.

Seminars :

The department organised an important National Seminar on "Numerical Weather Prediction with Emphasis on Boundary Layer Modelling and Mesoscale Modelling."

Dr. Ananda Mohan Manna is a member of the organizing committee of the National Environmental Science Academy, which organised a national seminar on "Environment of Calcutta To-day and To-morrow", between Feb. 18 and 20, 1999.

Papers published by the teachers of the department:

1. A Simple Co-ordinate space approach to study the 6 He hypernucleus":S. Mahapatra., J.Nag, D.P.Sural and S.N.Mukherjee, DAE Symposium on Nuclear Physics, Vol. 41 B (1998), 266.
2. Observed branching ratios of alpha to fission fragments of Cf²⁵² using C.R.-39 : R. C. Sastri, Radiation Measurements, 29, 133 (1998)
3. "SSND Study of the probable influence of alpha activity on the mass distribution of Cf²⁵² fission fragments." : R.C.Sastri, Radiation Measurements, 30, 127 (1999).
4. A Comparative study of thermodynamic nature of the atmosphere at Dum Dum, Calcutta (22.38 N, 88.28 E) on thunderstorm and favourable fair weather days : S. Ghosh, A. Manna and U. K. De, Indo. J. Phys 72B, 137 (1998).
5. Antarctic O₃ depletion its effect on the variation of Li 6708A emission line intensity at Mc. Murdo and Hally Bay : S.K. Midya, H. Sarkar and A. Manna. Earth, Moon and Planets (communicated).
7. " Ordering Potentials: Anomalous structural and thermodynamic properties of liquid binary alloys": Dr. R.N.Joarder, Physica B, 245 (1998),81-91.
- 8.Universality in the effective pair potential of d-shell metals -- compressibility and vacancy formation energy of 3d-liquid metals" Dr. R.N.Joarder, Pramana. J. Phys. 50 (1998)1-9.
9. "Effective pair potential variational thermodynamic calculation of 4f liquid metals",: Dr. R.N.Joardar, Phys. Stat. Sol. (b) 207, (1998),19-31.
10. On the structure function of liquid alcohols at small wave numbers and signature of H-bonded clusters in liquid state", Dr. R.N.Joardar, Phys. Letts. A(1998), accepted (in press).
11. "Structural changes in liquid CD₃OD at elevated temperatures",Dr. R.N.Joardar, DAESSPS,1998 (Kurukshetra).
12. Study of chaotic condition in RF discharged plasma : Abhijit Bhattacharyya & A.M. Basu, accepted at 6th Ukrainian Conference on Plasma Physics & Controlled Fusion, SEP 14-20, 1998.
13. Interaction of sub-micron sized dust particles with planetary magnetosphere : Abhijit Bhattacharyya & Ananda Mohan Basu, XII National Symposium on Plasma Science & Technology, Oct 27-30, 1998.
14. S.De., R.Basu. U. Nandi, C. Mukherjee, K.Bardhan and P. Nandy
Flicker noise in thin lipid films.(1997) Physical Review, B. 56 (21)., 13627-13629.
15. R.Basu, S. De and P. Nandy :
Effect of n-decane on lecithin phase transition temperature: a microscopic study. (1998)
Colloids and Surfaces B: Biointerfaces 11, 29-31.

16. R.Basu, S. De and P. Nandy :

Cholesterol incorporation in liposomal membrane: change in Van't Hoff enthalpy.(1998), J. Ind. Chem. Soc. 75, 405-406.

17. S. De, R. Basu. A. K. Ghosh and P. Nandy : Membrane based lipid-drug interaction. (1998) J. Surf. Sci. Tech. (in Press)

Patents:

(1) Design of bath type of optical cryostat with computer controlled temperature system: A.N.Basu and N.B. Manik (applied)

(2) A new temperature for continuous liquid level by opto sensor : A.N.Basu and N.B.Manik (applied)

PROJECTS UNDERTAKEN BY TEACHERS: (ONGOING)

Sl.No	NAME	FUNDING AGENCY	AMOUNT
1.	Dr. C.R. Mondal	D.S.T.	Rs. 5,32,413
2.	Prof. A. Roy Chowdhury	D.S.T.	Rs. 4,73,310
3.	Prof. D.C. Ghosh	D.S.T.	Rs. 2,00,000
		D.S.T.	Rs. 18,00,000
		N.S.F.	
4.	Dr. A.M.Bose	D.S.T.	Rs 13,44,000
5.	Dr. K. Chatterjee	D.S.T.	Rs.4,00,000
6.	Dr. Debasis Lohar	D.S.T.	Rs. 12,00,000
7.	Dr. P. Nandy	D.S.T.	Rs.8,00,000
8.	Dr.K. Goswami	U.G.C.	Rs.7,00,000
9.	Dr.U.K..Dey	D.S.T.	Rs.6,00,000
		I.M.D.	Rs 10,00,000
10.	Dr. D. P.Bhattacharya	C.S.I.R.	Rs 2,00,000
11.	Dr S.Tarafdar and Dr. T.R.Meddy	U.G.C.	Rs 4,00,000
12.	Dr. A.Datta	D.S.T.	Rs 4,00,000
		D.A.E.	Rs 2,70,000
13,	Dr. R.N.Joardar	I.U.C	Rs 50,000
		(DAET)	
		CSIR	Rs. 2,50,000
14.	Dr. Bhallari Chakraborti	D.S.T.	Rs 3,23,550

Name of the projects:

1. Studies on two-electron phenomena in heavy ion-atom interaction,
2. On the chaotic aspects of nonlinear processes in plasma.
3. (i) Studies on anomalon and QGP in high energy interaction.
(ii) Investigation of Leptron-nucleus interaction in high energy interaction.
4. Study of RF discharge plasma in pure gases, CO₂ laser gas mixture and seeded gases by microwave scanning technique.
5. Synthesis and preparation of DLC film.
6. Study of Interdecadal Variations in the Premonsoon Climate Over Gangetic West Bengal and Its Neighbourhood As a Result of Changes in Law Use Pattern.
7. Studies on bio-membranes.
8. Single crystal growth with the C-Z system.
9. (i) Comparative Study of Atmospheric Boundary Layer Behaviour Over a Dry Connective End and a Moist Connective End of the Pressure Trough During Monsoon Period; " Sponsored by D.S.T., Govt. of Indian.
Amount: 5,45,100
(ii) "Radar and Mass Scale Study and the Associated Physics and Dynamics of Connective Stroms in Gangetic West Bengal and Brahmaputra Valley of Assam", sponsored by Indian Met, Dept.
Amount: Rs. 10.00.000/
10. Effect of recombination on the electrical transport in two dimensional electron gas at low lattice temperature.
11. Study of grain boundary effects on conductivity of polycrystalline and composite superionic conductors.
- 12(a) Aspect of Particle Physics in the light of new experiments
(b) Collider Searches for New Physics
- 13 (a) Structural studies of H-bonded liquids through neutron diffraction.
13 b) A comprehensive study of non-simple liquid and allied systems through statistical mechanical modelling.
14. Theoretical Investigations of some properties of Hadrons and Quark Gluon Plasma.

Profesors :

1. Dr. Parthasarathi Mukhopadhyay. M. Sc., D Phil. (Cal)
2. Dr. Satyanarayan Banerjee. M. Sc., D Phil. (Cal)

3. Dr. Asit Banerjee, M. Sc., Ph. D. (Cal)
4. Dr. Asok Nath Basu, M. Sc., Ph. D. (Vice-Chancellor)
5. Dr. Sudhir Chandra Chakraborty, M. Sc., Ph. D. (J.U.)
6. Dr. Dipak Chandra Ghosh, M. Sc., Ph. D. (J.U.) (Head of the Department)
7. Dr. Sankar Sengupta, M. Sc., P.R.S., D Phil. (Cal)
8. Dr. Dhiranjan Roy, M. Sc., Ph. D (Cal)
9. Dr. Aresh Roychoudhury, M. Sc., Ph. D (J.U.)
10. Dr. Debiprasad Bhattacharya, M. Tech., Ph. D. (Cal)

Teachers with their specialisation :

SEX :	SPECIALISATION:
1. Male.	Particle Physics.
2. Male.	Particle Physics.
3. Male.	General Relativity & Cosmology.
4. Male.	Solid State Physics/Condensed Matter Physics/Quantum Mechanics.
5. Male.	Molecular Physics.
6. Male.	Particle Physics.
7. Male.	Atomic Physics.
8. Male.	Solid State Physics/ Computational Physics.
9. Male.	Particle Physics/ Non-linear Plasma Physics.
10. Male.	Electronics.

Readers:

11. Dr. R. Chalapati Sastri, M. Sc., (Osmania). Ph. D (J.U.)
12. Dr. Jnananjan Nag, M. Sc., (Cal). Ph. D (J.U.)
13. Dr. Samir Kumar Nandy, M. Sc. (Bihar), Ph. D (J.U.)
14. Dr. Samir Kumar Mandal, M. Sc., Ph. D (Cal)
15. Md. Khalil, M. Sc., (J.U.)
16. Dr. Ramendra Nath Joardar, M. Sc., Ph. D (J.U.)
17. Dr. Utpal Kumar De, D.Sc., (Cal)
18. Dr. Salil Ranjan Roy, M. Sc., D. Phil. (Cal)
19. Dr. Anandamoy Manna, M. Sc., D. Phil. (Cal)
20. Dr. Kushalendu Goswami, M. Sc., D. Phil. (J.U.)
21. Dr. (Mrs.) Papiya Nandy, M. Sc. (Cal), M.A. (Uni. Calif), Ph. D. (Kent, Ohio)
22. Dr. Ranjan Bhattacharya, M. Sc., (Cal), Ph. D. (Stony Brook, N.Y.)

23. Dr. Sekhar Bhusan Datta Chowdhury, M. Sc., D. Phil.(J.U.)
 24. Dr. Amitava Datta, M. Sc., D. Phil.(Viswa Bharati)
 25. Dr. Soumen Kumar Roy, M. Sc.(Cal), Ph.D.,(Cantab)
 26. Dr. Anjan Bhattacharya, B.Sc.(Cal), M. A. (Cantab), Ph. D. (Illinois)
 27. Dr. Alope Kumar Mukherjee, M. Sc., D. Phil.(Viswa Bharati)
 28. Dr. Tapas Ranjan Middy, M. Sc.(Cal), D. Phil.(J.U.)
 29. Dr (Mrs.) Sujata Tarafdar, .M. Sc., Ph. D. (J.U.)
 30. Dr. Ananda Mohan Basu, .M. Sc., Ph. D. (J.U.)

Reader :

SEX :

11. Male.
 12. Male.
 13. Male.
 14. Male.
 15. Male.
 16. Male.
 17. Male.
 18. Male.
 19. Male.
 20. Male.
 21. Female.
 22. Male.
 23. Male.
 24. Male.
 25. Male.
 26. Male.
 27. Male.
 28. Male.
 29. Female.
 30. Male.

SPECIALISATION:

- Nuclear Physics.
 Nuclear Physics.
 Spectroscopy
 Nuclear Physics.
 Nuclear Physics.
 Liquid State Physics.
 Atmospheric Sciences.
 Nuclear Physics.
 General Properties of Matters
 Solid State Physics.
 Bio-Physics.
 Computational Physics.
 General Properties & Cosmology.
 Do
 Liquid Crystals.
 Electronics.
 Electronics.
 Solid State Physics (Practicals)
 Solid State Physics (Practicals)
 Plasma Physics / Electronics.

Lecturers :(Senior)

- Dr. (Mrs.) Aparajita Bhattacharya, M.Sc., Ph.D. (J.U.)
 Dr. (Mrs.) Anuradha Mukhopadhyay, M.Sc., Ph.D. (Cal)
 Dr. Narayan Banerjee, M.Sc., (Cal) , Ph.D. (J.U.)
 Dr. Chittaranjan Mondal, M.Sc., Ph.D. (J.U.)
 Dr. (Mrs.) Sulava Bhattacharya, M.Sc., Ph.D. (J.U.)
 Dr. Tapas Kumar Ballav, M.Sc., Ph.D. (J.U.)
 Dr. Soumitra Sengupta, M.Sc., Ph.D. (Cal)

Lecturers :

- Dr. Kalyan Kumar Chattopadhyay, M.Sc., Ph.D. (J.U.)
 Dr. Debasish Lohar, M.Sc., Ph.D. (I.I.T.)
 Sri Nabin Baran Manik, M.Sc. (J.U.)
 Sri Abhijit Biswas, M.Tech. (Cal)
 Dr. Subhankar Roy, M.Sc. Ph.D.(J.U.)
 Dr. Argha Deb, M.Sc. Ph.D.(J.U.)

GEOLOGY :

The Department of Geology is one of the most reputed departments of the University. It has also earned for itself a place of uniqueness in the Eastern Zone of the teaching programmes and research activities. Besides, market survey shows that the Department of Geology is increasingly acquiring the status of a lucrative job-oriented subject, since almost all the students passing out with graduate & postgraduate degree from this department find themselves well-placed in the job market, both within the country and abroad.

Courses of studies and the student intake per year are given below:

Degree	Student
(1) Bachelor of Science (B.Sc.):	35
(2) Master of Science (M. Sc.) :	25
(3) Ph.D. :---	

Thrust areas of studies:

- (1) Mineralogy (2) Structural Geology (3) Petrology (4) Geophysics (5) Hydrogeology
 (6) Sedimentology (7) Palaeontology (8) Engineering Geology

During the 9th plan period the Department received Rs. 2 lakhs from the U.G.C. for development. The Department also received Central assistance from:

- (1) U.G.C. under Development Programme: Rs. 2 lakhs
 (2) U.G.C. under CAS Programme: Rs. 55 lakhs
 (3) C.S.I.R.: 6 lakhs on Research Projects.
 (4) DST: 10 lakhs on Research Projects.

The Department is under CAS Phase

A fund of Rs. 6,00,000/ has been approved for purchase of books & journals.

Professors :

1. Dr. Sanjib Chandra Sarkar, M.Sc., (J.U.), Ph.D. (Moscow)
2. Dr. Sachinath Mitra, M.Sc., Ph.D. (J.U.), D.I.C. (London)
3. Dr. Sukumar Basu Mallick, M.Sc., Ph.D. (J.U.)
4. Dr. Anandadeb Mukherjee, M.Sc., Ph.D. (J.U.)
5. Sri Aniruddha Ganguly, M.Sc., (J.U.)
6. Dr. Prasanta Kumar Bhattacharyya, M.Sc., Ph.D. (J.U.)
7. Dr. Pradip Kumar Bose, M.Sc., Ph.D. (J.U.)
(Head of the Department)
8. Dr. (Miss) Sudipta Sengupta, M.Sc., Ph.D. (J.U.), INSA
9. Dr. Arabinda Ghosh, M.Sc., Ph.D. (J.U.)
10. Dr. Somenath Das Gupta, M.Sc., Ph.D. (J.U.)

Sex:	Specialisation:
Male	Economic Geology
Male	Minerology
Male	Geophysics
Male	Enviornmental & Economic Geology.
Male	Petrology
Male	Petrology
Male	Sedimentology
Female	Structural Geology
Male	Coal Geology
Male	Metamorphic Petrology & Geochemistry

Readers :

11. Dr. Sibendu Choudhuri, M.Sc., Ph.D. (J.U.)
12. Sri Arun Kumar Bhattacharyya, M.Sc. (J.U.)
13. Dr. Dipendranarayan Bandyopadhyay, M.Sc., Ph.D. (J.U.)
14. Dr. Ranjit Kumar Majumdar, M.Sc., Ph.D. (I.I.T.)
15. Dr. Ajaylal Mukherjee, M.Sc., Ph.D. (J.U.)
16. Dr. Subhendu Bikash Bardhan, M.Sc., Ph.D. (J.U.)
17. Dr. Tapan Kumar Baidya, M.Sc., Ph.D. (J.U.)

Male	Coal Geology
Male	Engineering Geology
Male	Stratigraphy, Sedimentology
Male	Geophysics
Male	Hydrogeology
Male	Paleontology
Male	Economic Geology.

Lecturers :(Senior)

- Dr. Sisir Kanti Nag, M.Sc., Ph.D. (J.U.)
 Dr. Debashis Som, M.Sc., Ph.D. (J.U.)
 Dr. Pulak Sengupta, M.Sc., Ph.D. (J.U.)
 Dr. Subir Kumar Mukherjee, M.Sc., Ph.D. (J.U.)
 Dr. Nibir Mandal, M.Sc., Ph.D. (J.U.)

Lecturers :

- Sri Sugata Hazra, M.Sc., (J.U.)
 Dr. Subir Sarkar, M.Sc. (B.U.) Ph.D. (J.U.)

Ongoing projects (Geology)

Title of the project	Investigator(s) / Author	Sponsoring Agency	Year of completion
(1) "An integrated study on hydrological and geochemical behaviours of Bakreswar Thermal Springs Area, Birbhum District, West Bengal, using geological, geophysical and geochemical methods."	Dr. A.L.Mukherjee	DST(W.B.)	1996
(2) "Recovery of the constituent metallic elements from polymetallic sulphide ore deposit of Gorubathan, Dist, Darjeeling, West Bengal".	Dr. Tapan Kr. Baidya (Jointly with the Dept. of Metallurgical Engg., J.U.)	DST(W.B.)	1998
(3) "Study of organic (mainly coal) and inorganic sediments in Gondwana Coalfields of India".	Dr. Sibendu Choudhury	CAS-UGC	2002
(4) "Demarcation of Raniganj-Panchet boundary in the Damodar Valley Coalfield: a palynosedimentological approach"	Dr. Debasis Shome	CAS-UGC	2002
(5) "Minerological and geochemical study of ore-minerals of transition elements".	Dr. Sachinath Mitra	CAS-UGC	2002
(6) "Crustal Evolution & Metallogeny in the Precambrians of Western India".	Prof. A. D. Mukherjee Prof. P.K.Bhattacharyya	CAS-UGC	2002
(7) "Base metal, precious metal and Radioactive element Mineralisation in different parts of India".	Prof. S.C.Sarkar	CAS-UGC	2002
(8) "Evolution of Structures in Shear Zones".	Dr. Sugata Hazra	CAS-UGC	2002
(9) "Determination of growth history of ferromanganese nodules from present day ocean basins".	Dr. S. K.Mukherjee	CAS-UGC	2002
(10) Effects of coastal processes on the environment of coastal Sunderban	Prof. A.D. Mukherjee	DOE, W.B.	1998
(11) "Sedimentary and contemporary tectonics in Chaibasa Formation, 'Bihar'".	Dr. P.K. Bose	DST	1998
(12) "Genese Der Hoch-I Granulite Im Sudlichen Eastern Ghats Belt, Indien.	Dr. S. Dasgupta, Dr. P. Sengupta Prof. M. Raith (Bonn), Dr. S. Hoernes(do) Dr. B. Spiering (do).	DFG Germany	1998

(13) "Deep crustal processes beneath the Eastern Ghats belt, India: Pressure-temperature-fluid evolutionary history, melting processes, cause(s) ultrametamorphism and final exhumation".	Dr. P. Sengupta Dr. S. DasGupta	DST	2000
(14) "Sedimentation, diagenesis and metamorphism of manganese deposits".	Prof. Supriya Roy	INSA Project.	2000
(15) "Basin Evolution Study for the Semri Group, Central India".	Dr. Subir Sarkar Research Scientist.	DST	2000
(16) "Evolutionary history of the Vindhyan Supergroup in its last phase".	Prof. P. K. Bose	DST	2000
(17) Study of some precambrian sections for recognition of palaeo-weathering profiles and palaeoerosional surfaces	Prof. Asoke Mukherjee	INSA	2000
(18) Evolution of eastern ghat granulites	Prof. S.K. Sen	INSA	1999
(19) Monographic writings on the technics of sedimentologic analysis in the field	Prof. A. Bhattacharyya	DST	1998
(20) Initiation and structural evolution of ductile shear zones	Dr. S. Sengupta,	CSIR	2000
(21) Palaeomagnetic and rock magnetic study of deep continental rocks from Precambrian terrains in India	Prof. S. Basumallick	UGC	1999
(22) Magnetism of deep continental rocks from Central India	Prof. S. Basumallick	DST	2000
(23) Ground water explorations in Purulia district using integrated system approach	Prof. S. Basumallick	Rajiv Gandhi Foundation	1998
(24) Palaeomagnetic and Rock magnetic study in India	Prof. S. Basumallick	UGC	Rs.209500
(25) Initiation & Structural Evolution of Ductile Shear Zones	Prof. Sudipta Sengupta	CSIR	Rs.6,00,000
CAS-Geology UGC	Dr. P. Bhattacharya	UGC	Rs.35,00,000

Life Science and Bio-technology:

The department of Life Science and Bio-technology was established in the year 1993. However, the plan of setting up such a department in Jadavpur University was conceived by the authorities as early as in 1985, since all the leading universities of the country had shown a rising academic interest in such interdisciplinary courses covering the vast areas of Life Science, Biotechnology, Genetic Engineering and Medical Sciences.

To keep up to this new academic trend, J.U. decided to have the Department of Life Science and Bio-technology, securing the assurance of absolute infrastructural support from the Department of Food Technology and Biochemical Engineering. Consequently, this department came into existence and did not spend much time to establish itself as a very significant segment of the Faculty of Science.

The major areas that comprise the taught programmes specifically are Microbiology, Molecular Biology, Cell Culture, Bioprocess Engineering, Immunology and Genetic Engineering.

The department is organising a three-semester M.Tech. course on Biotechnology which will be launched in the near future.

The department provides facilities for consultancy services in the following areas:

(1) Microbial Biotechnology

(2) Recombinant DNA Technology and Gene Expression.

Specially designed modern equipments available in the Department are given below:

(1) Spectrophotometer,

(2) Freeze Dyer

(3) Ultra Centrifuge

(4) B.O.D. Shaker

(5) Refrigerated Centrifuge,

(6) -70° Freezer.

(7) Fermentor

(8) Co₂ Incubator

(9) Flourescent Spectrophotometer.

(10) Electrophoresis Equipment.

Ongoing Project

Title of the project

P. I.

Value of the Project

Sanctioning Authority

Image analysis system for rapid detection of sturctural changes of immunocompetent cell in tissue culture.

Dr. Sukumar
Chattopadhyay

Rs.3,39,720

UGC

Antibacterial Peptide.

Dr. S.Pal

Rs. 2,40,000

DBT

Professors:

- 1. Dr. Sukumar Chattopadhyay, M. Sc., (Cal), Ph. D. (Sask), FIC
- 2. Dr Asru Kumar Sinha, M. Sc, D. Sc., (Cal) (Head of the Department)

Reader:

- 3. Dr. Subrata Pal, M. Sc., Ph.D.(Cal)

Teachers with their specialisation :

SEX:	SPECIALISATION:
Professor:	
1. Male	Immunology Cell Culture.4
2. Male	Diabetes and Cancer.
Reader:	
3. Male	Molecular Biology/ Recombinant DNA Technology.

School of International Relations & Strategic Studies :

Since its establishment in 1988, this multi-disciplinary School has been engaged in the promotion of research on issues of contemporary significance, having a multi-disciplinary concern. Currently, the School is sponsoring research on (1) Nuclear Proliferation, and (2) Inter-State River Water Disputes.

During the period 1998-1999, the School has already completed two projects.
(a) "Inter-State River Water Disputes with the Kaveri Waters as a Case Study" by Ms. Sudakshina Sarkar; and (b) "Water Resources Management with Special Reference to the Narmada Waters" by Ms. Tania Das

A new research project, "Management of Water Resources in Eastern India Involving India ,Bangladesh, Nepal & Bhutan," has been undertaken by the School. It is expected to be complete by the end of this year.

National Seminars:

- (a) "Globalisation and India : Implications and the Challenges Ahead", held in March 1998.
- (b) "Development Co-operation Between European Union and India", held in January 1999.

A Symposium on "South Asian Security After the Nuclear Tests" was held on 30th July 1998.

The School has chosen " Environment and International Relations" as one of the thrust areas of its research programmes. A paper published recently by Prof. A.K. Banerji on "Globalisation : The Myth and the Reality" had a major focus on enviornmental issues in so far as they affect relations between States.

Important publications of the Director, Prof. A.K.Banerji.

(1) Editor & Contributor; *Security Issues in South Asia: Domestic and External Sources of Threats to Security* (Minerva, Cal, 1998)

(2) "Images and Observations : India & Pakistan" in Surjit Man Singh (ed.) : *India & Pakistan : Foreign Policies in Comparative Perspective*, Radiant, New Delhi, 1998.

The Director, Prof. Banerji visited Israel for a week in May, 1998 under the auspices of the Indo-Israeli Cultural Exchange Programme. During the period of his official tour, he interacted with the academics, officials, members of parliament and journalists, besides participating in an International Seminar in Israel.

Important Publications of Dr. P. Bhattacharya, Joint Director: "The Nuclear Policy of the Vajpayee Govt. : A Journey into Nowhere", *Mainstream*, New Delhi, 2 May, 1998. "West Europe; Quest for Integration," in Radharaman Chakravarty (ed.) ; *Contemporary International Relations*, (West Bengal State Book Board) January 1999.

Adult, Continuing Education and Extension Centre :

The Centre was established in the year 1983 with a view to serving the underprivileged sections of the community in accordance with the UGC guidelines of 1982. Considering the overall achievements of the Centre in all the fields of Adult and Continuing Education, the UGC has placed it in the highest phase – Phase III in 1997. The Centre has been designated as the “Nodal Agency” for ACEE Departments/Centres in ten Universities of West Bengal and the North-Eastern States.

The Continuing Education programme is mainly conducted in the university campus utilising the infrastructure of the university. A few courses are also Offered in collaboration with some reputed organisations other than J.U., such as, The Calcutta Medical Research Institute, The Spastic Society of Eastern India, Silence etc.

During the 9th plan period the Centre will receive an UGC grant of Rs. 6,50,000 to be utilized according to the following break up:

- a) For the extension of activities and field outreach Rs. 600,000/-
- b) Nodal Agency Rs. 50,000

The four major areas of activities of the Centre :

1. Continuing Education,
2. Post - Literacy Continuing Education and Extension
3. Research,
4. Field Outreach.

Grundtvig International Conference on Education and Development was organized by the Centre from Jan 15 to 16, 1999. Dignitaries both from India and abroad participated.

A. One Year Diploma Courses ;

1. P.G. Diploma in Mass Communication
2. P.G. Diploma in Instrumental Techniques in Chemical Analysis
3. P.G. Diploma in Special Education (in collaboration with Spastic Society of Eastern India)
4. Diploma in Welding Technology (Six Modules – in collaboration with ESAB)
5. Diploma in Radiography Diagnostic ('96-'97 session –in collaboration with CMRI)
6. Diploma in Medical Laboratory Technology ('96-'97 session – in collaboration with CMRI)
7. Diploma in Optometry (Continuing – in collaboration with Optometric Association of India)

A. Certificate level courses in Science/Technology/Vocational/Skill-based training for professionals, low income groups and the underprivileged

1. Printing and Binding
2. Quality Engineering and Total Quality Management (Certificate already distributed)
3. Draftsmanship (Mechanical)
4. Fundamentals of Electronic Devices

5. Maintenance and Servicing of TV, VCR and VCP
6. Basic Techniques in Photography
7. Thematic Surveying by Remote Sensing
8. Plate-making and Off-set Printing
9. Maintenance Management (Certificate already distributed)
10. Foundry Technology
11. Acupuncture
12. Desk-Top Publishing
13. Water Pollution : Measurement and Control Engineering (Certificate already distributed)
14. Computer-Aided Decision Technology
15. Air Pollution ; Measurement and Control Engineering (Certificate already distributed)
16. Maintenance of Telephone Receiver (Certificate already distributed)
17. Welding Technology (Certificate already distributed)
18. Ultrasonic Testing (Level I – Certificate already distributed)
19. Ultrasonic Testing (Level II – Certificate already distributed)
20. Dye Penetrate Testing (Level I - Certificate already distributed)
21. Dye Penetrate Testing (Level II – Certificate already distributed)
22. Training of Laboratory Assistant
23. Digital/Analog Integrated Circuit Electronics

A. Courses aimed towards rehabilitation and financial independence of physically handicapped and palsied people:

1. EDP Operators' Course for the Deaf and Physically Handicapped ('97 session and '98 session – in collaboration with Silence)
2. Home-based Training Programme for Cerebral Palsied Children (Certificate already distributed – in collaboration with SSEI)
3. Basic Management of Cerebral Palsy for Medical Practitioner (in collaboration with SSEI)
4. Computer Application and Programming (Continuing – in collaboration with SSEI)
5. Wordprocessing (Certificate already distributed – in collaboration with SSEI)
6. Database Management (Certificate already distributed – in collaboration with SSEI)
7. Spreadsheet Management (Continuing –in collaboration with SSEI).

Centre for Microprocessor Application for Training, Education and Research

This Centre started functioning from 1983 under the financial support from HRD, Govt. of India. The principal objectives of the Centre are:

1. To set up infrastructural facilities in the area of microprocessor application.
 2. Research and Development activities in the area of microprocessor application and allied fields.
 3. To train up teachers, students, industrial and other personnels in the related areas.
- Ongoing research areas are, Neuro-Fuzzy Logic Technology for Bio –Electric Signal Interpretation, Image Processing, Hand-Written Cursive Work Recognition etc.

A number of user industries like GSI, TISCO, DVC have taken specialized training in the field of micro-processors for their engineers.

Five short term courses were held on "Unix and C" with about 160 participants including a large number of students and research scholars from Jadavpur University.

An AICTE funded Research & Development project on "Development of Fuzzy Logic Technology for Interpretation of Bio-electric Signals" is being conducted by Prof. D.K. Basu.

The Centre has already established its claim as a leading unit of research. Several important publications made by the teachers related with this Centre are as follows:

- a) M. Kundu, M. Nasipuri and D.K. Basu, "A Knowledge based Approach to ECG Interpretation Using Fuzzy Logic", IEEE Trans. On Systems, Man and Cybernatics (Part B : Cybernatics), Vol.28, No., 2 April 1998, pp. 237 – 243.
- b) D. Bhattacharjee, D.K. Basu, M. Nasipuri and M. Kundu, "Human Face Recognition Using Fuzzy Matching Technique", accepted for presentation at the GLOBECOM 98, held from 8th -12th November, 1998 at Sydney, Australia.
- c) P.K. Mukhrejee, D.K. Basu and M. Nasipuri, "Storage of Domain Specific Multimedia Database System", accepted for presentation at the GLOBECOM 98, held from 8th - 12th November, 1998, at Sydney, Australia.
- d) M. Kundu, M. Nasipuri, D.K. Basu, 'Knowledge-based ECG Interpretation ; A Critical Review", accepted for publication in Pattern Recognition, Elsevier Science Series
- e) D.K. Bhattacharjee, D.K. Basu, M. Nasipuri and M. Kundu, "An Intelligent System for Human Face Recognition Using Fuzzy Discriminant Coefficients", Proceedings of the CNIW- 98, pp 145-154, December 9-12, 1998.
- f) P. K. Mukherjee, M. Nasipuri, D.K. Basu, M. Kundu, "Storage and Retrieval of Interactive Multimedia Database System", Proceedings of the CNIW-98 , pp 155-160, December 9-12, 1998.
- g) D. Bhattacharjee, D.K. Basu, M. Nasipuri and M. Kundu, "Human Face Recognition Using Decision based Back Propagation One-Class-in One –Network (OCON) Neural Network –The DBONN", accepted for presentation at the "Third International Workshop on Telematics", held at NERIST, Dec. 2-5, 1998.
- h) D. Bhattacharjee, D.K. Basu, M. Nasipuri and M. Kundu, "An Example-based Fuzzy Clustering Approach for Human Face Recognition", accepted for presentation in the International Conference on Cognitive Systems (ICCS) 1998, held at New Delhi, in December 1998.

B. M.C.S.E Thesis 1998-'99 :

Name of the Thesis	Submitted by	Guided by
Data Compression with Fractal	Malay K. Das	Sri Shovonlal Kundu
Image Compression with JPEG Standard	D. Chandra Sekhar	Sri Shovonlal Kundu
A Study on Nearest Neighbour Classifier for Hand-written Digit Recognition	C. Janardhana Reddy	Prof. M. Nasipuri
A Study on Multilayer Perceptrons for Hand-written Digit Recognition	Dasaraju Yugandhar	Prof. M. Nasipuri
A Comparative Study of Some Fuzzy and Non-Fuzzy Neural Models for Hand-written Numeral Recognition Problem	Arup Bhattacharjee	Dr. M. Kundu

Centre for Plasma Studies :

Jadavpur University has established Centres/ and Schools of Studies to develop particular areas of expertise in the Science and Technology sectors keeping in mind the growing significance of such studies in the contemporary age. One such department is the Centre for Plasma Studies, established with the formal approval of the University in the year 1993-1994. Although Plasma Science was being incorporated as a topic in the taught programmes and research projects of the Physics and Mathematics department, it did not exist as a separate Center as it does now.

The Govt. of India has identified Plasma Studies as one of the important areas of science and technology requiring major researches and further academic explorations, keeping in tune with the world-wide advancement in Plasma Physics that has become a viable source of industrial application in several areas of technology in the West. Consequently, research and training programmes in Plasma Studies are gaining rapid impetus in India. The Govt. of India has already helped to establish two such Centres of Plasma Studies – one at Indore in Madhya Pradesh and the other at Gandhinagar in a Gujarat. The reports of The Institute of Plasma Research and CAT Centre, Indore and GAINT Magnetically Confined Nuclear Fusion Programme at IPR, Gandhinagar respectively indicate the UGC'S growing interest in the development of Plasma Science.

Ongoing Projects:

Project Title	Funding Authority	Amount in lakh	Duration
1. Study of Long Wavelength Laser Interaction in Plasma	Dept. of Atomic Energy	4.00	1995-2000
2. Study of RF Discharge Plasma in Pure Gases, Co ₂ Laser gas Mixture, and Seeded Gases by Langmuir Probe Techniques.	Dept. of Science & Technology	13.43	1997-2000

Conference attended :

Dr. Monoranjan Khan was the lone Indian representative in the First General Assembly of Asian Plasma & Pacific Plasma Theory Conference at Beijing during Sept. 21-25 (1998). He presented a paper ; "Poloidal Magnetic Field generation in Laser Plasma Interaction." Dr. Khan has been nominated Senior Associate of Inter-University centre for Astronomy & Astro Physics, Pune ; 1997-2000. His total number of publications 1998-9 was out of them the following acclaimed importance amongst the academic circle.

1. "Self-generated Magnetic Field and Faraday Rotation in Laser Produced Plasma." Monoranjan Khan, C. Das, B. Chakravorty, T. Desai, H.C. Pant, M.K. Srivastav, S.V. Lawande, Physical Review, E58, 925, 1998.
2. "Modification of Stimulated Brillouin Scattering Due to Magnetic Anisotropy in Laser Plasma Interaction". M.Khan, S. Sarkar, T. Desai, H.C. Pant. Laser & Particle Beams 16(3) 491 (1998).

(Dr. A. M. Basu is actively associated with this Centre. His contributions have been mentioned along with the teachers of Physics Department.

Centre for Surface Science :

Surface Science occupies an important segment in the field of Chemistry. The Centre for Surface Science is yet another interdisciplinary department of great significance that has reached a state of high academic excellence. Prof. S. P. Moulik is presently the Director of the Centre for Surface Science. The major areas of research concern the study of the surfactant behaviours in solution, formation of micelles, reverse micelles and micro emulsions as well as surfactant polymer interaction. The investigation are made on thermodynamic kinetic and photochemical aspects of self-organizing systems. Kinetics of surfactant with protein and DNA are constantly kept on watch. Thrust areas of researches are also continuing in photochemical, photoelectrochemical and spectrochemical studies of liposomes and BLM in various conditions of photoactive compounds. The study is related to solar energy conversion and utilization. Absorption and Fluorescence behaviours of dyes in the self organized system are being studied to understand. The physico-chemical characteristics of micelles media and interaction of the dyes with the micelles. The fundamental and applied aspects of liquid membrane behaviour with special reference to transport through the membrane are carried on with great interest. Determination of membrane thickness, ultrafiltration aspects of solid membrane are being selected for exploration. The research activities on charge transport mechanism through lipid membrane, non lamellar configuration in lipid assembly, and DNA Sepunere study and its interpretation have received wide acclaim in the academic circle. Investigations are also being carried out into the mechanistic pathways of a number of redox reactions involving transition metal ion oxidants and organic like aromatic alcohols, aldehydes, ketones and diketones. Surfactants are expected to influence the mechanism and rates of such studies are being carried out to elucidate the role of different surfactants, cationic, anionic as well as non-ionic in controlling the pathways of such electron transfer reactions.

The Centre organized an International Conference on "Disperse Systems" during Feb. 19-21, 1998. To make it a grand finale two hundred delegates participated, out of which twelve were from Japan, Italy, France, U.K. Germany and Bangladesh.

The Centre in collaboration with the Indian Society for Surface Science & Technology, J. U., organised two seminar lectures :

Dr. Emdadul Haque of Institute of Chemistry, Academy of Science, Taipei, Taiwan, gave a lecture on "Confirmation of Amino - Terminal Domains gp-41 of HIV - 1 on May 14, 1998.

Dr. Abhijit Chakraborty of Saha Institute of Nuclear Physics gave a lecture on "Organisation and Dynamics of Biomembranes : The Present Sciences" on Dec. 23. 1998.

Projects:

A research project worth Rs. 50 lakhs, on Energetic, Surface, Chemical and Photochemical Studies of Self Organising Systems is going on, Prof. S.P.Moulik is the Principal Investigator, while Prof. B.B. Bhowmik, Dr. P.K. Sen and Dr. S.C. Bhattacharya are Co-Investigators of the Project.

The Centre also has received a research project worthy Rs.3.7 lakhs per annum, from the ICI Research and Technology, Thane. The title of the project is Thermodynamics of Micellization of Surfactants in Aquous and Salty Environments : A Systematic Study by Direct and Indirect Methods" and "Formation and Characterization of Vegetable Oil - based Microemulsions with Biodegradable Surfactants Including ICI Surfactants". Prof. S.P. Moulik and Prof. S.K. Sanyal are the Investigators of the Project. Papers published has been included in the chapters of the respective departments of the teachers.

Relativity and Cosmology Research Centre :

This important Centre came to be established in Feb.1990, under the Department of Physics. The primary aim of the Centre is to facilitate interactions among experts and research workers in areas such as general relativity, cosmology and several other related fields. Prof. A.K. Roychoudhury, a renowned scientist of the country, takes keen interest in its activities and is a major source of inspiration to the researchers. The regular weekly seminar is one of the most important aspects of the Centre, where the stalwarts in this academic area often participate.

The Centre has close association with the Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune.

The university provides Rs. 30,000 to the Centre as an annual grant. An assistance of Rs. 50,000 for books, journals and minor equipments has been received in March 1999 from the UGC under the 9th plan.

At present the Centre has 3 research scholars. The research area covered by the Centre include various topics in gravitation and cosmology such as inflation, cosmic... domain walls and monopoles, black holes and singularity free cosmologies among others.

A list of publications by the teachers & scholars of the Centre are appended below :

1. N. Banerjee and S. Sen
Power law inflation and scalar field cosmologies with causal viscous fluid.
Phys. Rev.D, 57, 4614 (1998)
2. A.A. Sen and N. Banerjee
Local cosmic strings in generalised scalar tensor theories
Phys. Rev. D, 57, 6558 (1998)
3. A.A. Sen and N. Banerjee
Gravitational field of a stationary cosmic string loop
Astrophys. Space Science, 259, 301 (1998)
4. N. Banerjee and S. Sen
Scalar no hair theorem for a charged spherical black hole
Phys. Rev. D, 58, 104024 (1998)
5. A. Banerjee, A. Beesham, S. Chatterjee and A.A Sen
Global monopole in scalar tensor theory
Class. Quant. Grav., 15, 645 (1998)
6. S. Chatterjee, A. Beesham and T. Ghosh
Inhomogeneous cosmological models in $D=6$, $N=2$ K-K supergravity
Phys. Rev. D, 57, (1998)
7. A. Banerjee and T. Ghosh
Static domain walls in Brans Dicke theory
Int. J. Mod. Phys. D, 7, 581 (1998)
8. A. Banerjee and A. Das
Domain walls in higher dimensions
Int. J. Mod. Phys. D, 7, 81, (1998)
9. S. Chakraborty and N. Chakravarty
A study of Kantowski Sachs model in Ashtekar variables
Int. J. Mod. Phys. A, 28, 4931 (1998)
10. S. Chakraborty
Gravitational field of non static global monopole
Physica Scripta, 58, 294 (1998)

11. S. Chakraborty and T.K. Ghosh
Inflationary solutions for higher dimensional anisotropic cosmological model in scalar tensor theory II.
Astrophys. Space Science, 257, 175 (1998)
12. S. Chakraborty and T.K. Ghosh
String Cosmology with Brans Dicke theory in higher dimensional Spacetime
Int.J.Theo.Phys., 37, 2409 (1998)
13. S. Chakraborty and A. Roy
String cosmology in inhomogeneous cylindrically symmetric spacetime
Pramana, 51, 369 (1998)
14. S. Chakraborty and F. Rahaman
Motion of test particle in global monopole with Brans Dicke theory
Pramana, 51, 689 (1998)
15. S. Chakraborty and F. Rahaman
String cosmology in a stationary cylindrically symmetric spacetime
Astro Phys. Space Science, (1999) (in press)
16. S. Chakraborty and N. Chakravarty
Quantisation of Kantowski Sachs model and the wave friction
Gen. Rel. Grav., (1999) (in press)
17. S. Chakraborty and L. Biswas
Non static general relativistic domain walls
Physica Scripta, (1999) (in press)

School of Bio Science & Engineering :

This is a unique set up of interdisciplinary teaching, research and developmental work, spanning the range of other academic disciplines such as Engineering and Medical Sciences, branches of Physics, Chemistry, Mathematics, Pharmaceutical Science, Chemical Engineering, Metallurgical Engineering, Electronics, Electrical and Mechanical Engineering are all included in the research programmes undertaken by this multidisciplinary School of study. This is the only advanced level school in the eastern region which also encompasses studies on Biomechanics, Biomaterials Modelling, Biomembrane, Medical Instrumentation etc. The primary aim of the School is to design and develop implants, prostheses or assistive devices for diseased joints and orthotics for handicapped people. The School has developed products like hydroxyapatite as bone graft and also hydroxyapatite-coated dental implant for permanent replacement of lost tooth. Pulsed electromagnetic field

generator for rapid fracture healing and non-union healing and other electronic assistive are effectively utilised by the School. The use of artificial bone material, both from natural as well as synthetic sources, have also been developed. The School is the first of its kind in Eastern India to initiate a 3-semester course in Biomedical Engineering. The School also offers short term manpower training of orthopaedic surgeons and also biomedical instrument operation and maintenance course.

School offers the following courses :

1. Master of Biomedical Engineering (M.B.M.E.)
2. Ph.D. both in Science & Engineering.
3. Special equipments are used, such as, 1. Instron material testing machine 50 KN, 2. Digital storage oscilloscopes 3. X-Ray ultrasonoscanner, ECG m/c, 4 Audio-video recording facilities with multimedia PC-Pentium 586 system to assist the laboratories of a. Biomechanics, b. Biomaterials.

Some of the major projects already completed :

Title	Authority	Amount in lakh
Infrastructure development	MHRD	22.00
Electronic Rehab. aids for the handicapped	DOE	6.00
Biomedical instrumentation and development	AICTE	13.00

The School of Bio Science and Engineering offers an interdisciplinary course bringing into its purview the disciplines of Engineering and Medical Sciences.

Covering studies on Biomechanics, Biomaterials & Medical Instruments, this is the only department of its kind in the Eastern region of the country. The School seeks to achieve excellence in the designing and development of implants, prostheses or assistive devices for diseased joints and orthotics for the handicapped and the disabled.

Special educational material production :

1. courseware development facilities
2. Training of orthopaedic and dental surgeon in implantology.

Industrial Testing facilities :

- (i) Stress and design analysis of any bio-engineering product
- (ii) Wear testing of prosthetic material, mechanical strength, hardness test
- (iii) Multimedia, D.T.P
- (iv) Biocompatibility testing of materials and implants causes of failures.

Consultancy services :

- (i) HA-coated titanium dental implant
- (ii) Hip, Knee, shoulder-joint prostheses development.
- (iii) Artificial bone material as bone graft.
- (iv) Commercialization of PEMF generator for bone fracture healing.

The School has developed a HA-coated titanium dental implant, In order to make implantation available to the common people at a reasonable cost, non-coated titanium

implant has been developed and is under clinical trial. The implants will substitute imports and the technology is expected to be available to common people.

The School organised a one day seminar on "Internet and Its Prospect" in collaboration with Regional Computer Centre, on 5th December 1998, at Cyber Hall, R.C.C.Jadavpur University Campus.

The school also organised a seminar on Bio-medical Engineering and its impact on Health-care Technology held on 3.1.98.

Title of the Project	Ongoing Projects		Sanctioning Authority
	P.I.	Value	
'Biological studies of artificial human joints'	Dr. S. Pal,	Rs. 178,000	UGC
Design Development and Testing Facilities for Bio-Medical Programme.	Dr. S. Pal	Rs. 23,00,000	AICTE

UGC granted a sum of Rs. 900,000 towards the budget provision of 1999-2000 for the School as follows:

Books & Journals	Rs. 1,00,000
Consumable Chemicals-	" 4,00,000
Research Associates -	" 1,00,000
Contingencies -	" 50,000
Travel -	" 20,000
Visiting Faculties	" 60,000
Research scholarship for students	" 60,000
Summer Praining Programme	" 10,000

School of Energy Studies :

The School was established in 1984 in Jadavpur University. It started as an endeavour to enhance an awareness of Energy Conservation against the ever-increasing energy-crisis and ecological disbalance over the world. At present, the School is an important centre of imparting education in the conversion of renewable energy and conservation and developmental multi-disciplinary unit, the school co-ordinates instructional research and developmental activities in the concerned fields of energy studies often jointly with other universities in the eastern zone of India. Instructional schedules for related activities in other sectors, such as, joint and collaborative efforts, industrial utilization of the design developments etc. Surveys and similar such programmes are also included in the original activities of the School.

The School specializes in the the study of fossil fuel and encourages developmental research programmes in the area of non-conventional energy sources.

The School is one of the only four institutes that have been entrusted with the task of

creating 'manpower' through extensive training for the effective handling of the projects in the field of energy study. The other three institutes are ; (1) Regional Engineering College, 2) Tiruchirapalli; IIT, Delhi, and 3) Roorkee University.

The School has been identified by the UGC as the organization to initiate collaborative programmes in Energy Conservation and developmental projects with various institutes of the USA with similar such departments for the study of energy and environmental sciences.

The only manpower training centre in Eastern India, the School offers the module of three semesters full-time Master of Technology, approved by the AICTE as well as the UGC. The School also offers a twenty four week evening course on Energy Management and Audit for professional engineers.

The school offers industrial testing facility mainly on the following:

1. Energy Auditing,
2. Pv-Modules
3. Renewal Energy Sources
4. Electrodes Deposition of Various Metal and Composit Coating
5. Energy Conservation
6. Biogas Digester for Production of Methane
7. Wind Electric Generator
8. Solar Thermal Device for Industrial Heating and Cooling.

The activities and succes of the school depends very much on its well equipped laboratories,such as:

1. Solar Photovoltaic Laboratory
2. Bio-gas or Biomass Laboratory
3. Wind - Energy Laboratory
4. Regional Test Centre
5. Back up Centre for Solar Thermal Devices.

School of Oceanographic Studies :

The School was founded in unde1986 the deptt. of geology to carry out Rsearches on :

1. Coastal Ocean and,Ocean and Resources
2. Man -Power Training in Occan Science and Technology
3. Socio -Economic Studies of Coastal Fishermen Community
4. Coastal and Oceanic Environment Management.

The School has received Rs. 50,000 from UGC for purchasing of equipments books etc. under the 9th plan Development Grant.It received Central assistances as follows :

UGC	Rs 40 Lakhs for starting a Modal Centre on Ocean Science & Technology
DOD	27 Lakhs, out of which 10 lakhs for infrastructural development, and the rest for research projects.

Ongoing project

Effects of Coastal Processes and its Impact on the Environment in Sunderbans , W. Bengal

Funding agency & value

DOE, Govt. of W. Bengal
2 lakhs

Name of P.I

Prof. A.D. Mukherjee.

Two important workshops held in the School :

1. National workshop on coastal Zone problems
2. National workshop on Disaster Management

Dr. R. Tessier and Dr. R. Richards, of Tyne University, New Castle-upon U.K. visited the School.

Activities of the School :

The School's Faculty Members and Research Fellors are actively engaged in research works in the coastal region of W.Bengal.

A number of faculty members participated as experts in various R & D Committees of the State and Central Government agencies. The School formulated schemes for the Coastal Zone Management Plan of West Bengal.

Considering its achivements the U.K. Govt. came forword and sanctioned project worth Rs. 4 crore to the School for initiating a training centre for ICZM in collaboration with the coastal zone management Institute of the university of New castle upon Tyne of U.K.

National Workshop:

For creating environmental awarness, the school organised a National workshop on Disaster Management from January 20 -22, 1999.

School of Women's Studies :

The School of Women's Studies was established in 1988 in J.U., and since then has been the central institute for developing studies concerning women's issues - social, political, economic or cultural, in the eastern region of the country.

Its aim is to create a mass awareness so as to integrate the aspirations and experiences of women in the prevailing social structure and to dissolve the artificially constructed barriers imposed by the phallogentric, traditional academic disciplines. The primary emphasis of the School is to inspire research and other developmental projects that would distinctly focus on the significant role of the women in society, her potential, as also the distressing reward she receives in the forms of her reduction into a mere object of all kinds of exploitations - sexual or otherwise.

As an inter - disciplinary School, it tries to interact with other relevant major academic disciplines. The School has a proposal to offer inter-disciplinary M.Phil course starting with about fifteen students initially.

The Honorary Director of Women's Studies is Dr. Anuradha Chanda ; since October 1999 (Prof. Malini Bhattacharya), has been appointed as the new Director of SWS, she is assisted by Smt. Sarbani Goswami, Research Officer, Sri Abhijeet Sen, Sm. Shrabani Majumdar, Sm. Anindita Bhaduri, Sm. Karuna Chakraborty and Sm. Rumi Ghoshal.

The School has undertaken a project of a series of publications concerning women's issues and causes encompassing social, political and economic aspects of the last two centuries specifically. With the untiring efforts, especially of Sri Abhijeet Sen and Smt. Sarbani Goswami the School has already been able to bring out eight such publications. UGC sponsored Refresher Course on "Women's Studies : Issues, Concepts and Methods," was held in collaboration with the Centre for Women's Development Studies, New Delhi, during Nov.-Dec. 1998.

CONFERENCES/ SEMINARS/WORKSHOPS:

A one-day workshop to discuss the findings of a survey-based research on Women's Land Rights, titled "Women - Second in the Land Agenda" with special reference to West Bengal was organized by the School in May 1998. The workshop was conducted by Dr. Jayoti Gupta, Project Director of the study, supported by a grant from HIVOS, Bangalore, and CWDS, New Delhi.

A one-day workshop, 'The Girl Child in the Indian Context', to commemorate the United Nations Week of the Girl Child was held in September 1998. The speakers were Prof. Jaba Guha, Dept of Economics, Jadavpur University Prof. Jasodhara Bagchi, Founder Director of School of Women's Studies and Sm. Indrani Sinha of *Sanlaap* spoke on the theme of "Development and Gender: The Girl Child". Ms. Indrani Sinha, *Sanlaap*, also spoke on "Sexually Vulnerable Girl Children."

In January 1999, a two-day Workshop on 'Sex and Violence ; Concepts and Constructs', was held in collaboration with the Counselling Cell of Jadavpur University. The idea of the Workshop emerged from an attempt to identify and explore the arenas in which violence is perpetuated on women, provide a definition of various aspects of violence and understand violence from the point of view of the Human Rights Movement in India.

A two-day workshop on Regional Histories of Women: The Eastern Region, titled "In Search of Pasts? History, Women's Movements and Women's Studies," sponsored by the Indian Association of Women's Studies was organised in collaboration with the Women's Studies Research Centre, Calcutta University, in February 1999. The proceedings of the Workshop has been published in mimeographed form, entitled: *In Search of Pasts? History, Women's Movements and Women's Studies*.

The objective of the Workshop was to bring together some of the ongoing historical research on gender in the Eastern region, aiming to provoke discussion on the need for a historical understanding of women's current situation and to examine how history is itself a political resource to define women's identity.

LECTURES

1. Prof. Peter Kulchyski, Department of Native Studies, Trent University, Canada, presented a paper on "Aboriginal Women and Issues of Land Claims" in January 1998.

Prof. Himani Bannerji, York University, Toronto, gave a talk on "Women's Subjectivity and Agency in the Context of Class, Gender and Modernity ; A Case Study in Khidirpur" April 1998.

Dr. Alison M. Blunt, Dept. of Geography, University of Southampton, UK, presented a lecture on "Anglo-Indian women and the Spatial Politics of Home" in March, 1999.

Women Writers Reprint Series :

Urmashashi Devir Rachana Samkalan. Edited by Abhijit Sen and Arun Kumar Banerjee. Calcutta : School of Women's Studies and Dey's Publishing Co. 1998.

Bukhalata Raoer Rachana Samkalan, Vol.I Edited by Jayeeta Bagchi. Calcutta ; Thema, 1999.

The eighth volume of this series, *Radharani Devir Rachana Samkalan, Vol.I*, compiled by Abhijeet Sen has been published on 30 November, 1999.

The ninth volume, Priyabala Gupta's autobiography, *Smriti-Manjusha*, edited by Ranjan Gupta and Jasodhara Bagchi, will be published on the first week of January, 2000.

The tenth volume *Savitri Rayer Nirbachita Rachana Samkalan* will be published on December 24, 1999. The eleventh volume, *Radharani Devir Rachana Samkalan, vol. 2* will be published on the second week of January, 2000

Dr. Anuradha Chanda, Director (Since October 1999 **Prof. Malini Bhattacharya** has been appointed as the Director of SWS)

Dr. Chanda attended a workshop organised by the Centre for Applied Rural Education, Extension & Research (CAREER), Visva Bharati, held in June 1998.

Participated in a programme on Awareness on Joint Forest Management for the Forest Officials organised by Regional Centre, National Afforestation and Eco-Development Board, held in Midnapore, June 1998.

Was Resource Person and Co-ordinator at a seminar on "Women's Issues in Civil Services" organised by the Administrative Training Institute, Home (P & AR) Department, Government of West Bengal, in July 1998.

Coordinated the second UGC sponsored Refresher Course in 'Women's Studies Issues, Concepts and Methods' organised by the School of Women's Studies and Centre for Women's Development Studies, New Delhi, held in February 1998. Also gave a lecture on

"Women's Studies in Asia". Gave a lecture on "Women in the International Political Processes: The Human Rights Experience" in the UGC sponsored Refresher Course organised by the Dept. of International Relations, Jadavpur University, in February 1999.

Sarbani Goswami, Research Officer

Taught a Master of Social Work course on "Gender and Development" at the Vidyasagar School of Social Work (affiliated to Vidyasagar University) from March 1997 to April 1999.

Was also invited to deliver a lecture on Women's Movement in India at the UGC sponsored Refresher Course in *Women's Studies: Issues, Concepts and Methods* conducted by the School in collaboration with Centre for Women's Dept. Studies, New Delhi, in November-December 1998.

Was invited by the United States Consul General of India, to participate in a three week programme on Women and Girl Child, in different cities in the US, including Washington D.C., in January 1999.

Delivered a lecture at the George Washington University at the Women's Studies Development on "Women's Studies and Women's Movement in India".

Delivered a lecture on the Status Committee Report on Women, 1974 and its implications and implementation in India at the Women's Political Cancus U.S. Government, Iowa

Attended the U.N. General Assembly Session on the Amendment of CEDAW document and participated in a discussion on Girl Child in West Bengal at UNICEF in New York.

Selected as a co-ordinator of the Eastern Region of the Sectional Committee on Women and Librarianship.

Dr. Shivani Bannerjee Chakravorty, Project Officer,

In January 1998, Dr. Shivani Bannerjee Chakravorty, along with Dr. Kavita Panjabi, Dept, of Comparative Literature, was invited to present a paper, "Tebhaga in Dinajpur and Narail : A Left Movement and a Women's Movement" based on their research on women's participation at a workshop on "History and the Politics of Gender" organised by the Dept. of History, Calcutta University. The paper will be published in the seminar proceedings. Dr. Panjabi and Dr. Banerjee Chakravorty were invited to present a paper on their research at a seminar organised by the Sephis Grants Program, held in Bolivia, in May 1999.

Was invited to teach an undergraduate course on "Third World Women and Change" in the Women's Studies Program, University of Manoa, Honolulu in June - July, 1998.

Presented a paper, "A Peasant's Movement and A Women's Movement: A Study of the Tebhaga Movement in Bengal, 1946-47" at the Brown Bag Lecture Series, Office of Women's Research, University of Manoa, Honolulu, in June 1998.

September 1998: Presented a paper on "Girl Children : The Social Construction" at a workshop on *The Girl Children in the Indian Context* to commemorate the United Nations Week of the Girl Child, organised by the School.

Report of Activities as taken place after the last meeting of Academic Board, held on 4.2.99.

Prof. Mark Siderits, Department of Philosophy, Illinois State University, delivered a lecture on "Sexuality or Labour: Which Explains Women's Oppression?"

The School of Women's Studies in collaboration with the British Council, Calcutta, screened *Sundari: An Actor Prepares* by Madhusree Dutta. The Film was about Jayashankar Sundari, a legendary female impersonator in the Gujarati theatre of Bombay in the early 20th Century.

A one-day Workshop to celebrate the Girl Child Week was held in September, 1999. The theme of Workshop was *The Girl Child in West Bengal*. The Workshop was organised in collaboration with the UNICEF, Eastern Region, Calcutta. The objective of the Workshop was to disseminate the findings of the *Situation Analysis on the Girl Child in West Bengal* by Prof. Jasodhara Bagchi. In the light of this findings a district level Workshop is also being planned with UNICEF. Since the Workshop was the part of NGO clustering programme of the UGC as stated in the Guidelines, it was attended by NGOs working in different districts

of West Bengal.

A one-day Workshop on Distant Education was organised in collaboration with IGNOU in August, 1999. The objective of the Workshop was to explore the possibilities of holding collaborative sessions on Gender and Development with the NGOs.

Prof. Geraldine M.H. Forbes delivered a lecture on *In Search of Elokeshi: Research in Progress on Tarakeshwar Murder Case* in August, 1999.

A Summer Programme was organised in collaboration with the Shastri-Indo Canadian Institute, New Delhi, for sixteen Canadian students in July, 1999.

A two-day Workshop was organised on Development and Empowerment of Women in Rural West Bengal in June, 1999.

Prof. Nabaneeta Dev Sen delivered the *Second Sukhalata Rao Memorial Lecture* in April, 1999.

Sj. Kanak Mukhopadhyay delivered the *First Pritilata Waddedar Memorial Lecture* in March 1999. In May 1999 an Occasional Paper entitled *Samakaler Prekshapatey Preetilata Waddedar* (compiled and annotated by Anindita Bhaduri and Abhijit Sen) have been published.

Other Projects:

Prof. Jasodhara Bagchi and Prof. Jaba Guha is working with District Primary Education Programme in preparing a gender-oriented module for Primary Education Curriculum.

The questionnaire on Women in Management in Higher Education has been sent back to Dr. Pam Rajput after working on it.

Endowment Lecture:

The Academic Committee meeting (dated 4.10.96.) resolved that the following persons be invited for the *Sukhalata Rao Memorial Lecture*.

1. Prof. Malini Bhattacharya.
2. Prof. Nabaneeta Dev Sen
3. Sm. Pratiba Roy, Orissa

University Science Instrumentation Centre :

The aim of this interdisciplinary centre is to act as a pivotal point of this university to make available for research projects various sophisticated instruments under one roof to be utilised by several disciplines of Science & Engineering. The USIC received Rs.10.10 lakhs from the UGC as development assistance during the period 1998-99.

A UGC sponsored Training Programme on "Microprocessor Interfacing and Introduction to Microcontrollers" was organised by USIC, J.U., in collaboration with Western Regional Instrumentation Centre (WRIC), Mumbai University, during October 26 to Nov. 7, 1998.

(a) A paper entitled "SEM Study of combplates of Pleurobrachia obtained from coastal water of West Bengal was accepted in the Indo-Japanese Symposium on Frontiers in Electron Microscopy in the 21st Century and xxiith Conference of the Electron Microscopy Society of India, held during Nov. 9-11, 1998, at the Centre for Cellular and Molecular Biology, Hyderabad. Sri R. Bhar is one of the co-authors of this paper.

(b) A paper entitled "Surface analysis of Mung bean Seeds Reveals Biodiversity as a Correlation of Ultrastructure and Genom" was accepted in the Asia-Pacific SIA' 98

Conference held during Nov.30-Dec,1998,at the University of Singapore. Sri R.Bhar is one of the co-authors of this paper.

Analytical services were given on the following sophisticated instruments :

i) Atomic Absorption Spectrophotometer (Perkin Elmer, Model -2380, located at Metallurgical Engg.Dept. - Dr. Badal Bhattachaya, Dept of Metallurgical Engg. is the incharge of that Laboratory). During the year a total number of 1518 determinations(114 external 1440 ,internal) have been done. The user include Scientists and Research Workers of different departments(Mett.Engg., Civil Engg., Mechanical Engg.,Chemical Engg., Chemistry, Pharmaceutical Engg.,etc.) of the University and Indian Association for the Cultivation of Science, Indian Institute of Chemical Biology, Development & Consultant Ltd., Dey's Medical, Infer(India) Ltd., Thermal Consultant & Services Pvt. Limited, CESC, Export Inspection Agencies, S. Mukherjee Memorial Reproduction Biological Research Centre, Balmer Lawrie F Ltd. etc.

ii) Scanning Electron Microscope (SEM) (Jeol, Japan, Model : JSM 5200 located in USIC Building, Sri R Bhar, Sr. Scientific Officer, USIC is the In-charge. During the year a total number of 178 samples studied in SEM. Total Micrographs taken in the instrument during the year is 638. The user include Scientists and Research Workers of different departments (Mett. Engg., Pharmaceutical Engg., Mechanical Engg., Electronics & Tele-Communication Engg.,Physics, Geological Sciences, Life Science & Bio Technology etc.) of the University and I.I.T. Kharagpur,Calcutta University, B.E. College, Chittaranjan Cancer Research Institute etc.

iii) Vacuum Coating Unit (Poloron, UK , Model P-150) with Film Thickness Monitor (Edward FTM - 5) Sri R.Bhar, Sr. Scientific Officer, is the incharge of this equipment. During the year total number substrate coated is 92, with different materials like Se,In,Ge,Ag,Cu, Sn, etc.

b) During the year the Centre developed a Gold Sputter Coating Unit for the purpose of giving a thin coating on the non-conducting samples before studying in Scanning Electron Microscope.

Errata

Read	For	Page	Line
Ph.D.	D.Phil	45	3
M.A.	M.A.,D.Phil	45	6
Ph.D.	D.Phil	45	7
Ph.D.	D.Phil	45	9
Ph.D.	D.Phil	45	10
B.A.(Cal.et.Cantab),M.A.(J.U.et.Cantab)	M.A.,D.Phil	45	11
Ph.D.	D.Phil	45	12
Ph.D.	D.Phil	45	13
Ph.D.	D.Phil	45	14
Ph.D.	D.Phil	45	15
Ph.D.	D.Phil	45	16
Ph.D.	D.Phil	45	17
Ph.D.	D.Phil	45	18
Sri Om Prakash Misra M.A., M.Phil	Dr.Om Prakash Misra M.A.,Ph.D	54	7
1956	1964	55	36

Addenda

English :

Professors :

Dr. Sukanta Chaudhury, M.A., D.Phil.
Dr. (Mrs.) Malini Bhattacharya, M.A.,Ph.D.
Dr. (Mrs.) Supriya Chaudhuri, M.A.,D.Phil.

Readers :

Miss Jyotsna Bhattacharya, M.A.
Dr. (Mrs.) Sheila Lahiri Choudhuri, M.A., Ph.D.
Sri Arup Kumar Rudra, M.A.
Dr. (Mrs.) Indrani Halder, M.A., Ph.D.
Mrs. Malabika Sarkar, M.A.
Dr. (Mrs.) Shova Chattopadhyaya, M.A., Ph.D.

Sr. Lecturers :

Dr. Aparajita Nanda, M.A., Ph.D.
Sri Prodosh Bhattacharya, M.A.,M.Phil, et. M.Litt. (oxon)

Lecturers :

Sm. Chandreyee Neyogi, M.A.
Dr. Santanu Biswas, M.A., Ph.D.
Sm. Paromita Chakravarti, M.A., M.Phil (oxon)
Dr. Abhijit Gupta , M.A.,D.Phil (oxon)

History :

Sr. Lecturers :

Dr. Jayanta Sengupta, M.A.,Ph.D.
Dr. (Mrs.) Nupur Dasgupta, M.A.,Ph.D.

Dr. Sudeshna Banerjee, M.A., Ph.D.
Dr. (Mrs.) Rila Mukherjee, M.A., Ph.D. (Sorbonne)

International Relations :

Sr. Lecturers :

Mrs. Anuradha Mukherjee, M.A.
Miss Kana Chatterjee, M.A., Dip. in German Language
Miss Sumita Sen, B.A., LL.M. (Moscow)

Lecturers :

Dr. Tridib Chakraborty, M.A., Ph.D.
Mrs. Rochana Poddar, M.A.
Dr. Anindya Jyoti Majumdar, M.A., Ph.D.
Sri Kanak Chandra Sarkar, M.A.
Sri Shibasish Chatterjee, M.A.

Philosophy :

Sr. Lecturers :

Mrs. Piyali Palit, M.A.

Lecturers :

Sri Soumitra Basu, M.A., M.Phil.
Sri Proyash Sarkar, M.A.
Dr. (Ms.) Lopamudra Choudhury, M.A., Ph.D.

Architecture :

Lecturers :

Sri Souvanic Roy, B.Arch., M.U.R.P., A.I.I.A., A.I.T.P.
Sri Tapas Kumar Bhattacharya, B.Arch.

Electrical Engineering :

Sr. Lecturers :

Sri Subrata Paul, M.E.E., M.I.E. (I), M.I.S.T.E.
Mrs. Mita Datta, B.E.E., M.Sc. (London), DIC, MIE (I)
Sri Sugata Munshi, M.E.E., MIE (I)
Sri Keshab Ch. Bhattacharyya, M.E.E., M.I.E. (I), M.I.E.E.E.
Dr. Subhas Chandra Mukhopadhyay, B.E.E., M.Sc. (England), Ph.D. (I.I.Sc.)

Lecturers :

Mrs. Suparna Kar Choudhury, B.E.E., M.Tech. (I.I.T.), A.M.I.E. (I)
Dr. Shyamapada Chowdhury, M.E.E., Ph.D., M.I.E. (I), M.I.I.S.T. (I)
Ms. Madhubanti Moitra, M.E.E.
Sri Chandan Chakraborty, M.E.E.
Sri Bikash Ch. Pal, B.E.E., M.E. (IISc), A.M.I.E. (I)
Sri Madhab Roy, M.E.E.
Sri Amitava Chatterjee, M.E.E.

Food Technology & Bio.Chem.Engineering :

Lecturer :

Dr. (Mrs.) L.G.Roy

Published by Sri Rajatkumar Bandyopadhyay, Registrar, Jadavpur University, Calcutta-700032
and

Printed by Sri Sanat Kumar Basu at Jadavpur University Press, Calcutta-700 032