

1. Name of the department – **Biochemistry (H)**
2. Year of Establishment – **2004**
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) – **UG**
4. Names of Interdisciplinary courses and the departments/units involved- **Nil**
5. Annual/ semester/choice based credit system (programme wise) - **Annual**
6. Participation of the department in the courses offered by other departments – **Microbiology and Chemistry**
7. Courses in collaboration with other universities, industries, foreign institutions, etc.- **Nil**
8. Details of courses/programmes discontinued (if any) with reasons- **Nil**
9. Number of Teaching posts

	Sanctioned	Filled
Professors Associate		
Professors		
Asst. Professors	One	NIL

2. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Monorama Polley Mondal	M.Sc, PhD	Govt. Approved Part time lecturer	Biochemistry	12	NIL
Dr. Surajit Sinha	M.Sc, PhD	Govt. Approved Part time lecturer	Physiology	10	NIL
Swagatika Samantaray	M.Sc, M.Phil	Govt. Approved Part time lecturer	Organic chemistry	6	NIL
Dr. Sarbari Mukherji	M.Sc, PhD	Govt. Approved Part time lecturer	Physical chemistry	10	NIL
Arijita Sen	M.Sc	Guest lecturer	Biochemistry	1	NIL

3. List of senior visiting faculty-NIL

4. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty-

Name	Part -I		Part -II		Part -III	
	Th	Pr.	Th	Pr	Th	Pr
Dr. Monorama Polley Mondal	28.56	0	28.56	50	23.52	75
Dr. Surajit Sinha	0	0	14.28	0	23.52	25
Swagatika Samantaray	21.42	42.84	14.28	0	5.88	0
Dr. Sarbari Mukherji	14.28	57.14	14.28	0	11.76	0
Arijita Sen	21.42	0	14.28	50	11.76	0

5. Student -Teacher Ratio (programme wise) – **31:5**

6. Number of academic support staff (technical) and administrative staff; sanctioned and filled- **one (college appointed)**

7. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification
Dr. Manorama Polley Mondal	MSc, B.Ed, PhD
Dr. Surajit Sinha	MSc, PhD
Swagatika Samantaray	MSc, M.Phil
Dr. Sarbari Mukherji	MSc, PhD
Arijita Sen	MSc

8. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received-**NIL**

9. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received-**NIL**

10. Research Centre /facility recognized by the University-**NIL**

11. Publications:

* a) Publication per faculty

* Number of papers published in peer reviewed journals (national / international) by faculty and students

□ Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

PAPERS (Dr. MANORAMA POLLEY MONDAL)

1. Kalkier mK9: A prorenin converting enzyme, in hypertensive mice. Uddin, M. Polley-Mandal, M. and Beg, O.U. *Biochem. Biophys. Res. Commun.* 304: 724-728, 2003.
2. Elevation of oxidative stress in aorta of genetically hypertensive mice. Mukarram Uddin, Hong Yang, Mingjian Shi, Manorama Polley-Mandal and Zhing Mao Guo. (Mechanism of ageing and development, vol 124 Issue- 7, 2003 811-817)
3. Brain regional adenylate cyclase activity: Effect of Theophylline under nontolerant and tolerant conditions. M. Mandal and M.K. Poddar. *Biogenic Amines*, 16, No. 3, (2001) 251-268.
4. Possible mechanism of interaction of GABAergic Adenosinergic systems in the regulation of theophylline- Research induced locomotor activity under its nontolerant and tolerant conditions. M. Mandal and M.K. Poddar. *Neurochemical*, 24 (1999) 757-765.
5. Hippocampal Serotonin: Effect of theophylline in nontolerant, tolerant and withdrawal rats. M. Mandal and M.K. Poddar. *Biogenic Amines*, 15 (1999) 217-228.
6. Theophylline withdrawal stimulates brain regional serotonin. M. Mandal and M.K. Poddar. *Journal of Serotonin Research*, 4 (1998) 273-282.
7. Brain regional serotonergic activity: Effects of theophylline in nontolerant and tolerant rats. M. Mandal and M.K. Poddar. *Journal of Serotonin Research*, 4 (1998) 283-293.

ABSTRACTS Published in Seminar Volume

1. Elevation of oxidative stress in the aorta of hypertensive mice. Uddin, M., Hong Yang, Yingehun Zhang, Mingjian, Shi, Polley-Mandal, M. and Zhing Mao, Guo. American Heart Association's. 56th Annual Fall Conference on High Blood Pressure Research. Sep. 18th 2002, Orlando, FL.
2. Binding of HeLa nuclear transcription factor to promoter regions of prorenin converting enzymes mK9, mK13, mK22 in normotensive, hypertensive and hypotensive mice. FASEB Meeting, April, 20-24, New Orleans, 2002.
3. Theophylline withdrawal reduces locomotor activity: Possible mechanism of involvement of central GABAergic- Serotonergic interaction. M.K. Poddar and M. Mandal. International Colloquium on "Brain Research" Organized by National Brain Research Centre (NBRC) Oct. 1-3, 1999.

Chapter in Edited Book

1.M.K. Poddar, M. Mandal and S. Mukhopadhyay. Theophylline-induced locomotor activity in nontolerant and tolerant mammals: Involvement of central serotonergic activity. In: Environment and Physiology. B.N. Mallick and R. Singh (Eds.) (1993) pp. 80-90. Narosa Publishing House, New Delhi, India.

PAPERS (Dr. SURAJIT SINHA)

1. Sinha,S., Maiti,M., Chattopadhyay,K., Chattopadhyay,B.D., 2012.Potential Amelioration of Curcumin Against Nicotine-induced Toxicity of Protein Malnourished Female Rats. Journal of Pharmacology and Toxicology 7(4),166-180.
2. Bandyopadhyaya,G., Sinha,S., Chattopadhyay,B.D.,Chakraborty,A., 2008. Protective role of curcumin against nicotine induced genotoxicity on rat liver under restricted dietary protei. European Journal of Pharmacology 588, 151-157.

PAPERS (SWAGATIKA SAMANTARAY)

1. Using phosphorus of MoO₃/ZSM-5 to modify performance in methane dehydroaromatisation. S. Burns, J.S.J. Hargreaves, P.Pal, K. M. Parida, S. Parija, J. Molecular catalysis, A: Chemical 245 (2005) 141-146.
2. The effect of dopants on the activity of MoO₃/ZSM-5 catalysts for the dehydroaromatisation of methane. S. Burns, J.S.J. Hargreaves, P.Pal, K. M. Parida, S. Parija, Catalysis Today, 114, 4 (2006) 383-387.
3. Photocatalytic degradation of phenol under solar radiation using microwave irradiated zinc oxide, K.M. Parida, Swagatika Parija. Solar Energy 80, 8 (2006) 1048-1054.
4. Preparation, characterization of molybdophosphoric and tungstophosphoric acid intercalated zinc aluminium hydrotalcite like compounds and their catalytic evaluation towards the oxidative bromination of phenol. K.M. Parida, S. Parija, J.Das, P.S. Mukherjee. Catalysis communication 7, 11 (2006) 913-919.

20. Areas of consultancy and income generated -**NIL**

21. Faculty as members in

a)National committees b) International Committees c) Editorial Boards....- **NIL**

21. Student projects

a. Percentage of students who have done in-house projects including inter departmental/programme- **NIL**

b. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies- **NIL**

23. Awards / Recognitions received by faculty and students- **NIL**

24. List of eminent academicians and scientists / visitors to the department

Dr.Sandip Kumar Bandhopadhyay(Reader,department of biochemistry,IPGM,Kolkata): He gave series of lectures on clinical biochemistry on one day per week.

24. Seminars/ Conferences/Workshops organized & the source of funding

a. National: NIL

b. International: NIL

25. Student profile programme/course wise: 2011-2014

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
BIOCHEMISTRY (HONS.)	84	35	04	13	53
BIOCHEMISTRY(GEN.)		2			

*M = Male *F = Female

26. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
BIOCHEMISTRY (H)	100	NIL	NIL

27. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

NET - ONE

SLET - NIL

GATE- TWO

CIVIL SERVICE- NIL

DEFENCESERVICE-NIL

28. Student progression

Student progression	Against % enrolled
UG to PG	65
PG to M.Phil.	NIL
PG to Ph.D.	10
Ph.D. to Post-Doctoral	3
Employed <ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	NIL 62
Entrepreneurship/Self-employment	2

29. Details of Infrastructural facilities:

- a. Internet facilities for Staff & Students: YES
- b. Class rooms with ICT facility: YES
- c. Laboratories:

A) INSTRUMENT:

Sl.No.	DESCRIPTION OF INSTRUMENT	QUANTITY
1.	UV SPECTROMETER	1
2.	COLORIMETER	2
3.	P ^H METER	2
4.	INCUBATOR(AT 37°)	2
5.	LAMINAR	1
6.	POTENTIOMETER	1
7.	CENTRIFUGE	1
8.	MICROCENTRIFUGE	2
9.	ELECTRONIC WEIGHING MACHINE	2
10.	ORDINARY WEIGHING MACHINE	1
11.	DISTILLED WATER PLANT	1
12.	AUTOCLAVE	1
13.	INCUBATOR WITH SHAKER	1
14.	OVEN	1
15.	CONDUCTIVITY METER	1
16.	ANALYTICAL BALANCE	6
17.	MICROSCOPE	2
18.	POLARIMETER	1
19.	FURNACE	1
20.	ELECTROPHORESIS TANK	4

21.	MICROPIPETTE	4
22.	STIRER	1
23.	VORTEX	1
24.	UV ILLUMINATOR	1

B) ASSET OF LABORATORY:

Sl.No	DESCRIPTION	QUANTITY
1.	COMPUTER	1
2.	LAPTOP	1
3.	LASER PRINTER	1
4.	UPS	1
5.	WHITE BOARD	1
6.	WOODEN WALL CABINET	6
7.	STUDENT WORKING BENCHE AND TABLE	3
8.	WORKING TABLE	3
9.	EXHAUST FAN	2
10.	FIRE EXTINGUISHER	1
11.	FRIDGE	2
12.	ALMIRAH	1

C) DESCRIPTION OF THE LABORATORY ENVIRONMENT:

The area of laboratory is near about 800 sqft. The room is airy. Available water supply is there. The lab is divided into four chambers and has well equipped gas line and well designed drainage system. 4 wooden working table is there for the students.

D) LIBRARY:

SEMINAR	CENTRAL
Around 70 books	Around 300 books

30. Number of students receiving financial assistance from college, university, government or other agencies – 0

31. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts: Seminar and student reunion come competition.

A) STUDENTS SEMINAR COME COMPETITION ON 2005,2006 &2009

B) Lectures delivered by eminent Professors from different Colleges and Universities

21.09.2006- Prof. A .B. Banerjee, (department of Biochemistry,CU)

Dr.Sandip Kumar Bandhopadhay(Reader,department of biochemistry,IPGM,Kolkata)

01.12.2006- (World's Aids Day :

Avik Mukherjee (Research Scholar ,West Bengal University Of Technology)

08.12.2007- Biochemistry- Dr. Aditi Nag Chowdhury (Lady Brabourne College HOD of microbiology department)

32. Teaching methods adopted to improve student learning-

a) Chalk & Talk(maximum).

b) Overhead Projection

33. Participation in Institutional Social Responsibility (ISR) and Extension Activities- NIL

34. SWOC analysis of the department and Future plans –

STRENGTH:

Biochemistry department set up at 2004. From 2004 till now the lab has been remodelled. The laboratory is well equipped with all kinds of old and new instruments as well as apparatus.

This lab can accommodate quite a good number of students to work together. The list of instruments has already been given in tabular form.

Apart from laboratory our departmental library is also well known for varieties of books of Indian as well as International authors, which can guide our students in theoreticals as well as practical aspects.

To build up keen interest on this subject students are allowed to give postal presentation as well as seminars upon various topics of their own scientific interest.

Weakness:

- 1) Laboratory setup should be upgraded if we plan to commence the Post Graduate programme.
- 2) As this is a new invented subject we are getting less number of students and also some student drop out.

Opportunity:

Here students get different kinds of theoretical as well as practical knowledge on clinical, molecular as well as enzymological technique.

Challenges:

To give students keen interest on this newly invented subject and helping them to build up a competitive attitude, so that they can carry forward their career on this subject in India as well as in abroad.

Future plan:

- 1) To organise state level and national level seminar for the sake of students by renowned professor of biochemistry from different university and institute.
- 2) Every year we want to organise seminar competition among students.
- 3) We want to arrange summer project and workshop for the students sponsored by UGC
- 4) Thinking about starting Post Graduate programme on biochemistry in distance.