

DEPARTMENT OF CHEMISTRY
Nimapara Autonomous College, Nimapara

HISTORY:

The department of Chemistry owes its existence to the establishment of the Nimapara College, Nimapara in the district of Puri, a premier educational institution was established in the year 1963 with a motive to input higher education in rural area. The faculty of science in intermediate level came into existence in the year 1966 followed by opening of graduation level in science in the year 1972 and honours in Chemistry in 1978. Being a cardinal ingredient chemistry has always carved a niche for itself in the domain of basic science. With a change in trajectory basic science and interdisciplinary studies becoming more relevant, the role of chemistry as a multidisciplinary subject is greatly redefined.

At present the department conducts teaching programme for both higher secondary (+2) and under graduate (+3) level affiliated to Council of Higher Secondary Education (CHSE), Odisha and Utkal University, respectively. The college got autonomous status in the year 2011 and since then the academics of the department is regulated as per the guidelines of the Nimapara Autonomous College.

Nearly five decades since its inception, the department has come up strength by strength, relentlessly enlighten many and continues to strive for academic excellence. Needless to say it has many alumni to its credit who are rendering services in different spheres of life.

We are dedicated to create a scientific temper among the youth who are out of box thinking and of high psychological alertness devoid of fear and greed.

MISSION:

The department of Chemistry plays itself to encourage the broadest and most liberal manner of advancing Science through student friendly and scholastic method of education. It is committed to helping each student achieve his/her personal academic potential by creating an environment that promotes frequent interaction between faculty and students, independent of thought, exchange of ideas and of high moral standard. It strives to develop innovative instructional technique through lectures and laboratory activities. It provides high standard of content knowledge communication skills, which can demonstrate Science as human endeavour to understand the natural world in all its manifestations.

VISION:

1. To prepare students for a diverse and changing world by striving to contribute a literate Society through teaching, Scholarship and service with dignity of labour.
2. To educate and prepare graduate and post-graduate students to compete in the ever evolving knowledge centered world of the 21st century.
3. To make students equipped with the required knowledge and expertise to enter into job and research field.
4. The department is committed to produce knowledgeable graduates and post-graduates who are high in ethics for careers in academics, industry and in different fields.

PROFILE:

1. NAME OF THE DEPARTMENT AND ITS YEAR OF ESTABLISHMENT:

Department of Chemistry 1966

2. NAMES OF PROGRAMMES / COURSE OFFERED

((UG, PG, M.Phil, Ph.D. INTEGRATED-MASTER, INTEGRATED Ph.D) :-

PG	CHEMISTRY
UG	+3 CHEMISTRY

3. NAMES OF INTERDISCIPLINARY COURSES AND DEPARTMENT INVOLVED:

Environmental Science

Industrial Chemistry

4. ANNUAL / SEMESTER / CHOICE BASED CREDIT SYSTEM

PG	SEMESTER
+3 (HONS)	SEMESTER (CBCS)

5. PARTICIPATION OF THE DEPARTMENT IN THE COURSES OFFERED BY OTHER DEPARTMENT: NIL

6. NUMBER OF TEACHING POSTS:

	SANCTIONED	FILLED
PROFESSORS	Nil	Nil
ASSOCIATE PROFESSORS (READER)	07	05
LECTURER	01	01

7. FACULTY PROFILE WITH NAME, QUALIFICATION, DESIGNATION, and SPECIALIZATION:-

NAME	QUALIFICATION	DESIGNATION	SPECIALISATION	EXPERIENCE	NO. OF Ph.D STUDENTS GUIDED FOR THE LAST 4 YEARS
Dr. PRAVAT KUMAR PADHI	M.Sc, Ph.D	Reader (SS)	Analytical	37	NIL
Dr. PRADYUMAN KUMAR SWAIN	M.Sc, Ph.D	Reader (SS)	Organic	37	NIL
Dr. AKSHAYA KUMAR KAR	M.SC, M. Phil, Ph.D	Reader (SS)	Physical & Nuclear	32	NIL
Dr. SULAGNA PATNAIK	M.Sc, Ph.D	Reader (SS)	Inorganic	33	NIL
MRS. ANITANJALI BEHERA	M.Sc	Reader (SS)	Organic	32	NIL
Dr. BIBHUTI BHUSAN MISHRA	M.Sc, Ph.D	Lecturer	Organic	01	NIL

8. PERCENTAGE OF CLASSES TAKEN BY TEMPORARY FACULTY: - 20%

9. STUDENT TEACHER RATIO (PROGRAMME WISE) :

PROGRAMME	STUDENT : TEACHER
PG	6:1
+3 CHEMISTRY	50: 1

10. NUMBER OF ACADEMIC SUPPORT STAFF:

STAFFS	SANCTIONED	FILLED
Technical support	12	05
Administrative support	01	00

LIST OF TECHNICAL STAFFS :

SL.NO	NAME	DESIGNATION	QUALIFICATION	SEX
1.	MR. SAHADEV PARIDA	Demonstrator	B.Sc	M
2.	MR. SIBA PRASAD MISHRA	Demonstrator	B.Sc	M
3.	MR. ASHOK KUMAR SAHOO	Lab. Attendant	+2	M
4	MR GOPAL CHANDRA BARALA	Lab. Attendant	+2	M
5	MR BIDYADHAR JENA	Lab. Attendant	+2	M

11. PUBLICATION

NUMBER OF PAPERS PUBLISHED IN PEER REVIEWED

JOURNALS (NATIONAL) Nos : 61

CHAPTER IN BOOKS : 02

BOOKS WITH ISBN NUMBERS WITH DETAILS OF PUBLISHERS : 02

IMPACT FACTOR-RANGE/AVERAGE : Average

H-INDEX : 15

12. SEMINAR / CONFERENCE / WORKSHOP ORGANISED AND THE SOURCE OF FUNDING (NATIONAL / INTER NATIONAL) WITH DETAILS OF OUTSTANDING PARTICIPANTS, IF ANY : A NO. . OF SEMINARS ARE ORGANIZED

13. STUDENT ENROLLMENT AND DIVERSITY:

Admission of students to both core & generic courses in Chemistry is done through "Student Academic Management System" (SAMS), a web-based unified system of enrollment at the University level. All such activities related to student enrollment is managed by the SAMS Resource Centre of the College. There has been a significant improvement in the enrollment of quality students. However student's diversity has not changed much and most of the student hails from native state.

14. ENROLLMENT FOR LAST FIVE YEARS :-

YEAR	Applications Received	BOYS	GIRLS	TOTAL
2018-19	1456	46	42	88
2019-20	1502	48	40	88
2020-21	1275	41	26	67
2021-22	1170	45	29	74
2022-23	1260	31	36	67
2023-24	1322	24	25	49

15. STUDENTS HAVE CLEARED CIVIL SERVICES/DEFENCE SERVICES/NET/ SLET/GATE DURING CURRENT SESSION:

GATE-03

NET-02

JAM-05

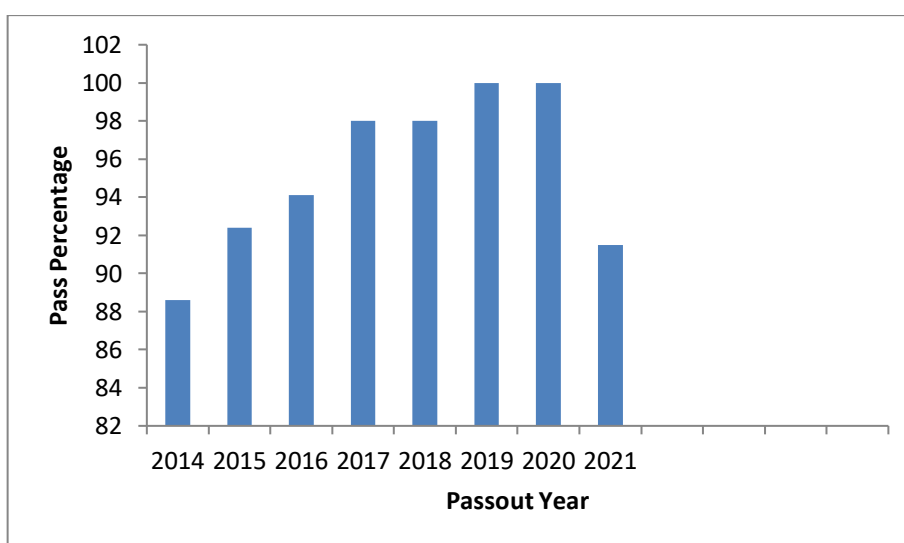
16. STUDENT PROGRESSION:

STUDENT PROGRESSION	PERCENTAGE AGAINST ENROLLED
UG to PG	Each year 15-20 % students are being selected for PG
PG to Ph.D	
Ph.D to Post Doctoral	
Employed Campus Selection, other than campus selection	
Entrepreneurs	Insufficient data.

17. RATE OF SUCCESS OF STUDENTS:

The department has achieved an upward trend in the rate of success of students in the Final Degree Examination. The trend provides helpful cues to leap forward for higher targets.

NAME OF EXAM.	YEAR OF ADMISSION	YEAR OF APPEARING THE EXAM.	NO. OF STUDENTS APPEARED	NO. OF STUDENTS PASSED	PASS PERCENTAGE
+3 Science (III yr. Hons)	2014	2017	70	62	88.6
-do-	2015	2018	79	73	92.4
-do-	2016	2019	85	80	94.1
-do-	2017	2020	82	80	98
-do-	2018	2021	88	86	98
-do-	2019	2022	73	73	100
-do-	2020	2023	64	64	100
-do-	2021	2024	71	65	91.5
-do-	2022	2025	cont	cont	Cont
-do-	2023	2026	cont	cont	Cont



Graphical representation of last 10 years Results of Chemistry Department

18. DIVERSITY OF STAFF:

Percentage of faculty who are Graduates :-		
Of the same parent university	75%	
From other universities	25%	
From other universities from other state	Nil	

19. NUMBER OF FACULTY WHO WERE AWARDED PH.D /D.SC/D.LITT.

: 06

20. PRESENT DETAILS ABOUT INFRASTRUCTURAL FACILITIES:

LIBRARY : (TWO)

(1) Seminar Library, (2) General Library

INTERNET FACILITIES FOR STAFF AND STUDENT : YES

TOTAL NUMBER OF CLASS ROOM : THREE

CLASS ROOM WITH ICT FACILITIES : NIL

STUDENT LABORATORIES : THREE

RESEARCH LABORATORIES : ONE

21. NUMBER OF STUDENT GETTING FINANCIAL ASSISTANT FROM THE COLLEGE:

YEAR	CATEGORY	NUMBER
	SC	08
2010	SC,ST	01+05
2011	SC	02
2012	SC	04
2013	ST	01
2014	SC	02
2015	SC,ST	04
2016	SC	02
2017	SC,ST	03
2018	SC	03
2019	SC,ST	04

22. DOES THE DEPARTMENT OBTAIN FEED BACK?

Feedback obtains from the faculties on curriculum & teaching learning evaluation are properly acknowledged and used for further development. The dept always tried its level best for the effectiveness of the feedback. This dept regards the employer and the alumni as its observer & co-observer respectively, their feedback gets priority.

23. LIST OF THE DISTINGUISHED ALUMINI OF THE DEPARTMENT:

1. Dr. Pravamayee Mishra -Scientist, CRRI, Cuttack
2. Sri Bijay Kumar Mishra -Senior Manager, Indian Overseas Bank,.
3. Dr. Amitabh Dash -Reader, in Chemistry
4. Dr. Bishnu Charan Das -Assistant Professor, Chemistry
5. Sri Krushna Mohan Das- Scientist, R&D, Indian Railway
6. Sri Sarat Senapati -Analyst, Quality Control Division, BPCL
7. Dr. Anjali Panda -Scientist, BARC, Mumbai
8. Sri Manoj Kumar Nayak -Lecturerin Chemistry
9. Dr. Namita Das -Asst. Professor,AB Institute of Technology, Cuttack
10. Sri Subhendu Kumar Nayak -Chemist, Sterlite India, Lanjigarh, Kalahandi
11. Sri Dipti Ranjan Nayak -Scientist, FSL, Odisha
12. Sri Gopabandhu Sahoo -C.A., Rourkela
13. Ms. Rashmirekha Barik - JRF, IIT, Kharaghpur
14. Ms. Suchismita Acharya - Assistant Professor in Chemistry, Centurian University, BBSR.
15. Sri Rajesh Swain - JRF, IMMT, BBSR
16. Sri Ashutosh Baral - Journalist, Times of India.
17. Sri Swadhin Kumar Sahoo – Lecturer in Chemistry
18. Mrs Madhusmita Yadav- - JRF U.U. BBSR
- 19- Soumyadarsi Khatoi- - JRF IMMT, BBSR
- 20- Aswini kumar Sahoo- - Research Scholar NEHU.

24. SEMINAR ARRANGED FOR THE STUDENTS:

The department of chemistry organizes seminars regularly as a part of its co-curricular activities. Students are encouraged to showcase their latent potentials and diverse scientific interests. The departmental seminar often includes subject's matters from syllabus as well as from

areas of recent advances in sciences. The students and staff members are also enriched through popular talks delivered by staff members and science luminaries/enthusiasts from different organizations. Besides dissemination of knowledge, the seminar has often provided an interface for departmental cohesion.

25. LIST OF THE TEACHING METHODS ADOPTED BY THE FACULTY FOR DIFFERENT PROGRAMMES

Class Room Teaching
Doubt Clearing Classes
Discussion of Project Preparation
Hints on Seminar Presentation

26. HOW DOES DEPARTMENT ENSURES THAT PROGRAMME OBJECTIVES ARE CONSTANTLY MET AND LEARNING OUTCOMES MONITORED?

Through Interaction between Faculty Members

Objective Met Through:

Grade Syllabi
Doubt Clearing Classes
Seminar Presentation

Learning Outcome Monitored Through:

Discussion
Mid-Semester Examination
End Semester Examination
Review of Result

27. STRENGTH, WEAKNESS, OPPORTUNITY, CHALLENGES (SWOC) ANALYSIS
STRENGTH

- Chemistry is a strategically important discipline.
- Seminars on the current topics are arranged at regular intervals.
- High quality teaching by quality teachers.
- Well equipped laboratories.
- Good placement opportunity for passed out students in various companies and industries.

WEAKNESS:

- Insufficient financial support for development of basic knowledge of students.
- Inadequate networking, in terms of interstate mobility.
- Inadequate infrastructure facilities.
- Inadequate teaching staff and disparity in pay structure
- Seminar library has no reading room facility.

OPPORTUNITY:

- Enhancing the efficient utilization of funding.
- Creating a long-term plan to enhance the educational standard of students.
- Reinforcing application oriented programmes.
- Strategic location of the college in the vicinity of national level institutes like IMMT, NISER and IIT provides good scope for students to involve in research works.

CHALLENGES:

Imparting quality education keeping pace with rapid progress in research in different branches of chemistry & generation of resources through funding for different research projects are the challenges faced by the department.

FACULTY PROFILE

1. Name of the teacher : **Dr. Pravat Kumar Padhi**
2. Designation : Reader in Chemistry (H.O.D.)
3. Date of Birth : 02.06.1965
4. Date of entry in the Public Service : 06.11.1987
5. Education Qualification : M.Sc., Ph.D,
P.G.D.C.A
6. Teaching Experience : 37 Years
7. Specialisation : Analytical Chemistry
8. Research work : Physical Chemistry



i) Topic of research leading to Ph.D. Degree:

“THERMODYNAMICS OF ELECTROLYTIC SOLUTIONS IN VARIOUS SOLVENT SYSTEM”

ii) Guidance of research, if any : NIL

iii) Paper published : 04

- 1) JTR in Chemistry- Vol. 11(2), PP 81-86, June 2005
- 2) JTR in Chemistry – Vol.12(2)- PP 86-92, Dec. 2005
- 3) JTR in Chemistry – Vol. 15(2) – PP 68-75, Dec 2008
- 4) Journal of creative thinkers – Vol. no. 3, Sept. 2010

9. No of refresher course attended-03

Sl. No.	Nature of Course/Training	Name of Institution imparting course/training	Period	Grade
1	Refresher Course	Central University, Hyderabad	10.01.2003 to 31.01.2003	A
2	Refresher Course	A.S.C, Utkal University	05.12.2005 to 25.12.2005	A
3	Refresher Course	A.S.C, Utkal University	04.02.2013 to 24.02.2013	A

10. Seminar attended – 04

a. National level-2

Sl.No	Theme of the seminar	Organized by	Period
1	Chemistry for Environmental Crisis and its protection	Mangala Mahavidyalaya, Kakatpur	28.02.2009 to 01.03.2009
2	Coordination Chemistry and its application	P.G. Dept. of Chemistry Utkal University	25.03.2009

b. State level

Sl.No.	Theme of the Seminar	Organized by	Period
1	Workshop in service of rural farmers	UN College, Adaspur	23.12.06 to 24.12.2006
2	Workshop "Awareness to environmental Management	Konark Bhagabati College, Konark	03.08.2003

11. Activities for diffusion of knowledge.

- i) Publication of popular article : NIL
- ii) Extension of lecture delivered before learned society:
 - a) During Refresher Course
 - b) During the national and state level Seminars.

12. Social useful work, if any: NIL

13. Other activities, if any:

- a) Organized UGC sponsored national Seminar on "**CHEMISTRY FOR ENVIRONMENTAL CRISIS AND ITS PROTECTION IN 2009**" as organizing secretary.
- b) Edited Souvenir of the seminar titled above

FACULTY PROFILE

1. Name of the teacher : Dr. Pradyumna Kumar Swain
2. Designation : Reader in Chemistry
3. Date of Birth : 25.06.1964
4. Date of entry in the Public Service : 20.01.1988
5. Education Qualification : M.Sc., PhD.
6. Teaching Experience : 36 Years
7. Specialisation : Organic Chemistry
8. Research work :



i) Subject of Research leading to Ph.D degree:

“Synthesis and characterization of Biodegradable polymers from Chitosan”

ii) Papers published- 07 (Seven)

- 1) Synthesis and characterization of polyvinyl alcohol/closite 30b (MMT) nanocomposite for controlled release of anticancer drug curcumin. International journal of advance in Pharmacy, biology and chemistry. 3(4), 2014, 926-932.
- 2) Preparation and characterization of Chitosan nanocomposites different solvents and its antimicrobial activity. International journal of Applied biology and pharmaceutical Technology, 5(4), 2014, 187-196.
- 3) Biodegradation studies of chitosan polycaprolactone nanocomposites in soil burial test, Middle East Journal of Scientific Research, 23 (20, 2015, 253-258.
- 4) Biocompatible copolymer from chitosan substituted polyaniline graft copolymerization of poly (orthophenylene diamine) onto chitosan, International journal of pharm bioscience, 2015, 6(4), 476-481.
- 5) Comparative study of controlled release mechanism of Curcumin from different polymer matrices, International journal of plant, animal and environmental science, 2016, 6(1), 245-254.
- 6) Synthesis and characterization of Conducting polymers multiwalled carbon nanotube (MWCNT)-Chitosan composites coupled with polyparamethoxy aniline, Middle East Journal of Scientific Research, 2014, 22(12), 1832-1839.
- 7) Synthesis and characterization of Chitosan based novel super absorbent Hydrogel, Middle East Journal of Scientific Research, 2015, 23(2), 259-276.

iii) Guide live of research if any: NIL

9. No of refresher course attended-04

Sl. No.	Nature of Course/Training	Name of Institution imparting course/training	Period	Grade
1	Refresher Course	PG Dept. of Chemistry, Utkal University	05.12.2008 To 25.12.2008	A
2	Refresher Course	-do-	15.12.2009 To 04.01.2010	A
3	Refresher Course	-do-	09.03.2011 To 29.03.2011	A
4	Refresher Course	-do-	29.11.2011 To 19.12.2011	A

10. Seminar attended – 05

a. National level

Sl. No	Theme of the Seminar	Organised by	Period	Paper presatei
1	Hazardous effects of pesticides on human health and ecology	S.N. College, Rajkanika	25.11.2006 & 26.11.2006	-
2	Nanotechnology and its applications	SIET, Denkanal	17.07.2009 & 18.07.2009	-
3	Nanomedicine and its effects	SIET, Phulnakhara, BBSR.	13.08 2011	-
4	Recent trends of Nanotechnology in chemical sciences	SIET, Phulnakhara, BBSR.	20.12.2013 To 21.12.2013	-
5	Recent trends in physics	Mahirshi College Of Natural law, BBSR.	26.12.2010 To 27.12.2010	-

b. State level

Sl. No	Theme of the Seminar	Organised by	Period	Paper Presatei
1	Environmental management of Chilka lake and its importance	KBDAV College, Nirakarpur	24.11.2006 & 25.11.2006	-
2	Faculty development	CNSNT, SOA University,	03.07.2017	-

	programme	BBSR	& 08.07.2009	
3	WB- HEPEE Sponsered Academic development programme	Utkal University, BBSR	22.10.19 to 28.10.19	--

11. Activities for diffusion of knowledge

- a. Publication of popular article : NIL
 - b. Extension of lecture delivered before learned society: During refresher course.
11. Social useful work if any : NIL

FACULTY PROFILE

1. Name of the teacher : **Dr. Akshaya Kumar Kar**
2. Designation : Reader in Chemistry
3. Date of Birth : 09.11.1966
4. Date of entry in the Public Service: 16.08.1991
5. Education Qualification : M.Sc, M.Phil, Ph.D.
6. Teaching Experience : 33 Years
7. Specialisation : Physical & Nuclear Chemistry



8. Research work, if any :
 - i) Topic of research leading to Ph.D. Degree: 8 years of research experience.
“Interaction of metal ions with Biologically important molecules: Substitution and Redox reactions in solution”
 - ii) Guidance of research if any: NIL
 - iii) Papers published: 03
 - 1) Journal of Chemical Science, 126 (3), 2014, PP-547-559.
 - 2) RSc Advances, 2014, 4, 58867-58879.
 - 3) RSc Advances, 2016, 6, 11739.
9. Refresher Course attended : 04

Sl.No	Name of the Course	Academic Staff College/University	Period	Grade
1	Refresher Course	Utkal University	05.09.2008 to 25.09.2008	A
2	-do-	Utkal University	15.12.2009 to 04.01.2010	A
3	-do-	Utkal University	09.03.2011 to 29.03.2011	A
4	-do-	Utkal University	29.11.2011 to 19.12.2011	A

10. Seminar attended – 03 (International (01), National (02))

Sl.No.	Theme of the Seminar	Organized by	Period
1	RAMC-2017	Utkal University, BBSR	24.02.2017 to 26.02.2017
2	CCA-2009	Utkal University, BBSR	09.05.2016 to 02.05.2015
3	ACS-2015	Utkal University, BBSR	18.11.2015

11. Activities for diffusion of Knowledge

a) Publication of popular article : NIL

b) Extension of lecture delivered before learned society: During Refresher Course learned society

12. Social useful work, if any: NIL

FACULTY PROFILE

1. Name of the teacher : **Dr. Sulagna Patnaik**
2. Designation : Reader in Chemistry
3. Date of Birth : 12.06.1968
4. Date of entry in the Public Service : 02.09.1991
5. Education Qualification : M.Sc., Ph.D.
6. Teaching Experience : 33 Years
7. Specialisation : Inorganic Chemistry
8. Research work : Material chemistry



i) Topic of research leading to Ph.D. Degree:

“Photocatalytic applications of Graphitic-C₃N₄ for the generation of Hydrogen energy and degradation of Environmental pollutants”

ii) Guideline of research if any: 5 years of research experience.

iii) Papers Published : 14 (Fourteen), Book Chapters-02

- 1) *Inorg. Chem. Front.*, 2016, 3, 336-347
 - 2) *RSC Adv.*, 2016,6, 46929-46951
 - 3) *Phys Chem ChemPhys.* 2016, 18, 28502-28514
 - 4) *RSC Adv.*, 2016, 6, 112602
 - 5) *Energy Technology*, 2017, 5, 879-896
 - 6) *Renewable and sustainable energy reviews.* 2017, 82, 1297-1312.
 - 7) *Nanoscale*, 2018, 10, 5950 – 5964.
 - 8) *Catalysis Today*, DOI: 10.1016/j.cattod.2018.04.008
 - 9) *Inorganic Chemistry* (under revision)
 - 10) *Inorg. Chem. Front.*, 2018, 5, 879-896
 - 11) *Inorganic Chemistry Frontiers*, 2019, 6 (1), 94-109.
 - 12) *Catal. Sci. Technol.*, 2019, 9, 2493-2513
 - 13) *Catal. Sci. Technol.*, 2019, 9, 916-941
 - 14) *Journal of Colloid Science and Interface*, 2019, DOI: 10.1016/j.jcis.2019.09.041
 - 15) Book chapter, Photocatalysis, Chapter 9, *Springer*
 - 16) Book Chapter, Green Photocatalysis for energy and environment, Ch 8, *Springer*
9. No of refresher course attended-03

Sl.No	Name of the Course	Academic Staff College/University	Period	Grade
1	Refresher Course	Sambalpur University	07.07.08 to 27.07.08	A
2	-do-	-do-	24.01.2011 to 13.02.2011	A
3	-do-	Utkal University	04.02.2013 To 24.02.2013	A

10. Seminar attended – 05

Sl.No.	Theme of the Seminar	Organized by	Period
1	DNEES-2015	SOA University, BBSR	02.05.2015 & 03.05.2015
2	DNEES-2016	SOA University, BBSR	09.05.2016 & 02.05.2015
3	OCS-2016	IT Campus, BBSR	24.12.2016 & 24.12.2016
4	FDP-2016	Raman college, BBSR	12.12.2016 to 17.12.2016
5	FDP-2016	SOA University, BBSR	03.8.2017 to 08.8.2017

11. Activities for diffusion of Knowledge

- a) Publication of popular article : NIL
- b) Extension of lecture delivered before learned society: During Refresher Course.

12. Social useful work, if any: NIL

FACULTY PROFILE

1. Name of the teacher : **Mrs. Anitanjali Behera**
2. Designation : Reader in Chemistry
3. Date of Birth : 30.06.1967
4. Date of entry in the Public Service : 14.10.1992
5. Education Qualification : M.Sc.
6. Teaching Experience : 32 Years
7. Specialisation : Organic Chemistry
8. Research work, if any : NIL
9. Refresher Course attended : 02



Sl.No	Name of the Course	Academic Staff College/University	Period	Grade
1	Refresher Course	Utkal University	19.09.2007 To 09.10.2007	A
2	-do-	Utkal University	05.09.2008 To 25.09.2008	A

10. Activities for diffusion of Knowledge
 - a) Publication of popular article : NIL
 - b) Extension of lecture delivered before learned society: During Refresher Course learned society
11. Social useful work, if any: NIL

FACULTY PROFILE

1. Name of the teacher : **Dr. Bibhuti Bhusan Mishra**
2. Designation : Lecturer in Chemistry
3. Date of Birth : 06.03.1990
4. Date of entry in the Public Service : 02.03.2024
5. Educational Qualification : M.Sc., Ph.D, PGD-PPT
6. Teaching Experience : 03 Years
7. Research work :



i) Subject of Research leading to Ph.D degree: **“Liquid Liquid Extraction of Eu(III) and Sm(III) using Phosphonium Ionic Liquids and Organophosphorus Extractants”**

ii) Guideline of research if any : Published 10 research articles in international journals (SCI journals) with a total impact factor of 35.4.

iii) Paper published- 10 (Ten)

- 1) Solvent extraction and separation of europium (III) using a phosphonium ionic liquid and an organophosphorus extractant-A comparative study. J. Mol. Liq. 2018,271, 389–396.
- 2) Yttrium and europium recycling from phosphor powder of waste tube light by combined route of hydrometallurgy and chemical reduction. Minerals Engineering 2019,136 , 43–49.
- 3) Biosorption for removal of hexavalent chromium using microalgae Scenedesmus sp. J. Clean. Prod. 2019,209, 617-629.
- 4) Recovery of Samarium and Cobalt from Sm–Co Magnet Waste Using a Phosphonium Ionic Liquid Cyphos IL 104. J. Sustain. Metall.2020, 6,410-418.
- 5) Study on the Extraction and Separation of Samarium from Chloride Medium Using D2EHPA and [P₆₆₁₄][D2EHP] and Their Application to Monazite Ore. Trans Indian Inst Met.,2020 73,2247-2257
- 6) D2EHPA is a potential extractant for extraction of europium and samarium from chloride medium. , Materials Today Proceedings 2020, 30(2), 254-257.
- 7) Hydrometallurgical recovery of α - Fe₂O₃ from red mud and photo-Fenton degradation of organic dye using CuO promoted α - Fe₂O₃. Indian Chemical Engineer,2020, 68-79.
- 8) Recycling of REMS and removal of toxic metals from fluorescent and CRT waste: A review. Biointerface Research in Applied Chemistry, 2020, 10 (2),5312-5317.
- 9) Solvent extraction and separation of samarium from transition and rare-earth metals using phosphonium ionic liquid Cyphos IL 104. Monatshefte für Chemie-Chemical Monthly,2021, 152,767–775.

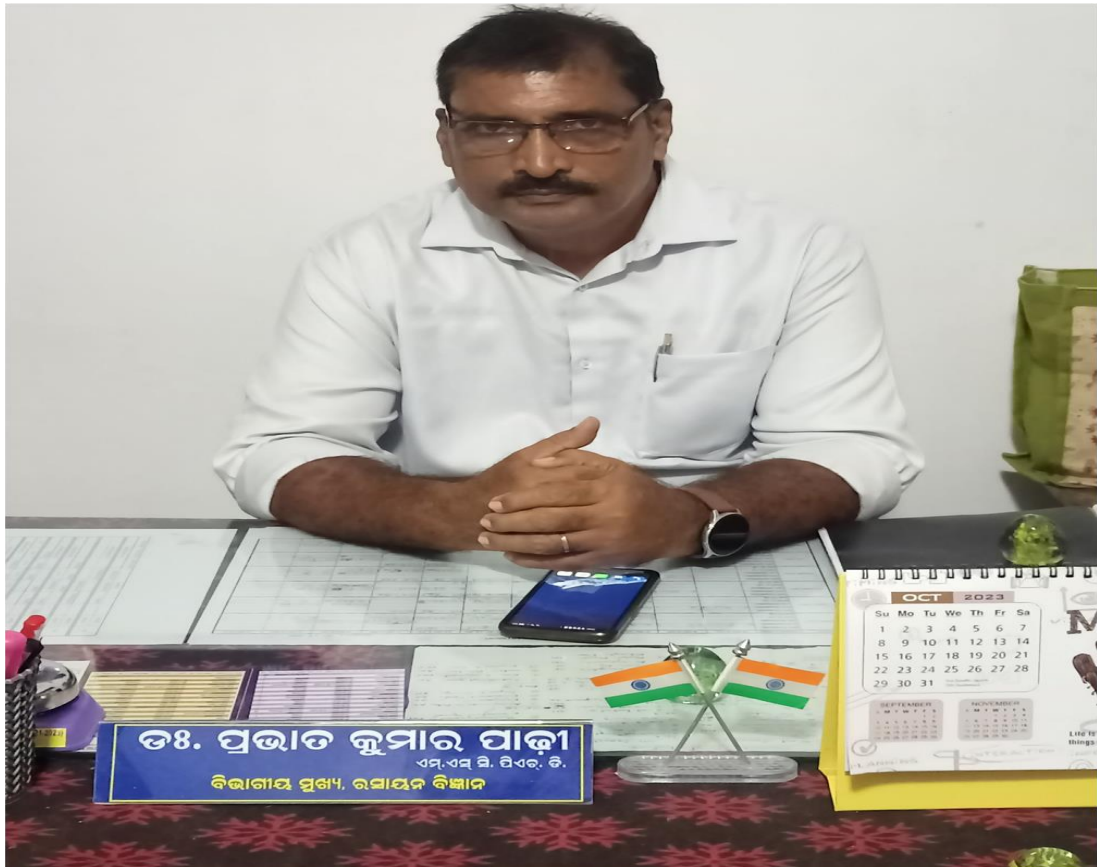
- 10) Application of bifunctional ionic liquids for extraction and separation of Eu^{3+} from chloride medium. Trans. Nonferrous Met. Soc. China, 2022, 32(6), 2061–2070.
8. Awards/ Achievement : Qualified CSIR NET JRF 2018, GATE 2017, 2018
9. No of refresher course attended-NIL
10. Seminar attended – 06

Sl. No.	Nature of Seminars	Name of Institution	Time
1	APM	CIPET Chennai	March 25-27,2011
2	RAMC	Utkal University	Feb 24-26,2017
3	NWAMA	SOA University	Dec 1-2,2018
4	NMD-ATM	IIM Kolkata	Nov 15-17,2018
5	GTCE	SOA University	May 20,2019
6	MMT	SOA University	Oct 30,2019

11. Activities for diffusion of knowledge
- a. Publication of popular article : **NIL**
- b. Extension of lecture delivered before learned society:
- (i) During NMD-ATM organized by IIM Kolkata
- (ii) At IIIT Bhubaneswar
12. Social useful work if any : **NIL**
13. Other activities, if any:

Completed Postgraduate Diploma in Plastics Processing & Testing from Central Institute of Plastics Engineering & Technology, Hyderabad, India, in 2012 and worked in injection molding as a Plastic processing engineer at Time Techno Plast Ltd., Silvasa.

Departmental Activities



Department and Head of the Department



Department Laboratories



NIMAPARA AUTONOMOUS COLLEGE,
DEPARTMENT OF CHEMISTRY



DEMONSTRATION IN LABORATORY

NIMAPARA AUTONOMOUS COLLEGE,
DEPARTMENT OF CHEMISTRY



NIMAPARA AUTONOMOUS COLLEGE,
DEPARTMENT OF CHEMISTRY



DEMONSTRATOR EXPLAINING EXPERIMENT

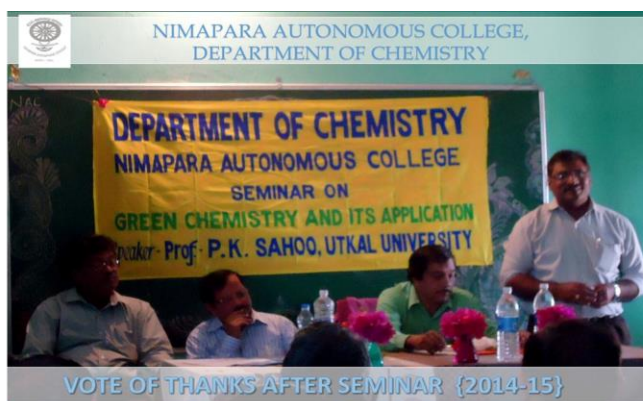


STUDENTS PERFORMING EXPERIMENTS

Students in the Laboratory doing experiments



Students at Examination hall



VOTE OF THANKS AFTER SEMINAR {2014-15}



PROFESSOR DURING HIS SEMINAR {2014-15}



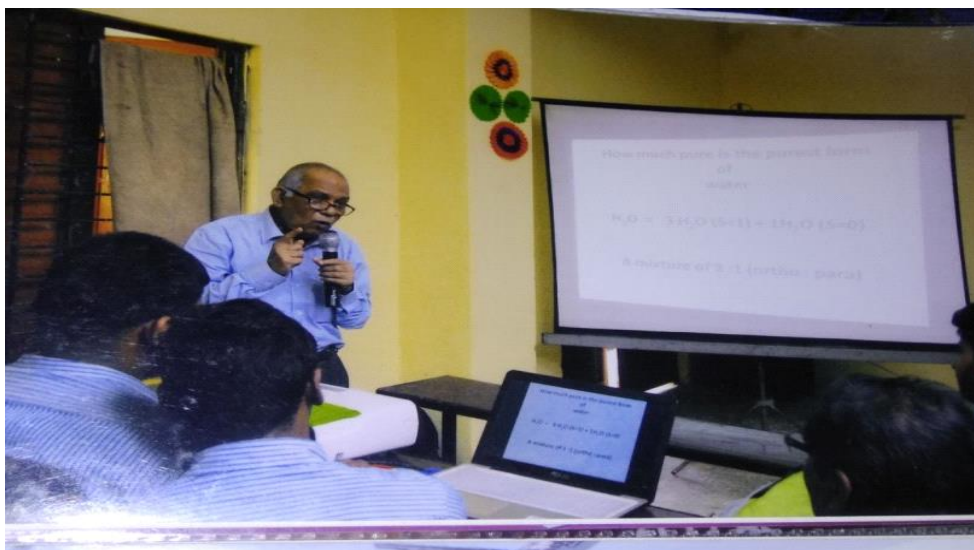
UGC SPONSORED SEMINAR (2013-14)

UGC Sponsored Seminar activities of the Department

Prof. U. N. Dash, and Prof. P.K.Sahoo, Utkal University delivering talk on "Green chemistry and its applications"



**UGC Sponsored Seminar activities of the Department
Prof. Bikash Jena, Scientist, IMMT, deliverig talk on “Applications of Nanotechnology”**



UGC Sponsored Seminar activities of the Department

Prof. Anadi Ch. Dash , Retd. Prof. Utkal University and emeritus scientist delivering talk & Prof. Upenrda. N. Dash , Retd. Prof. Utkal University Delivering Tlak on Golden Jubilee ceremony of the Dept.



**UGC Sponsored Seminar activities of the Department
Prof. Himansu Sekhar Biswal, NISER, BBSR delivering talk on
“Hydrtogen bonding”**



**UGC Sponsored Seminar activities of the Department
Prof. Anadi CH. Sahoo, Prof U. N dash & Prof. P Mohanty, Utkal University**

Students seminar (2018-19)



Departmental seminars (2019-20)





Golden Jubilee Celebration in the Department 2016-17, Padmashree Bhabani Sankar Patnaik, Sri Sameer Ranjan Das, President GB addressing the students



**Swachha Bharat Abhiyan at Nimapara Hospital
by the Students**



Community outreach programme of the Chemistry honours students helping the underprivileged



Students donating blood in a blood donation camp and participating in a organ donatiion camp at Utkal University creating awareness



A SHORT PLAY BY SENIORS IN WELCOME CEREMONY (2015-16)



CULTURAL ACTIVITIES, WELCOME CEREMONY (2015-16)

Department students on study tour and performing one act play



Department students on study tour