DEPARTMENT OF CHEMISTRY

IMPORTANCE OF CHEMISTRY :

Chemistry is one of the fundamental sciences. Chemistry as a specialisation in science deals with the nature and properties of various compounds and the large numbers of reaction taking place around us. The stimulating career options opened by chemistry are wide ranging and cover different aspects of the field. Studying chemistry is lucrative from many perspectives. Being a central science, chemistry is used in every aspects of human life from the food consumed to the product used.

Enlisted below are the manifold reasons for pursuing a degree in Chemistry and establishing a career in the field of chemical science;

- It teaches useful skills that can be used in practical life when dealing with chemicals.
- With growth of civilization ,to meet the various needs of human beings the advancement chemistry through new knowledge and research is on continuous progression.
- A student gets acquainted with various chemicals present in the environment and thus has a better understanding of how natural processes occur.
- Chemistry is a popular course and there exists a large scope of employment in various sectors that a person with a degree in chemistry can pursue his/her career.

History of Department of chemistry:

With opening of +2 science in Derabis college in the year 1989 Chemistry being an compulsory optional subject ,Department of Chemistry began to function in the college. In the year 2013 the UG Course in science (pass) was opened and chemistry was being taught a pass subject.Bsc (hons) in chemistry was opened in the year 2018 and Department of chemistry started to function in real sense 16 permitted seats.

YEAR OF ESTABLISHMENT							
:-	2018						
-	UG						
	UG Courses-	Hons 14 DSE- 04 GE- 04					
	:-	:- 2018 - UG					

SYLLABUS ADOPTED :-Participation of the Department in the courses offered by other Departments: :- Choice Based Credit System(CBCS)

Generic Elective (A & B)

MISSON AND VISION OF THE DEPARTMENT

VISION:

- To make department fully modernized and and updated.
- To facilitate and promote the research facilities among the students.
- To organize state and national seminars.
- To provide books to students through seminar library and book bank.

MISSON:

- To guide the students to enhance their self-confidence and personality to achieve academic excellence as well as to make them worthy and responsible citizens of India.
- To upgrade and equip the laboratories with modern nstruments in order to keep the students abreast of advance lab techniques.

FACULTY PROFILE

TOTAL FACULTY MEMBERS -

SL NO	NAME OF TEACHING STAFF	DESIGNATIO N	QUALIFICATIO N	TEACHING EXPERIENCE IN PERIOD
1	Bikram Kumar Mohanty	Reader in Chemistry	M Sc. in Chemistry	33 yrs +2 Sc 10 yrs UG pass 05 yrs UG Hons.
2	Swarnalata Mishra	Demonstrator in Chemistry	M Sc. in Chemistry	31 yrs +2Sc 10 yrs UG pass 05 yrs UG Hons
3	Kalyani Jena	Lecturer in Chemistry	M Sc. in Chemistry	01yr UG Hons left
4	Abinash Behera	Lecturer in Chemistry	M Sc in Chemistry	03 yrs UG Hons left
5	Chandini Sahoo	Lecturer in Chemistry	M Sc.in Chemistry	01 yr UG Hons Continuing
6	Ranjan Kumar Panda	Laboratory Attendant	+2 Arts	28 yrs

DETAILS OF FACULTY MEMBER

Name	Bikram Kumar Mohanty
Department	Chemistry
College	Derabis College
Desgnation	Reader in Chemistry
Phone No	9437442571
Email id	mohantybikramkumar@gmail.com
Qualification	M Sc. in Chemistry
Teaching Experience	33yrs +2 Sc ,10 yrs UG
Area of Specialization	Analytical chemistry
Courses and Subjects Taught	+2 Sc, UG Hons & Pass Chemistry
Workshop	
Conference	
Seminar/Webinar	11
National Seminar	03
Refresher Course/Orientation	2 Refresher Course
Programmes	
FDP	Nil
Areas of Intrest(Academic)	Analysis Of steel,Coal,Coke,lime stone,
Area of Intrest(Non Academic)	Social Service

CONFERENCE/SEMINAR/WEBINAR ATTENDED:

- National seminar on "RECENT TRENDS IN PHYSICAL SCIENCE AND CHEMICAL SCIENCE."
- 25th Regional conference of Orissa Chemical Society and national seminar on "FRONTIERS IN RECENT CHEMICAL RESEARCH."13th-14th March 2022, Dept.Of Chemistry K.A College.
- National seminar on "SCIENCE FOR SOCIETY" 20th Odisha Bigyan 'O' Paribesh Congress,NISER,OES.17th -18th November 2018.
- State level seminar on "GREEN CHEMISTRY:SOLUTION TO ENVIRONMENTAL CRISES" K.A College.3rd November 2019.
- State level seminar on "NANO TECHNOLOGY: A BOON TO MAN KIND ."Pattamundai College, 4th November 2019.
- 99th Indian Science Congress Association, KIIT, 7th January 2012.
- Webinar on "CHEMISTRY:MAN AND NATURE."Salipur autonomous college,23 july 2022
- Webinar on "TRANSFORMATION OF TEXT BOOK KNOWLEDGE TO REAL CHEMICAL RESEARCH IN LIGHT OF TRANSMETALLATION AND DISPROPORTIONATION REACTIONS IN ORGANOMETALLIC CHEMISTRY." Sri sri Baya baba college,02 june 2021.
- Webinar on "ROLE OF CHEMISTRY IN THE SUSTAINABLE DEVELOPMENT Of SOCIETY"Pattamundai college,Kendrapara 28 September 2020.

Extra Institutional Affiliation:

Administrative Assignments:

1.Prof. I/C Admission

2.Ptof.I/C Examination

3.Prof.I/C Scholarship

4. Coordinator Mo College

DETAILS OF FACULTY MEMBER -2

Name	SWARNALATA MISHRA
Department	Chemistry
College	Derabis College
Desgnation	Demonstrator in chemistry
Phone No	9938131725
Email id	Slmishra71@gmail.com
Qualification	M Sc. in Chemistry
Teaching Experience	31 yrs +2 Sc ,10yrs UG
Area of Specialization	Analytical chemistry
Courses and Subjects Taught	+2 Sc, UG Hons & Pass Chemistry
Workshop	nil
Conference	nil
Seminar/Webinar	nil
National Seminar	2
Refresher Course/Orientation	nil
Programmes	
FDP	nil
Areas of Intrest(Academic)	
Area of Intrest(Non Academic)	Singing, Drawing, Painting, Gardening

SEMINAR ATTENDED:

- Seminar on "INDUSTRILISATION INDUCED ENVIRONMENTAL CRISIS AND ITS CURE"Berhampur University,Bhanja Bihar,28-29 Dec 2010.
- National seminar on "ENVIRONMENTAL MANAGEMENT:THE NEED OF HOUR" kendrapara auto college,21-22 Jan 2012.

DETAILS OF FACULTY MEMBER-3

Name	Chandini Sahoo
Department	Chemistry
College	Derabis College
Desgnation	Lecturer
Phone No	8144086078
Email id	Chandinisahoo143@gmail.com
Qualification	M Sc. in Chemistry
Teaching Experience	7months
Area of Specialization	Organic chemistry
Courses and Subjects Taught	+2 Sc, UG Hons & Pass Chemistry
Workshop	nil
Conference	nil
Seminar/Webinar	nil
National Seminar	nil
Refresher Course/Orientation	nil
Programmes	
FDP	Nil
Areas of Intrest(Academic)	Organic chemistry
Area of Intrest(Non Academic)	

STUDENT PROFILE

ADMISSION DATA

Academic Session	Sanctioned Strength	No of Applicants				Enro	lled	Total			
			GN	OBC	SC	ST	SEBC	MIN	Μ	F	
2018-19	16	15	3	10	2	-	-	-	9	6	15
2019-20	16	15	6	9	-	-	-	-	6	9	15
2020-21	16	14	3	11	-	-	-	-	8	6	14
2021-22	16	16	2	12	1	-	-	-	12	4	16
2022-23	16	4	-						3	1	4
2023-24	16	12	2	9	1	-	-	-	4	8	12

NAME OF THE BEST PERFORMERS IN CHEMISTRY DEPARTMENT

Sl No	Year	Name of the Students	% of Marks
1	2018-21	Harichandan Das	76.30
2	2019-22	Isharani Mohanty	75.57
3	2020-23	Abhijit Parida	80.46
4			
5			

<u>RESULT DATA</u>

RESULT ANALYSIS FOR LAST FIVE YEARS

SL NO	YEAR	APPEARED	PASS	FAIL	DROPOUT
1	2018- 21	13	13	nil	2
2	2019- 22	14	12	2	1
3	2020- 23	13	13	nil	1
4	2021- 24				
5	2022- 25				

		RTMENT OF CHEN RSE SPECIFIC OUT	
SEMESTER	PAPER/COURSE	NAME OF THE PAPER/COURSE	COURSE OUTCOME
SEMESTER-1	CORE-1	Inorganic Chemistry I	
		Inorganic Chemistry practical	
	CORE-2	Physical Chemistry I	
		Physical Chemistry practical	
	GE-1	Calculus and differential equations	
Semester -2	CORE-3	Organic Chemistry I	
	CORE-4	Physical Chemistry II	
	GE-2	Physics	
Semester -3	CORE-5	Inorganic Chemistry II	
	CORE-6	Organic ChemistryII	
Semester -3	CORE-5	Inorganic Chemistry II	

	GE 1.2	Mathematics; Algebra	
Semester-4	CORE 8	Inorganic Chemistry III	
	CORE 9	Organic Chemistry III	
	CORE 10	Physical Chemistry IV	
Semester-5	GE 2.2 CORE 11	Physics Organic Chemistry IV	
	CORE 12	Physical Chemistry V	
	DSE-1	Polymer	
	DSE-2	Green chemistry	

Semester-6	CORE 13	Inorganic Chemistry IV	
	CORE 14	Organic Chemistry V	

DSE-3	Industrial chemistry	
DSE-4	Dissertation	

+<u>3 3RD YEAR(HONS) DEPARTMENT OF CHEMISTRY</u>

MENTOR-MENTEE LIST

Mentor: Bikram kumar Mohanty

Sl No	Roll No	Name OF the Student
1	BS(P)21-016	Gyanendra Sahoo
2	BS(P)21-017	Ritish Bhadra
3	BS(P)21-019	Nigamananda Sahoo
4	BS(P)21-021	Bikash Mallick
5	BS(P)21-022	Prachi Pratyasha Mati
6	BS(P)21-038	Durga Prasad Jena
7	BS(P)21-055	Tanuja priyadarshinee
		Parida
8	BS(P)21-057	Suryodaya Sahoo
9	BS(P)21-058	Sahista Jahangir
10	BS(P)21-061	Harish ch. ojha
11	BS(P)21-063	Udaya kumar Sahoo
12	BS(P)21-069	Chittaranjan Das
13	BS(P)21-070	Bhagyalaxmi Swain
14	BS(P)21-078	Kiran kumar Mohanty
15	BS(P)21-079	Sekhar suman Behera
16	BS(P)21-081	Haraprasad Barik

+3 2ND YEAR (HONS) Department of Chemistry

Mentor:Chandini Sahoo

Sl No	Roll No	Name OF the Student
1	BS(P)22-011	Sarbajit Routray
2	BS(P)22-050	Payal Prusty
3	BS(P)22-038	Ritik ranjan Mohanty
4	BS(P)22-024	Sambid kumar Das

+3 1ST YEAR(HONS.)Department of Chemistry

Mentor:Chandini Sahoo

Sl No	Roll No	Name of the Students
1	BS(P)-23-044	Subhrajit Nayak
2	BS(P)-23-036	Rudranarayan Panda
3	BS(P)-23-032	Diptirekha Das
4	BS(P)-23-039	Swayam pragyan Swain
5	BS(P)-23-045	Sonali Malik
6	BS(P)-23-011	Shradhanjali Patra
7	BS(P)-23-031	Usharani Ghadei
8	BS(P)-23-038	Sasmita Moharana
9	BS(P)-23-053	Lipsarani Rout

10	BS(P)-23-046	Smruti ranjan pradhan
11	BS(P)-23-047	Usashree Rana
12		

DEPARTMENTAL SEMINAR WITH EXTERNAL EXPERTS

SL NO	NAME OF THE EXPERT	DATE	TOPIC
1	Dr.Pramod kumar Das	26.03.2019	Chemical crystallography
2	Dr.Seetaram Mohapatra	13.03.2020	Organic transformation is the key path in the journey of molecules to medicine
3	Dr.Asit Parija	31.03.2021	Nano chemistry
4	DR.Dillip kumar Baral	11.03.2022	UV-VIS spectroscopy

The Department encourages the UG students to organize Seminars from time to time on the topic of interest and issue - related subjects. This helps the students to inculcate knowledge and promote in depth study in the concerned subject and create comprehensive ability to express their thoughts. It is compulsory for allUG students to participate in the Seminars.

LIST OF SEMINAR PAPERS PRESENTED BY

STUDENTS

	STODLITS				
NO	NAME	ROLL NO	DATE	TOPIC	
1	Gyanendra Sahoo	BS(P)21-016	16.08.2023	Zero waste technology	
2	Nigamananda Sahoo	BS(P)21-019	16.08.2023	Less hazardus chemical synthesis	
3	Prachi Pratyasha Mati	BS(P)21-022	16.08.2023	Design chemical product to preserve efficacy of function by reducing toxicity	
4	Durga Prasad Jena	BS(P)21-038	16.08.2023	Design chemical synthesis for energy effficiency	
5	Tanuja priyadarshinee Parida	BS(P)21-055	16.08.2023	Design chemical synthesis by using renewable feedstocks	
6	Sahista Jahangir	BS(P)21-058	16.08.2023	Design synthetic methodologies for degradation of chemical products	

7		BS(P)21-063	16.08.2023	Inherent safer design
	Sahoo			
8	Chittaranjan Das	BS(P)21-069	16.08.2023	Goals and of green
	5			chemistry
9	Bhagyalaxmi	BS(P)21-070	16.08.2023	Biocatalyst
	Swain			
10	Haraprasad Barik	BS(P)21-081	16.08.2023	Designing chemical synthesis
	-			by the use of catalytic reagent

PROJECT WORK

SL	Name of the	Roll No	Year	Tonia
NO	Students	KOII INO	Ieal	Торіс
1	Harichandan Das		2021	To study and calculate the content of ascorbic acid in citrus fruits
2	Ipsita Jena	BS-18-066	2021	To study and calculate the content of ascorbic acid in citrus fruits
3	Sasmita Das	BS-18-056	2021	Zeolites as fertilizers
4	Pritimayee Parida	BS-18-067	2021	Zeolites as fertilizers
5	Naliniprava Mishra	BS-18-075	2021	Zeolites as fertilizers
6	Subhashree Swain	BS-18-042	2021	To study and calculate the content of ascorbic acid in citrus fruits
7	Gyanajyoti Mohanty	BS-18-005	2021	Biodegradable polymer
8	Manoranjan Rout	BS-18-044	2021	Biodegradable polymer
9	Biswajit Moharana	BS-18-077	2021	Nano chemistry
10	Das	BS-18-052	2021	Nano chemistry
11	Mahesh ku. pradhan	BS-18-014	2021	Lead in the environment
12	Avijit Behera	BS-18-034	2021	Lead in the environment
13	Niranjan Behera	BS-18-062	2021	Lead in the environment
14	Ansari Parwin	BS-19-067	2022	Water purification system
15	Aparupa Mohanty	BS-19-066	2022	Hydrogen –the fuel for future
16	AShutosh Sahoo	BS-19-052	2022	Nano Matterial
17	Biswojit Mohapatra	BS-19-031	2022	Water purification system
18	Himanshu Biswal		2022	Synthesis of polymeric compound and their application
19	Isharani Mohanty	BS-19-060	2022	Green and sustainable approach towards environment
20	Kalpana Nath	BS-19-030	2022	Green and sustainable approach towards environment

21	Maheswari Das	BS-19-057	2022	Hydrogen – the fuel for
22	Mamata Sahoo	BS-19-044	2022	future Crystal field theory
22			2022	Hydrogen –the fuel for
_	Rajalaxmi Bal	BS-19-039		future
24	Sonalisha Dash	BS-19-058	2022	Crystal field theory
25	Suryakant Moharana	BS-19-053	2022	Water purification system
26	Abhijit Parida	BS-20-002	2023	Role of Iron in heamoglobin and myoglobin
27	Abinash Jena	BS-20-005	2023	Role of Iron in heamoglobin and myoglobin
28	Akash kumar Rout	BS-20-040	2023	Role of Iron in heamoglobin and myoglobin
29	Debendra Bhadra	BS-20-053	2023	Water purification system
30	Kirti Chandra Jena	BS-20-055	2023	Green and sustainable approach towards environment
31	Laxmipriya Jena	BS-20-049	2023	A detailed study of biochemical reaction in human body
32	Niharika Behera	BS-20-028	2023	Sustainable energy source
33	Pabitra Rana	BS-20-048	2023	Green and sustainable approach towards environment
34	Pravabati Ghadai	BS-20-042	2023	Sustainable energy source
35	Rokeya Parmin	BS-20-061	2023	A detailed study of biochemical reaction in human body
36	Rozi Parida	BS-20-054	2023	Water Pollution
37	Subhashree subhasmita Sahoo	BS-20-054	2023	A detailed study of biochemical reaction in human body
38	Subhransu sekhar Das	BS-20-054	2023	Green and sustainable approach towards environment

OTHER DEPARTMENTAL ACTIVITIES

- 1. Teachers' Day Celebration.
- 2. Welcome Ceremony.
- 3. Farewell Ceremony.
- 4. Parents-teacher meeting.
- 5. Ganesh Puja
- 6. Saraswati Puja

INNOVATIVE TEACHING METHODS

- 1. Use of Traditional Lecture method.
- 2. Assignments.
- 3. Seminar.
- 4. Tests.
- 5. Providing study materials.
- 6. Encouraging students to refer general text books.
- 7. Providing videos(you tube).
- 8. Group discussion
- 9. Online Classes via google meet

BEST PRACTICES

- 1. Faculty members donate personal books to the students.
- 2. Faculty members used to pay admission fee to poor students.
- 3. Faculty members also provide counselling to the students.
 - Motivational Counselling
 - Academic Counselling
 - Career Counselling

DETAIL OF SWOC OF THE DEPARTMENT

STRENGTH

- Results Excellent
- Dedicated Teachers with Teaching Experience
- Demand of the Subject
- Active Participation of Students in Departmental activities

WEAKNESS

• Inadequate teaching and non teaching staffs.

OPPORTUNITY

- All the students are adequately trained to pursue their higher studies
- Many got the opportunity of placement

CHALLENGES

• Increase the rate of student progression in Higher Studies and employment.

FUTURE PLANS

- 1. To conduct more number of syllabus oriented seminars for the students.
- 2. To conduct life skill development programmes regularly.
- 3. To give various project work to develop the department.
- 4. To train the students for job opportunities.

DEPARTMENTAL SEMINAR



Prizes





TEACHERS' DAY CELEBRATION





LABORATORY



Extra co-curricular Activities





FAREWELL CEREMONY



