

Faculty Profile



1. Name: Dr. Debasis Mohanty
2. Qualification: M. Sc., M. Phil, Ph. D.
3. Designation: Assistant Professor (S-III) / Reader in Chemistry
4. Email: maildebasismohanty@gmail.com
5. Area of Interest: Organic Chemistry, Organic Spectroscopy, Polymer chemistry, green Chemistry
6. Area of Research: Applied Polymer Chemistry, Environmental Chemistry, Schiff base resins.
7. Teaching Area : UG- Organic Chemistry, Organic Spectroscopy, Green Chemistry.
P.G.- Advanced Organic Chemistry, Polymer chemistry, Organic Spectroscopy
8. Total Number of Teaching experience (Yrs): UG- 26 years
PG- 09 years
9. Research Supervision
(On Going) (M. Phil, Ph. D. D. Sc.)

Sl. No.	Name of the Student	Degree	University	Title of the Thesis	Date of Registration
1.	Soumya Ranjan Kar	Ph. D	VSSUT, Burla	Synthesis and characterisation of Chelating resins derived from Schiff base	9. 8. 2017
2.	Lalit Chaudhury	Ph. D	GIET,	Isolation,	10. 12.

			Gunpur	identification and Evaluation of the effective Phyto compounds for the management of ground beetles infesting stored groundnuts(<i>Arachis Hypogaea</i> L.)	2022
3.	Pritam Jena	Ph. D	Utkal University	Development of Polymeric resins for removal of arsenic: Synthesis, Characterisation and environmental application.	25. 7. 25
4.	Ankita Pradhan	Ph. D	VSSUT, Burla	Synthesis and Characterization of a Nano Polymeric Resin Containing Schiff Base Moiety and Chromophoric Material for Colorimetric Sensing of Toxic Metal Cations at ppm Level	

10. Publication Profile:

(a) Research Article Published:

1. A Formyl Chromone based Schiff base Derivative: An Efficient Colorimetric and Fluorescence Chemosensor for the Selective Detection of Hg^{2+} ions, S R Kar , P P Dash, S N Panda, P Mohanty , **D. Mohanty** , A. K. Barick , S. K. Sahoo , P Mohapatra and B R Jali, Journal of Fluorescence(Spinger-Nature),**2025**, 35(1),483-495. ISSN-1053-0509 (print) and 1573-4994 (online)

2. Green synthesis, characterisation and antibacterial activity studies of new multifunctional nano polymeric material, which may have multidimensional application in water purification. Soumya Ranjan Kar, Priyaranjan Mohapatra, **Debasis Mohanty**, Polymer Bulletin (Springer-Nature), **2023**, Vol-80(1) 703-723 <https://doi.org/10.1007/s00289-021-04046-5> I.F.-2.87 ISSN: 0170-0839 (print) 1436-2449 (web)
3. Synthesis and In Vitro Antimicrobial Study of Some Novel Schiff Bases, **Debasis Mohanty**, International Journal of All Research Education and Scientific Methods (IJARESM), **2021**, Vol-9(8), 705-716, ISSN: 2455-6211, www.ijaresm.com
4. Conventional as well as Emerging Arsenic Removal Technologies - A Critical Review. **Debasis Mohanty**, Water, Air, and Soil Pollution (Spinger- Nature), **2017** Vol-228(10) P-381, DOI10.1007/s11270-017-3549-4, ISSN: (online); 0049-6979 (Print) 1573-2932 (Online) IF-1.702
5. Synthesis and characterization of the polymeric phenolic Schiff bases containing aminothiazole moiety
D. Mohanty, P. Mohapatra, S. Samal, Chem. Sci. Trans. , 2014 Vol-3(4)1288-1299, ISSN: 2278-3318 (online); 2278-3458 (print) IF-0.6062
6. Antibacterial studies of the polymeric phenolic schiff bases containing aminothiazole moiety.

Debasis Mohanty International journal of research in pharmaceutical and nano science.(IJRPNS). 2014 Vol- 3(3), 215 – 221, ISSN: 2319-9563 IF-2.9

7. Selective removal of toxic and heavy metal ions like arsenic and copper from drinking water by using novel chelating resins immobilized on silica gel.

D. Mohanty, S. Acharya, S. Samal, 2013 Res. J. Pharm., Biol. Chem. Sci., vol-4(1): 43-58. (ISSN: 0975-8585) IF-0.35

8. The antibacterial activities of thiazoles, substituted thiazoles and their metal complexes- a review.

Debasis Mohanty, Current pharma research. 2012 ,Vol-3 (1) : 750-763. ISSN: 2230-7842 ISSN No- 2230-7834 IF-1.0488

9. Selective removal of toxic metals like copper and arsenic from drinking water by using phenol-formaldehyde type chelating resins.

Debasis Mohanty, Shashadhar Samal, E- J. Chem. 2009; Vol.-6 (4): 1035-1046. (ISSN: 0973-4945) IF-0.772

10. Isolation, Identification and evaluation of the effective phyto-compounds for management of groundnut beetles infesting stored groundnut (*Arachis hypogaea* L.)

L. Choudhury, M. Dash, S. Mohapatra, **D. Mohanty**, S. Choudhury., International Journal of Advanced and applied research, 2024, Vol-5 (27) : 50-57 (ISSN-2347-7075).

(b) Book Published:

Sl. No.	Name of Book	Name of Authors	Name of publisher	Status of publisher	Year of publication	ISBN No.
1.	A test book of +2 Practical Chemistry, Second revised	Dr. Debasis Mohanty	V. K. Global Publication	National level	2025	935612230-X

	edition					
2.	A test book of +2 Practical chemistry, First Edition	Dr. Debasis Mohanty	V. K. Global Publication	National level	2022	935612230-X
3.	Fuel & Pesticide Chemistry Skill Enhancement Course (As per CBCS Course)	Dr. Debasis Mohanty	Kalyani Publisher, Ludhiana	National Level	2021 3 rd revised edition	978-93-5359-076-5
4.	Fuel & Pesticide Chemistry Skill Enhancement Course (As per CBCS Course)	Dr. Debasis Mohanty	Kalyani Publisher, Ludhiana	National Level	2019 2 nd edition	978-93-5359-076-5
5.	Fuel Chemistry (As per CBCS Course)	Dr. Debasis Mohanty	Kalyani Publisher, Ludhiana	National Level	2017	978-93-272-7530-8
6.	A Test Book on Practical Chemistry	Dr. Debasis Mohanty and Dr. B. C. Das	Nalanda publication, Cuttack	State Level	2011	81-89638-18-9
7.	A test Book of Environmental Education	Dr. A. K. Khilar and Dr. Debasis Mohanty	Nalanda publication, Cuttack	State Level	2006	81-89637-12-6
8.	Paribesha Sikhya	Dr. A. K. Khilar and Dr. Debasis Mohanty	Nalanda publication, Cuttack	State Level	2006	81-89637-10-X

(c) Articles Published in Newspaper / Magazine:

Sl. No	Name of the Article	Newspaper/ magazine	Date of publication	Language	Remark
1.	“ Puspā Ra Soundarya re lukayat Bisa” (The poison hidden behind the beauty of flowers)	The Dharitri- Odia daily News Paper	29.07.2019	Odia	Popular science article
2.	Jaiba Prajukti Vidya ra Nutan Astra - Anubansika Katuri	Nitidina- Odia daily News Paper	3.11.2020 Page-8	Odia	Popular science article

	(2020 Chemistry Nobel Prize) The new weapon of biotechnology- CRISPR/Cas9 genetic scissors				
3.	Lithium Bateria- Manav samaj pain eke asirbada (2019 Chemistry Nobel Prize) (Lithium Ion battery- A boon for human society)	Bigyana Diganta- Monthly magazine of Orissa Bigyan Academy	April-2021 Volume-28 Issue-4 Page-204-206	Odia	Popular science article
4.	Tika- Karona mahamari virudha re eka sakti Sali astra Part-I Vaccine- A powerful weapon against Corona pandemic)	The Dharitri- Odia daily News Paper	5.7.2021	Odia	Popular science article
5.	Tika- Karona mahamari virudha re eka sakti Sali astra Part-II Vaccine- A powerful weapon against Corona pandemic)	The Dharitri- Odia daily News Paper	12.7. 21 Swastya o Bigyana page	Odia	Popular science article
6.	Paribeshagrahi Jaiba Utpreraka (2021 Chemistry Nobel Prize) (Environmental friendly organocatalysis)	Nitidina- Odia daily News Paper	21.12.2021 Page-6	Odia	Popular science article
7..	Surya ra Bhagna Ansha (Broken part of Sun)	The Dharitri- Odia daily News Paper	27.2.2023	Odia	Popular science article
8.	Kita bihune Srusti nasa (Decreasing insect number affect other life forms)	Nitidina- Odia daily News Paper	19.4.2023 Page No-6	Odia	Popular science article
9.	Ekaka plastic byabahara pare paritekta sanskruti- samaj pain khyati karaka (Use and throw culture of single used plastic is very harmful to society)	Conference Bulletin P.G. Department of Botany	5.5.2023 Page-1	Odia	Awareness science article

10.	Khyatikaraka ekaka Byabahruta plastic Part-1 (Harmful effect of single used plastic-part one)	The Dharitri-Odia daily News Paper	29.5.2023	Odia	Awareness science article
11.	Khyatikaraka ekaka Byabahruta plastic Part-2 (Harmful effect of single used plastic-part Two)	The Dharitri-Odia daily News Paper	5.6.2023	Odia	Awareness science article
12.	Dui Dharua Anubansika Katuri (Two edge of genetic scissor)	Bigyana Diganta-Monthly magazine of Orissa Bigyan Academy	Volume-30 Issue-10 October-2023 Page-631	Odia	Science Fiction Story
13.	Quantum Dot- Ekka Kuni Bismaya (2023 Chemistry Nobel Prize) (Quantum Dot- tiny wonders)	The Prameya-Odia daily News Paper	15.11.2023 Editorial Page	Odia	Popular science article
13.	Bigyana o Parampara	The Saptasajya-Magazine of Dhenkanal (A) College, Dhenkanal	Session-2022-23 Page-21	Odia	Awareness science article
15.	Holi o jaiba prakrutika ranga (Holi and Natural Organic colours)	The Dharitri	25.3.2024	Odia	Popular science article
16.	Madhura Jahara Nitrous Oxide	The Dharitri	29.7.2024	Odia	Popular science article
17.	Manodasha Niyatraka Rasayana (Mood Controlling Chemicals)	The Dharitri	26.8.24	Odia	Popular science article
18.	Kutrima Budhimata (artificial Inteligence) part-I	The Dharitri	30.9.24 page-6 Swastya Bigyana	Odia	Popular science article
19.	Kutrima Budhimata (artificial Inteligence) part-II	The Dharitri	7.10.24 Swastya Bigyana page	Odia	Popular science article
20.	Protin sanrachanara Rahasya bheda	The Samaj	8.11.2024 Editorial page	Odia	Popular Science article on Nobel prize
21.	Mahajagatika samanweya ra Pratika-	The nitidin	27.2.2025 Page-6 Editorioal page	Odia	Popular science article

	Mahakumbha				
22.	Ujjwala bhabisyata pain bigyan mohotsava	The Dharitri	28.2.2025 Editorial Page	Odia	Awareness science article
23.	Bharata Ra Sudarsan chakra S-400	The Dharitri	19.5.2025 Swastya Bigyan	Odia	Popular science article
24.	Prakruti ra Jhadudar	The Dharitri	16.6.2025 Swastya Bigyan page (11)	Odia	Popular science article
25.	Khyatikaraka Nisha Oushadha. Part-1	The Dharitri	14.7.2025 Swastya Bigyan page	Odia	Popular science article
26.	Khyatikaraka Nisha Oushadha. Part-2	The Dharitri	21.7.25 Swastya Bigyan page	Odia	Popular science article
27.	Panire Niraba Hatyakari	The Dharitri	1. 10. 25 Swastya Bigyan page	Odia	Popular science article

11. Research Project

Sl. No.	Name of the Topic	Place of Work	Sponsoring Agency	Amount	Status
1.	Metal ion uptake study of chelating resins of formaldehyde condensed Knoevenagel's adduct obtained from activate methylene Compound	Bhadrak (Auto) College, Bhadrak	U.G.C, New Delhi	40000/-	Completed
2.	Synthesis, characterization, and application in selective removal of toxic and heavy metal cations and anions from drinking water and industrial effluents of novel polymeric chelating resins of phenolic schiff bases containing heterocyclic moiety	Dhenkanal (Auto) College, Dhenkanal	U.G.C, New delhi	500000/-	Completed

12. Invited lecture/ Special lecture/ Resorse Person/ Presentation at Conference

(a) Invited Talked

1. NanoShield : Innovative Polymeric Nano Materials to Combat Water Pollution", Debasis Mohanty, National seminar on waste Energy and Environment, Synergy Institute of Engineering and Technology, Dhenkanal, Odisha,, 23rd – 24th August-2024.

2. Combating Pollution of Industrial Effluent by using Novel Chelating Resins Containing Heterocyclic Moiety, Debasis Mohanty, State level conference on Environmental Pollution- A threat to mankind, Gadibhrama Women's College, Kaduapada, Jagtsinghpur, 10th -11th January-2018

3. Treatment of Industrial Effluent by using Novel polymeric Chelating Resins of aminothiazoles Schiff bases, Debasis Mohanty, National Conference on Air pollution: its effect and Mitigation, Department of

Chemistry, O.P.S. Mohavidyalaya, Hindol Road, Dhenkanal, Odisha

4. Purification of Industrial Effluent Water from Toxic and Heavy Metal Ions and Pathogenic Bacteria by Using Novel Chelating Resins Containing Heterocyclic Moiety, Debasis Mohanty, National Level conference on Biotechnological intervention for abatement of industrial & mining pollution, P.G. Department of Botany, Dhenkanal Autonomous College, Dhenkanal, 10th -11th December-2016

5. Combating pollution of Industrial effluents by using novel chelating resins containing hetero cyclic moiety. Debasis Mohanty, National seminar on Environmental impact assessment and Human Health: prospective , approaches & Future Directions, Department of Chemistry, Mohan Subudhi College, Baramba, Cuttack, 28th- 29th September-2016

(b) Paper presentation at conferences

1. Green synthesis, characterization and application of Some Novel Polymeric Nano materials for treatment of contaminated drinking water and industrial effluents. Debasis Mohanty, **3rd Global Conference on Polymer, Plastics and composites**, 11th and 12th September, 2023 at **Barcelona Spain**.

2. Selective removal of toxic and heavy metal ions like arsenic and copper from drinking water by using novel chelating resins immobilized on silica gel

Debasis mohanty_ and shashadhar samal , **International conference, ICER-11, Surat, India, 15th -17th December-2011,**

3. Metal Ion Loaded Chelating Resins for Efficient Removal of Arsenate Ion from Water.

D. Mohanty, P. Mohapatra, S. Samal, Singapore International Chemistry Conference, **Suntec Convention & Exhibition Centre, Singapore**, 16th -19th December 2007. **ISBN: 978-81-904438-2-1**

4. Synthesis and metal ion behavior of formaldehyde condensed chelating resins containing aminothiazole moiety.

D. Mohanty, S. Samal, S. Achary, P. Mohapatra, **MACRO 2006, National Chemical Laboratory, Pune**, 17th -20th December, 2006.

5. Adsorption behavior of chelating resin derived from the Schiff bases of aliphatic diamine and hydroxy benzaldehyde.

D. Mohanty, S. Samal, S. Achary, P. Mohapatra, **MACRO 2006, National Chemical Laboratory, Pune**, 17th -20th December, 2006.

6. Studies on silica gel immobilized Phenol-Formaldehyde-Type Chelating Resins obtained by condensing formaldehyde and Schiff's bases of 2, 6-diaminopyridine and o-hydroxybenzaldehyde.
Debasis Mohanty, Shashadhar Samal, **RETICS-2008**, Sambalpur University, Jyoti Vihar, Burla, 9th-11th Feb-2008
7. Studies on Phenol-Formaldehyde-Type Chelating Resins Containing Amino-thiazole Moiety
D. Mohanty, S. Samal, **Orissa Chemical Society**, 21st Annual Conference, Orissa Engineering College, Bhubaneswar, 22nd and 23rd December 2007.
8. Metal ion uptake study of chelating resins of condensed formaldehyde Knoevenagel's adduct obtained from active methylene compounds.
S. Samal, D. Mohanty, **Orissa Chemical Society**, 15th Annual Conference, B.J.B. Autonomous College, Bhubaneswar, 22nd and 23rd December, 2001.
9. Comparison of metal ion uptake capacity of chelating resins of formaldehyde condensed Knoevenagel's adduct from cyanoacetic ester and salicylaldehyde with resin obtained from resorcinol and formaldehyde.
S. Samal, D. Mohanty, **Orissa Chemical Society**, 15th Annual Conference, B.J.B. Autonomous College, Bhubaneswar, 22nd and 23rd December, 2001.
10. Some Plausible Solutions to Give a Sense of Direction to the Fast Decaying System of Higher Education in Orissa.
D. Mohanty, Bhadrak Autonomous College, Bhadrak, 29th-30th Sept-2001.
11. Metal ion uptake study of chelating resins of condensed formaldehyde Knoevenagel's adduct obtained from active methylene compounds.
S. Samal, D. Mohanty, **Orissa Chemical Society**, 14th Annual Conference, Government Autonomous College, Bhawanipatna, 16th and 17th December, 2000.
12. Adsorption and removal of As (v) using Cu-loaded phenol-formaldehyde type chelating resin containing Schiff base moiety.
D. Mohanty, P. Mohapatra, S. Samal **Orissa Chemical Society**, 22nd Annual Conference, North Orissa University, Baripada, 27th and 28th December-2008
13. Nano Science and technology: Thinking small to do big things.
Debasis Mohanty Nano Technology and its applications NSNA-2011, 6th and 7th November-2011, Chitalo Mahavidhyalaya, Chitalo, Jajpur, odisha.

(c) Resource person

Sl. No.	Date	Topic	Area	Type	Type of audience	Organizer & Place
1	22.05.2022	Journey of chemistry with evolution of human race	Popular science	Prof. G. N. Mohapatra birth centenary celebration	Student, research scholar, faculty and general public	Department of chemistry, Ravenshaw University.
2	30.9.2022	Leadership: Goal Setting	YRC	Training Programme	YRC counsellors	Indian Red Cross Society, Odisha

		and Achieving the Target			(faculties of different colleges.)	state branch (YRC)
3	9.11.2023	Chemistry evolves in making a better world	Popular science	Prof m K rout memorial lecturer	Student, research scholar, faculty and general public	Department of chemistry, M. S. college badamba
4	13.9.2024	Building leadership through youth RED CROSS	YRC	Training Programme	YRC counsellors (faculties of different colleges.)	Indian Red Cross Society, Odisha state branch (YRC)
5	16.10.2024	Artificial Intelligence- a journey from Myths to modern marvels	Basic of AI	Symposium on AI and right to food	Agriculture scientist , researchers and research scholars	Faculty of Agricultural Science, SOA,Bhubaneswar
6	3.1.2025	NAAC sensitization programme	NAAC & IQAC	Capacity Building Programme	Faculties	Principal Dhenkanal Mahila Mhavidyalaya, Dhenkanal
7	19.1.2025	Ideas to Innovations, Innovations to Solutions, and Challenges in Education	NEP-2020	Seminar	Educationist, education administrator and other stake holder	Hotel Welcome Organized by Hon'ble MP Mrs Aparajita sarangi
8	24.1.2025	The Magic of Carbon: Exploring the Heart of Organic Chemistry	Teaching Organic Chemistry	Capacity Building programme	Higher Secondary Chemistry teachers from different colleges of the state	CHSE, Odisha ITER, SOA University
9	28.2.25	The Evolution of Science : From Curiosity to Nobel Discoveries	Popular Science	Seminar	Students	Principal PG Department of Chemistry Dhenkanal (A) College
10	11.3.2025	The Evolution of Science : From Curiosity to Nobel Discoveries	Popular Science	Seminar	Students & Faculty	Director Synergy institute of technology, Dhenkanal
11	4. 7. 2025	Madam Curie, an	Popular Science	Seminar	Students & Faculty	B. B. High School, Dhenkanal in

		inspiration				Collaboration with Bigyan Chetana Manch.
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13. Awards and Distinctions

(a) Awards

Bharat Vidya Shiromani Award – IEM, New Delhi (National)

Prakriti Mitra Award – Govt. of Odisha (State)

Rajiv Gandhi Sikkhya Samman – Odisha Rajiv Gandhi Students Forum (State)

(b) Fellowship

Summer Research Fellowship (Teacher Fellow) – Indian Academy of Sciences

14. Association with Professional Bodies

- (i) **Orissa Chemical Society- Life member- Secretary-cum-Treasurer(2021-23)- EC Member (Continuing)**
- (ii) **Ravenshaw Chemistry Alumni Association- Life member**
- (iii) **OGCTA- General Secretary (2020-2025)**
- (iv) **The Uranium- Life member**