

## Faculty Profile Format

### 1. Personal Details:

- a. Name of the Faculty: **Prof. (Dr.) Jayanta Maity**
- b. Academic Degrees: **M.Sc., Ph.D. IIT, Kharagpur.**  
**Post Doctoral fellow, Oklahoma University, USA.**
- c. Department: **Chemistry**
- d. Designation: **Professor**
- e. Email id: **jayantajune@gmail.com, maityj.chem@dhwu.ac.in**
- f. Courses Taught: **Chemistry (Organic Special)**



- g. Area of Research Interests: My research interests are in the two principal areas of surfactant science and polymer science and engineering. Using an interfacial polymerization process very similar to emulsion polymerization, we are modifying the surfaces of commercially important materials and also exploring the technique as a means of forming unusual polymers. Our efforts focus on learning the range of versatility of the method and on characterizing these thin polymer films. Within polymer science and engineering, we are interested in preparing high performance polymer composites using different types of natural and synthetic fibers and different polymers and nonmaterial's.

### h. Teaching Experience:

Assistant Professor, Chemistry Department, Banwarilal Bhalotia College,  
Asansol. [2010-2013]

Assistant Professor, Chemistry Department, Sidho Kanho Birsha University,  
Purulia. [2013-2021]

Professor, Chemistry Department, Diamond Harbour Womens University, South 24  
Paraganas. [2021 cont...]

### i. Administrative Experience:

- Head, Chemistry Department, Diamond Harbour Women's University.
- Member, Executive Committee, Diamond Harbour Women's University.
- Convenor, IQAC, Diamond Harbour Women's University.
- Secretary, Faculty Council .of Science, Diamond Harbour Women's University.
- Member, Ph.D. Cell for Science, Diamond Harbour Women's University.
- Member, Library Committee, Diamond Harbour Women's University.
- Member, NSS Advisory committee, Diamond Harbour Women's University.

- Convenor, Intellectual Property Right Cell, Diamond Harbour Women's University.
- G.B. Member University nominee, Kazi Nazrul Islam Mahavidyalaya, Churulia, Burdwan. (No. IC/GB/P/61 DATED 24/08/2012, 3 years)
- G.B. Member University nominee, Durgapur Women's College, Durgapur, Burdwan (No. IC/GB/P/60 DATED 24/08/2012, 3 years)
- CBCS syllabus committee, Sidho Kanho Birsha University.

## 2. Research Publications [Last 5 Years]:

Serial No.	Title of the Research Paper	Level [international/national/state]	ISBN/ISSN	Name of the Publishing Agency	Year of Publication
1	Durable Hydrophobic Polymer Coating on Silk Surface by Surfactant-aided Fluoro-monomer Polymerization Through Admicellar Technique. Ananya Chaudhuri, Jayanta Maity, Volume 73, Part 4, Pages 567-575, 2023.	International	ISSN 2214-7853	Elsevier	2023
2	Fabrication of AgNPs/Silane coated mechanical and washing durable hydrophobic cotton textile for self-cleaning and oil-water separation application. Sukanta Pal, Sourav Mondal, Prasanta Pal, Ajit Das, Jayanta Maity, Journal of the Indian Chemical Society 99 (2022) 100283	International	ISSN 0019-4522	Elsevier	2022
3	Fabrication of CuO/TMSPM Coated Superhydrophobic Fabric for Self-cleaning and Oil-water Separation. Sukanta Pal, S. Mondal, A. Das, J. Maity, Fibers and Polymers, 22, 3517–3525 (2021)	International	ISSN 1229-9197	Springer	2021
4	Fabrication of Durable Fluorine-free fluorine free Superhydrophobic cotton Fabric for Efficient Self-cleaning and Heavy/Light Oil-water Separation. Sukanta Pal, S. Mondal, P. Pal, A. Das, S. Pramanik, J. Maity,	International	ISSN 2215-0382	Elsevier	2021

	Colloid and Interface Science Communications, 2021. 44 (2021) 100469.				
5	Two-Step Fabrication of Durable, Flexible, and Fluorine- Free Superhydrophobic SiO <sub>2</sub> -Silane@Fabric for Self- Cleaning Application. Sukanta Pal, S. Mondal, Ajit Das, D. Mondal, J. Maity Chemistry Select, 6, 1669 – 1684, 2021.	International	ISSN 2365-6549	European Chemical Societies	2021
6	Fluoropolymer adhered bioinspired hydrophobic, chemically durable cotton fabric for dense liquid removal and self-cleaning application. S. Mondal, Sukanta Pal, A. Chaudhuri, J. Maity, Surface Engineering, 37(3), 299–307, 2021.	International	ISSN 0267-0844	Taylor & Francis	2021
7	Applications of Nanotechnology For Antibacterial Finishing Textiles: A Review. Sukanta. Pal, S. Mondal, P. Pal, A. Das, D. Mondal, A. Chaudhuri, B. Panda, J. Maity, Sensor Letters, 18, 437-448, 2020.	International	ISSN 2475-1472	American Scientific Publishers	2020
8	Modification of silk surface by polymerization of fluoro-monomer in fluoro-surfactant solution. Ananya Chaudhuria, Sourav Mondala, Anwesa Chaudhurib and Jayanta Maity J. Indian Chem. Soc., Vol. 97, No. 12c, 2020, 2903-2908.	International	ISSN 0019-4522	Indian Chem. Soc	2020
9	Synthesis and leaching behaviour of borosilicate glasses containing uranium as radioactive waste. Patit Paban Malik and Jayanta Maity, J. Indian Chem. Soc., Vol. 97, No. 12c, 2909-2913, 2020.	International	ISSN 0019-4522	Indian Chem. Soc	2020
10	Fabrication of fluoropoly-mer modified hydrophobic functionalization of cotton fabric by admicellar polymerization. S. Mondal, Sukanta Pal, A. Chaudhuri, J. Maity, The Journal of The Textile Institute, 110(12), 1747–1754. 2019.	International	ISSN 0040-5000	Taylor & Francis	2019
11	Green Synthesis, Characterization	International	ISSN	American	2019

	and Applications of ZnO Nanoparticles – A Review. Sukanta Pal, S. Mondal, P. Pal, J. Maity, Advanced Science, Engineering and Medicine, 11, 1009–1022, 2019.	nal	2164-6627	Scientific Publishers	
12	Fabrication and Characterization of Hydrophobic Thin Polytrifluoroethyl Methacrylate adhered Coating on Cotton surface via Admicellar Polymerization. S. Mondal, Sukanta Pal, and J. Maity, Journal of Adhesion Science and Technology, 33(3), 243–252, 2019.	International	ISSN 0169-4243	Taylor & Francis	2019
13	Design and fabrication of thin polymer coating on cotton fabric surface to impart hydrophobicity, An admicellar polymerization approach. Sukanta Pal, S. Mondal, J. Maity, International Journal of Polymer Analysis and Characterization, 24(1) 32–39. 2019.	International	ISSN 1563-5341	Taylor & Francis	2019

3. Research papers presented in conferences/seminars [Last 5 years]:

4. Research Projects:

Serial No.	Title of the Research Project(s)	Funding Agency	Date of Award	Duration of the Project	Research Grants Amount	Status of the Project
1	Surface modification and preparation of super hydrophobic cotton fabric	Department of Science and Technology (DST) DST No: SR/FT/CS-26/2011	2012	3 years	24 lakhs	Completed

5. E-learning material, if any:

Course Details	Name of the Institution	Date/year of uploading	Quadrant I, II, III, IV	Link
Understanding of Stereochemistry through power point presentation	Chemistry Department, Sidho Kanho Birsha University, Purulia	2020	SEM I to IV	skbu.ac.in

Understanding of biomimetic organic synthesis	Chemistry Department, Sidho Kanho Birsha University, Purulia	2020	SEM I to IV	skbu.ac.in
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6. Research Supervision (Ph.D./M.Phil.)

Serial No.	Name of the student	Research Topic	Name of the institution	Date of Registration	Year of Award of the Degree
1	Sourav Mondal	Surface modification of textile materials using admicellar polymerization and it's applications	Sidho Kanho Birsha University Purulia	Reg. No.: 015390 of 2014-15.	30/07/2020
2	Sukanta Pal	Hydrophobic Coatings on Cellulose-Based Textile Materials: Fabrication, Properties and Applications	Sidho Kanho Birsha University Purulia	Reg. No.: R/Ph.D./Registration./549/2017	03/11/2021

7. Programmes Conducted / Organised as Convenor / Organising Secretary at DHWU [Last Five Years]

Serial No.	Date	Convenor: Name of the Programme	Sponsored By
1	November 24, 2022	Chemistry in Daily Life	DHWU and Self-sponsoring by Department of Chemistry, DHWU
2	June 8, 2020	Co-Convenor: International webinar on Covid-19, the facts and findings..	SKBU
	November 26-27, 2019	Convenor: Celebration of International Year of Periodic Table And National Conference on "Chemistry for Sustainable Development" (CSD 2019).	SKBU in collaboration with Indian Chemical Society

8. Other Relevant Information, if any:

Serial No.	Achievements / Awards	Assignment Details [Membership of Professional Bodies/Editorial Board/BOS/BORS etc.]
1	Siksha Ratna Award 2022 (West Bengal Gov.)	Editorial Board Member of: Journal of Environment Pollution and Human Health, ISSN 2334-3397(Print), 2334-3494 (Online).
2		Editorial Board Member of: International Journal of Innovative Research Engineering...
3		Editorial Board Member of: Advances in Materials (AM),

		Science Publishing Group, 548 Fashion Avenue, New York, NY 10018, U.S.A. ISSN: 2327-2503 (Print); ISSN: 2327-252X (Online).
4		BOS Member (UG, PG), Sidho Kanho Birsha University upto 2021
5		PG-BORS Member Sidho Kanho Birsha University upto 2021
6		BOS Member, Diamond Harbour Women's University
7		BORS Member, Diamond Harbour Women's University
8		PG-BOS Member, School of Sciences, NSOU
9		RAC Member, Department of Chemistry, School of Science and Technology, <i>The Neotia University</i>
10		PG BOS member of Sabang Sajanikanta Mohavidyalaya, Midnapore, West Bengal
11		National Advisory Committee: National Symposium on Chemistry and the Environment and National Convention of Chemistry Teachers - 2016
12		Life time member of Association of Chemistry Teachers

### **Book Chapters:**

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|---|---|--|--------------|------------------------|
| 1 | An artificial lotus leaves like cotton textile          | Environmental Pollution, Conservation and Climate Change: Issues and Challenges/ Sparrow Publication | Biodiversity | ISBN 978-81-89140-17-7 |
| 2 | Toxicity and pollution on Modern Civilization- A review | Environmental Pollution, Conservation and Climate Change: Issues and Challenges/ Sparrow Publication | Biodiversity | ISBN 978-81-89140-17-7 |

### **Reviewer in different journal/Book:**

- Journal of Adhesion Science and Technology, (Taylor & Francis).
- Progress in Organic Coatings, (Elsevier).
- Reactive and Functional Polymers, (Elsevier).
- Journal of Cleaner Production, (Elsevier).
- Industrial Crops and Products, (Elsevier).
- Colloids and Surfaces A: Physicochemical and Engineering Aspects, (Elsevier).
- Applied Surface Science, (Elsevier).
- Polymer International, (Wiley).
- Springer Nature, Springer Nature Publishing Company.
- Fibers and Polymers, (Springer).
- Progress in Organic Coatings, (Elsevier).
- Textile Research Journal, SAGE Publication.
- Journal of Industrial Textiles, (SAGE Publication).
- Energy Research, (Wiley).
- Polymers for Advanced Technologies, (Wiley).

Date: 20/04/2023