

FACULTY MEMBER ACADEMIC PROFILE

- Name of the Faculty member:** Dr. AJANTA MUKHERJI
- Designation:** Assistant Professor in Chemistry (W.B.E.S.)
- Qualification:** M.Sc. (CU), Ph.D. (Bose Institute; JU)
- Specialization:** Organic Chemistry
- E-mail address:** ajanta.m@gmail.com
- Date of Joining in W.B.E.S.:** 29.07.2010
- Date of Joining in this College:** 29.07.2010
- Total Teaching experience in College level:** 7+ years
- Research interests:** Synthesis of bioactive, heterocyclic molecules, Green Chemistry, environmental chemistry
- Title of thesis (Ph.D.) with year:** “Synthetic Approaches to Heterocycles and Studies on Their Reactions” (2010)
- Research guidance:** Nil
- Research Projects (Completed and ongoing):** Nil
- List of publications:**

**Published papers in Journals:**

- “A New Catalytic Application of a Keggin acid in the Synthesis of Symmetrical Bis(indolyl)alkanes”, M. Chakrabarty, **A. Mukherji**, S. Karmakar, S. Arima and Y. Harigaya, *Heterocycles*, **2006**, 68(2), 331-338 [ISSN 0385-5414; **IF: 1.077**].
- “Application of Sulfamic acid as an Eco-friendly Catalyst in an Expedient Synthesis of Benzimidazoles”, M. Chakrabarty, S. Karmakar, **A. Mukherji**, S. Arima and Y. Harigaya, *Heterocycles*, **2006**, 68(5), 967-974 [ISSN 0385-5414; **IF: 1.077**].
- “Phosphoric acid-on-Silica gel: A Green Catalyst for the Synthesis of Symmetrical Bis(indolyl)alkanes”, M. Chakrabarty, R. Mukherjee, **A. Mukherji**, S. Arima and Y. Harigaya, *Heterocycles*, **2006**, 68(8), 1659-1668 [ISSN 0385-5414; **IF: 1.077**].
- “A Keggin Heteropoly acid as an Efficient Catalyst for an Expedient, One-pot Synthesis of 1-Methyl-2-(hetero)arylbenzimidazoles”, M. Chakrabarty, **A. Mukherji**, R. Mukherjee, S. Arima and Y. Harigaya, *Tetrahedron Lett.*, **2007**, 48(30), 5239-5242 [ISSN 0040-4039; **IF: 2.379**].
- “Expedient Reaction of Ninhydrin with Active Methylene Compounds on Montmorillonite K10 Clay”, M. Chakrabarty, **A. Mukherji**, S. Arima, Y. Harigaya and G. Pilet, *Monatsh. Chem.*, **2009**, 140(2), 189-197 [ISSN 0026-9247; **IF: 1.282**].
- “An Expedient Synthesis of Novel 2-Substituted Thiazolo[4,5-*f*]isoquinolines/quinolines and Benzo[1,2-*d*:4,3-*d'*]bisthiazoles and Their Potential as Inhibitors of COX-1 and COX-2”, M. Chakrabarty, **A. Mukherji**, S. Karmakar, R. Mukherjee, K. Nagai, A. Geronikaki and P. Eleni, *Arkivoc*, **2010**, (xi), 265-290 [ISSN 1551-7004; **IF: 1.165**].
- “Heteropoly Acids as Novel Catalysts in Organic Synthesis”, **A. Mukherji**, *Conscientia*, **2011**, 1(2), 9-17 [ISSN 2278-6554].

8. "An Expedient Phase Transfer Catalyst-mediated Synthesis of 2-Alkyl/Aryl-1,8-Phenanthrolines", M. Chakrabarty and A. Mukherji, *Journal of Heterocyclic Chemistry*, **2012**, 49(6), 1443-1446 [ISSN 0022-152X; IF: 0.893].
9. "Eco-friendly Synthesis of Condensed Nitrogen Heterocycles - A Brief Experience from Our Group", M. Chakrabarty and A. Mukherji, *J. Indian Chem. Soc.*, **2013**, 90(10), 1681-1694 [ISSN 0019-4522; IF: 0.382].
10. "Analysis of Drinking-water in Nadia District for Chemical Contaminants: Some Preliminary Findings", A. Mukherji, *International Journal of Ecosystem*, May, **2015**, 5(3A), 18-28 [ISSN 2165-8889].

14. Membership of Learned Societies/ Editorial Boards, etc.:

1. Life Member of Indian Association for the Cultivation of Science library
2. Life Member of Indian Chemical Society
3. Member of British Council library

15. Patents: Nil

16. Awards: CSIR-Junior Research Fellowship in NET (UGC-CSIR) in December, 2003.

17. Other notable activities:

1. Acted as a **Resource person** and delivered a lecture entitled "Nuclear Energy: Our Friend or Foe?" in 15th Dipta Memorial Symposium on 'Nuclear Energy: Boon or Bane', organized by Bose Institute Research Scholars' Forum, Bose Institute, Kolkata on **5th October, 2007**.
2. Acted as a **Judge** in **District level Exhibition and Project Competition** under **DST-INSPIRE Award Scheme, 2013**, organized by CMS St. John's High School, Krishnagar, Nadia on **20th August, 2013**.
3. Participated as a **Member of University Visiting Team** for the Part-II University Examination, 2014 of the University of Kalyani on **19th June, 2014**.
4. Acted as a **Judge** in **District level Exhibition and Project Competition** under **DST-INSPIRE Award Scheme, 2015**, organized by Krishnagar A.V. High School, Krishnagar, Nadia on **12th August, 2015**.
5. Acted as **Joint Convener** of "Initiation", **Inter-college Chemistry Quiz competition**, organized by the Department of Chemistry, Krishnagar Government College on **25th January, 2018**.

Departmental excursions/study tours

1. Conducted a **Study Tour** with **24 students** of **3rd Year (Hons)** to **IISER, Mohanpur** on **18th April, 2013**.
2. Supervised the participation of **8 students** of **3rd Year (Hons)** in the **Science Academies' Lecture Workshop** held at the University of Kalyani from **6th - 8th April, 2017**.
3. Supervised the participation of **11 students** of **2nd Year (Hons)** and **3rd Year (Hons)** in the **Science Academies' Lecture Workshop** held at Bethune College, Kolkata on **17th - 18th November, 2017**.
4. Supervised the participation of **24 students** of **1st Year (Hons)**, **2nd Year (Hons)** and **3rd Year (Hons)** in the **Science Academies' Lecture Workshop** held at Chakdaha College, Nadia on **19th - 20th January, 2018**.
5. Supervised the participation of **5 students** of **2nd Year (Hons)** and **3rd Year (Hons)** in the **Science Academies' Lecture Workshop** held at Jhargram Raj College, Jhargram on **14th - 16th February, 2018**.

18. A) Participation in Seminars/Symposia/Conferences/Workshops:**Seminars:**

1. Participated in UGC sponsored **National Seminar** on ‘*Current Trends in Chemistry-V (NSCTC-V)*’, organized by Department of Chemistry, University of Kalyani on **25th February, 2011**.
2. Participated in UGC sponsored **National Seminar** on ‘*Chemistry for a Better World: Celebrating The International Year of Chemistry*’, organized by Department of Chemistry, University of Kalyani on **29th March, 2011**.
3. Participated in **National level Acharya Prafulla Chandra Ray Memorial Symposium** on ‘*Chemistry Today (2011) and Celebration of the International Year of Chemistry*’ organized by the Indian Chemical Society on **2nd & 3rd August, 2011**.
4. Participated in UGC sponsored **State Level Seminar** on ‘*Environmental Degradation & Strategies for Conservation & Management*’, organized by Department of Geography, Krishnagar Govt. College, Krishnagar in collaboration with World Wide Fund for Nature (WWF), India on **24-25th November, 2011**.
5. Participated in UGC sponsored **National Seminar** on ‘*Journey of an Atom Through 100 Years*’, organized by Bethune College, Kolkata in collaboration with Vidyasagar College, Kolkata and held at Bethune College on **15th & 16th December, 2011**.
6. **Presented a paper (oral presentation)** entitled “*An Expedient Synthesis of 2-Alkyl/aryl-1,8-phenanthrolines using Phase Transfer Catalyst-mediated Skraup/Doebner-von Miller Reaction*” in **Acharya P.C. Ray National Young Scientists’ Conference**, organized by Presidency University, Calcutta University and Vivekananda Vijnan Mission (West Bengal chapter of Vijnana Bharati) and held at Presidency University on **17-18th February, 2012**.
7. Participated in **National level Acharya Prafulla Chandra Ray Memorial Symposium** on ‘*Chemistry & Industry (2012)*’, organized by the Indian Chemical Society on **2nd & 3rd August, 2012**.
8. **Presented a paper (oral presentation)** entitled “*Nanogold: From a Golden past to a Glittering Future*” in UGC sponsored two-day **National Seminar** on ‘*Current Trends in Chemistry*’, organized by Department of Chemistry, Sripat Singh College, Jiaganj, Murshidabad, in association with Dumkal College, Basantapur, Murshidabad on **23-24th December, 2013**.
9. **Presented a paper (oral presentation)** entitled “*Heteropoly Acids: A Unique Class of Highly Efficient, Versatile and Eco-friendly Acid Catalysts*” in **National Symposium** on ‘*Recent Advances in Chemistry & Industry (2014)*’, organized by the Indian Chemical Society on **1st & 2nd August, 2014**.
10. **Presented a Poster** entitled “*Analysis of Drinking Water in Nadia District for Chemical Contaminants: Some Preliminary Findings*” in two-day **International Seminar** on ‘*Groundwater: Issues & Challenges of the 21st Century*’, organized by Sripat Singh College, Jiaganj, Murshidabad in collaboration with Department of Chemistry (Analytical), University of Kalyani on **29-30th December, 2014**.
11. **Presented a Poster** entitled “*Reaction of Ninhydrin with Malonic and Meldrum’s Acid: Decarboxylation and Tandem Cleavage-Decarboxylation-Esterification observed on Mont. K10 Clay*” in **National Symposium** on ‘*Recent Advances in Chemistry & Industry (2015)*’, organized by the Indian Chemical Society on **31st July & 1st August, 2015**.
12. **Presented a Poster** entitled “*Reaction of Ninhydrin with Cyclic and Acyclic 1,3-Diketo compounds: Unexpected Formation of Heterocycles from Acyclic Substrates*” in UGC sponsored one-day **National Seminar** on ‘*Recent Advances in Chemistry*’, organized by Department of Chemistry, Sripat Singh College, Jiaganj, Murshidabad, in association with Dumkal College, Basantapur, Murshidabad on **21st December, 2015**.

13. Participated in **National Seminar** on '*Current Trends in Chemistry-VII (NSCTC-VII)*', sponsored by UGC-SAP, DST-Purse and KU and organized by Department of Chemistry, University of Kalyani on **24th February, 2016**.
14. **Presented a Poster** entitled "*Detection of Nitrate and Nitrite ions in Drinking Water: A Case Study in Nadia District*" in **23rd West Bengal State Science and Technology Congress, 2016**, organized by Presidency University, Kolkata on **28-29th February, 2016**.
15. **Presented a Poster** entitled "*Reaction of Ninhydrin with Indane-1,3-dione on Mont. K10 Clay: Unexpected Tandem Aldol condensation-Dehydration-Michael addition*" in **National Symposium** on '*Recent Advances in Chemistry & Industry 2016 (with special emphasis on Pharmaceutical Industry)*', organized by the Indian Chemical Society on **2nd & 3rd August, 2016**.
16. Participated in one day **National Seminar** on '*Recent Advances in Life Science in the Light of Chemistry*', organized by Department of Chemistry, Bethune College, Kolkata in collaboration with Royal Society of Chemistry (Eastern India Section) on **9th September, 2016**.
17. **Presented a Poster** entitled "*Application of a Keggin Heteropoly acid as a Highly Efficient Catalyst for an Expeditious, One-pot Synthesis of 1,2-Disubstituted Benzimidazoles*" in **National Seminar** on '*Recent Development in Chemical Sciences*' organized by Barrackpore Rastraguru Surendranath College on **14th February, 2017**.
18. Participated in **National Symposium** on '*Recent Advances in Chemistry & Industry 2017*' organized by the Department of Chemistry, IEST, Shibpur, Howrah and Indian Chemical Society, Kolkata on **2nd & 3rd August, 2017**.
19. Participated in **One-day Regional Level Seminar-2017** on '*Degenerative Diseases of Brain and Folk Music as a Healer*', organized by Krishnagar Govt. College on **16th September, 2017**.

Workshops:

1. Participated in **Science Academies' Lecture Workshop** on '*Chemistry: The Basics and Advances*', sponsored by the Indian National Science Academy, New Delhi, Indian Academy of Sciences, Bangalore and the National Academy of Sciences, Allahabad and organized by Department of Chemistry, **University of Kalyani** on **6-8th April, 2017**.
2. Participated in **Science Academies' Lecture Workshop** on '*Fundamental of Chemistry*', sponsored by the Indian National Science Academy, New Delhi, Indian Academy of Sciences, Bangalore and the National Academy of Sciences, Allahabad and organized by Department of Chemistry, **Bethune College**, Kolkata on **17th - 18th November, 2017**.
3. Participated in **Science Academies' Lecture Workshop** on '*Basic Chemistry for Advanced Future*', sponsored by the Indian National Science Academy, New Delhi, Indian Academy of Sciences, Bangalore and the National Academy of Sciences, Allahabad and organized by Department of Chemistry, **Chakdaha College**, Chakdaha, Nadia on **19th-20th January, 2018**.
4. Participated in **Science Academies' Three Days Lecture Workshop** on '*Recent Advancements and Achievements in Chemical Sciences*', sponsored by the Indian National Science Academy, New Delhi, Indian Academy of Sciences, Bangalore and the National Academy of Sciences, Allahabad and organized by **Jhargram Raj College**, Jhargram on **14th -16th February, 2018**.

B) Participation in OP/RC:

1. Participated in UGC sponsored **Orientation Programme**, organized by UGC-ASC, Jadavpur University from **3rd to 31st December, 2012**.
2. Participated in UGC sponsored **Refresher Course** on '*Contemporary Teaching and Research in Chemistry*' organized by UGC-ASC, Jadavpur University from **2nd to 22nd January, 2014**.