



## UNIVERSITY OF CALCUTTA

### FACULTY ACADEMIC PROFILE/ CV



1. **Full name of the faculty member:** Dr. Md. Farooque Abdullah

2. **Designation:** Assistant Professor

3. **Specialisation:** Pharmaceutical Technology

4. **Contact information:**

Department of Chemical Technology, University of Calcutta

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5. **Academic qualifications:**

College/ university from which the degree was obtained	Abbreviation of the degree
West Bengal University of Technology	B. Pharm.
University of Calcutta	M. Tech.
University of Calcutta	Ph. D

6. **Positions held/ holding:** Assistant Professor

7. **Research interests:**

- Nanotechnology.
- Polymer Chemistry
- Green Technology
- Bioremediation.

8. **Research guidance:**

Number of researchers awarded M.Phil/ Ph.D degrees:

Number of researchers pursuing M.Phil/ Ph.D: 4

## 9. Select list of publications:

### a) *Journals:*

1. Extraction of polysaccharide fraction from cadamba (*Neolamarckia cadamba*) fruits and evaluation of its in vitro and in vivo antioxidant activities. *International Journal of Biological Macromolecules* 279 (2024): 135564.
2. Semi-interpenetrating hydrogels from carboxymethyl guar gum and gelatin for ciprofloxacin sustained release. *International Journal of Biological Macromolecules*. 2018, 120, 1823-1833.
3. Synthesis of Guar gum Propionate Nanoparticles for Antimicrobial Applications. *Materials Today: Proceedings*. 2018, 5, 9683–9689.
4. Guar gum benzoate nanoparticle reinforced gelatin films for enhanced thermal insulation, mechanical and antimicrobial properties. *Carbohydrate Polymers*. 2017, 170, 89–98.
5. Edible nano-bio-composite film cargo device for food packaging applications. *Food Packaging and Shelf Life*. 2017, 11, 98–105.
6. Antifungal ouzo nanoparticles from guar gum propionate. *RSC Advances*. 2016, 6, 106563-106571.
7. Cationic guar gum orchestrated environmental synthesis for silver nano-bio-composite films. *Carbohydrate Polymers*. 2015, 134, 30–37.
8. Fabrication and fluorescent labeling of guar gum nanoparticles in a surfactant free aqueous environment. *Materials Science and Engineering C*. 2015, 46, 521–529.
9. Encapsulation of Congo red in carboxymethyl guar gum–alginate gel microspheres. *Reactive & Functional Polymers*. 2014, 82, 103–110.
10. New Guar Biopolymer Silver Nanocomposites for Wound Healing Applications. *BioMed Research International*. 2013, 2013, 1- 8.

### b) *Books/ book chapters :*

- “Paramagnetic Iron Oxide Nanoparticles in Guar-ester for Bisphenol A Removal in Water Environment”- *Nanospectrum: A Current Scenario*, 2015, 89-96. ISBN: 978-93-85926-06-8.
- “Guar Gum Nanoparticles for Bioimaging Applications: Extraction and Optimization” *Nanospectrum: A Current Scenario*, 2015, 138-144. ISBN: 978-93-85926-06-8.

### c) *Conference/ seminar volumes:*

1. “Broad Spectrum Bactericidal Bio-nano Composite Films for Pharmaceutical and Related Applications”- National Conference on “Sustainable Development through Innovative

Research in Science and Technology”, organised jointly by Jadavpur University and DST Purse programme, Jadavpur University, Kolkata 700032, September 2012.

2. “Capped Silver Nanoparticles for Pharmaceutical and Biomedical Application”- Presented in the conference on “Clinical Research & Regulatory Affairs-Present Scenario” organized by Bioequivalence Study centre, Dept. of Pharmaceutical Technology, Jadavpur University, July 2012.
  3. “Biomaterial-Silver Nano-conjugate Films for Pharmaceutical and Biomedical Applications”-Presented in the “100<sup>th</sup> Indian Science Congress” organized by The Indian Science Congress Association, January 2013.
  4. “Catechol functionalized iron oxide nanoparticles for bioremediation in water environment”- Presented in the conference on “5<sup>th</sup> Asian Conference on Colloid and Interface Science” organized by The Asian Society for Colloid and Surface Science and Department of Chemistry, University of North Bengal, Darjelling, India, November 2013.
  5. “Magnetically guided guar benzoate films for removal of bisphenol A in water environment “- Presented in the conference on “Recent Advantage in clinical Research with a Special Emphasis on BA/BE Study” organized by The DST Sponsored 5 day- International Seminar/ Workshop, Held in Bioequivalence Study Centre, Jadavpur University, September 2014.
  6. “Magnetically Guided Removal of Bisphenol A in Water environment by Iron oxide Nanoparticles in Guar-ester”- Presented in national conference on “Nanoscience and nanotechnology (NS & NT-2014)” organized by Centre for Research in Nanoscience and Nanotechnology (CRNN), University of Calcutta, September 2014.
  7. “Bisphenol A removal from water by magnetically guided guar benzoate films”-Presented in Macro 2015, an international symposium on “Polymer Science and Technology” organized by the Indian Association for the Cultivation of Science (IACS) under the umbrella of The Society of Polymer Science, January 2015.
  8. “Reusable Guar-Ester Maglev Films for Synchronous Decontamination of Pollutants and Bacteria”-Carbo-XXXI 2016, An international Conference on New Frontiers in Carbohydrate Chemistry and Biology, November 2016.
10. **Awards:** “5<sup>th</sup> National Award for Technology Innovation” in the category of Innovation in Polymer Waste Management & Recycling Technology and Green Polymeric Materials & Products for the Innovation in “Magnetically Guided Water Submerged Biopolymer Films for Synchronous Decontamination of Pollutants and Bacteria”., Ministry of Chemicals & Fertilizers. Govt. of India.