

CURRICULUM VITAE

DR. SAMPAD GHOSH

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OBJECTIVE:

To seek a challenging opportunity as **Faculty/Scientist** position and to satisfy my employer.

PERSONAL:

Male; Married; Born on 05th June 1978, Kolkata, India

EDUCATIONAL QUALIFICATION:

Doctor of Philosophy (PhD), Biophysical & Analytical Chemistry, June 2011 from Indian Institute of Technology (IIT), Kharagpur, India.

Thesis Title: Interaction of cationic and anionic surfactants: Preparation of pH-responsive stable vesicles for drug delivery applications.

Master of Technology (M.Tech) in Corrosion Sc. & Technology, 2005 from NIT-Durgapur, Durgapur, India (77.90%).

Thesis Title: Kinetic studies on corrosion of mild steel in pure and mixed aqueous media of urea, sodium chloride, potassium chloride, glycine.

Master of Science (M.Sc) in Chemistry, 2002 from C.S.J.M. University, Kanpur, India (61.00%).

Bachelor of Science (B.Sc.) in Chemistry, 2000 from Burdwan University, India (53.25%).

NET (Chemical Sciences, 2003, 2004) - CSIR-UGC (LS).

GATE (Chemistry, 2003)-MHRD, Govt. of India.

HIGHLIGHTS:

- Extensive experience in field of **synthesis of organic molecules, characterization, and their use in pH-responsive vesicular drugs delivery.**
- **Surface Chemistry, Corrosion and Extraction of precious metals from ores.**
- Good organizational and management skills.

EXPERIENCE:

- Worked as Part-time **Lecturer** in Bengal College of Engineering & Technology, Durgapur for nearly three months.
- Worked as **Research scholar** in National Metallurgical Laboratory, Jamshedpur (a CSIR Lab) from October 2005 to January 2007.
- Worked as **Senior Research Fellow** in Dept. of Chemistry, IIT Kharagpur from February 2007 to April 2011.

- Currently appointed as **Assistant Professor** (on Contract) at **National Institute of Technology, Jamshedpur** since April 2011.

INSTRUMENTAL EXPERTISE:

I have hands on experience on various instrumental techniques for elemental analysis, metal extraction, and organic synthesis.

Characterization Techniques:-

UV-Visible Spectroscopy, FT-IR, CHNSO analyser, ^1H and ^{13}C NMR, Circular Dichroism, Surface Tensiometry, AAS, Fluorescence Spectrophotometer, Fluorescence Confocal Microscopy, Field Emission Scanning Electron Microscopy, High Resolution Transmission Electron Microscopy, Dynamic Light Scattering, X-ray Diffraction etc.

AWARDS AND HONOURS:

- **National Scholarship** from Ministry of Education, Govt. of India in 1991-94.
- **Graduate Aptitude Test in Engineering (GATE)**, March 2003.
- **National Eligibility Test (NET)**, CSIR-New Delhi, June 2003 and Dec 2003.
- **Junior Research Fellow** (DST, New Delhi), Feb 2007 - June 2009, IIT Kharagpur.
- **Senior Research Fellow** (CSIR, New Delhi), Dec 2009 - March 2011, IIT Kharagpur.
- **Best Oral Presentation** at Research Scholar Day, September 2010, IIT Kharagpur.
- **Invited Speaker** in the National Conference on Nanoscience and Nanotechnology at Techno India, Salt Lake, September 14-15, 2012.

MEMBER OF PROFESSIONAL BODIES:

- Annual Member, **Chemical Research Society of India (CRSI)**.
- Annual Member, **Indian Chemical Society (ICS)**.
- Life Member, **International Association of Engineers (IAENG)**.
- Life Member, **International Journal of Engineering & Sciences (IJENS-Researchers Promotional Group Member)**.
- Advisory/Editorial Board Member of **Association of Engineers and Researchers**.
- Fellow of **International Accreditation Council of Quality Education & Research (IACQER)**.
- Associate Editor in **International Journal of Creative Mathematical Sciences and Technology (IJCMST)**.
- Editor in **International Journal of Advancements in Research and Technology (IJOART)**.
- Editor in **International Journal of Scientific and Engineering Research (IJSER)**.
- Editor in **International Journal of Technology and Research Advances (IJTRA)**.
- Editor in **Journal of Applied and Industrial Sciences (JAIS)**.
- Editor in **International Organization Scientific Research (IOSR)**.
- Editor in **International Journal of Advance Industrial Engineering (IJAIE)**.

REVIEWER OF REPUTED JOURNAL:

- Central European Journal of Chemistry (RSC)
- Industrial and Engineering Chemistry Research (ACS)
- Journal of the Chinese Chemical Society (Wiley)

- World Applied Sciences Journal (WASJ).
- International Journal of Advance Industrial Engineering (IJAIE).
- Journal of Applied and Industrial Sciences (JAIS).

PROJECTS WORKED/HANDLED:

- Worked in a GAP Project (October 2005 to January 2007) on the topic “**Studies on hydrometallurgical recovery of base metals from selected sulphides**” in NML-Jamshedpur (a CSIR Lab).
- Worked in a Project on the topic “**Preparation of stable vesicles from catanionic surfactants for drug delivery: Characterization by surface tension, fluorescence probe, light scattering and microscopic techniques.**” in Department of Chemistry, IIT Kharagpur (Feb 2007 to Nov 2009).

PAPER/POSTER PRESENTATION:

- Presented a poster on “*Recent trends in Chemistry*” **Sampad Ghosh** and Ashoke Srivastava in CSJM University, Kanpur, India, 2002.
- Presented a lecture on “*Green Chemistry-The Chemistry of New Millennium*” **Sampad Ghosh** and Alak Kumar Ghosh in NIT-Durgapur, India, 2004.
- Presented a poster on “*Stable vesicles from mixtures of N-Acylamino acid derived surfactants and N-Cetylpyridinium chloride*” **Sampad Ghosh** and Joykrishna Dey, *International Conference on Soft System*, Jadavpur University, Kolkata, India, Feb., 13-15, 2008.
- “*Vesicle-Forming Zwitterionic Surfactant as a Chiral Selector for Enantiomeric Separations by Capillary Electrophoresis*”. Arjun Ghosh, **Sampad Ghosh**, Dibyendu Khatua, and Joykrishna Dey, *Sixth One Day National Symposium in Chemistry*, Indian Institute of Technology, Kharagpur, India, November 8, 2008.
- Presented a poster on “*Characterization of the catanionic mixtures of sodium n-acyl-l-alaninate and n-cetylpyridinium chloride surfactants: spontaneous formation of stable vesicles*” **Sampad Ghosh** and Joykrishna Dey, *Chemical Research Society of India*, NCL-Pune, India, Feb., 6-8, 2009.
- Presented a poster on “*Colloids, drug delivery, and enantioseparations*”, **Sampad Ghosh** and Joykrishna Dey, *Research Scholar Day*, IIT Kharagpur, India, Sept, 14, 2009.
- Presented a lecture on “*Preparation and characterization of pH-responsive stable vesicles*” **Sampad Ghosh** and Joykrishna Dey, *Research Scholar Day*, IIT Kharagpur, India, Sept, 14, 2010.
- Presented a poster on “*Vesicles in metal extraction from ores*”, **Sampad Ghosh**, *International Symposium on Recent Trends of Research in Chemistry*, Midnapore College, India, Oct 31-Nov 1, 2011.
- Attended Faculty Development Programme on “*Materials – Present and Future Perspectives*”, **Sampad Ghosh**, NIT Calicut, India, Dec 12-16, 2011.
- Presented a Keynote Lecture on “*Stable catanionic vesicles for drug delivery applications*”, **Sampad Ghosh**, *National Conference on Recent Developments in Chemistry (RDC-2013)*, NIT Durgapur, India, Oct 3-5, 2015.

BOOK PUBLISHED:

- **Title:** “Physicochemical Properties of Model Catanionic Surfactant Systems” (ISBN: 978-3-659-30050-9)
Publisher: LAP LAMBERT Academic Publishing House, Saarbrücken, Germany, **2012.**
- **Title:** “Toxicity of Fluorides in the Environment” (ISBN: 978-3-8465-2902-7)
Publisher: LAP LAMBERT Academic Publishing House, Saarbrücken, Germany, **2012.**

LIST OF PUBLICATIONS:

1. “Physicochemical properties and microstructure formation of the surfactant mixtures of sodium *N*-(2-(*n*-Dodecylamino) ethanoyl)-L-alaninate and SDS in aqueous solutions” Khatua, D.; **Ghosh, S.**; Dey, J.; Ghosh, G.; Aswal, V. K. *J. Phys. Chem. B* **2008**, *112*, 5374-5380.
2. “Spontaneous formation of pH-sensitive, stable vesicles in aqueous solution of *N*-[4-*n*-octyloxybenzoyl]-L-histidine”. Patra, T, **Ghosh, S.**; Dey, J. *Soft Matter* **2010**, *6*, 3669-3679.
3. “Interaction of sodium *N*-Lauroylsarcosinate with *N*-alkylpyridinium chloride surfactants: Spontaneous formation of pH-responsive, stable vesicles in aqueous mixtures”. **Ghosh, S.**; Dey, J. *J. Colloid Interface Sci.* **2011**, *358*, 208-216.
4. “Interaction between zwitterionic and anionic surfactants: Spontaneous formation of zwitterionic vesicles”. **Ghosh, S.**; Khatua, D.; Dey, J. *Langmuir* **2011**, *27*, 5184-5192.
5. “Kinetic studies on corrosion of mild steel in pure and mixed aqueous media of urea, sodium chloride, potassium chloride and glycine” **Ghosh, S.**; Ghosh, A.K. *International Journal of Creative Mathematical Sciences and Technology*, **2012**, *1(1)*, 26-33.
6. “Simultaneous extraction of copper and iron from chalcopyrite concentrates in hydrochloric acid media: Effect of additives and temperature.” **Ghosh, S.**; Ambade, B.; Prasad, S.K.; Choudhary, A.K. *Research Inventy: Int. Jou of Engg. & Sci.*, **2012**, *1(9)*, 8-13.
7. “Isolation and preliminary characterization of potent bioactive fraction with antioxidant and UV absorbing potential from *Aloe vera* L. Gel”. Ray, A.; **Ghosh, S.**; Dutta Gupta, S. *J. Plant Biochem. & Biotech.*, **2013**, *22(4)*, 483-487.
8. “Air quality deterioration by firecracker during Diwali festival in Jamshedpur, India.” Ambade, B.; **Ghosh, S. J. Applicable Chemistry**, **2013**, *2(2)*, 352-358.
9. “Interaction in aqueous mixtures of sodium *N*-(*n*-Alkanoyl)-L-alaninate and *n*-alkyltrimethylammonium hydroxide surfactants: Effects of composition and hydrocarbon chain length” **Ghosh, S.**; Ambade, B. *Adv. Chem. Lett.*, **2013**, *1*, 174-181.
10. “Stable catanionic vesicles as drug delivery vehicle” **Ghosh, S.**; Ambade, B.; Ray, A. *Science of Advanced Materials*, **2013** (DOI:10.1166/sam.2013.1649).
11. “Ambient air quality of Jamshedpur city: A study with reference to SO₂, NO₂, RSPM and SPM contents” Ambade, B.; **Ghosh, S. J. Applicable Chemistry**, **2013**, *2(3)*, 539-544.

12. "Characterisation of PM₁₀ in the ambient air during Deepawali festival of Rajnandgaon district, India" Ambade, B.; **Ghosh, S. *Natural Hazards*, 2013** (DOI: 10.1007/s11069-013-0725-8).
13. Review - "Gene delivery using cationic micelles and vesicles." **Ghosh, S.**; Ambade, B.; Ray, A. ***Adv. Chem. Lett.*, 2013, 1**, 93-103.
14. "Evaluation of Anti-oxidative activity and UV absorption potential of the extracts of Aloe vera L. gel from different growth periods of plants." Ray, A.; Dutta Gupta, S.; **Ghosh, S. *Industrial Crops and Products*, 2013, 49**, 712-719.
15. "Chemometric studies on mineral distribution and microstructure analysis of freeze-dried Aloe Vera L. gel. at different harvesting regimens" Ray, A.; Dutta Gupta, S.; **Ghosh, S.**; Aswatha, S. M.; Kabi, B. ***Industrial Crops and Products*, 2013, 51**, 194-201.

CO/EXTRA CURRICULAR ACTIVITIES/CONTRIBUTIONS:

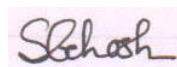
- Acted/acting as Faculty Advisor (PG), Tabulator-in-charge, Infrastructure Developer-in-charge in Chemistry Dept, Assistant Warden in Hostel-A at NIT-Jamshedpur.

DECLARATION:

I hereby assure that the above informations provided are true to the best of my knowledge and belief.

Place:

Date:



(SAMPAD GHOSH)

REFERENCES:

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