RAMMOHAN COLLEGE

FACULTY ACADEMIC PROFILE

Name: **Dr. SAMIRAN MONDAL**

Department: **CHEMISTRY**

Email: **samiran1985@gmail.com**

Academic background: **M.Sc, Ph.D**

Positions: **Assistant Professor**

Awards/ Honours:

(1) Awarded HFSP-CDF Postdoctoral fellowship (2012-2015), International Human Frontier Science Program Organization, 12, Quai Saint-Jean-67000, Strasbourg, FRANCE.
(2) Jeffrey Modell foundation Best Abstract Award in the Frontiers in Immunology 2014 conference (June 12-14, 2014) organized by Nobel Forum, Stockholm, Sweden**.**
(3) Qualified in a global competition among Young Scientists Worldwide to participate in the **63rd Lindau Nobel Laureate Meeting (Chemistry)**, Lindau (June 30-July 5, 2013), Council for the Lindau Nobel Laureate Meeting, Lindau, Germany.
(4) Outstanding Paper Award in 1st Regional Science and Technology Congress, 2016, Presidency Division, West Bengal (November 13-14, 2016) organized by Department of Science and Technology, Govt. of west Bengal, NITTTR, Kolkata, India.
(5) International Travel Grant from Science & Engineering Research Board (SERB), DST, Govt. of India, for participating in International Symposium on Immune Diversity and Cancer Therapy to be held from 26-01-2017 to 28-01-2017 in KOBE, JAPAN.
(6) Young Researcher and was awarded Third Prize in Poster presentation in International Conference on Nano Science and Technology (ICONSAT, January 20-23, 2012), Hyderabad, India.
(7) Best Poster Award in 13th CRSI National Symposium in Chemistry (February 4-6, 2011), School of Chemical Sciences, NISER and KIIT University, Bhubaneswar, India.
(8) One of the Best 10 Posters Award in 3rd Asia Pacific Symposium on Radiation Chemistry (APSRC-2010) & DAE-BRNS 10th Biennial Trombay Symposium on Radiation Chemistry & Photochemistry (TSRP, September 14-17, 2010), Radiation & Photochemistry Division, Bhabha Atomic Research Centre, Mumbai, India.
(9) Second Prize in Poster presentation in International Conference on Nanomaterials: Synthesis, Characterization and Applications (ICN-2010) (April 27-29, 2010) organized by

Centre for Nanoscience and Nanotechnology, Mahatma Gandhi University, Kottayam, Kerala, India.

Research interest:

(1) Molecular Biology (Immunology), Cancer Biology

(2) Fluorescence Spectroscopic investigation of Biochemical events

(3) Synthesis, characterization and applications of Nanomaterials

Ongoing Project:

UGC sponsored Minor Research Project in the field of Biochemistry entitled "Fluorescence spectroscopy for investigating biochemical events in small molecular length scales**"**

Research guidance: **Not yet**

Selected publications:

1. **S. Mondal**, N. A. Begum, W. Hu, T. Honjo*, "Functional requirements of AID's higher order structures and their interaction with RNA-binding proteins" ***Proceedings of the National Academy of Sciences (PNAS), 2016, 113,*** **E1545.**

2. W. Hu, N. A. Begum, **S. Mondal**, A. Stanlie, T. Honjo*, "Identification of DNA cleavage- and recombination-specific hnRNP co-factors for Activation-induced cytidine deaminase" ***Proceedings of the National Academy of Sciences (PNAS),*** **2015,** 112, 5791.

3. A. S. Yousif, A. Stanlie, **S. Mondal**, T. Honjo*, N. A. Begum, "Differential regulation of S-region hypermutation and class-switch recombination by noncanonical functions of uracil DNA glycosylase" ***Proceedings of the National Academy of Sciences (PNAS),*** **2014,** 111, E1016.

4. D. Ghosh, A. K. Pradhan, **S. Mondal**, N. A. Begum, D. Mandal*, "Proton transfer reactions of 4'-chloro substituted 3-hydroxyflavone in solvents and aqueous micelle solutions" ***Phys Chem Chem Phys,*** **2014,** 16, 8594.

5. **S. Mondal*****, S. Basu, N. A. Begum, D. Mondal, "A Brief Introduction to the Development of Biogenic Synthesis of Metal Nanoparticles" ***Journal of Nano Research***, **2014**, 27, 41.

6. N. Roy, Md N. Alam, **S. Mondal**, I. Sk, R. A. Laskar, S. Das, D. Mandal, N. A. Begum, "Exploring Indian Rosewood as a promising biogenic tool for the synthesis of metal nanoparticles with tailor-made morphologies" ***Process Biochemistry*****, 2012,** 47, 1371.

7. **S. Mondal**, N. Roy, R.A. Laskar, S. Basu, D. Mandal, N. A. Begum*, "Biogenic synthesis of Au, Ag and bimetallic Au/Ag nanopaticles using Mahogany (*Swietenia mahogany* JACQ.) leaf extract" ***Colloids and Surfaces B: Biointerfaces*****, 2011,** 82, 497.

8. S. Basu, **S. Mondal**, D. Mandal*, "Proton transfer reactions in nanoscopic polar domains: 3-Hydroxyflavone in AOT reverse micelles" ***Journal of Chemical Physics***, **2010**, 132, 034701.

9. N. Roy, **S. Mondal**, R.A. Laskar, S. Basu, D. Mandal, N. A. Begum*, "Biogenic synthesis of Au and Ag Nanoparticles by Indian Propolis and its Constituents" ***Colloids and Surfaces B: Biointerfaces,*** **2010,** 76, 317.

10. S. Basu, **S. Mondal**, D. Mandal*, "3, 3'-diethyloxacarbocyanine iodide: a new microviscosity probe for micelles and microemulsions" ***Colloids and Surfaces A: Phys. Engg. Aspects***, **2010**, 363, 41.

11. S. Mondal, S. Basu, D. Mandal*, "Ground- and excited-state proton-transfer reaction of 3-Hydroxyflavone in aqueous Micelles" ***Chemical Physics Letters*****,** 2009, **479, 218.**

12. N.A. Begum, **S. Mondal**, S. Basu, R.A. Laskar, D. Mandal*, "Biogenic synthesis of Au and Ag nanoparticles using aqueous solutions of Black Tea leaf extracts" ***Colloids and Surfaces B: Biointerfaces***, **2009**, 71, 113.

13. N.A. Begum, N. Roy, **S. Mandal**, S. Basu, D. Mandal*, "Fluorescence Spectroscopy of a Naturally Occurring Carbazole Alkaloid: Murrayanine" ***Journal of Luminescence***, **2009**, 129, 158.

14. S. Basu, **S. Mondal**, U.Chatterjee, D. Mandal*, "Poly(styrene-b- 2-(N,Ndimethylamino) ethyl methacrylate) Diblock Copolymers: Micellization and Application in the Synthesis of Photoluminescent CdS Nanoparticles" ***Materials Chemistry and Physics***, **2009**, 116, 578.

15. S. Basu, D. P. Chatterjee, U. Chatterjee, **S. Mondal**, D. Mandal*, "Fluorescence probing of block copolymeric micelles using Coumarin 153" ***Colloids and Surfaces A: Phys. Engg. Aspects***, **2009**, 341, 13.