Mohammad Amin Mir Associate Professor Post Graduate Department of Chemistry Govt Degree College Anantnag Pulwama J&K, India Mobile# 09797047887; 07006500461



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DATE OF APPOINTMENT

APRIL 2010

SUMMARY

Exploring Science at molecular level and sharing the knowledge at every level is what I am passionate about. Graduation (B. Sc. and M. Sc.) from University of Kashmir, Jammu and Kashmir, was followed by M. Phil and Ph. D from the same University under the supervision of Prof. G. M. Rather. I have been awarded NET (JRF) in 2005 by Council of Scientific and Industrial Research and Graduate Aptitude Test for Engineering (GATE) in 2006 by Human Resource Development, Govt. of India.

"Colloidal and Interfacial Science and Protein-Surfactant Interactions" are my research interests. Since 2005, I have been playing with these disciplines by means of both conventional and sophisticated techniques viz., Turbidometry, Viscometry, Conductometry, surface Tensiometry, UV- Visible Spectrophotometry, Spectrofluorimetry, Circular Dichroism, Dynamic Light Scattering, and High-Pressure Liquid Chromatography. I have developed strong analytical skills in data analysis by using my competence in advanced computer softwares viz., Flsol, Jascow32, Chem. Sketch, ISIS Draw, Origin8.0 lab and expertise in theoretical and thermodynamic models viz., Clint's Model, Rubingh's Model, Rosen's Model and Regular Solution Approach.

EDUCATION

Department of Chemistry, University of Kashmir, Hazratbal, Srinagar-190006, J&K, India

Ph. D in Chemistry 2008-2010 "Studies On Surfactant–Surfactant And Surfactant–Biomolecule Interaction"

M. Phil. in Chemistry "Studies on Surfactant-Polymer Interactions"

M.Sc. in Chemistry

Specialization: Physical Chemistry Main courses studied: Surface Chemistry, Quantum Chemistry, Statistical Thermodynamics, Electrochemistry, Material Science and Chemical Kinetics

AWARDS

2006-2007

2005

 Junior Research Fellow (JRF-NET), CSIR INDIA National Eligibility Test (NET), CSIR INDIA National Eligibility Test (NET), CSIR INDIA Graduate Aptitude Test for Engineering (GATE), HRDG INDIA 	2007 June 2005 Dec 2005 March 2006		
		ADEMIC EXPERIENCE	
		Govt Degree College for Women Anantnag	
		Assistant Professor- Physical Chemistry UG Classes, Lab UG classes.	2010 to 2017
Govt. Degree College Boys, Pulwama.	2017 till date		
Deptt. of Chemistry, University of Kashmir, Hazratbal, Srinagar- 190006, J&K, India			
Junior Research Fellow – "Physical Chemistry."	2008-201		
Taught courses on Electrochemistry, Bio-Physical and Material Science			
Lab Course (CHM-306L and CHM-418L)			
Contractual Lecturer – "Chemistry."	2007-200		
Taught courses of Electrochemistry, Bio-Physical and Material Science			
Lab Course (CHM-306L and CHM-418L)			

PUBLICATIONS

- Interaction of Hydroxypropylcellulose with Hexadecyldimethylbenzylammonium Chloride in Absence and Presence of Hydrophobic Salts, Mohammad Amin Mir, Aijaz Ahmad Dar, Adil Amin, Ghulam Mohammad Rather. Journal of Molecular Liquids 150 (2009) 86–91.
- Mixed Micellization and Interfacial Properties of Tween Surfactants with Cetylpyridinium chloride: A Tensiometric Study. Nuzhat Rehman, Mohammad Amin Mir, Musarat Jan, Adil Amin, Aijaz Ahmad Dar, Ghulam Mohammad Rather. Journal of Surfactants and Detergents. (2009) 12:295–304.
- 3. Effect of Sodium Alkanaotes on Micellization of Dodecylbenzyldimethylammonium Chloride in Aqueous Medium. Adil Amin, A. A Dar, M. A. Bhat, M. Jan, N. Rehman, Mohammad Amin Mir and G. M. Rather. J. Disp. Sci. and Tech. (Taylor and Francis), 29:1-9, 2008
- Effect of Spacer Length on the Micellization and Interfacial Behavior of Mixed Alkanediyl- ,ω-bis(dimethylcetylammonium bromide) Gemini Homologues. Kabir-ud-Din, Mohammad Shafi Sheikh, Mohammad Amin Mir, Aijaz Ahmad Dar. Journal of Colloid and Interface Science, 2010, 344, 75–80.
- 5. Gemini Surfactant assisted refolding of BSA via artificial chaperone protocol. Nuzhat Gull, **Mohammad Amin Mir**, Javed Masood Khan, Aijaz Ahmad Dar,

Rizwan Hassan Khan and Gh. Mohd Rather Journal of Colloid and Interface Science 364 (2011) 157–162.

- Interaction of Bovine Serum Albumin with Cationic Single Chain/Non-ionic and Cationic Gemini/Nonionic Binary Surfactant Mixtures. Mohammad Amin Mir, Nuzhat Gull, Javeed Masood Khan, Aijaz Ahmad Dar, Rizwan Hasan Khan, Ghulam Mohammad Rather. J Phy. Chem. B 2010, 114, 3197–3204.
- Effect of Spacer Length of Alkanediyl- ,ω-bis(dimethylcetylammonium bromide) Gemini Homologues on the Interfacial and Physicochemical Properties of BSA. Mohammad Amin Mir, Javeed Masood Khan, Aijaz Ahmad Dar, Rizwan Hasan Khan, Ghulam Mohammad Rather. Colloids and Surfaces B: Biointerfaces 2010, 77, 54-59.
- 8. Triphenyls: Solubilization and Kinetics in Single and Binary Surfactant Systems Mohammad Amin Mir, Aijaz Ahmad Dar, Ghulam Mohammad Rather. Journal of Colloid and Interface Science 364 (2011) 163–169.
- 9. Impact of self-assemblies of surfactants on solubilization and antioxidant activity of Rutin. Mohammad Amin Mir, Oyais Ahmad Chat, Aijaz Ahmad Dar, Ghulam Mohammad Rather. Journal of Colloid and Interface Science 355 (2011) 140–149.
- Interaction of Cetyltrimethylammonium Bromide and its Gemini Homologue Bis(cetyldimethylammonium)butane Dibromide with Xanthine Oxidase. Mohammad Amin Mir, Javed Masood Khan, Rizwan Hasan Khan, Ghulam Mohammad Rather, Aijaz Ahmad Dar. J Phy. Chem. B 2012, 116, 5711 – 5718.
- 11. Effect of Cetyltrimethylammonium Bromide and its Gemini Homologue Bis(cetyldimethylammonium)Butane Dibromide on Activity of Xanthine Oxidase. Mohammad Amin Mir. Journal of Dispersion Science and Technology 2017, <u>https://doi.org/10.1080/01932691.2017.1383269</u>
- Structural changes in trypsin induced by the bile salts: An effect of amphiphile hydrophobicity. Muzaffar Hussain Najar, Oyais Ahmad Chat, Parvaiz Ahmad Bhat, Mohammad Amin Mir, Ghulam Mohamamd Rather, Aijaz Ahmad Dar. Int J Biol Macromol. 2021 Jun 1;180:121-128. doi: 10.1016/j.ijbiomac.2021.03.041. Epub 2021 Mar 11.
- 13. Structural and activity changes of xanthine oxidase induced by cetyltrimethylammonium bromide and its Gemini homologue bis(cetyldimethylammonium)hexane dibromide: a comparative study.

Mohammad Amin Mir. Journal of Dispersion Science and Technology, 2021. https://doi.org/10.1080/01932691.2021.1931288

BOOK

• TITLE: SURFACTANT-POLYMER INTERACTIONS

Sub Title: Interaction between Hydroxypropylcellulose and Hexadecylbenzyldimethylammonium chloride Lambert Academic Publication. ISBN NO. 78-3-330-04778-5

ORIENTATION/REFRESHER COURSES ATTENDED

- 4 Week Orientation Course organized by Human Resource Development Centre, Jaaharlal Nehru University, Delhi, from 5th March 2012 to 30th March 2012
- 3 Week Refresher Course organized by Human Resource Development Centre, Himachal Pradesh University, Shimla-5, from 23rd November 2015 to 12th December 2015.
- 4 Week Refresher Course on Contemporary Studies organized by Human Resource Development Centre, Jaaharlal Nehru University, Delhi, from 31st December 2018 to 25th January 2019
- Online Refresher Course in Chemistry for Higher Education Faculty (SWAYAM) May 2019 Offered by Sri Guru Tegh Bahadur Khalsa College, Delhi
- National Level One Week Online Faculty Development Programme on "MOODLE: Learning Management System" organized by Central Library, Govt. Degree College, Tangmarg in association with Spoken Tutorial Project, IIT Bombay from 20th June to 24th June 2020
- One Week National Faculty Development Program on Developing Multimedia enriched Powerful Presentations from 11 to 16 August 2020 organized by Guru Angad Dev Teaching Learning Centre SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of MHRD.
- Two Weeks Faculty Development Programme on "ADVANCED CONCEPTS FOR DEVELOPING MOOCS" from July 02 - July 17, 2020 organized by Teaching Learning Centre Ramanujan College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of MHRD.
- One Week Online Faculty Development Programme on "ICT ENHANCED TEACHING LEARNING AND CREATING MOOCS" August 18 - August 25, 2020 organized by Ramanujan College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of MHRD.
- 2-Week Faculty Development Programme on "MANAGING ONLINE CLASSES AND CO-CREATING MOOCS 3.0" from 11 - 25 May, 2021 Teaching Learning Centre Ramanujan College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of MHRD.

- **2-Week Faculty Development Programme on "MANAGING ONLINE CLASSES AND CO-CREATING MOOCS 5.0"** from July 25 August 10,2020 Teaching Learning Centre Ramanujan College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of MHRD.
- Online Refresher Course in Chemistry for Higher Education Faculty (SWAYAM) May 2021 Offered by Sri Guru Tegh Bahadur Khalsa College, Delhi
- 1-Week Faculty Development Programme on "Psychological Skills for Effective Teaching and Learning" from 6 – 12 January, 2022 Teaching Learning Centre Ramanujan College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of MHRD.
- 2-Week Faculty Development Programme on "Advanced Research Methodology" from 22 May – 5 June 2023 Teaching Learning Centre Ramanujan College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of MHRD

CONFERENCES, WORKSHOPS AND SEMINARS ATTENDED

- **Introduction to Robotics** organized by Department of Computer Science and Engineering, Indian Institute of technology, Powai, Mumbai-4000 076, on 25th and 26th April, 2016 at Islamic University of Science and Technology, Jammu and Kashmir.
- **Training Programme** at Rajkot Centre (INDGJRJ-1) of Station e Language Lab from April 30 to May 2, 2013
- 14th National Conference on surfactants, Emulsions and Biocolloids (NATCOSEB-XIV) organized by Department of , University of Kashmir, Hazratbal, Srinagar-190006, J&K on 28-30 July 2009.
- Two Day Seminar on Dynamics of Science Education, Current Problems and Future Challenges, held at Department of Chemistry, University of Kashmir, Hazratbal, Srinagar-190006, J&K on 23rd – 24th October, 2007
- Nanotechnology: Present and Future Horizons, organized by Department of Chemistry National Institute of technology, Srinagar, Kashmir on 8th September, 2007
- **National Workshop on Nuclear Magnetic Resonance** 1st- 5th August, 2006 organized by Department of Chemistry, University of Kashmir, Srinagar.
- One Day National Webinar entitled "ICT Enabled Science Education in India" jointly organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of MHRD and Telangana Academy of Sciences, Hyderabad held on 10th July 2021.
- One Day National Webinar entitled **"Implementation of Academic Credits"** jointly organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on

Teachers and Teaching (PMMMNMTT) of MHRD and Telangana Academy of Sciences, Hyderabad held on 28 June 2020.

• One Day National Webinar entitled **"The Importance of Data Visualization"** jointly organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of MHRD and Telangana Academy of Sciences, Hyderabad held on 10th August 2021.

RESIDENTIAL ADDRESS

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