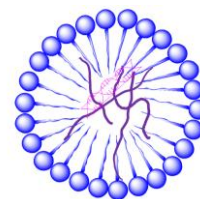
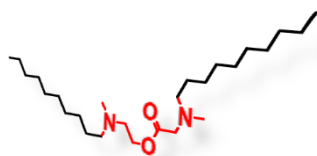


Biodata



Dr. Imtiyaz Ahmad Bhat
(Science simply unfolds grey matter, explore and love it)

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Cluster University, Srinagar
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Email: bhattimtiyaz@gmail.com (Primary)
Birth Place: Kashmir, India

➤ Teaching/Research Experience

Postdoctoral Research Experience	2 Years
Teaching experience+ Research	7 Years
Citations	697
h-index	17
i-10 index	27
Total Research Articles	33
Research Conferences	07

➤ Current Research Interests

Surfactant-additive Systems, Soft-Matter Chemistry, Computational Chemistry, Fluorescence, Stimuli Responsive materials, Hydrogels

➤ Academic Qualifications

Class	Year	Institution/University	Division/Grade
10 th	2002	JKBOSE	1 st
12 th	2004	JKBOSE	1 st
B.SC	2005-2008	University of Kashmir	1 st
M.SC	2008-2010	Jamia Millia Islamia, New Delhi	1 st
CSIR-NET	2011	CSIR-UGC	AIR-28
UGC-BSR JRF	2013	UGC	Awarded
UGC-BSR SRF	2014-2016	UGC	Awarded
Ph.D.	2016	Aligarh Muslim University	Awarded
Post-doctorate (N-PDF)	2016-2019	Indian Institute of Science Education and Research Pune (IISER PUNE)	Completed
Assistant Professor (Tenure)	20-03-2020-24-05-2025	University of Kashmir	
Assistant Professor	26-05-2025- Till date	Cluster University. Srinagar	

Ph.D. Thesis Title

Studies on Amphiphile-Additive Systems

Advisor

Prof. Mohd. Akram

➤ Awards/Achievements

	Remarks
1. Qualified UGC-CSIR National Eligibility Test (NET) in June-2011 with ALL India Rank-28.	In India NET is Conducted at National Level Jointly by University Grants Commission (UGC) and Centre for Scientific and Industrial Research (CSIR), Govt. of India.
2. Awarded UGC-BSR JRF/SRF in 2013/2015.	UGC-BSR JRF is the Prestigious Fellowship Awarded to meritorious students by the University Grants Commission (UGC), Govt. of India.
3. Best Presentation Award.	At 17th National Conference on Surfactants, Emulsions and Bio-colloids, School of Studies in Chemistry, Pt. Ravi Shankar Shukla University, Raipur, November 4-6, 2015, PP-3.
4. Best Presentation Award.	At National Conference on Chemical Sciences: An Interdisciplinary Approach, Pune University, January 18-20, 2018, PP-49, p.17
5. Awarded Prestigious DST-SERB NPDF in 2017.	The SERB-National Post-Doctoral Fellowship (N-PDF) is Aimed to Identify Motivated Young Researchers and Provide them Support for Doing Research in Frontier Areas of Science and Engineering. The Fellowship Provides a Platform to Develop as Independent Scientists

➤ Administrative Responsibilities and Membership

1. President and Convener of Institutions Innovative Counsel (IIC) at Cluster University of Srinagar
2. Member of PG Board of Studies
3. Member of Recruitment Cell
4. Nodal Officer e-Samadhan UGC grievances
5. Member of Screening Committee for the Appointment of Academic Arrangements
6. Life member of CRSI (Chemical Research Society of India)
7. Life member of Indian Society for Surface Science and Technology (ISSST)

➤ Expertise in Techniques

Tensiometry, Fluorescence (Extrinsic, Intrinsic, Synchronous Time Resolved), UV-vis Spectroscopy, Dynamic Light Scattering (DLS), Circular Dichroism (CD), pH metry, Fourier Transform Infrared Spectroscopy (FT-IR), Nuclear Magnetic Resonance (NMR), Isothermal Titration Calorimetry (ITC), Cyclic Voltametry (CV), Scanning Electron Microscopy (SEM), Transmission Electron Microscopy (TEM), Atomic Force Microscopy (AFM) and Molecular Docking Simulations.

➤ Computational Software Knowledge

Expertise in Handling Origin Pro-8, Chimera-1.9, Hex 6.1, Avagadro, PyMol, Das-6, Chem. Sketch and Chem. Draw. Besides these software's I have Good Hand in Microsoft Applications (Excel, Power Point, Word etc.).

➤ Independent Major Research Projects Handled as a Principal Investigator

Title	Funding Agency	Cost
1. Novel Gemini-Bile Salt Mixed Micelles as Unfolding/Stabilization Agents of Model Proteins: Implications in Industrial, Biomedical and Cosmetic Domains	Science and Engineering Research Board (SERB), India	19,20,000/Rs-

➤ Research Publications

1. Effect of *in situ* mixed micellization of ester-functionalized gemini surfactant at different pHs on solubilization and co-solubilization of various polycyclic aromatic hydrocarbons of varying hydrophobicities
Showkat Rashid, Umar Nabi Tak, Mohd Sajid Lone, Oyais Ahmad Chat, Parvaiz Ahmad Bhat, Firdaus Ahmad Ahanger, **Imtiyaz Ahmad Bhat**, Aijaz Ahmad Dar
Environ Pol. 336 (2023) 122489 **Impact Factor = 7.3**
2. Micellization and gelation characteristics of Pluronic P123 and single ester-bonded cleavable cationic gemini surfactant: A potential system for solubilization and release of ibuprofen
Hina Kouser Qadri, Arjumund Shaheen, Showkat Rashid, **Imtiyaz Ahmad Bhat**, Ghulam Mohammad Rather, Aijaz Ahmad Dar
J.Mol. Liq., 366 (2022) 120311 **Impact Factor = 5.2**
3. Exclusive behaviour of asymmetric zwitterionic gemini surfactants towards lysozyme
Imtiyaz Ahmad Bhat*, Tasneem Kausar, Aijaz Ahmad Dar, Shahid M Nayeem, Mohd Akram
J. Mol. Liq., 336 (2021) 116583 **Impact Factor = 5.2**
4. Micelles of cleavable gemini surfactant induce fluorescence switching in novel probe: Industrial insight
Imtiyaz Ahmad Bhat*, Bibhisan Roy, Kabir-ud-Din
J. Indust. Eng. Chem. 25 (2019) 60-64 **Impact Factor = 6.0**
5. Conformational and solution dynamics of haemoglobin (Hb) in presence of a cleavable gemini surfactant: Insights from spectroscopy, atomic force microscopy, molecular docking and density functional theory
Imtiyaz Ahmad Bhat*, Bibhisan Roy, Partha Hazra, Kabir-ud-Din
J. Colloid Interf. Sci. 538 (2019) 489-498 **Impact Factor = 9.7**
6. Probing interaction of bovine serum albumin (BSA) with the biodegradable version of cationic gemini surfactants
Mohd Akram, Farah Ansari, **Imtiyaz Ahmad Bhat**, Kabir-ud-Din
J. Mol. Liq. 276 (2019) 519-528 **Impact Factor = 5.2**
7. Synthesis and Biophysical Analysis of a Novel Gemini Surfactant with Lysozyme: Industrial Perspective
Imtiyaz Ahmad Bhat*, Bibhisan Roy, Kabir-ud-Din
J. Indust. Eng. Chem. 63 (2018) 348-358 **Impact Factor = 6.0**
8. Solution Behaviour of Lysozyme in the Presence of Novel Biodegradable Gemini Surfactants
Imtiyaz Ahmad Bhat*, Bibhisan Roy, Mohd Akram, Kabir-ud-Din
Int. J. Biol. Macromol.109 (2018) 301-307 **Impact Factor = 8.5**
9. Interaction of a Novel Twin-Tailed Oxy-Diester Functionalized Surfactant with Lysozyme: Spectroscopic and Computational Perspective
Imtiyaz Ahmad Bhat*, Waseem Feroze Bhat, Mohd Akram, Kabir-ud-Din
Int. J. Biol. Macromol. 109 (2018)1006-1011 **Impact Factor = 8.5**

10. Exploration of ibuprofen binding with micellar assemblies of the efficiently engineered gemini surfactants: Insights from spectroscopic and voltammetric studies
Mohd. Akram, Sana Anwar, Imtiaz Ahmad Bhat, Kabir-ud-Din
Colloids and Surfaces A 555 (2018) 121–132 **Impact Factor = 5.4**
11. Unravelling the interaction of hemoglobin with a biocompatible and cleavable oxy-diester-functionalized gemini surfactant
Mohd. Akram, Sana Anwar, **Imtiaz Ahmad Bhat**, Kabir-ud-Din
Int. J. Biol. Macromol. 96 (2017) 474–484 **Impact Factor = 8.5**
12. Multifaceted Analysis of the Non-Covalent Interactions of Myoglobin with Finely-Tuned Gemini Surfactants: A Comparative Study
Mohd. Akram, Sana Anwar, **Imtiaz Ahmad Bhat**, Kabir-ud-Din
Industrial and Engineering Research 56(2017)13663-13676 **Impact Factor = 3.9**
13. Analyzing the Interaction Between Porcine Serum albumin (PSA) and Ester-Functionalized Cationic Gemini Surfactants
Mohd Akram, Farah Ansari, **Imtiaz Ahmad Bhat**, Sumit Kumar Chaturvedi, Rizwan Hasan Khan
Process Biochem 63 (2017) 145-153 **Impact Factor = 4.0**
14. Anti-Fibrillogenic and Fibril Destabilizing Effects of Metal Ions on Cystatin Fibrils
Waseem Ferooze Bhat, Sheraz Ahmad Bhat, Imtiaz Ahmad Bhat, Aamir Sohail, Aaliya Shah, Bilqees Bano
Process Biochem. 57 (2017) 105-116 **Impact Factor = 4.0**
15. An Ester-Functionalized Cationic Gemini Surfactant Mediated Structural Transitions of Porcine Serum Albumin (PSA) via Binding interaction
Mohd Akram, Farah Ansari, Imtiaz Ahmad Bhat, Sumit Kumar Chaturvedi, Rizwan Hasan Khan
Colloids and Surfaces A: 516 (2017) 245-253 **Impact Factor = 5.4**
16. Biophysical Perspective of the Binding of Ester-Functionalized Gemini Surfactants with Catalase.
Mohd. Akram, **Imtiaz Ahmad Bhat**, Sana Anwar, Ajaz Ahmad and Kabir-ud-Din
Int.J.Biol Macromol.88 (2016) 614-623. **Impact actor = 8.5**
17. Solution Behaviour of an Ester-Functionalized Gemini Surfactant, Ethane-1, 2-diyl bis (N, N-dimethyl-N-dodecylammoniumacetoxo) Dichloride in the Presence of Inorganic and Organic salts
Mohd. Akram, Imtiaz Ahmad Bhat, and Kabir-ud-Din
J. Indust. Eng. Chem. 40 (2016) 161-167 **Impact Factor = 6.0**
18. Effect of Salt Counterions on the Physicochemical Characteristics of Novel Green Surfactant, Ethane-1,2-diylbis(N,N-dimethyl-N- tetradecylammoniumacetoxo) Dichloride
Mohd Akram, **Imtiaz Ahmad Bhat**, Kabir-ud-Din
Colloids Surf. A, 493(2016) 32-40. **Impact Factor = 5.4**
19. Binding of a Novel 12-E2-12 Gemini Surfactant to Xanthine Oxidase: Analysis Involving Tensiometric, Spectroscopic, Microscopic and Molecular Docking Approach.
Mohd Akram, **Imtiaz Ahmad Bhat**, Kabir-ud-Din
J. Lumin., 170 (2016) 56-63. **Impact Factor = 3.6**
20. Biophysical Analysis of a Novel Oxy-Diester Hybrid Cationic Gemini Surfactants (Cm-E2O-Cm) with Xanthine Oxidase.
Mohd. Akram, **Imtiaz Ahmad Bhat**, Sana Anwar, and Kabir-ud-Din
Process Biochem. 9 (2016) 1212- 1221. **Impact Factor = 4.0**
21. In Vitro Disintegration of Goat Brain Cystatin Fibrils Using Conventional and Gemini Surfactants: Putative Therapeutic Intervention in Amyloidosis
Waseem Ferooze Bhat, **Imtiaz Ahmad Bhat**, Sheraz Ahmad Bhat, Bilqees Bano
Int. J. Biol. Macromol. 93 (2016) 493-500 **Impact Factor = 8.5**
22. In Vitro Evaluation of the Non-Covalent Interactions of Hemoglobin with Distinctively Modified Gemini Surfactants: Effect of Structural Variation
Mohd Akram, Sana Anwar, **Imtiaz Ahmad Bhat**
Colloids and Surfaces A: 525 (2016) 145-157 **Impact Factor = 5.4**
23. Bio-physicochemical analysis of ethylene oxide linked diester-functionalized green cationic gemini surfactants
Mohd. Akram, Sana Anwar, Farah Ansari, Imtiaz Ahmad Bhat, Kabir-ud-Din
RSC Adv. 6(2016) 21697–21705 **Impact Factor = 4.6**
24. Anti-Fibrillation Propensity of a Flavonoid Baicalein Against the Fibrils of Hen Egg White Lysozyme: Potential Therapeutics for Lysozyme Amyloidosis
Naveed Ahmad Fazili, **Imtiaz Ahmad Bhat**, Waseem Ferooze Bhat, Aabgeena Naeem
J. Biomol. Struct. Dynamics 34(2106) 2102-2114 **Impact Factor = 2.7**
25. Molecular Interaction of an Ester-Functionalized Biodegradable Gemini Surfactant with Lysozyme: Insights from Spectroscopy, Calorimetry and Molecular Docking.
Mohd Akram, **Imtiaz Ahmad Bhat**, Sana Anwar, Kabir-ud-Din
J. Mol. Liq., 212 (2015) 641-649. **Impact Factor = 5.2**
26. Conformational Alterations Induced by Novel Green 16-E2-16 Gemini Surfactant in Xanthine Oxidase: Biophysical Insights from Tensiometry, Spectroscopy, Microscopy and Molecular Modeling.
Mohd Akram, **Imtiaz Ahmad Bhat**, Waseem Ferooze Bhat, Kabir-ud-Din
Spectrochim. Acta Part A, 150 (2015) 440-450. **Impact Factor = 4.6**
27. Interaction of a Green Ester-Bonded Gemini Surfactant with Xanthine Oxidase: Biophysical Perspective
Mohd Akram, **Imtiaz Ahmad Bhat**, Kabir-ud-Din
Int. J. Biol. Macromol., 78(2015) 62-67. **Impact Factor = 8.5**
28. Self-Aggregation of Surfactant Ethane-1,2-diyl bis (N,N-dimethyl-N-hexadecyl ammoniumacetoxo) Dichloride: Tensiometric, Microscopic, and Spectroscopic Studies.

- Mohd Akram, **Imtiyaz Ahmad Bhat**, Kabir-ud-Din
J. Phys. Chem. B, 119 (2015) 3499-3509. **Impact Factor = 2.9**
29. New Insights into Binding Interaction of Novel Ester-Functionalized m-E2-m Gemini Surfactants with Lysozyme: A Detailed Multidimensional Study.
Mohd Akram, **Imtiyaz Ahmad Bhat**, Kabir-ud-Din
RSC Adv., 5 (2015) 102780-102794. **Impact Factor =4.6**
30. Micellization Behaviour of m-E2-m Biodegradable Gemini Surfactants in Presence of Sodium Alkanoates (Sodium Propionate, Sodium Hexanoate, Sodium Decanoate).
Kabir-ud-Din, **Imtiyaz Ahmad Bhat** and Mohammad Akram
Tenside Surf. Det. 52 (2015) 1-15 **Impact Factor = 1.2**
31. Physicochemical Investigation of Novel Biodegradable Dicationic Ester-Bonded m-E2-m Gemini Surfactants with Bile salts: Insights from Surface Tension, Dynamic Light Scattering and Fluorescence
Mohd Akram, **Imtiyaz Ahmad Bhat**, Zahid Yaseen and Kabir-ud-Din
Colloids Surf. A, 444 (2014) 209-216. **Impact Factor = 5.4**
32. Detergent Induces the Formation of IgG Aggregates: A Multi-methodological Approach.
Samreen Amani , Faisal Nasim, Taqi Ahmed Khan, Naveed Ahmad Fazili , Mohammad Furkan, Imtiyaz Ahmad Bhat, Javed Masood Khan, Rizwan Hasan Khan , Aabgeena Naeem
Spectrochim. Acta Part A, 120 (2014)151-160. **Impact Factor = 4.6**
33. Molecular Interactions of Cationic Gemini Surfactants (m-s-m) with an Environmental Friendly Nonionic Sugar- Based Surfactant (b-C12G): Interfacial, Micellar and Aggregation behavior
Jeenat Aslam, Umme Salma Siddiqui, **Imtiyaz Ahmad Bhat**, Kabir-ud-Din
J. Indust. Eng. Chem. 20 (2014) 3841-3850. **Impact Factor = 6.670**

➤ Papers/Abstracts Accepted in Conferences

1. Modulation of Physicochemical Characteristics of Bile Salts by Gemini Molecules Imtiyaz Ahmad Bhat Emerging Trends in Biophysics 42nd Annual Meeting of the Indian Biophysical Society (IBS-2018)), March 9-11, 2018, IISER Pune, PP-75
2. Conformational Alterations of Lysozyme in Presence of an Ester Functionalized Surfactant Imtiyaz Ahmad Bhat National conference on chemical sciences: An interdisciplinary approach, Pune University, January 18- 20, 2018, PP-49, p.17.
3. Self-Aggregation of Cleavable Gemini Surfactant in the Presence of Salts Imtiyaz Ahmad Bhat 22 th CRSI National Symposium in Chemistry, Pt. Ravi Shankar Shukla University, Raipur, February 2-4, 2018, PP-04, p.63.
4. Interaction of Novel Twin Tailed Oxy-Diester Functionalized Surfactant with Lysozyme: Multi Technique Approach Imtiyaz Ahmad Bhat 21 th CRSI National Symposium in Chemistry, CSIR-Indian Institute of Chemical Technology, Hyderabad, July 14-16, 2017, PP-193, p.264
5. Spectroscopic, Calorimetric and Molecular Docking Studies on the Interaction of a Biodegradable Gemini Surfactant with Hen Egg White Lysozyme (HEWL). Imtiyaz Ahmad Bhat, Mohd. Akram and Kabir-ud-Din 18 th CRSI National Symposium in Chemistry, Panjab University, Chandigarh, February 5-7, 2016, PP-40, p.40.
6. Interaction of a Ester-bonded Green Surfactant with Lysozyme: A Multidimensional Study. Imtiyaz Ahmad Bhat, Mohd. Akram and Kabir-ud-Din 17 th National Conference on Surfactants, Emulsions and Biocolloids, School of Studies in Chemistry, Pt. Ravi Shankar Shukla University, Raipur, November 4-6, 2015, PP-3, p. 68.
7. Micellization Behaviour of a Biodegradable Gemini Surfactant (16-E2-16) in Presence of Various Inorganic and Organic Salts. Imtiyaz Ahmad Bhat, Mohd. Akram and Kabir-ud-Din National Symposium on Chemistry (NSC-2014), Department of Chemistry, Aligarh Muslim University, Aligarh, March 22, 2014, PP-104, p.90.

➤ Referees

Available on Request