

CURRICULUM VITAE

Dr. Javed Masood Khan (Ph.D.)

Post-Doctoral Research Fellow

Lab No. 3L5

Indian Institute of Science Education and Research (IISER-M)

Mohali, Punjab 140308, India

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Educational Qualification:

- **Post-doctoral Fellow** at Indian Institute of Science Education and Research Mohali (IISER-M), Punjab 140308, India. (From 1 January 2014 to till date).
- **Ph.D. (Biotechnology)** from Aligarh Muslim University in 2013.
- **M.Sc. (Biochemistry)** from Hamdard University, New Delhi, in 2006.
- **B.Sc. Life Science** from Lucknow University in 2003

Current Employment:

Indian Institute of Science Education and Research, India

Designation : Post Doctoral Fellow

Dated : January 2014-to till date

Teaching Experience:

One and Half years at Indian Institute of Science Education and Research (IISER), Mohali, **INDIA**

Awards:

- Post-doctoral Fellow at at Indian Institute of Science Education and Research Mohali (IISER-M), INDIA in year 2014..
- Awarded three years Dr. D.S. Kothari Postdoctoral Fellowship in 2013, India
- Received a travel grant form Department of Science and Technology (DST) New Delhi for poster presentation in International Conference entitled “ESF-EMBO Conference on molecular Perspectives on Protein-Protein Interactions” 25th-30th May 2013 Polonia Castle in Pultusk, Poland.
- Received a travel grant for poster presentation from *neutron scattering society of America* (NSSA) “1st Asia-Oceania Conference on Neutron Scattering” 20th -24th November 2011. EPOCHAL TSUKUBA Tsukuba International Congress Center TSUKUBA, Japan.

- Senior research fellowship (CSIR-SRF) from council of Scientific and Industrial Research (2011 to 2012).
- Selected as UGC-BSR junior research fellow in 2011.
- Selected as a junior research fellow for **DBT** funded project entitled “Characterization of molten globule in banana lectin”. (2007 to 2010).

Memberships:

- Life time member of Indian Biophysical Society

Reviewer of the International Journals:

- PLoS One

Total Number of Publications: 26

List of Publications:

Publications from the Ph.D. thesis work

1. **Khan JM**, Chaturvedi SK *et.al.* [Protonation favors aggregation of lysozyme with SDS.](#) *Soft Matter*, 2014,10(15):2591-9. **Impact Factor 4.151.**
2. **Khan JM**, Rehman SA *et.al.* [Hydrophobicity alone cannot trigger aggregation in protonated mammalian serum albumins.](#) *Physical Chemistry Chemical Physics*, 2014, 16(11): 5150-61. **Impact Factor 4.198.**
3. **Khan JM**, Chaturvedi SK *et.al.* [Elucidating the protective effect of SDS on serum albumins against temperature and urea at low pH.](#) *Biochemical and Biophysical Research Communications*, 2013, 441: 681–688. **Impact Factor 2.474**
4. **Khan JM**, Qadeer A *et.al.* [Monomeric banana lectin at acidic pH overrules conformational stability of its native dimeric form.](#) *PloS One*, 2013, 8: e62428. **Impact Factor 3.730**
5. **Khan JM**, Qadeer A *et.al.* [SDS Can Be Utilized as an Amyloid Inducer: A Case Study on Diverse Proteins.](#) *PloS One*, 2012, 7: e29694. **Impact Factor 3.730.**

Other Relevant Publications:

1. Chaturvedi SK, Ahmad E, **Khan JM** *et.al.* [Elucidating the Interaction of Limonene with Bovine Serum Albumin: A Multi-technique Approach.](#) *Molecular BioSystems*, 2015, 11(1): 307-16. **Impact Factor. 3.183.**

2. Gull N, **Khan JM** *et.al.* Secondary structural changes in Guanidinium hydrochloride denatured Mammalian serum albumins and protective effect of Small amounts of Cationic Gemini Surfactant Pentanediyl-<alpha>, <omega>-bis(cetyldimethylammonium Bromide) and methyl-<beta>-cyclodextrin: A Spectroscopic Study. *Journal of Colloid and Interface Science*, 2015. 1;439:170-6. **Impact Factor 3.583.**
3. Rub MA; **Khan JM** *et.al.* [Study on the interaction between amphiphilic drug and bovine serum albumin: A thermodynamic and spectroscopic description.](#) *Journal of Luminescence*, 2014, 155:39–462014. **Impact Factor 2.23.**
4. Rub MA; Asiri AM; **Khan JM** *et.al.* [A study of interaction between antidepressant drug nortriptyline hydrochloride with gelatin.](#) *Journal of the Taiwan Institute of Chemical Engineers*, 2014. **Impact Factor 2.45**
5. Amani S; Naseem F; Khan TQ; Furkan M; **Khan JM** *et.al.* [Detergents in the formation of IGg aggregates: A multimethodological approach.](#) *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 2014, 120: 151–160. **Impact factor 2.12.**
6. Rub MA; Asiri AM; **Khan JM** *et.al.* [Interaction of gelatin with promethazine hydrochloride: Conductimetry, tensiometry and circular dichroism studies.](#) *Journal of Molecular Structure*, 2013, 1050: 35–42. **Impact Factor 1.59.**
7. Iram A, Alam T, **Khan JM** *et.al.* [Molten globule of hemoglobin proceeds into aggregates and advanced glycated end products.](#) *PLoS One*, 2013, 8(8):e72075. **Impact Factor 3.730.**
8. Qadeer A; Masihuzzaman; Khan MW; **Khan JM** *et.al.* [Concentration-dependent antagonistic persuasion of SDS and naphthalene derivatives on the fibrillation of stem bromelain.](#) *Arch Biochem Biophys.* 2013, 540: 101–116. **Impact Factor 3.252.**
9. Rub MA; **Khan JM** *et.al.* [Conformational change of serum albumin upon complexation with amphiphilic drug imipramine hydrochloride.](#) *Journal of Proteins and Proteomics*, 2012, 3: 207-215. **Impact Factor 0.5.**
10. Qadeer A; Rabbani G; Zaidi N; Ahmad E; **Khan JM** *et.al.* [1-Anilino-8-Naphthalene Sulfonate \(ANS\) Is Not a Desirable Probe for Determining the Molten Globule State of Chymopapain.](#) *PLoS One*. 2012, 7: e50633. **Impact Factor 3.730.**

11. Khan AB; **Khan JM** *et.al.* [Interaction of amphiphilic drugs with human and bovine serum albumins.](#) *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*. 2012, 7: 119-124. **Impact factor 2.12.**
12. Mir MA, **Khan JM** *et.al.* [Interaction of cetyltrimethylammonium Bromide and Its Gemini Homologue Bis\(cetyldimethylammonium\)butane Dibromide with Xanthine Oxidase.](#) *Journal of Physical Chemistry B*, 2012, 116: 5711–5718. **Impact Factor 3.377.**
13. Gull N; Mir MA; **Khan JM** *et.al.* [Refolding of bovine serum albumin via artificial chaperone protocol using gemini surfactants.](#) *Journal of Colloid and Interface Science*, 2011, 364: 157-62. **Impact Factor 3.583.**
14. Khan AB; **Khan JM** *et.al.* [Spectroscopic approach of the interaction study of amphiphilic drugs with the serum albumins.](#) *Colloids and Surfaces B: Biointerfaces*, 2011, 87: 447-53. **Impact Factor 3.583.**
15. Ali MS; Anjum K; **Khan JM** *et.al.* [Complexation behavior of gelatin with amphiphilic drug imipramine hydrochloride as studied by conductimetry, surface tensiometry and circular dichroism studies.](#) *Colloids and Surfaces B: Biointerfaces*, 2011, 82: 258-62. **Impact Factor 4.226.**
16. Ali MS, **Khan JM** *et.al.* [Multi-technique approach on the effect of surfactant concentrations on the thermal unfolding of rabbit serum albumin: Formation and solubilization of the protein aggregates.](#) *Colloids and Surfaces B: Biointerfaces*, 2010, 80: 169–175. **Impact Factor 4.226.**
17. Ali MS, Gull N, **Khan JM** *et.al.* [Unfolding of rabbit serum albumin by cationic surfactants: surface tensiometry, small-angle neutron scattering, intrinsic fluorescence, resonance Rayleigh scattering and circular dichroism studies.](#) *Journal of Colloid and Interface Science*, 2010, 352(2):436-43. **Impact Factor 3.583.**
18. Mir MA, **Khan JM** *et.al.* [Effect of spacer length of alkanediyl- \$\alpha\$, \$\omega\$ -bis \(dimethylcetylammmonium bromide\) gemini homologues on the interfacial and physicochemical properties of BSA.](#) *Colloids and Surfaces B: Biointerfaces*, 2010, 77: 54–59. **Impact Factor 4.226.**

19. Mir MA, Gull N, **Khan JM** *et.al.* [Interaction of bovine serum albumin with cationic single chain + nonionic and cationic + nonionic binary surfactants mixtures.](#) *Journal of Physical Chemistry B*, 2010, 114: 3197-3204. **Impact Factor 3.377.**
20. Sen P; Fatima S; **Khan JM** *et.al.* [How methyl cyanide induces aggregation in all-alpha proteins: A case study in four albumins.](#) *International Journal of Biological Macromolecule*, 2009, 44: 163-169. **Impact Factor 3.227.**
21. Ahmad E; Rahman SK; **Khan JM** *et.al.* [Phytolacca americana lectin \(Pa-2; pokeweed mitogen\): an intrinsically unordered protein and its conversion into partial order at low pH.](#) *Bioscience Reports*, 2009, 30: 125-134. **Impact Factor 1.177.**

Papers Under Reviews:

1. **Khan JM**, Sharma P, Arrora K and Guptasarma P. [SDS accelerating amyloid fibril formation in Hyperthermophilic Proteins.](#) *Biochemistry*, December 2014.
2. **Khan JM**, Kumar S and Khan RH. [Comperative binding mechanism of SDS and CTAB on ConA and Succnyl ConA plant proteins.](#) *Plos One*, October 2014.

Conferences, Seminars and Workshops:

1. Invited talk in “**Bio-World 2014: Protein Structure and Function**” 12th-14th December 2014 Kusuma School of Biological Sciences, Indian Institute of Technology Delhi India.
2. Participated in international conference for poster presentation entitled “**ESF-EMBO Conference on Molecular Perspectives on Protein-Protein Interactions**” 25th-30th May 2013 Polonia Castle in Pultusk, Poland.
3. Participated in international conference for poster presentation “**International Symposium on Protein Folding and Dynamics**” National Center for Biological Science (NCBS), October 15 to 17, 2012, Bangalore India.
4. Invited oral presentation entitled “**SDS Can Be Utilized as an Amyloid Inducer: A Case Study on Diverse Proteins**” at Interdisciplinary Biotechnology Unit, Aligarh Muslim University Aligarh in 2012.
5. Participated in international conference for poster presentation “**1st Asia-Oceania conference on Neutron Scattering**” 20th -24th November 2011. EPOCHAL TSUKUBA Tsukuba International Congress Center TSUKUBA, Japan.

6. Participated poster presentation in “**Biospark 2010**”, 11th -12th March 2010. VIII Annual research festival of School of Life Science Jawaharlal Nehru University New Delhi, India.
7. National workshop on “**Molecular Modeling of Proteins**”, Jan 21-23, 2010. Bioinformatics Center, Birla Institute of Scientific Research, Jaipur, India.

Techniques Known:

Spectroscopy Techniques:

- UV-Visible Spectroscopy
- Circular Dichroism Spectroscopy (CD)
- Fluorescence Spectroscopy
- Time-Resolved Spectroscopy
- Fourier Transform Infrared Spectroscopy (FTIR)
- Dynamic Light Scattering Spectroscopy (DLS)
- Basic working knowledge of Surface Plasmon Resonance Spectroscopy (SPR)

Calorimetry:

- Isothermal Titration Calorimetry (ITC)
- Differential Scanning Calorimetry (DSC)

Microscopy:

- Atomic force microscopy (AFM)
- Transmission Electron Microscopy (TEM)

Chromatography:

- Fast Protein Liquid Chromatography (FPLC)

Protein Purification:

- Expression and purification (Ni-NTA)
- Natural sources like banana pulp, egg and plant seeds.

Molecular Biology:

- Gene Cloning
- Protein Expression and Purification & Sub-Cloning Techniques
- Site Directed Mutagenesis
- Isolation of Genomic DNA
- Plasmid Isolation, Purification and Quantitation

- Gel Elution and Restriction Digestion Analysis Gel Purification, Ligation, PCR Purification, use of Gel Documentation System
- Designing Primers for Gene Cloning
- Agarose, Native or Polyacrylamide Gel Electrophoresis

Mass spectrometry (MS): Getting expertise on Electrospray Ionisation Mass Spectrometry.

Bioinformatics Tools:

- Multiple sequence alignment tools (Clustal W),
- visualizing tools (Pymol)
- Autodoc.

Personal details:

Sex : Male

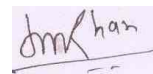
Nationality : Indian

Marital Status: Married,

Date of Birth : 28th September 1982

Declaration:

I declare that the information furnished above is true and authentic to the best of my knowledge.



12.02.2015

(Javed Masood Khan)

Referees:

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