CURRICULUM VITAE

MD. SHAHID NAYEEM

Male, Indian, Born on 10th May 1969

ADDRESS FOR CORRESPONDENCE:
Associate Professor, Department of Chemistry,
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EDUCATION:

Examination	Year of passing	Board/University	Div./Class	%age/CGPA
Ph. D.	2013	I.I.T. Delhi		9.5/10.0 Ph.D. Course
M. E. Polymer Tech.	1995	D.C.E., Delhi University	1st	79.9
M. Sc. Chemistry	1993	I.I.T., Delhi	1st	7.39/10.0
B. Sc. Chem. Hons.	1990	B.U., Muzaffarpur	1st	70.5
I. Sc.	1985	B.I.E.C., Patna	1st	67.7
Matriculation	1983	B.S.E.B., Patna	1st	75.8

EXPERIENCE:

GIAN Course:

Organized one week **GIAN course as Coordinator** on "Light emitting nanomaterials and their application in energy related fields". Prof. Andrey Rogach, (Associate Editor ACS Nano) and Director, Centre for functional Photonics (CFP), City University of Hong Kong was the foreign faculty of this course. (22-28 December, 2016).

Industrial:

1. Worked with Goodlass Nerolac Paints Ltd. As Senior Technical Officer (R&D) from March 1996 to Oct. 96 at Mumbai.
   Experience in designing, developing and modifying coating resins viz. Acrylics, Polyesters, MF, CED resins etc. and formulating lacquers for industrial and architectural coatings.

Administrative:

1. Worked as **Assistant Director**, Center for Distance Education, A.M.U., Aligarh since August 2005 to June 2008. Assisted the CDE in various responsibilities, viz. Development & printing of self learning material (SLM), Framing of long overdue academic and executive ordinances of the CDE, visit of several prospective study centers for inspection, setting out parameters for establishment of the study centers e-learning deployment at the Centre.
2. Presently working as **Assistant coordinator of IGNOU** study center of A.M.U., Aligarh.

Institutional management:

1) Worked as member Draft Committee of SSR (Self Study Report) of AMU for its first NAAC Accreditation.
2) Worked as member for drafting application to the UGC under the scheme "Universities with potential for excellence".
3) Worked as member of Committee to Monitor University Ranking and academic progression.

Teaching:

1. Worked as lecturer in the Deptt. of Chemistry, D. S. College, Katihar under B. N. Mandal University Madhepura, Bihar from 14th Nov. 1996 to 31st July 2001 after appointment on recommendation of Bihar State University (Constituent Colleges) Service Commission, Patna.
   Taught undergraduate and postgraduate courses in **Quantum Chemistry/Physical Chemistry.**
2. Worked as Lecturer in the Dept. of Chemistry, Dr. R.M. L. S. College Muzaffarpur under B.R.A. Bihar University, Muzaffarpur from 1st Aug.2001 to 12th Sep.2003.
   Taught undergraduate courses in **Physical Chemistry.**
3. Worked as Lecturer (Sr. Scale) and Lecturer (selection grade) in the Dept. of Chemistry, Aligarh Muslim University, Aligarh from 15th sep.2003 to 16th sept. 2011.
4. Presently working as Associate Professor in the Dept. of Chemistry, Aligarh Muslim University, Aligarh since 17th Sept. 2011
   Teaching undergraduate courses in **Quantum Chemistry/Physical Chemistry** and postgraduate courses in **Quantum Chemistry and Bio-Physical Chemistry.**

SPECIAL RESEARCH SKILLS:

Experimental Techniques: U.V. spectrophotometer, Fluorescence spectrophotometer, CD spectrometer, SDS-PAGE, Protein Expression and purification, Transformation, Competent cell preparation.

Computational tools: **GROMACS, Delphi, GRASP, APBS, NAMD, VMD, Chimera, Modeller, Pymol, AutoDock, Haddock, NACCESS, TINKER, ORCA, GAUSSIAN, GitHub tools.**

Computer: **Knowledge of Linux, Programming in C++, AWK, Sed and perl, TCL, Shell Programming**, **Using High Performance parallel Computing facility.**

Project Work: Thermal and Crystallization behavior of Nylon-6/PET Blend prepared by ester- amide exchange reaction was studied through DSC during M.E.

Seminar: Presented Seminar on "Non aqueous Enzymology" at I.I.T. Delhi as part of M. Sc. Course.

PUBLICATIONS:

1) **M. S. Nayeem** and Rizwan H. Khan, "Misfolded Proteins and Human Diseases" ***Protein and Peptide Letters***, vol. 11, No. 6, pp. 593-600, **2004. [Impact Factor: 0.78 Publisher: Benthem Science Publishers]**

2) **M. S. Nayeem** and Rizwan H. Khan, "Recombinant Antibodies in Cancer Therapy" *Current Protein &Peptide Science,* vol. 7, No. 2, pp. 165-170, **2006. [Impact Factor: 3.98 Publisher: Benthem Science Publishers]**

3) Ghosh S., Kaushik, D.K., Gomes J., **Nayeem S.**, Deep S. and Basu A., "Changes in Cytosolic Ca^{+2} levels corresponds to fluctuation of lactate level in crosstalk of astrocyte-neoron cell lines*"* ***Indian Journal of Experimental Biology***, vol.48 pp.529-537, **2010. [Impact Factor: 0.70 Publisher: National Institute of Science Communication and Information Resources, CSIR]**

4) **Nayeem S. M.,** Deep S., "Rationalization of poor solubility of TGF-b3 using MD Simulation" ***Biochemical and Biophysical Research Communication,*** Vol.401, pp.544-47, **2010. [Impact Factor: 2.60 Publisher: Elsevier]**

5) Ahluwalia, U., **Nayeem, S.M.** and Deep, S., "The non-native conformation of Cytochrome C in sodium dodecyl sulfate and their modulation by ATP" ***Eur. Biobphys J.*** vol. 40 pp. 259-271, **2011. [Impact Factor: 2.14 Publisher: Springer]**

6) Nandini S., Kumar R., Sinha A. K., Reddy P. B., **Nayeem S. M.,** Deep S., "Anthraquinone derivatives based natural dye from Rheum emodi as a probe for thermal stability of proteins: Spectroscopic and chromatographic studies" ***Journal of Pharmaceutical and Biomedical Analysis*** vol. 62 pp. 96 – 104, **2012. [Impact Factor: 2.97 Publisher: Elsevier]**

7) Srivastava, A., Meena S.K., Alam M., **Nayeem S.M**., Deep S., Sau A.K., "Structural and Functional Insights into the Regulation of Helicobacter pylori Arginase Activity by an Evolutionary Nonconserved Motif" ***Biochemistry*** vol. 52 pp. 508-519, **2013. [Impact Factor: 3.44 Publisher: ACS Publications].**

8) **Nayeem, S. M.** and Deep S. "Electrostatic environment of the cell modulates the TGF-β ligands binding to the receptors: A computational analysis" ***Journal of Molecular Recognition.*** vol. 27 pp. 471-481, 2014. **[Impact Factor: 3.006 Publisher: Wiley].**

9) Kausar, T., **Nayeem S.M**. "Computational analysis on conformational dynamics of bone-morphogenic protein-2 (BMP-2)" ***Journal of Biomolecular structure and dynamics*** vol. 35, pp. 2224-2234, **2017. [Impact Factor: Publisher: Taylor & Francis]**

10) Kumar J. Umar T., Kausar T., Mobashir M., **Nayeem S.M.** and Hoda N., "Identification of lead BAY 60-7550 analogues as potential inhibitors that utilize

the hydrophobic groove in PDE2A: a molecular dynamic simulation study" ***Journal of Molecular Modeling*** vol. 23 pp. 7, **2017. [Impact Factor: 1.4 Publisher: Springer]**

11) **Nayeem S.M.**, Oteri F., Baaden M., Deep S., "Residues of Alpha Helix H3 Determine Distinctive Features of Transforming Growth Factor β3" ***The Journal of Physical Chemistry B,*** vol. 121(22), pp. 5483-5498 **2017. [Impact Factor: 3.146 Publisher: ACS publication]**

12) Abidi M., Khan M.S., Ahmad S., Kausar T., **Nayeem S.M**., Islam S., Ali A.,Alam K. "Biophysical and biochemical studies on glycoxidatively modified human low density lipoprotein" ***Archives of biochemistry and biophysics*** vol. 645, pp. 87-99, **2018 [Impact Factor: 3.118 Publisher: Elsevier]**

13) Kausar, T., **Nayeem S.M.** "Correlating interfacial water dynamics with protein-protein interaction in complex of GDF-5 and BMPRI receptors" ***Biophysical Chemistry*** vol.240 pp.50-62, **2018 [Impact Factor: 1.870 Publisher: Elsevier]**

14) Kausar, T., **Nayeem S.M. "**Identification of small molecule inhibitors of ALK2: a virtual screening, density functional theory and molecular dynamics simulations study.**"** ***Journal of Molecular Modeling*** 24(9), 262, **2018 [Impact Factor: 1.4 Publisher: Springer]**

15) Jahan I., **Nayeem S.M.**, "Effect of urea, arginine and ethanol concentration on aggregation of 179CVNITV184 fragment of sheep prion protein" *ACS Omega,* vol. *3* (9), pp 11727–11741, **2018. [Impact Factor: ---- Publisher: ACS]**

16) Chandel T., Zaidi N., Zaman M., Jahan I., Masroor A., Siddique I.A., **Nayeem S.M.**, Ali M., Uversky N.V., Khan R.H. "A multiparametric analysis of the synergistic impact of anti-Parkinson's drugs on the fibrillation of human serum albumin" *BBA-Proteins and proteomics (**Under Revision**).*

17) Uversky N.V, Siddique I.A, Ali M., Chandel T, Jahan I, Masroor A., **Nayeem S.M.**, Siddiqi M.K., Khan R.H. "Molecular basis of the inhibition and disaggregation of thermally-induced amyloid fibrils of human serum albumin by an anti-Parkinson's drug, benserazide hydrochloride" *Journal of Molecular Liquids* (***Submitted***)

18) Raninga N., Pandita E., **Nayeem S.M.**, Gupta S., Deep S., Mullick R., Das S., Sau A.K."A hidden basis for the assembly-stimulated second phosphate cleavage of GTP in a unique large GTPase hGBP1 and its role in antiviral activity" *Journal of Molecular Biology* (***Submitted***)

Book Chapter:

1) **M.S. Nayeem** and Rizwan H. Khan "Recombinant Polypeptides in Therapeutics"

In Faiz Mohammad ed. *Specialty Polymers: Materials and Applications,* I.K. International Publishing House Pvt. Ltd., N. Delhi (**2007**).

CONFERENCES:

1. Poster presented on "TGF-β 3 stability and aggregation: MD simulation Analysis" 7th Asian Biophysics Association (ABA) Symposium & Indian Biophysical Society (IBS) 2011, Jan. 30 – Feb. 2.

2. Poster presented in "International Conference on Chemistry: Frontiers and Challenges" held at Aligarh Muslim University, Aligarh, 2–3 March 2013.

3. Poster presented on "Specificity of transforming growth factor β1 and β3 ligands under electrostatic environment" at National Symposium on Recent Advances in Free Radical Biology and Biochemistry on March 06, 2014. Department of Biochemistry, A.M.U., Aligarh.

4. Poster presented on "In Silico analysis of Transforming Growth Factor β 1 and β 3 aggregation" National Symposium on chemistry on March 22, 2014 Department of chemistry, A.M.U., Aligarh.

5. Oral presentation on "Helix unfolding governs the preference of transforming growth factor 3 for its open versus closed conformation" at National Symposium on innovative methods in chemistry education & National convention of chemistry teachers. On Oct. 8-10, 2015. Department of chemistry, University of Lucknow, Lucknow. U.P.

6. Oral presentation on "Bio-molecular Simulation" at International conference on recent Advances in Chemical Sciences on March 29-30, 2016. Department of Chemistry, A.M.U., Aligarh.

7. Oral presentation on "Distinctive structural attributes of TGF-b3 depends on H3-Helix stability" at National conference on interdisciplinary approaches in chemical sciences on Dec. 16, 2015. Centre for Interdisciplinary Research in Basic Sciences, JMI, New Delhi.

8. Poster presented on "Electrostatic environment drives binding specificity of growth and differentiation factor-5 (GDF-5) with its receptor-1" International Conference on Emerging trends in Biomedical Sciences on March 6-8, 2016. Department of Biochemistry, A.M.U., Aligarh.

9. Poster presented on "Aggregation prone regions of α-Synclein: A molecular dynamic simulation study" National conference on Recent Advances in Chemical Sciences on March 25-26, 2017 in the Department of Chemistry, A.M.U., Aligarh.

10. Poster presented on "Effect of Urea on Aggregation prone fragment ^{179}CVNITV^{184} of sheep prion protein" National Conference on Emerging Trends in Chemical Sciences on February 24-25, 2018, in the Department of Chemistry, A.M.U., Aligarh.

WORKSHOP ATTENDED:

1) Workshop on "Genome Analysis: A Bioinformatics Approach" at Interdisciplinary Biotechnology Unit, Aligarh Muslim University, Aligarh during February 24-25, 2007.

2) Workshop on "Content Development and usage of E- Learning Solutions" at Centre for Distance Education, Aligarh Muslim University, Aligarh during August 6-7, 2007.

3) Workshop on "Introduction to Gaussian: Theory and Practice" organized by Gaussian, Inc. at IISER Pune from Dec.12-16, 2014.

WORKSHOP ORGANIZED:

1) Organized three days Workshop on "Capacity Building on E-Learning Technologies" at Centre for Distance Education, Aligarh Muslim University, Aligarh during March 15-17, 2007.

2) Organized National Conference on Emerging Trends in Chemical Sciences on February 24-25, 2018, in the Department of Chemistry, A.M.U., Aligarh as Joint Organizing Secretary.

PH. D. IN PROGRESS UNDER MY SUPERVISION:

S. No.	Name	Topic	Date of Registration
1.	Tasneem Kausar	Computational studies on TGF-β superfamily ligands and receptors interaction.	22.02.2014
2.	Ishrat Jahan	Studies on protein folding and aggregation.	07.12.2015
3.	Ashima khan	Studies on Aggregation prone proteins/peptides.	18.12.2017

AWARDS/ACHIEVEMENTS:

Qualified GATE-93 with 88.47 percentile.
Qualified National Eligibility Test (**NET, July 93**) and was offered JRF from CSIR.

REFERENCES:

On request

(Md. Shahid Nayeem)