Shabir H. Qureshi

University of Missouri, M 315 Department of Chemistry and Biochemistry, One University Boulevard, St.Louis, MO 63121 Work: (314) 516-4239 Mobile: (314) 255-7137 E-mail: gureshis@umsl.edu, shabirh 2000@yahoo.com

Home address, 4407 E, Normandy Trace Ct St.Louis, MO 63121 Ph. (314) 524-7244

Sex	:	Male
Nationality	:	Indian
Date of Birth	:	October 30, 1971
Marital Status	:	Married

Current Status (Research)

I am presently working on a NIH sponsored project "**Restriction Endonucleases Structure and Function**" as a part of my Postdoctoral work at University of Missouri St. Louis USA. with Dr. Cynthia M. Dupureur.

Academic profile:

YEAR	DEGREE	UNIVERSITY/INSTITUTE	FIELD OF STUDY	DIVISION
2003 1997	M.Sc.	Jamia Millia University, New Delhi Hamdard University, New Delhi	Protein Structural Biology Biochemistry	Awarded First
1994	B.Sc.	University of Kashmir, Srinagar	Physics, Chemistry, Botany, English	First

•AISSCE (12 th) 1990 from CBSE through J&K Sainik School Manasbal Kashmir with First Division.

•AISSE (10 th) 1988 from CBSE through J&K Sainik School Manasbal Kashmir with First Division.

•**Diploma in Computer Software** 1995 from AICTE through State Vocational Training Institute with First Division.

Ph.D thesis Title: Determination of Stabilities of Native, Molten Globule and Partial Unfolded States of Bovine Heart Cytochrome-C. Advisor: Prof. Faizan Ahmad Ph.D., F.N.A.Sc.

Research experience:

04/2004--till date, **Postdoctoral Research Associate.** Department of Chemistry and Biochemistry, University of Missouri, St.Louis, Missouri. 63121. Advisor- Dr. Cynthia M. Dupureur *"Restriction Endonuclease Structure and Function"*

11/2003 to 3/2004 **Senior Research Fellows**, Department of Biosciences, Jamia. Millia Islamia, New Delhi, 110025 India. Advisor- Prof. Faizan Ahmad, Ph.D., F.N.A.Sc "Determination of Stability of Native and Molten Globules of Homologous Cytochromes-c" 6/1998 to 10/2003 **CSIR** (N. Delhi) **Junior & Senior Research Fellow**, Department of Biosciences, Jamia. Millia Islamia, New Delhi, 110025 India. Advisor- Prof. Faizan Ahmad, Ph.D., F.N.A.Sc. "<u>Determination of Stabilities of Native, Molten Globule and Partial Unfolded States of Bovine Heart</u> <u>Cytochrome-C</u>".

Technical Skills:

Molecular Biology

I am well versed in techniques including: Plasmid, DNA, and RNA isolation. Digestion. Ligation and Transformation. Protein expression & purification. Purification of DNA, RNA and Plasmids. Northern, Southern. Western blot SDS (PAGE) and electrophoresis. Maintenance and growth of pure bacterial cell cultures.

Biochemistry

Extensive experience in Spectroscopy: Circular dichorism, fluorescence spectroscopy (including FRET), UV/Vis spectroscopy, Atomic absorption spectroscopy. Chromatography: Ion exchange, gel filtration, HPLC and FPLC. I have experience in Radio-labeling macromolecules with radioactive isotopes and handling of radioactive samples. Enzyme kinetics. Protein folding-unfolding studies. Thermodynamic of protein and nucleic acid folding and unfolding. I have also used few small mathematical simulation programs in analyzing and fitting of experimental data to obtain kinetic and thermodynamic parameters.

Scientific Interests

I am interested in studies pertaining to Structure function relationship, Enzyme kinetics, protein folding and unfolding, protein-protein interaction, protein-nucleic acid interaction, cell signaling and diseases caused by improper protein folding. Immunological studies, molecular structural biology leading to development of novel drugs and therapeutic agents to treat human diseases. Clinical biochemistry, virology and cancer research. I am flexible about my approach in learning and using new techniques of molecular biology and structural biology.

Awards/ Fellowships:

- Cleared National Eligibility Test (NET) in 2001 conducted jointly by CSIR and UGC, New Delhi India. A national test conducted for eligibility for research fellows and lecturers in Universities and research institutes in India.
- Cleared **State Level Eligibility Test** (**SLET**) in 2000 conducted by Jammu University, Jammu. A national test conducted for eligibility for lecturer in Indian Universities

- Cleared National Eligibility Test (NET) in 1998 conducted by Agriculture Scientist Research Board (ASRB) Indian Council for Agriculture Research New Delhi A national test conducted for eligibility for scientists and research fellows in Indian Universities.
- Cleared Graduate AptitudeTest for Engineering (GATE) in 1998 conducted jointly by IIT Delhi and UGC. India.

Publications:

- Qureshi, S. H., Moza, B., Yadav, S., and Ahmad, F. (2003) Conformational and Thermodynamic Characterization of the Molten Globule State Occurring During Unfolding of Cytochromes-c Using Weak Salt Denaturants. Biochemistry 42, 1684-1695.
- Moza, B., Qureshi, S. H., and Ahmad, F. (2003) Equilibrium Studies of the Effect of Difference in Sequence Homology on the Mechanism of Denaturation of Bovine and Horse Cytochromes-c. Biochimica et Biophysica Acta 1646, 49-56.
- Moza, B., Qureshi, S.H., Singh, R.K and Ahmad, F (2005) A Unique Molten Globule State of Cytochrome-c Induced by LiCIO₄ Near Physiological pH and Temperature: STRUCTURAL AND THERMODYNAMIC CHARACTERIZATION Biochemistry (in press)
- One manuscript under preparation

Presentations and Conferences:

- Conformational and Thermodynamic Characterization of the Molten Globule State Occurring During Unfolding of Cytochromes-c Using Weak Salt Denaturants, Moza, B., Qureshi, S. H., Yadav, S. and Ahmad, F. The 2002 Colorado Protein Stability Conference, U S A.
- 2 Effect of Sequence Homology on the Equilibrium Unfolding of Horse and bovine Cytochromec, Moza, B., Qureshi, S. H., and Ahmad, F. National Symposium on Biophysics, Indian Institute of Technology, Roorkee, India 2003.
- Was selected for and attended the international symposium on "FRONTIERS IN STRUCTURAL BIOLOGY 25-27 Aug1999" held at National Center for Biological Sciences, Bangelore, India.
- Was selected for and attended the international Workshop on "PROTEIN STRCTURAL BIOINFORMATICS AND GENOMICS on 28 Aug1999" held at National Center for Biological Sciences, Bangalore, India
- Attended "Third Annual New Enzymology Kinetics Workshop: Kinetic Analysis of Proteins and Nucleic Acids: January 9-12, 2005" Hyatt Regency Hotel, Austin, Texas, USA
- The Effect of pH on Specific DNA Binding and Cleavage by Pvull Restriction Endonucleases, Xie, F., Qureshi, S. H. and Dupureur, C. M. XXV Midwest Enzyme Chemistry Conference, October 8, 2005. Department of Chemistry, Loyola University Chicago, IL 60626 USA

References

Dr. Cynthia M. Dupureur

Associate Professor Deptt. of Chemistry & Biochemistry, University of Missouri, St. Louis, MO, 63121-4400, USA Ph. (314) 516-4392(O) Fax. (314) 516-5342 E-mail: cdup@umsl.edu

Dr. Faizan Ahmad Ph.D F.N.A.Sc.

Professor & DSW Deptt. of Biosciences , Jamia Millia Islamia, New Delhi 110 025, India, Ph.+91 (11) 26981733(O) +91 (11) 26920954 (H) E-mail: faizan_ahmad@yahoo.com

Dr. Zulfiqar Ahmad Research Assistant Professor Deptt. of Biochemistry and Biophysics, University of Rochester, Medical Centre Rochester, NY, 14642, USA Ph. 585-275-2777(O) 585-244-9904(H) E-mail: zulfiqar_ahmad@urmc.rochester.edu

All the above information is true to my knowledge and further I am ready to provide any information as and when required.

Date: 02-15-06 Place: St.Louis

Shabir H Qureshi