

## Curriculum Vitae

Md Abul Kalam, Ph.D.

Assistant Professor of Chemistry

Department of Earth & Physical Sciences, Box C-139, Sul Ross State University, Alpine, TX 79832

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### EDUCATION

**Ph.D.**, Chemistry, University of Connecticut, Storrs, CT (2005)

*Concentration:* Biological Chemistry

*Dissertation:* Mutagenesis Studies of Selective Lesions Derived from Purines under Oxidative Stress

*Advisor:* Dr. Ashis K. Basu

**M.S.** (GPA 3.94), Chemistry, University of Connecticut, Storrs, CT (2004)

*Concentration:* Biological Chemistry

*Advisor:* Dr. Ashis K. Basu

**M.Sc.** (First Class), Chemistry, University of Dhaka, Dhaka, Bangladesh (1996)

*Concentrations:* Physical Chemistry and Inorganic Chemistry

*Dissertation:* Determination of Surface Concentration on Silica-Supported Platinum Catalysts by Hydrogen-Oxygen Titration

*Advisor:* Dr. M. Muhibur Rahman

**B.Sc.** (Honors; First Class), Chemistry, University of Dhaka, Dhaka, Bangladesh (1994)

*Minors:* Physics and Mathematics

### PROFESSIONAL EXPERIENCE

#### Academic Positions

08/28/2007 – Present

**Assistant Professor of Chemistry**

*Earth and Physical Sciences, Sul Ross State University, Alpine, TX*

09/01/2005 – 08/24/2007

**Post-doctoral Research Fellow**

*Department of Biochemistry, Vanderbilt University, Nashville, TN*

01/22/2001– 08/31/2005

**Teaching/Research Assistant**

*Department of Chemistry, University of Connecticut, Storrs, CT*

## Curriculum Vitae: Md Abul Kalam

- 10/10/2000 – 01/15/2001     **Assistant Professor**  
*Department of Chemistry, Shahjalal University of Science and Technology, Sylhet, Bangladesh*
- 10/06/1996 – 10/09/2000     **Lecturer**  
*Department of Chemistry, Shahjalal University of Science and Technology, Sylhet, Bangladesh*

### **Research Experience**

#### ***Sul Ross State University***

- Spectrophotometric Assays for Aminopeptidases
- Isolation and Characterization of Alkaloids from Native Desert Plants (Collaborator: Dr. Martin Terry, Department of Biology, SRSU)

#### ***Vanderbilt University***

- *In vitro* translesion synthesis of deoxyoligonucleotides using human Y-family polymerases
- Determination of the structural basis for frameshift mutagenesis by M<sub>1</sub>dG
- Site-specific mutagenesis of deoxyadenosine adducts derived from lipid peroxidation

#### ***Shahjalal University of Science and Technology***

- Adsorption kinetics of environmental pollutants (e.g. dyes) on rice husk ash
- Removal of arsenic from drinking water via adsorption on natural adsorbents (e.g. earth crush containing high iron)

## PUBLICATIONS AND PRESENTATIONS

### Refereed Journal Publications

- Clinal Geographic Variation in Mescaline Concentration among Texas Populations of *Lophophora Williamsii* (Cactaceae)  
Hulsey, D., **Kalam, M. A.**, Daley, P., Fowler, N., and Terry, M.; *J. Bot. Res. Inst. Texas* (2011), 5(2), 677-683.
- Genetic Effects of Oxidative DNA Damages: Comparative Mutagenesis of the Imidazole Ring-Opened Formamidopyrimidines (Fapy lesions) and 8-Oxo-purines in Simian Kidney Cells  
**Kalam, M. A.**, Haraguchi, K, Chandani, S,Loechler, E, Moriya, M., Greenberg, M., and Basu, A. K.; *Nucleic Acids Res.* (2006), 34(8), 2305-2315.
- Mutagenesis of 8-Oxoguanine Adjacent to an Abasic Site in Simian Kidney Cells: Tandem Mutations and Enhancement of G→T Transversions  
**Kalam, M. A.** and Basu, A. K.; *Chem. Res. Toxicol.* (2005), 18(8), 1187-1192.
- Reactive Gas Solubility in Water: An Empirical Relation  
Islam, M. A., **Kalam, M. A.**, Khan, M. R.; *Industrial & Engineering Chemistry Research* (2000), 39(7), 2627-2630
- Determination of surface concentration on silica-supported platinum catalysts by hydrogen-oxygen titration  
**Kalam, M. A.** and Rahman, M. M.; *Dhaka University Journal of Science* (1998), 46(2), 203-213

### Conference Proceedings/Presentations

- Mescaline concentrations in Chihuahuan Desert vs. Tamaulipan thornscrub populations of *Lophophora williamsii* (peyote)  
Hulsey, D., **Kalam, M. A.**, Daley, P., and Terry, M.; 66<sup>th</sup> Northwest Regional Meeting of the American Chemical Society, Portland, OR, United States, (June 2011), Abstract ID-159
- Translesion DNA Synthesis Across Pyrimido[1,2- $\alpha$ ]purin-10(3H)-one Adduct by Human DNA Polymerase Pol  $\eta$   
**Kalam, M. A.**, Rizzo, C. J., Guengerich, F. P., and Marnett, L. J.; 234<sup>th</sup> ACS National Meeting, Booston, MA, United States, (August 2007), TOXI 117
- DNA damage and mutagenesis.  
Basu, A. K., Colis, L., Watt, D., **Kalam, M. A.**, Altamirano, A., and Greenberg, M. M. 232<sup>nd</sup> ACS National Meeting, San Francisco, CA, United States, (September 2006),

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TOXI 14.

- Mutagenesis and repair of 8-oxodG adjacent to an abasic site  
**Kalam, M. A.** and Basu, A. K.; *96<sup>th</sup> Annual Meeting of AACR*, Anaheim, CA (**April 2005**); Abstract #3067
- Mutagenicity of Fapy•dG in Mammalian Cells  
**Kalam, M. A.**, Wiederholt C. J., Greenberg, M. M. and Basu, A. K.; *94<sup>th</sup> Annual Meeting of AACR*, Washington, DC (**July 2003**); *Proceeding*, p-338

### PROFESSIONAL AFFILIATIONS

2001– Present    Member, American Chemical Society; Member # 2303776

2006– 2008     Associate Member, American Association for Cancer Research; Member no # 123103