UTSA The University of Texas at San Antonio™

Saugata Datta, Professor (saugata.datta@utsa.edu)
Chemical Hydrogeology and Aqueous Geochemistry

Academic Experience

- 2019-present: Hammond Distinguished Professor, UTSA
- 2017-18:Halbouty Visiting Chair Professor, Texas A&M
- 2008-19: Asst., Assoc., and Professor, Kansas State University
- 2004-08: Asst. Professor, Georgia College and State University
- 2005-06: Assoc. Professor, University of Calcutta
- 2001-04: Earth Sciences Mellon-Barnard, Earth Institute Fellow, Columbia University
- 2001: Ph.D., University of Western Ontario, Canada
- 1995: M.S., University of Calcutta, India
- 1993: B.S., University of Calcutta, India

Research Interests

Our research focuses on issues of water resources, water availability, and understanding the cycling of different metals and organic compounds in our groundwaters, surface waters, soils, and sediments, as well as how land use pattern changes affect the distribution of such metals and pollutants in our environments. Our research projects have links to health impact assessments, targeting both human and ecosystem health.

Lab website: http://www.utsa.edu/geosci/faculty/DattaLab/

Laboratory Capabilities

Analytical: IRMS-Stable Isotope; Thermo-Dionex Ion Chromatogram, Shimadzu TOC-L-TDN Analyser, Horiba AquaLog Spectrometer, HACH UV-VIS Spectrophotometers, Agilient ICP-OES, NeXioN ICP-MS, Thermo-GCMS, Horiba HydroLab, ODLAB Acid Purification System, Laminar FlowHood with Exhaust and anaerobic chambers, Microwave Digestion System and other wet lab and field apparatuses.

Teaching (current courses)

Aqueous Geochemistry

Current Research

Aqueous Bio-Geochemistry of Lava (Volcanic) Tube Caves: Terrestrial Analog for Moon, Mars and Other Rocky Planetary Bodies

Trace Element Biogeochemistry in Waters

Groundwater Contamination and Assessment and Solid Phase Speciation of Oxyanions

Lead Isotopes as Exposure Tracer in Children's Blood

Geologic CO_2 Capture and Drinking Water Security

Research Sponsors

NSF · Department of Energy · NASA · CSA ASC · NETL · Lawrence Livermore National Laboratory