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Education and Training

2010 Texas Tech University, Environmental Engineering, PhD
2006 Texas Tech University, Civil Engineering, MS
2000 Madras University, Chemical Engineering, BTech

Research and Professional Experience

2011-Present Postdoctoral Research Associate, Environmental Sciences Division, ORNL
2010-2011 Postdoctoral Research Associate, Department of Civil Engineering, Texas Tech University, Lubbock
2004-2010 Research Assistant, Department of Civil Engineering, Texas Tech University, Lubbock
2000-2003 Process Engineer, Reliance Industries Limited, Jamnagar, India

Publications

1. Rao, B.; Wang, W.; Qingsong, Anderson, T. A.; Gu, B. Photochemical Transformation of the Insensitive Munitions Compound 2,4-Dinitroanisole. *Science of Total Environment*, 2012 doi: 10.1016/j.scitotenv.2012.11.033
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3. Rao, B.; Wake, C. P.; Anderson, T. A.; Jackson, W. A. Presence of Perchlorate obtained from Eclipse and Upper Freemont Glacier ice-cores in North America, *Water Air and Soil Pollution*, 2011, doi:10.1007/s11270-011-0849-y.
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5. Rao, B.; Anderson, T. A.; Redder, A.; Jackson, W. A. Perchlorate Formation by Ozone Oxidation of Aqueous Chlorine/Oxy-Chlorine Species: Role of Cl_xO_y Radicals. *Environ. Sci. Technol.* 2010, 44, 2961-2967
6. Rao, B.; Hatzinger, P. B.; Böhlke, J. K.; Sturchio, N. C.; Andraski, B.; Frank D. Eckardt.; Jackson, W. A. Natural Chlorate in the Environment: Application of a New IC-ESI/MS/MS Method with a $Cl^{18}O_3^-$ Internal Standard. *Environ. Sci. Technol.* 2010, 44, 8429-8434.
7. Kang, N.; Anderson, T. A.; Rao, B.; Jackson, W. A. Characteristics of Perchlorate formation via Photo-dissociation of Aqueous Chlorite. *Environ. Chem.* 2009, 6, 53
8. Scanlon, B. R.; Reedy, R. C.; Jackson, W. A.; Rao, B. Mobilization of naturally occurring perchlorate related to land-use change in the Southern High Plains, Texas. *Environ. Sci. Technol.* 2008, 42, 8648-8653
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Conference Presentations

1. Rao, B.; Wei Wang; Baohua, Gu. Photochemical Degradation Rates and Mechanisms of Insensitive Munitions-2, 4-dinitroanisole. 243rd ACS National Meeting & Exposition, 2012, San Diego, California.
2. Rao, B.; Hatzinger, P. B.; Böhlke, J. K.; Sturchio, N. C.; Andraski, B.; Eckardt, F. D.; Jackson, W. A. Natural Occurrence of Chlorate in Environmental Samples determined using Ion Chromatography coupled with Tandem Mass Spectrometry (IC-ESI-MS/MS) and $Cl^{18}O_3^-$ as Internal Standard. *SERDP-ESTCP*, 2010.
3. Rao, B.; Hatzinger, P. B.; Jackson, W. A.; Böhlke, J. K.; Gu, B.; Sturchio, N. C. Understanding Natural Perchlorate Formation by Ozone and UV-Oxidation of Aqueous Cl Species. Platform Presentation, *Goldschmidt: Earth, Energy and the Environment*, 2010.
4. Rao, B.; Hatzinger, P. B.; Jackson, W. A.; Böhlke, J. K.; Sturchio, N. C. (2010) Isotopic Fractionation Resulting from the Biodegradation of Perchlorate. Platform Presentation, *Seventh International Conference on Remediation of Chlorinated and Recalcitrant Compounds*, 2010.
5. Rao, B.; Jackson, W. A. Perchlorate Production Potential by Photo-decomposition of Residual Chlorine in Water Systems. Platform Presentation, *Texas Water*, 2010.

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8. Rao, B. Natural Perchlorate Reservoir in the Arid and Semi-Arid Regions of the Southwestern USA. Platform Presentation, *63rd Southwest Regional Meeting of the American Chemical Society*, 2007.
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10. Jackson, W. A.; Rajagopalan, S.; Rao, B.; Anderson, T. A.; Rainwater, K.; Stonestrom, D.; Fahlquist, L.; Orris, G.; Harvey, G. Occurrence of Atmospherically Generated Perchlorate in Arid and Semi-Arid Regions of North America. *The 16th Symposium in GRA's Series on Groundwater Contaminants*, 2006.