**RAMESH ATTINTI**

**Education/Training**

B.S. (Maths, Physics, Chemistry) Sri Venkateswara University, India, 1994

M.S. (Analytical Chemistry) Sri Venkateswara University, India, 1997

Ph.D. (Analytical Chemistry) Sri Venkateswara University, India, 2002

**Positions**

**2010-Present** Post-doctoral Scientist, Department of Earth and Environmental Studies, Montclair State University, Montclair, USA.

 **2007- 2010** Post-doctoral Research Associate, Department of Plant and Soil Sciences, University of Delaware, Newark, USA.

**2005-2007** Post-doctoral Fellow (Japan Society for the Promotion of Sciences Fellowship), Department of Chemistry and Chemical Engineering, Kanazawa University, Kanazawa, Japan.

**2003-2005** Post-doctoral Fellow, Department of Chemical Engineering, National Taiwan University, Taipei, Taiwan.

**2002-2003** Post-doctoral Fellow, Department of Chemistry, National Chung-Hsing University, Taichung, Taiwan.

**Honors/Awards**

* *Senior Research Fellow:* 2001 – 2002, Awarded by Council of Scientific and Industrial Research, New Delhi, **India**.
* *JSPS post-doctoral fellow Award*: Sep 2005 – Aug 2007, Awarded by Japan Society for the Promotion of Sciences, **Japan**.

**Selected Refereed Publications (out of more than 25 total publications)**

* **Attinti, R**., K. Rama Mohan, and K. Seshaiah (2002): Preconcentration of trace metals in Amberlite XAD-4 resin coated with dithiocarbamates and determination by inductively coupled plasma – atomic emission spectrometry in saline matrices. Talanta 57: 243-252.
* **Attinti, R**., K.Rama Mohan, K. Seshaiah, and N.V. Choudary, (2002): Removal of beryllium from aqueous solutions by zeolite 4A and bentonite. Sep. Sci. Technol.37: 1123-1134.
* **Attinti, R**., D.J. Lee, and J.W.C Wong (2005) Thermodynamic parameters for adsorption equilibrium of heavy metals and dyes from wastewater with low-cost adsorbents, J Colloids Interf. Sci. 291, 588-592.
* **Attinti, R**., D.J. Lee, and S.G. Hong (2006) Soluble microbial products (SMP) and soluble extracellular polymeric substances (EPS) from wastewater sludge. Appl. Microbiol. Biotechnol. 73: 219-225.
* **Attinti, R**., D.J. Lee, and J.Y. Lai (2007) Membrane biofouling by extra cellular polymeric substances or soluble microbial products from membrane bioreactor sludge Appl. Microbiol. Biotechnol. 74: 699-707.
* **Attinti, R**., H. Hasegawa, T. Maki, and K. Ueda (2007) Adsorption of inorganic and organic arsenic by Al/Fe modified montmorillonite. Sep. Purif. Technol. 56: 90-100.
* **Attinti, R**., H. Hasegawa, T. Maki, and K. Ueda (2008) Adsorption of gold(III), platinum(IV) and palladium(II) onto glycine modified crosslinked chitosan resin. Bioresour. Technol. 99: 3801-3809.
* **Attinti, R**., B. Aparna Devi, H. Hasegawa, T. Maki, and K. Ueda (2007) Nanometer sized alumina coated with chromotropic acid as a solid phase metal extractant from environmental samples and determination by inductively coupled plasma atomic emission spectrometry. Microchem. J. 86: 124-130.
* **Attinti, R**., J. Wei, K. Sims, and Y. Jin (2010) Virus (MS2, φX174, Aichi) attachment on sand measured by atomic force microscopy and their transport through sand columns. Environ. Sci. Technol. 44: 2426-2432.
* Wang, C., Bobba,A., **Attinti**, **R**., Shen, C., Lazouskaya, V., Wang, L.P. and Jin, Y (2012): Retention and transport of silica nanoparticles in saturated porous media- Effect of particle size. Environ. Sci. Technol. 46, 7151-7158.

**Reviewer**

Peer reviewer of more than twenty five scientific international journals including Environmental Science and Technology, Langmuir, Talanta, Journal of Colloidal and Interface Science Journal of Hazardous Materials, Applied Microbiology and Biotechnology etc.

**Research Experience**

* Developed a phytoremediation system using vetiver grass to remove lead (Pb) in paint contaminated residential soils.
* Experience in stormwater treatment for removal of toxic and heavy metals.
* Experience in synthesis of nanoparticles and solid adsorbents for environmental treatment applications
* First researcher to use Atomic Force Microcopy to quantify the interaction forces between the viruses and solid surfaces.
* Extensive experience in the identification of foulants in membrane biofouling.
* Developed novel analytical methods for the detection of toxic and trace metals in environmental samples.
* Demonstrated leadership skills by mentoring graduate students.

**Instrumental skills**

* **Mass spectrometry**: MALDI TOF-MS, GC-MS and ICP-MS.
* **Separation techniques**: HPLC and SPE
* **Spectroscopic techniques**: UV-Vis absorbance spectroscopy, Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES), Atomic Absorption Spectrometry (AAS), Emission and Excitation Spectrometry and ATR-FTIR.
* **Microstructure and morphology**: Scanning Electron Microscopy (SEM), EDX, Transmission Electron Microscopy (TEM), Confocal Laser Scanning Microscopy (CLSM) and Atomic Force Microscopy (AFM).
* **Other Instruments**: Particle size analyzer and Zetasizer.

**Technical skills**

* MS-Office, Origin, Sigma Plot, JMP, Math Lab and Chem Draw were used to analyze the experimental data. A certificate was obtained from the language of Oracle 7.0 and windows developer 2000.

**Professional affiliations (Previous & Present)**

American Chemical Society, Sigma Xi, Soil Science Society of America and Pittcon.