
2009 Peer-reviewed Publications by ESE Faculty

(This listing is arranged in **alphabetical order** by Author and ESE faculty are highlighted in bold.)

An J Y, Kim S, Chun Y, Lee S J, **Ng H Y** and Chang I S, 2009, "Floating-Type Microbial Fuel Cell (FT-MFC) for Treating Organic-Contaminated Water", *Environmental Science & Technology*, **43**(5): 1642-1647.

Ang E L, **Obbard J P** and Zhao H M, 2009, "Directed Evolution of Aniline Dioxygenase for Enhanced Bioremediation of Aromatic Amines", *Applied Microbiology and Biotechnology*, **81**: 1063-1070.

Balasubramanian R, He J, Karthikeyan S and Umid M J, 2009, "Determination of Semi-Volatile Organochlorine Compounds in the Atmosphere of Singapore Using Accelerated Solvent Extraction", *Chemosphere*, **75**(5): 640-648.

Balasubramanian R, Sundararajan V P and Kuppusamy V, 2009, "Equilibrium Isotherm Studies for the Multi Component Adsorption of Lead, Zinc, and Cadmium onto Indonesian Peat", *Industrial and Engineering Chemistry Research*, **48**(4): 2093-2099.

Basheer C, Alnedhary A A, Rao B S M, **Balasubramanian R** and Lee H K, 2009, "Determination of Carbamate Pesticides using Micro-Solid-Phase Extraction Combined with High-Performance Liquid Chromatography", *Journal of Chromatography A*, **1216**: 211-216.

Choi Jae-Hoon, Park S K and **Ng H Y**, 2009, "Membrane Fouling in a Submerged Membrane Bioreactor Using Track-etched and Phase-inversed Porous Membranes", *Separation and Purification Technology*, **65**(2): 184-192.

Han H and **Bai R B**, 2009, "Buoyant Photocatalysts with Greatly Enhanced Visible-light Activity Prepared Through a Low Temperature Hydrothermal Method", *Industrial & Engineering Chemistry Research*, **48**(6): 2891-2898.

He J and **Balasubramanian R**, 2009, "Determination of Atmospheric Polycyclic Aromatic Hydrocarbons Using Accelerated Solvent Extraction", *Analytical Letters*, **42**: 1-17.

He J and **Balasubramanian R**, 2009, "A Study of Gas-Particle Partitioning of SVOCs in the Tropical Atmosphere of Southeast Asia", *Atmospheric Environment*, In Press.

He J and **Balasubramanian R**, 2009, "A Study of Precipitation Scavenging of Semi-volatile Organic Compounds (SVOCs) In a Tropical Area", *Journal of Geophysical Research-Atmospheres*, In Press.

He J and **Balasubramanian R**, 2009, "The Exchange of SVOCs Across the Air-Sea Interface In Singapore's Coastal Environment", *Atmospheric Chemistry and Physics*, In Press

Jin L, **Ng H Y** and **Ong S L**, 2009, "Performance and Fouling Characteristics of Different Pore-Sized Submerged Ceramic Membrane Bioreactors (SCMBR)", *Water Science and Technology*, In Press.

Karthikeyan S and **Balasubramanian R**, 2009, "Inter-Laboratory Study to Improve the Quality of the Analysis of Nutrients in Rainwater Chemistry", *Atmospheric Environment*, **43**(21): 3424-3430.

Karthikeyan S, He J, Umid M J and **Balasubramanian R**, 2009, "Determination of Total Nitrogen in Environmental Samples: Validation by Inter-comparison and Intra-laboratory Studies", *Analytical Letters*, **42**(7): 948-957.

Kuppusamy V, Arun M, Umid M J and **Balasubramanian R**, 2009, "Biosorption of As(V) onto the Shells of the Crab (*Portunus Sanguinolentus*): Equilibrium and Kinetic Studies", *Industrial & Engineering Chemistry Research*, **48**(7): 3589-3594.

Kuppusamy V, Mahadevan A, Umid M J and **Balasubramanian R**, 2009, "An Examination of the Uptake of Lanthanum from Aqueous Solution by Crab Shell Particles", *Chemical Engineering Journal*, In Press.

Kuppusamy V, Teo T T, **Balasubramanian R** and Joshi U M, 2009, "Application of Sargassum Biomass to Remove Heavy Metal Ions from Synthetic Multi-metal Solutions and Urban Storm Water Runoff", *Journal of Hazardous Materials*, **164**(2-3): 1019-1023.

Lee L Y, **Ng H Y**, **Ong S L**, **Hu J Y**, Tao G, Kekreb K, Viswanathb B, Lay W and Seah H, 2009, "Ozone-Biological Activated Carbon as a Pretreatment Process for Reverse Osmosis Brine Treatment and Recovery", *Water Research*, In Press.

Lefebvre O, Ooi W K, Tang Z, MD. A, Chua D H C and **Ng H Y**, 2009, "Optimization of a Pt-free Cathode Suitable for Practical Applications of Microbial Fuel Cells", *Bioresource Technology*, In Press.

Li TG, **Bai R B** and Liu JX, 2009, "Biodegradation of Acetonitrile by Adapted Biofilm in a Membrane-aerated Biofilm Reactor", *Biodegradation*, **20**: 569-580.

Lim S F, Zheng Y and **Chen J P**, 2009, "Organic Arsenic Adsorption onto a Magnetic Sorbent", *Langmuir*, **25**(9): 4973-4978.

Lim S F, Zheng Y, Zou S W and **Chen J P**, 2009, "Removal of Arsenate by an Alginate Encapsulated Magnetic Sorbent", *Journal of Colloid and Interface Science*, **333**(2): 33-39.

Lim S F, Zheng Y and **Chen J P**, 2009, "Removal of Copper by Calcium Alginate Encapsulated Magnetic Sorben", *Chemical Engineering Journal*, In Press.

Lin Y and Valentine R L, 2009, "Reduction of Lead Oxide (PbO₂) and Release of Pb(II) in Mixtures of Natural Organic Matter, Free Chlorine and Monochloramine", *Environmental Science & Technology*, **43**(10): 3872-3877.

Ng T C A and **Ng H Y**, 2009, "Characterisation of Biofilm Constituents and Their Effect on Membrane Filterability in MBRs", *Water Science and Technology*, **58**(10): 1933-1939.

Sathrugnan, K, He J, Sundarambal P, **Balasubramanian R** and Burger D, 2009, "Determination of Total Nitrogen In Atmospheric Wet and Dry Deposition samples", *Talanta*, **77**(3): 979-984, 6.

Sundarambal P, **Balasubramanian R** and Tkalich P, 2009, "Atmospheric Fluxes of Nutrients onto Singapore Strait", *Water Science and Technology*, **59**(11): 2287-2295.

Sundarambal P, Tkalich P and **Balasubramanian R**, 2009, "Modeling the Effect of Atmospheric Nitrogen Deposition on Marine Phytoplankton at the Singapore Strait", *Water Science and Technology*, **39**(1).

Syam K P, Kuppusamy V and **Balasubramanian R**, 2009, "Removal of Cr(VI) Ions by Spent Tea and Coffee Dusts: Reduction to Cr(III) and Biosorption", *Industrial and Engineering Chemistry Research*, **48**(4): 2113-2117, 5.

Tan J, Loganath A, Chong Y S and **Obbard J P**, 2009, "Exposure to Persistent Organic Pollutants in Utero and Related Maternal Characteristics on Birth Outcomes: A Multivariate Data Analysis Approach", *Chemosphere*, **74**(3): 428-433.

Tan J, Loganath A, Chong Y S and **Obbard J P**, 2009, "Persistent Organic Pollutants in Human Breast Milk in Singapore: Influential Factors and the Health Risks of Infants.", *Journal of Toxicology and Environmental Health-Part A*, In Press.

Xiao M and **Obbard J P**, 2009, "Transesterification of Oils using Lipase Biocatalyst: A Review", *GCB Bioenergy*, In Press.

Zhao W, Zheng Y, Zou S W, Ting Y P and **Chen J P**, 2009, "Effect of Hexavalent Chromium on Performance of Membrane Bioreactor in Wastewater Treatment", *Journal of Environmental Engineering-ASCE*, In Press.

Zheng Y, Lim S F and **Chen J P**, 2009, "Preparation and Characterization of Zirconium based Magnetic Sorbent for Arsenate Removal", *Journal of Colloid and Interface Science*, In Press.