

4th International Conference on **Pollution Control & Sustainable Environment**
&
6th Edition of International Conference on **Water Pollution & Sewage Management**
July 26-27, 2018 Rome, Italy

Removing of strontium ion from water using ion flotation

Mojtaba Taseidifar¹, Richard M Pashley¹ and Barry W Ninham²

¹The University of New South Wales Canberra, Australia

²Australian National University, Australia

The effect of a new surfactant obtained with reacting cysteine and octanoyl (C8) was investigated in ion flotation removal of low levels of chromium ions from aqueous solution. The synthesised amino acid-based single-chain surfactant shows high water solubility and causes extensive foaming in a typical flotation chamber. In an ion flotation process, this surfactant was able to remove 99.8% of the 5 ppm strontium present in the contaminated water, in a simple, single-stage physiochemical process.

Recent Publications

1. Taseidifar M, Shahid M, and Pashley R. M., "A study of the bubble column evaporator method for improved thermal desalination", *Desalination*, 432 (2018) 97-103.
2. Taseidifar M, Makavipour M, Pashley R. M., "Removal of heavy metal ions from water using ion flotation", *J. Environ. Tech. Innovation*, 8(182-190).
3. Nikafshar S, Zabihi O, Ahmadi M, Mirmohseni A, Taseidifar M, Naebe M, "The effects of UV light on physical, chemical and mechanical properties of epoxy-diamine system with and without organic UV absorber", *J. Mater.*, 10(2), 180 (2017).
4. Taseidifar M, Khataee A. R, Vahid B, Khorram S, Joo S. W, "Production of nanocatalyst from natural magnetite by glow discharge plasma for enhanced catalytic ozonation of an oxazine dye in aqueous solution", *Appl. Mol. Catal. A*, 404-405, 218-226 (2015).
5. Khataee A. R, Taseidifar, Sheydaei M, S. Khorram, S. W. Joo, "Sonocatalytic degradation of Basic blue 3 using plasma-treated magnetite nanostructures ", *Curr. Nanosci.*, 1, 1-11 (2015).

Biography

Mojtaba Taseidifar is an Iranian PhD student attending University of New South Wales, Australia with thesis entitled "Novel Water Technologies" in research group of Professor Richard Mark Pashley. Moji's research area generally evolve re-using wastewater, cavitation prevention and seawater desalination, which all are of paramount importance to tackle the problems associated with water pollution and shortage. He is very interested to mingle with the experts/researchers to find out about their work in order to build up his future research.

m.taseidifar@student.unsw.edu.au