



COST ACTION GREENERING – DATA COLLECTION

First name, Family Name: Fatemeh Hanifpour

Type (Academic or Industrial): Academic

Country: Iceland

Leadership position in the COST: MC member on CA18224

Working Group in which you are involved: WG3

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Laboratory/Company:

- 1- Science Institute and Faculty of Industrial Engineering, Mechanical Engineering and Computer Science, University of Iceland, VR-III, Hjardarhaga 2, 107 Reykjavík, Iceland
- 2- Atmonia, Árleyni 8, 112 Reykjavík, Iceland

Laboratory/Company info:

Atmonia is an early stage company, developing a breakthrough electro-catalytic process for generating aqueous ammonia from air and water, for direct use as fertilizer through irrigation. The Atmonia process, unlike conventional ammonia production, is zero carbon and works at ambient pressure and temperature and is based on economical and abundant catalysts

Link to the home page of the Laboratory/Company: <https://atmonia.com/>

Fields of expertise:

Solvent (liq-liq) extraction; magnetite nanoparticle synthesis; adsorption processes; heavy metal recovery from industrial and synthetic wastes; electrochemistry; catalysis; electro-catalysis; Nitrogen reduction reaction; ammonia synthesis; flow injection analysis (FIA); gas chromatography-mass spectrometry (GC-MS)

5 Main publications or patents:

- Sadeghi, M., Hanifpour, F., Taheri, R., Javadiand, H. and Ghasemi, M. Comparison of Using Formaldehyde and Carboxy-methyl Chitosan in Preparation of Fe₃O₄ Superparamagnetic Nanoparticles-chitosan Hydrogel Network: Sorption Behavior Toward Bovine Serum Albumin. *Process Safety and Environmental Protection* 102, (2016), 119-128.
- Agarwala, S., Tyagib, I., Kumar, V. G., Hanifpour, F., Maghsudi, M. and Javadian, H. Mo (IV) adsorption from nitric acid media by Di-(2-ethylhexyl) phosphoric acid (D2EHPA) coated silanized magnetite nanoparticles. *Journal of Molecular Liquids* 218, (2016), 346-353.
- Ghaemi, A., Maghsudi, M., Hanifpour, F. and Samadfam, M. Preparation of a Uranium Conversion Plant's Nuclear Waste for Final Disposal by Means of Magnetically Assisted Chemical Separation. *International Journal of Chemoinformatics and Chemical Engineering*, 3, (2013), 8-18.



- Hanifpour, F., Moazen, M., Taghizadeh, M., Ghaemi, A., Samadfam, M. Uranium Recovery from Isfahan's UCF Plant Solid Waste Using a Pulsed Sieve-Plate Column. The 7th International Chemical Engineering Congress & Exhibition (IChEC), 2011, Kish Island, Iran.