

Mir-Hosseini BLV.Organizations of Agriculture-Zabol, Iran, +989143884293,

arfania@udel.edu

Work Experience

2019– Present **Agricultural and Natural Resources Research and Education of Sistan - Zabol, IRAN**, Assistant Professor of Soil and Water Research Department. Main responsibility; Principal investigator, Extension specialist, Rural area development, Soil and water conservation...

TEACHING EXPERIENCE:

Teaching assistant in courses: Advanced Plant Nutrition – Soil Physical Chemistry – Soil Chemistry
Soil Testing and Plant Analysis – Soil and Water Pollution, Teaching for farmers: Soil fertility management and fertilizer recommendation – Soil organic matter management

Academic Experience

10/2013–09/2018 **Doctor of Philosophy (Ph.D.)-Soil Chemistry and Fertility**, Urmia University, Urmia,
Title of the Ph.D. thesis: Evaluation of Phosphorus Status in Wetland Soils and Western
River Sediments of Urmia Lake Basin Iran

11/2013–01/2018 **Visiting Research Project:** Tracking Sources and Cycling of Phosphorus in Zhanjiang Mangrove
Estuarine Environment China, University of Delaware, USA

06/2009-10/2010 Military

09/2006–11/2008 **Master of Science in Soil Chemistry and Fertility**, Bu-Ali Sina University, Hamedan, Iran,
Title of Master Thesis: Leaching and Fractionation of Heavy Metals from Abshined and Gareh-Chai
Rivers, Western Iran

09/2006–11/2008 **Bachelor of Science in Soil Sciences**, Urmia University, Urmia, Iran, Title of Bachelor Thesis:
Depletion of Soil Potassium Content under Sugar Beet Cultivation of Western Azerbaijan Province,
Iran

Journal Reviewer Journal of Soils and Sediments, Applied Soil Science

Languages: Persian (native speaker), English, (C2), German (A1),

Crop and soil related skills: Soil testing and plant analysis, Sequential extraction of heavy metals and phosphorus of soil and sediment methods, Kinetics study column and batch, Silver phosphate micro precipitation for oxygen isotope in phosphate ($\delta^{18}O$ P) analysis, Microbiological Culture, Microbial analysis for N and C estimation
Heavy metals analysis and evaluation, Algal bioassay and toxicity test for sediment and water samples,
Sediment and water sampling (Urmia Lake, Hamoon Lake, Chesapeake Bay, Zhanjiang Estuary, etc.)

Soil testing and fertilizer recommendation for extension program Sediment quality analysis Wind erosions of soils in Sistan Plain Pilot projects (integrative soil fertility and plant nutrition management) in Sistan plain
Surface water quality analysis of Chanimeh water reservoir, Zabol Sistan

IT skills: Microsoft (word, excel, PowerPoint), Statistical analysis (SPSS, Minitab), ArcGIS, AutoCAD

Communication skills: Professional communication skills gained through experience in different laboratories. Goal oriented intercultural experience. Ability to work in a team highly self-motivated.

The list of publication; next page

Publications

Arfania, H., Asadzadeh, F., (2019) Chemical Weathering Evaluation in Western River Sediments of Urmia Lake. J. of Water and Soil Conservation (Accepted).

Arfania, H., Samadi, A., Asadzadeh, F., Sepehr E (2017). Phosphorus fractionation in relation to algal growth (*Scenedesmus obliquus*) in western river sediment of Urmia Lake basin. J. of Water and Soil Conservation, Vol. 24(3).

Arfania*, H., Samadi, A., Asadzadeh, F., Sepehr E (2017) Estimating bioavailable phosphorus by some chemical extraction methods for algae (*Senedesmus obliquus*) in Western River sediments of the Urmia Lake Basin. Journal of Water and Soil31:1200-1214.

Arfania*, H., Asadzadeh (2016) Heavy Metals bioavailability (Zn, Cd, Ni, Cu, & Pb) in Sediments of Abshineh River. Western Iran. Journal of Soil Management and Sustainable Production. 5:133-146.

Arfania*, H., Asadzadeh. (2015) Kinetics fractionation of heavy metals release from clayey sediments using leaching column. Journal of Environmental Science. 3:1-10

Peer-reviewed journal publications:

Arfania*, H., Samadi, A., Asadzadeh, Sepher, E., F., S.E.A.T.M van der Zee. (2019) Bioavailability of phosphorus of river sediments and its effect on growth of *Selenastrum capricornutum*. Journal of Hydorlogy (under review)

Arfania*, H., Samadi, A., Asadzadeh, F., Sepher, E., Jaisi, DP (2018) Distribution of phosphorous pools in western river sediments of the Urmia Lake Basin, Iran. Environmental Science and Pollution Research. 12:11614-11625.

Arfania*, H., Asadzadeh, F. (2015) Mobility of heavy metals after spiking in relation to sediment and metal properties: leaching column study, Journal of Soils and Sediments. 15:2311-2322.

Jalali M., **H. Arfania**. (2011) Distribution and fractionation of cadmium, copper, lead, nickel, and zinc in calcareous sandy soil receiving municipal solid waste, Environmental Monitoring and Assessment. 10:1384-1389.

Jalali M., **H. Arfania**. (2010) Leaching of heavy metals and nutrients from calcareous sandy-soil receiving solid sewage sludge, Journal of Plant Nutrition and Soil Science.173: 407-416.