

Faten Salim

EDUCATION

Candidate for Doctor of Philosophy

September 2013 - present

Analytical Chemistry, University of Waterloo, Waterloo, Ontario

Supervisor: Professor Tadeusz Górecki

Relevant Courses

- Groundwater Modelling Grade: 98/100
- Principles of Polymer Science Grade: 93/100
- Statistics in Engineering AUD
- Applied Engineering Mathematics AUD

Master of Science Degree in Analytical Chemistry

2013

Department of Chemistry, University of Waterloo, Waterloo, Ontario

Supervisor: Professor Tadeusz Górecki

Thesis: Novel Application of the Waterloo Membrane Sampler (WMS) in Volatile Organic Compound Sampling from Different Environmental Matrices

Relevant Courses

- Multi-Component Analysis Grade: 90/100
- Mass Spectrometry Grade: 91/100
- Separations Grade: 95/100
- Introduction to Experimental Design & Chemometrics Grade: 90/100

Bachelor's Degree in Chemistry

2001

Department of Chemistry, Tishreen Universtiy, Latakia, Syria

TEACHING EXPERIENCE

Teaching Assistant of Undergraduate Courses

Jan. 2011- Aug. 2018

Department of Chemistry, University of Waterloo, Waterloo, Ontario

- Experience as a teaching assistant over 16 terms in eight undergraduate courses: Multi-Component Analysis, Introductory Analytical Chemistry, Analytical Chemistry Laboratory 1, Analytical Chemistry Laboratory 2, Chemical Reactions Laboratory 2, Introduction to Scientific Calculations, Introductory Spectroscopy and Structure, and Structure and Bonding.
- *Supervising students in the laboratory:*
 - Introduced several instrumental analytical methods, trained students on the proper use of the analytical techniques, and guided them through the analysis process.
 - Observed students' work, provided recommendations, and discussed the results of their experiments and how to interpret these results.

- *Leading tutorial sessions*

- Designed and ran the tutorial sessions based on questions and problems developed as applications of the material covered in the course.
- Answered questions and helped students during weekly office hours.
- Marked assignments, quizzes, midterm and final examinations

Guest Lecturer

- “Multi-Component Analysis” (second year chemistry course, 30-50 students)

University of Waterloo

- Gas Chromatography
- Electrolysis techniques

Winter 2017

Spring 2018

- “Introductory Analytical Chemistry” (second year chemistry course, 200 students)

University of Waterloo

- Final review

Fall 2016

Student supervision experience

Department of Chemistry, University of Waterloo, Waterloo, Ontario

- Introduced students to the research environment, trained them on developing, planning and performing the required experiments and data analysis.
- Navigated them through the process of evaluation and decision making.

Other teaching experiences

- Second language and Quran teacher **2006- 2007**
Private school, Windsor, Ontario
 - Taught students of different ages Arabic language and professional rules of Quran recitation.
- Second language and Quran teacher **2008 – 2010**
Private school, Waterloo, Ontario
 - Taught students of different ages Arabic language and professional rules of Quran recitation.
- Middle school physics and chemistry teacher **2003 – 2004**
Latakia, Syria

TEACHING TRAINING

- Certificate in University Teaching **September 2015–August 2017**
Centre for Teaching Excellence, University of Waterloo
- Fundamentals of University Teaching Certificate, **October 2014 - April 2015**
Centre for Teaching Excellence, University of Waterloo
- Teaching seminar and workshop **2015**
Department of Physics & Astronomy, University of Waterloo
- Teaching assistance workshop **September 2014**
Department of Chemistry, University of Waterloo

RESEARCH EXPERIENCE

Doctoral Researcher

Department of Chemistry, University of Waterloo

2013-present

Research Projects

- Development of passive sampling techniques for environmental applications including method development, validation and troubleshooting.
- Modelling and evaluation of the sampling process in a passive sampler.
- Application of theoretical model results to optimization of the sampler design.
- Development of a correction method to improve accuracy of the Time Weighted Average (TWA) concentrations using passive sampling.
- Application of passive sampling in isotope fingerprinting for environmental studies.

Master's Researcher

Department of Chemistry, University of Waterloo

2011-2013

Research Projects

- Ranking the potential risks of intruding pollutants in vapor intrusion studies.
- Assessment of a PDMS-based permeation passive sampler (Waterloo Membrane Sampler) as a tool in vapor intrusion investigations.
- Novel applications of the Waterloo Membrane Sampler (WMS) in water and bulk soil sampling.
- Calibration of the sampler towards VOCs for air quality monitoring.

PUBLICATIONS

- Salim, F., M. Ioannidis, and T. Górecki., Experimentally validated mathematical model of analyte uptake by permeation passive samplers, *Environmental Science: Processes & Impacts*, 19.11 (2017): 1363-1373.
- Salim, F., T. Górecki and M. Ioannidis, New applications of the mathematical model of a permeation passive sampler: prediction of the effective uptake rate and storage stability, *Environmental Science: Processes & Impacts*, 2018, DOI: 10.1039/C8EM00397A
- Salim, F., Ioannidis, M., Penlidis, A. and Górecki, T., Modelling Permeation Passive Sampling with Various Types of Adsorbents: Intra-Particle Resistance to Mass Transfer and Comprehensive Sensitivity Analysis, *Environmental Science: Processes and Impacts*, in preparation.

CONFERENCE PRESENTATIONS

- Salim, F. Ioannidis, M. and Górecki, T. and Puvanendran, H., (2018) "Modelling and Experimental Evaluation of the Sampling and Post-Sampling Processes in a Permeation Passive Sampler" (Oral presentation), PITTCON (International Conference), Orlando, US.
- Groenevelt, H., McAlary, T., Ettinger, R., Górecki, T., Salim, F. and Ioannidis, M., "Recent Developments in Quantitative Passive Soil Gas Sampling for VOCs", 28th Annual AEH International Conference On Soil, Water, Energy and Air, San Diego, CA, 21 March, 2018
- Salim, F. Ioannidis, M. and Górecki, T. (2017) "A mathematical model and numerical evaluation of analyte uptake by a permeation passive sampler" (Oral presentation), The 9th International Passive Sampling Workshop and Symposium, Toronto, Canada.

- Salim, F., Puvanendran, H., Ioannidis, M., and Górecki, T. (2017) “Modelling and numerical evaluation of the post-sampling period in a permeation passive sampler” (Oral presentation), 100th Canadian Chemistry Conference and Exhibition (National Conference), Toronto, Canada.
- Salim, F. Ioannidis, M. and Górecki, T. (2016) “Development of a Mathematical Model Representing the Sampling Process in a Permeation Passive Sampler” (Oral presentation), 99th Canadian Chemistry Conference and Exhibition (National Conference), Halifax, Canada.
- Salim, F. Ioannidis, M. and Górecki, T. (2016) “Investigation and Modelling of the Sampling Process in a PDMS-Based Permeation Passive Sampler” (Oral presentation), PITTCO (International Conference), Atlanta, US.
- Salim, F. and Górecki, T. (2013) “Novel Applications of a PDMS-Based Permeation Passive Sampler in Environmental Analysis” (Oral presentation), 96th Canadian Chemistry Conference and Exhibition (National Conference), Québec, Canada.
- Salim, F. and Górecki, T. (2013) “Applications of the Waterloo Membrane Sampler in Sampling of Volatile Organic Compounds from Different Environmental Matrices” (Oral presentation), PITTCO (International Conference), Philadelphia, US.

TEACHING AWARDS

- Department of Chemistry Teaching Assistant Excellence Award **Spring 2018**
- Department of Chemistry Teaching Assistant Excellence Award **Winter 2018**
- Department of Chemistry Teaching Assistant Excellence Award **Winter 2017**

SCHOLARSHIPS AND GRANTS

- Queen Elizabeth II Graduate Scholarship in Science and Technology (QEII-GSST)
\$ 5000/term for three terms **Fall 2016 – Spring 2017**
A merit-based scholarship for graduate students in a research graduate program in one of the STEM (Science, Technology, Engineering and Math) fields.
- University of Waterloo President's Graduate Scholarship
\$ 1667/term for three terms **Fall 2016 – Spring 2017**
The award is provided by the University of Waterloo to outstanding graduate students who hold major federally and provincially funded competition-based scholarships.
- University of Waterloo Graduate Scholarship
\$ 750-1000 **Winter 2014, Winter 2015 and Winter 2016**
An award presented to outstanding graduate students in recognition of their accomplishments.
- Provost Doctoral Entrance Award (PDEA) for Women
\$ 5000 **Fall 2013**
This award is provided to outstanding full-time female doctoral students.
- MAX Gala Scholarship for Women in Graduate Chemistry
\$ 2500 **2018**
- International Passive Sampling Workshop and Symposium (IPSW) 2017 Student Presentation Award. **2017**

This award is provided in appreciation for participation and in recognition of the high quality of the presentation and research.

- First-ranked graduate student award, Tishreen University, Syria
\$ 1400 **2002**
- First-ranked undergraduate student award, Tishreen University, Syria
\$ 430/year **1997,1998, and 1999**
- Graduate Studies Office Research Travel Assistantship \$ 500 **2016**
- Graduate Studies Office Research Travel Assistantship \$ 500 **2018**

EXTRA CORRECUA ACTIVITIES

- Volunteer coach in one-on-one training for young children
Strong Start to Reading organization, Ontario, Canada **Sep 2018 – present**
 - Received two training sessions to work on one-on-one activities with children.
 - Working with children individually. The children practice letter sounds through fun activities that are especially designed for the program.
- Waterloo Science Outreach and Let's talk science
Volunteer, Waterloo, Ontario, Canada **2014 – present**
 - helped running and supervising hands-on activities for young people to engage them in science during school visits or in-campus activities.
- Professional Arabic language and Quran tutor for University of Waterloo students **2012 – 2013**