

**Esmaeel Masadeh**

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**EDUCATION:**

Ph.D. program, 2003-2011  
Department of Chemistry  
University of Nevada, Reno/ Desert Research Institute  
Reno, Nevada, US

Masters in Chemistry, 1991-1994  
Middle East Technical University  
Ankara, Turkey

Bachelor in Chemistry, 1987-1991  
Al-Yarmouk University  
Irbid, Jordan

**EXPERIENCE:**

**Hill College. Cleburne TX. August 2010-Present**

- Full Time Instructor:
  - Teaching Chemistry to undergraduate students both in the laboratory and the classroom.
  - Teaching online classes using web-based course management and collaboration portals such as Angel, Moodle, Black Board, Turnitin.com, and Masteringchemistry.com that help educators to manage course material and communicate quickly, easily, and effectively

**Tarrant County Community College, Arlington TX, July 2013 –Present**

- Part Time Instructor:
  - Teaching Chemistry to undergraduate students both in the laboratory and the classroom.
  - Teaching online classes using web-based course management and collaboration portals such as Blackboard, Angel, Moodle, Turnitin.com, and Masteringchemistry.com that help educators to manage course material and communicate quickly, easily, and effectively

**Navarro College. Waxahachie TX, January 2011- June 2013**

- Part Time Instructor:
  - Teaching Chemistry to undergraduate students both in the laboratory and the classroom.
  - Teaching online classes using web-based course management and collaboration portals such as Angel, Moodle, Black Board, Turnitin.com, and Masteringchemistry.com that help educators to manage course material and communicate quickly, easily, and effectively

**Trukee Meadows Community College. Reno, NV. August 2008 – May 2010.**

- Part Time Instructor:
  - Teaching Chemistry to undergraduate students both in the laboratory and the classroom.
  - Teaching online classes using web-based course management and collaboration portals such as Angel, Moodle, Turnitin.com, and Masteringchemistry.com that help educators to manage course material and communicate quickly, easily, and effectively

**Deseret Research Institute, Reno NV. 2007- Present**

- Research Assistant:
  - Performed research to develop a microscopic chemical imaging system to characterize atmospheric particulate and determine the sources of the observed pollutants. Utilized the computer and related data-processing equipment in the treatment of research data, utilized statistical techniques related to research, assisted in the preparation of reports and papers for seminars and conferences as well as those destined for publication or presentation at national and international meetings, and aided in the maintenance of records. Performed, as appropriate, such teaching functions as proctoring examinations, placing books on library reserve, and engaging in other bibliographic services relating to teaching.

**University of Nevada at Reno. Reno, NV. 2003-2007**

- Research and Teaching assistant:
  - Performed a variety of duties including teaching undergraduate classes, grading papers, and conducting laboratory research.
  - Worked on an Organic research projects that draw upon concepts and methods in synthetic and physical organic chemistry, coordination chemistry, spectroscopy and structural chemistry. The unifying theme is molecular devices: molecules that are tailored to bind and sense other molecules, to act as switches or motors, or to act as drugs interfering with biochemical processes

**Duke University Medical Center. Durham, NC (full-time) 1999-august 2003**

- Medical Technologist, Coagulation Laboratory:
  - Responsibilities included: performing various medical laboratory tests to obtain data for use by physicians in a offsite medical practice in the diagnosis and treatment of disease.
  - Setting up equipment, instrument and apparatus required for specific laboratory tests.
  - Operating manual and automatic laboratory equipment(MDA 180, STA, ST4, MTX, PFA100, Aggrometer, PACKS-4)to make qualitative and quantitative analysis of specimens.
  - Preparing chemical reagents and solutions, maintaining sufficient inventory of material, supplies and equipment for performance of duties; and clean and maintain equipment.
  - Assisted in the development of new medical laboratory procedures and techniques.
  - Provided guidance to other staff.
  - Responsible for the operation, trouble shooting and maintenance on a variety of analytical laboratory instruments(MDA 180, STA, ST4, MTX, NMR, IR, UV, HPLC, PFA100, Aggrometer, PACKS-4)

**North Carolina State Laboratory. Raleigh, NC (part-time) 6/2001-10/2001**

- Medical Technologist:
  - Responsible for preparing culture media, chemicals, reagents and solutions and for obtaining and preparing brain tissue for rabies testing.

**Self-employed. Durham, NC (full-time) 1997-1999**

- Chemistry Tutor:
  - Provided tutelage to private undergraduate students in General and Organic Chemistry

**Jordan University of Science and Technology. Irbid Jordan**

- Chemistry Instructor (full-time) 1996-1997:
  - Responsible for teaching General, Organic, Analytical and Physical Chemistry to undergraduate students.

- Proctoring exams and the grading exams and research papers.

#### **Middle East Technical University, Ankara Turkey.**

- Teaching and Research Assistant. Ankara, Turkey (full-time) 1992-1995:
  - Responsible for teaching General, Organic, Analytical and Physical Chemistry to undergraduate students.
  - Extensive knowledge in using Vacuum lines for studying the efficiency of the Pruitt-Baggett Catalyst in the Stereoregular Polymerization of Propylene Oxide.

### **PROFESSIONAL SKILLS**

#### **Laboratory and technical skills:**

- Understanding of scientific and mathematical principles and concepts.
- Solid laboratory, analytical, and problem solving skills.
- Excels in planning, coordinating and executing projects.

#### **Communication skills:**

- Fluent in the English, Turkish and Arabic languages and strong interpersonal and writing skills
- Effectively able to present ideas to laboratory and research team members.

#### **Operation knowledge:**

- Practice and knowledge of specialized laboratory equipment and techniques.
- MDA 180, STA, ST4, MTX, NMR, IR, UV, HPLC, PFA100, Aggrometer, PACKS-4, Gas Chromatograph, UV-Vis, HPLC, FIPA-20, Vacuum lines.,
- Responsible for operation, trouble shooting and maintenance on a variety of analytical laboratory instruments.

#### **Computer skills:**

- Excellent computer skills, including spreadsheets, graphing, and office programs.
- *Software:* Microsoft Office

#### **Personal attributes:**

- Ability to work independently and in a team environment while under pressure in a multitask setting.
- Well organized, attention to detail, and easily adaptable to change.

#### **Publications:**

Masadeh, E. and A.W. Gertler (2009). Development of a Microscopic Chemical Imaging System to Characterize Ambient Particulate Matter, in preparation.

Masadeh, E. and A.W. Gertler (2009). Validation the Microscopic Chemical Imaging Technique for Ambient Particulate Matter Source Apportionment, in preparation.

Masadeh, E., A.W. Gertler, J. Engelbrecht, and J. Chow (2009). Sources of Particulate Matter in Hyderabad, India Based on Microscopic Chemical Imaging, in preparation.

#### **Presentations:**

Masadeh, E. and A.W. Gertler (2008). Application of a Microscopic Chemical Imaging System to Characterize Ambient Particulate Matter, presented at the Goldschmidt 2008 Conference, Vancouver, Canada, July 13-18, 2008.

Masadeh, E., A.W. Gertler, and D. Moshe (2008). Validation of a Microscopic Chemical Imaging System for PM Source Apportionment, presented at the Air and Waste Management Association Annual Conference and Exhibition, Detroit, MI, June 16-19, 2009.