#### **CURRICULUM VITAE**

### Name: Dr. Amjad K. Fataftah



E-mail : afataftah@alfaisal.edu Mobile : +966507275839 Current Address: Olya, Riyadh, Saudi Arabia Date of Birth: 15/11/1964 Nationality: Jordanian, and USA Permanent Residence Marital Status: Married

#### **EMPLOYMENT HISTORY:**

August 2014 – Present
Assistant Professor, AUPP Director, Al-Faisal University, College of
Science and General Studies, Chemistry Department, Riyadh, KSA
September 2013 – January 2014
Adjunct Professor, Al-Faisal University, College of Science and General
Studies, Chemistry Department, Riyadh, KSA
January 2005 – July 2014
Assistant Professor, Department Chairman, Naif Arab University for
Security Sciences, College of Forensic Sciences, Forensic Chemistry
Department, Riyadh, KSA
April 1997- July 2004
Senior Research Scientist, ARCTECH, Inc., Chantilly, VA 20151 USA
June 1994-March 1997
Teaching Assistant, Chemistry Department, Northeastern University
Boston, MA 02115 USA.
Oct. 1993-Mar.1994
Research Assistant, Chemistry Department, Yarmouk University. Irbic
JORDAN
June 1993-Sept.1993
<b>Quality Control Manager,</b> Arab Pesticide Manufacturing Co. Irbic JORDAN.
Sept. 1990-Apr. 1993
Toobing Assistant Chamistry Department Vermoul University Irbic

**Teaching Assistant,** Chemistry Department, Yarmouk University. Irbid, JORDAN

#### **EXPERIENCES:**

# 1- At Alfaisal University, College of science and General studies, Chemistry Department

- Teaching CHM 310 Introduction to Instrumental Analysis for life science students.
- Teaching SCI 310, Forensic Science
- Teaching General Chemistry for the University Preparatory Program (UPP)
- Teaching General Chemistry for life science students
- Director of the University Preparatory Program (UPP)
- Head of the chemistry Department

#### 2- At Naif Arab University, Northeastern University, and Yarmouk University

- Teaching different academic courses including General Chemistry, Inorganic Chemistry, Analytical Chemistry, Organic Chemistry, Inorganic Forensic Toxicology, Explosives and Arson Analysis, and Nuclear Security. Using a state-of-the-art teaching technique, equipment and tools, including smart blackboards and PowerPoint presentation, and the electronic communications with students (homework and assignments)
- Supervising Master's students research projects in toxicology and nuclear security (Listed Below)
- Organizing, teaching and supervising several training courses in different forensic chemistry topics including Drug Analysis in Human Fluids, Explosive Analysis, Arson Analysis
- Development of different curriculum for academic programs (Toxicology Diploma program, Toxicology Masters programs, Nuclear Security Diploma program)
- Organizing several training courses in Nuclear Security
- Member of the University Scientific Council (2009- present)
- Participates in consultancy and technical meetings for the development of the IAEA's Educational Program in Nuclear Security (NSS # 12)

#### 3- At ARCTECH, Inc. USA

- Team leader for process and product research and development of different innovative adsorption and ion-exchange technologies and products from fundamental research to application-oriented process development.
- Conducting applied research for technology development related to wastewater treatment and Recycling of Explosives
- Conducting pilot scale testing of water remediation technology for removal of organic and inorganic contaminants.
- Writing and preparation of projects final reports, and proposals.
- Writing and preparations of Standard Operation Procedures (SOPs).
- Responsible for all the analytical aspects related to ARCTECH's projects including sample preparation and analysis of organic and inorganic contaminants.

- Management and technical support for fertilizers formulation and production facility including Quality Control for products formulation.
- Management of an analytical/Environmental chemistry laboratory (people, instruments, equipment and safety)
- Supervision of maintenance and operation of analytical instruments (Inductively Coupled Plasma (ICP), and Atomic Absorption (AA), UV-vis., FTIR, and GC & GC-MS.
- Technical support for marketing organic humic acid fertilizer, including making presentations, new fertilizers formulations, direct customer contact, and field testing and trials.
- Technical support for marketing technology for wastewater remediation, including preparation and presenting technical information to customers, preparation of and submission of proposals and quotations.
- Technical support and marketing technology for the safe recycling of obsolete explosives into fertilizer through chemical hydrolysis.
- Technical presentations to clients, partner companies and internal R&D contacts.

#### **EDUCATION:**

June 1994-August 1997

#### Ph. D., Inorganic Chemistry

Northeastern University, Chemistry Department, Graduate School of Arts and Sciences, Boston, MA 02115.

#### **Thesis Topic: Metal-Humic Acid Interactions**

#### Sept. 1990-Apr. 1993

#### M. Sc., Inorganic Chemistry

Yarmouk University, Chemistry Department, Faculty of Science Irbid, JORDAN.

## Thesis Topic: Preparation and characterization of Iridium (III) complexes

Oct. 1983-May 1990

#### B. Sc., Chemistry

Bir Ziet University, Chemistry Department, Faculty of Science Bir Ziet, WEST BANK

#### **PROFESSIONAL MEMBERSHIP:**

- American Chemical Society
- International Humic Substances Society
- International Nuclear Security Education Network (INSEN)

#### **COMPUTER SKILS:**

- Experienced in using the Microsoft Office programs (Word, Excel, Access and PowerPoint)
- Trained on using spreadsheets, chemistry graphics and statistical software.

#### **TRAINING PROGRAMS:**

- Monopolize your market, March 2002
- 24-Hours HAZWOPER, May 2002
- International Seminar on Nuclear Security, Argonne National Laboratory, October 2006.
- Radiological Crime Scenes & Nuclear Forensics, Canadian Police College, November 2009.
- International School on Nuclear Security, ICTP, Trieste, Italy, April 2011

#### AWARDS AND GRANTS:

- Ernst Giessen Travel Fellowship, Barnett Institute, Northeastern University, Boston, MA USA (1996).
- Teaching Assistant Scholarship, Northeastern University, Boston, MA USA (1994-1997)
- INTERNAL RESEARCH GRANT (IRG2015), Alfaisal University, Riyadh, KSA (October 2015 - April, 2017)

#### **PUBLICATIONS:**

- "Probing high-affinity aptamer binding region and development of aptasensor platform for the detection of cylindrospermopsin" Raja Chinnappan, Razan AlZabn, Amjad K. Fataftah, Ali Alhoshani, Mohammed Zourob. Analytical and Bioanalytical Chemistry, 18 May 2020.
- "A New Coated Wire Selective Electrode for Quetiapine in Biological and Pharmaceutical Analysis", Hassan Arida1, Majed Al robaian1, Mena Elbeshlawy, <u>Amjad Fataftah</u>, Ghalib AL-Sllami. Int. J. Electrochem. Sci., 12, 2017, pp. 4120 – 4133
- 3. "Dose Determination of Activated Charcoal in Management of Amitriptyline-Induced Poisoning by Reversed-Phase High-Performance Liquid Chromatography", Mohammed A Alotaibi1, <u>Amjad K Fataftah</u>, Khalid Alkhanbashi, Abdlatif A Al- Dhawailie, Fawaz A Alanazi1, Fowad M Khurshid and Mohammed S Alsultan. Tropical Journal of Pharmaceutical Research, April 2015; 14 (4): 655-662
- 4. "A Comparison Evaluation of Known Liquid Humic Acid Analysis methods" <u>A. Fataftah</u>, D. S. Walia, B. Gaines, and S. I. Kotob, In "*humic substances*, STRUCTURE, MODELS AND FUNCTIONS" Royal Society of Chemistry, Cambridge, UK. 2001, pp. 337-342.
- 5. "Tight Metal Binding by Solid Phase Peat and Soil Humic Acid" <u>A.</u> <u>Fataftah,</u> G. Davies, A. Cherkasskiy, E. A. Ghabbour, In "Humic

Substances and Chemical Contaminants" Soil Science Society of America, Inc. 2001, pp. 371-395.

- "HUMASORB-CS<sup>TM</sup>: A Coal-Derived Humic Acid-Based Sorbent" <u>A.</u> <u>Fataftah</u>, H.G. Sanjay, and D. S. Walia, In "Environmental Separation of Heavy Metals, Engineering Processes" Lewis Publishers, 2001, pp. 347-374.
- "Performance Improvement and Applications of HUMASORB-CS<sup>TM</sup>: A Humic Acid-Based Adsorbent for Contaminated Water Cleanup "<u>A.</u> <u>Fataftah</u>, H.G. Sanjay, and D. S. Walia, In "HUMIC SUBSTANCES, Verstile Components of Plants, Soils and Water" Royal Society of Chemistry, Cambridge, UK. 2000, pp. 309-319.
- "Anew multipurpose remediation media" H.G. Sanjay, <u>A. Fataftah</u> and D.
  S. Walia, *Environmental Protection*, December 1999, p. 42.
- "Humasorb-CS<sup>TM</sup>: A Humic Acid-based Adsorbent to Remove Organic and Inorganic Contaminants" H.G. Sanjay, <u>A. Fataftah</u> and D. S. Walia, In "UNDERSTANDING HUMIC SUBSTANCES, Advanced Methods, Properties and Applications" Royal Society of Chemistry, Cambridge, UK. 1999, pp. 245-253.
- "Humic acid gel drying with supercritical Carbon Dioxide" R. J. Willy, <u>A.</u> <u>Fataftah</u>, A. Radwan, G. Davies, M. E. Vozzella, and E. A. Ghabbour, *J. Non-Cryst. Solids*, 1998, <u>225</u>, pp. 30-35.
- "Greenhouse Gas Dilemma and Humic Acid Solution" D. S. Walia, <u>A.</u> <u>Fataftah</u> and K. C. Srivastava, In "HUMIC SUBSTANCES, Structure, Properties and Uses" Royal Society of Chemistry, Cambridge, UK. 1998, pp. 235-241.
- "Tight Metal Binding by Humic Acids and its Role in Biomineralization,"
  <u>A. Fataftah</u>, G. Davies, A. Cherkasskiy, E. A. Ghabbour, S. A. Jansen, S. Kolla, M. D. Paciolla, L. T. Sein, Jr., W. Buermann, M. Balasubramanian, J. Budnick and B. Xing, *J. Chem.Soc.Dalton.*, 1997, pp.4047-4060.
- 13. "Isolation of Humic Acid from the Brown Seaweeds Ascophyllum nodosum, Fucus Versiculosus, Laminaria saccharina and Zostera marina," by A. Radwan, G. Davies, <u>A. Fataftah</u>, E. A. Ghabbour, S. A. Jansen and R. J. Willey, J. Appl. Phycol., 1997, <u>8</u>, pp. 553-562.
- 14. "Supercritical Fluid CO<sub>2</sub> Extraction Accelerates Isolation of Humic Acid from the Live Alga *Pilayella littoralis*," by A. Radwan, R. J. Willey, G. Davies, <u>A. Fataftah</u>, E. A. Ghabbour and S. A. Jansen, *J. Appl. Phycol.*, 1997, <u>8</u>, pp. 545-551.

- "Isolation of Humic Acid from the Terrestrial Plant *Brugmansia* sanguinea," G. Davies, <u>A. Fataftah</u>, E. A. Ghabbour, S. A. Jansen, A. Radwan and R. F. Raffauf, *Sci. Total Envir.*, 1997, <u>201</u>, pp. 79-87.
- "Aerogels: New High Surface Area Forms of Solid Humic Acids," G. Davies, <u>A. Fataftah</u>, A. Radwan, R. J. Willey, S. A. Jansen, and E. A.Ghabbour, In "the role of humic substances in the Ecosystems and in Environmental protection" IHSS-Polish Society of humic Substances, Grunwaldzka 53, 50-357 Wroclaw, Poland 1997.
- "Isolation of Humic Acids from Live Plants," G. Davies, <u>A. Fataftah</u>, A. Radwan, R. J. Willey, S. A. Jansen, and E. A.Ghabbour, In "the role of humic substances in the Ecosystems and in Environmental protection" IHSS-Polish Society of humic Substances, Grunwaldzka 53, 50-357 Wroclaw, Poland 1997.
- "Ash and Metal Free Humic Acids," G.Davies, <u>A. Fataftah</u>, A. Cherkasskiy, A. Radwan, S. A. Jansen, M. Paciolla, and E. A. Ghabbour In "the role of humic substances in the Ecosystems and in Environmental protection" IHSS-Polish Society of humic Substances, Grunwaldzka 53, 50-357 Wroclaw, Poland 1997.

#### FUTURE RESEARCH INTEREST:

- 1- Forensic Applications of Nanotechnology (Drug Analysis, recovery of latent fingerprints, Toxicity of Nanomaterials)
- 2- Nuclear Forensic Applications (Attribution Technology)

#### **CONFERENCES AND PRESENTATIONS:**

- 1. The Group meetings of the International Nuclear security Education network, IAEA headquarters, Vienna, Austria, February 2014.
- International Conference on Nuclear Security: Enhancing Global Efforts, Vienna, July 2013
- 3. The Group meetings of the International Nuclear security Education network, IAEA headquarters, Vienna, Austria, February 2013.
- 4. The second meeting of the International Nuclear security Education network, IAEA headquarters, Vienna, Austria, August 2011.
- Topical Meeting on Nuclear Security Plan 2012-2013: Establishment of Selfsustaining Nuclear Security Support Centres, IAEA headquarters, Vienna, Austria, July 2011.
- 6. The International School on Nuclear Security, ICTP, Trieste, Italy, April 2011

- 7. The first meeting of the International Nuclear security Education network, Working group I, IAEA headquarters, Vienna, Austria, August 2010.
- 8. European Commission Meeting, Promoting Regional CBRN Centers of Excellence through the development of a culture of safety and security, Amman, Jordan, may, 2010.
- 9. International Conference on Human Resources Development for Introducing and Expanding Nuclear power Programmes, Abu Dhabi, UAE, March 2010.
- 10. Workshop on the Coordination and Promotion of the Educational programme in Nuclear Security, IAEA headquarters, Vienna, Austria, March 2010.
- 11. International Workshop, Introduction to Radiological Crime Scenes & Nuclear Forensics, Canadian Police College, Ottawa, Canada, November 2009.
- 12. Arabic Workshop on Preventing Terrorist from Acquiring Weapons of Mass Destruction, League of Arab States, Cairo, October 2009.
- 13. IAEA Workshop on Implementing Legislation in Nuclear Security for Members of the League of Arab States, IAEA headquarters, Vienna, Austria, May 2009.
- 14. International Symposium on Nuclear Security, IAEA headquarters, Vienna, Austria, April 2009.
- 15. Technical Meeting, Master of Science Program in Nuclear Security, IAEA headquarters, Vienna, Austria, August, 2008.
- 16. International Workshop, Master of Science Program in Nuclear Security, IAEA headquarters, Vienna, Austria, March 2008.
- 17. Consultancy Meeting, Master of Science Program in Nuclear Security, IAEA headquarters, Vienna, Austria, October, 2007.
- 18. Humic Substances Seminar X, Northeastern University, Boston, MA, March 2007.
- 19. International Seminar on Nuclear Security, Argonne National Laboratory, Argonne, IL, October 2006.
- 20. 11th Biennial meeting of the International Humic Substances Society, Northeastern University, Boston, MA, July 2002.
- 21. Humic Substances Seminar V, Northeastern University, Boston, MA, March 2001.
- 22. Humic Substances Seminar IV, Northeastern University, Boston, MA, March 2000.
- 23. GORDON Conference on Reactive Polymers, Ion-exchangers and Adsorbents, New England College, Henniker, NH, July 1999.
- 24. Humic Substances Seminar III, Northeastern University, Boston, MA, March 1999.
- 25. Consortium of Premium Carbon Products from coal, Pennsylvania State University, State college, PA, February 1999.
- 26. Remediation Technologies Development Forum, Oak Ridge National Laboratory, Oak Ridge, TN, November 1998.
- 27. Humic Substances Seminar II, Northeastern University, Boston, MA, March 1998
- 28. Industry Partnerships to Deploy Environmental Technology, Federal Energy Technology Center, Morgantown, WV, October 1997.
- 29. American Society of Agronomy, Anaheim, CA, October 1997.

- 30. Remediation Technologies Development Forum, Virginia Beach, VA, September 1997.
- 31. Royal Society Symposium, Norwich, England, September 1997.
- 32. Northeast Regional meeting of the American Chemical Society, Saratoga Springs, New York, June 1997.
- 213th National American Chemical Society Meeting, San Francisco, April 1997.
- 34. Humic Substances Seminar I, Boston, MA, March 1997.
- 35. 8th Biennial meeting of the International Humic Substances Society, Wroclaw, Poland, September 1996.
- 36. Barnett Institute Science Day, Northeastern University, Boston MA, March 1996.