

## CURRICULUM VITAE

### SAMAR AL-SHAKSHIR AL-HAZZAM

Department of Chemistry, An-Najah N. University,  
P.O. Box 1437, University Street,  
Nablus – West Bank, Palestine

Tel. (H) +970-9-239 1171 (O) +970-9-2345113

Fax +970-9-238 7982

E-mail: [ssalshakshir@yahoo.com](mailto:ssalshakshir@yahoo.com) or [salshakshir@najah.edu](mailto:salshakshir@najah.edu)

#### PERSONAL

**Place of Birth:** Nablus  
**Nationality:** Palestine  
**Marital Status:** Married

#### EDUCATION:

**1990-1995** The University of Oklahoma at Norman, Oklahoma  
Doctor of Philosophy in Chemistry.

**1984 – 1986** Southern Illinois University at Carbondale, Illinois  
Master of Science in Chemistry

**1978 –1982** An-Najah N. University, Nablus  
Bachelor of Science in Chemistry

#### OCCUPATIONS:

**2009-2011** Head of Chemistry department

**1995-Present** An-Najah N. University  
Assistant Professor

**March- Sept. 1995** The University of Oklahoma at Norman, Oklahoma  
General Postdoctoral Research Assistant.

**1990- Jan.1995** The University of Oklahoma at Norman, Oklahoma  
General Chemistry Teaching Assistant / Research Assistant

**1987 – 1989** An-Najah N. University  
Lecturer

**Aug- Dec. 1986** Southern Illinois University at Carbondale, Illinois  
General Chemistry Teaching Assistant

**1982-1984** An-Najah N. University  
Teaching and Research Assistant

### **RESEARCH INTERESTS:**

1. Synthesis of fire retardant compounds based on organoalkylsilane compounds. Structural and conformational studies using spectroscopic techniques.
2. Homogeneous catalysis with organometallics.
3. Photoelectrochemistry.
4. Speciation and removal of metal ions from water

### **RESEARCH SKILLS:**

Ability in performing chemical synthesis and reactions by employing Bench and Vacuum Line methods and techniques.

Experience in operating multinuclear NMR (Varian XR-300 S), Infrared, (Perkin Elmer 283B, IBM32 FTIR).

Mass Spectrometry (Hewlett Packard 5890 Series II) & HPLC Instruments.

### **COMPUTER AND SOFTWARE SKILL:**

1. Basic knowledge of Windows, Dos, Graphics, MS word 7, Excel 7.
2. Internet and on line skills.

### **THESIS CO-SUPERVISION:**

M.Sc student thesis 1999-2000, Moayyad Masoud.

M.Sc student thesis 2013 Jumana Ishtewie .

### **THESIS EXAMINATION:**

1. Moayyad Masoud, M.Sc. Thesis in Chemistry (2000)
  2. Ghazi Nour, M.Sc. Thesis in chemistry (2009)
  3. Maisaa Ateeq, M.Sc. Thesis in chemistry (2012)
  4. Waseem Mansour, M.Sc. Thesis in chemistry (2013)
- And others.

### **ADMINISTRATION:**

1. Chairman, Chemistry Department at An-Najah N. University (2009-2011).
2. Coordinator for the Graduate Studies School for Chemistry Department at An-Najah N. University (2009-2011).

### **COMMITTEE MEMBERSHIP:**

1. Member of the Science Faculty Council.
2. Graduate studies committee.
3. Social activity committee.
4. Graduate student admissions.
5. Study plan evaluation committee.
6. Fact finding committee.
7. General chemistry and practical general chemistry evaluation committee.
8. Member of committee for quality assurance.
9. Registration & student supervision.
10. Pure chemistry plan committee.

**TEACHING:**

1. Advanced Inorganic Chemistry (senior level chem.. 23421)
2. Advanced Inorganic Chemistry (M.Sc. chem.. 423521)
3. Instrumental Analysis Laboratory (M. Sc. Chem423515)
4. Inorganic Chemistry I and II and Inorg. Chem. Laboratory (Chem. 23321, 23322, 23325).
5. General Chemistry Lecture and Laboratory.
6. Analytical Chemistry Laboratory (Chem. 23215, 23216).
7. General chemistry for medicine students.

**OTHER ACTIVITIES:**

1. Tennis, Volleyball, Walking
2. Travel
3. Reading
4. Embroidery

**MEMBERSHIPS:**

American Chemical Society

**AWARDS:**

AMIDEAST Scholarship (1984 – 1986).

**CONFERENCES:**

1. 2<sup>nd</sup> International Conference of Pure, Applied and Environmental Chemistry, Yarmouk University, Irbid, Jordan. April 17-21, 2000.
2. Second conference on Biotechnology Research and Application In Palestine. An Najah N. University, Nablus, Palestine. Sep. 26, 2010.
3. Palestinian Conference on Modern Trends in Mathematics and Physics II. An Najah N. University, Nablus, Palestine. Aug. 2<sup>nd</sup>, 2010.
4. Palestinian International Chemistry Conference. Birzeit University, March 23-24, 2013.
5. The first International Palestinian Conference on nanotechnology for advanced material and devices. An Najah N. University, 26-3-2012.
6. The fifth Palestinian international chemistry conference. An Najah N. University, 1-6-2011.
7. Renewable energy and material science. An Najah N. University, 30-3-2013.
8. The science day on theoretical and applied physics. An Najah N. University, 23-11- 2013.

**VISITS:**

Dr. Francois Cansell, ICMCB, Bordeaux University, France, (Summer, 2004)

## PUBLICATIONS

1. "Speciation of Charged Complexes by Donnan Dialysis". James A. Cox and Samar Al-Shakhshir, *Anal. Lett.* **21(9)**, 1787-1769 (1988)
2. Proceedings of the Oak Model conference on Waste Management : Volume1. Part 3, Pages 89-110, Oct. 1987: James A. Cox. Atul Bhatanger & Samar Al-Shakhshir, Membrane- based Methods for speciation and removal of Metals from Waste Water.
3. Metalloporphyrin/polysiloxane modified n-GaAs surfaces : effect on photoelectrochemical efficiency and surface stability, Hikmat S.Hilal ,Moayad Masoud, Samar Shakhshir , Najeh Jisraw: *J. Electroanal. Chem.*, **527**,(2002), 47-55
4. Surface modification of n-GaAs semiconductor with metalloporphyrin/polysiloxane matrices. Hikmat S. Hilal , Moayad Masoud, Samar Shakhshir : 2<sup>nd</sup> International conference of pure, applied and environmental chemistry, Yarmouk University, Irbid- Jordan. April 17-21,2000
5. Repositioning of n-GaAs band edges by modification with metalloporphyrin/polysiloxane matrices. Hikmat S. Hilal, Moayad Masoud, Samar Shakhshir : *Active and Passive Electronic Components*, **26**(2003)11.
6. Surface modified n-GaAs semiconductor with metalloporphyrinatomanganese (III) encapsulated in polysiloxane matrices: effect of modification on the semiconductor characteristics at the solid/liquid junction, H.S. Hilal S. Shakhshir, and Moayyad Massoud, (Sharjah International Solar Energy Conference, Sharjah University, Sharjah, UAE, Feb. 2001).
7. n-GaAs Band-edge repositioning by modification with metalloporphyrin/polysiloxane matrices, H.S. Hilal, M. Masoud, S. Shakhshir, N. Jisrawi, (proc. Sharjah Solar Energy, Conf., 2001).
8. Stability and Cell Efficiency Enhancement of n-GaAs electrodes by Metalloporphyrin Complexes Embedded inside Polysiloxane Matrices, H.S. Hilal, M. Masoud, S. Shakhshir, N. Jisrawi, World Renewable Energy Congress VII, June 29<sup>th</sup> – July 5<sup>th</sup>, 2002 Cologne, Germany.
9. Preparation, characterization, modification and application of thin-film cadmium chalcogenide semiconductors: enhancement of solar conversion efficiency and stability. Hikmat S. Hilal, Iyad Sadeddin, Rania Ismail, Amer El-Hamouz, Huda Sabri, Subhi Saleh, Maysaa Atatri, Ahed Zyoud, Mosa El-Hasan, Israa hamdan, Samar Al-Shakhshir, Moayyad Masoud. 2<sup>nd</sup>

International Conference on Energy and Environmental Protection in Sustainable Development (ICEEP' 2009). Palestine Polytechnic University. Hebron, Palestine, November 10-12, 2009.

10. Understanding the Mode of Action of ZnO Nano-Particles as Photocatalysts in Water Disinfection: Bacteria Killing vs. Complete Photo-degradation. Jumana Ishtaiwa , Majdi Dwikat, Samar Shakhshir, Ahed Zyoud and Hikmat Hilal. Palestinian International Chemistry Conference. Birzeit University, Birzeit, Palestine, March 23 - 24, 2013.