

## CURRICULUM VITAE

**Name:** Bassem Shraydeh  
**Date of birth:** 25/5/1949  
**Title:** Professor  
**Marital status:** Married(6 children)

### Education:

**B. Sc.** 1974(Jordan University)  
**PhD.** 1980 (University of Wales, Cardiff)

### Summer schools:

1. Summer institute in quantum chemistry-Uppsala / Sweden- 1981.
2. Coulson's Summer school in theoretical chemistry-Oxford/England-1984.

### Conferences:

1. Fifth international conference on mechanisms of reactions in solution (University of Kent) at Canterbury 2-6/ July/ 1990.
2. 1<sup>st</sup> Palestinian Chemistry Conference -An-Najah National University 25-30/July/1992.
3. Expert group meeting for substitution of ozone depleting substances in the ESCWA Region. Amman-Philadelphia hotel 1-12/Feb (1993).
4. Second Palestinian Conference on chemistry and applied chemistry 23-24/ May/1995.
5. Second Mediterranean meeting on photochemistry –Sicily/Italy\_ (28/June-2 /July 2003).
6. Teaching and research at Al-Quds University during the sabbatical year 2007-2008.

### Courses taught at undergraduate level:

General chemistry	101
General chemistry	102
Chemical thermodynamics	241
Chemical kinetics	341
Physical lab 1.	345
Physical lab 2.	346
Analytical chemistry	211
Instrumental analysis	311
Quantum chemistry	342

Special topics in physical chemistry 481

**Courses taught at postgraduate level:**

**M.Sc.**

Quantum chemistry 541

Statistical thermodynamics 542

**Ph.D.**

Molecular spectroscopy 641

**Evaluation forms:**

Got distinguished teaching experience as evidenced from excellence in yearly evaluation forms and letters of gratitude from the president of the University.

**M.Sc. thesis supervised**

1. Kinetics and mechanism of oxidation of phenols by  $\text{Fe}^{+3}$  in the presence of ferrozine 1995.
2. Solvent effects on the solvatochromism of ferrocypen complex and on the kinetics of aquation of tris ferrozine iron (II) complex 1996.
3. Kinetics and mechanism of abstraction of cyanide from hexacyanoferrate (II) by mercury (II) in the presence of ferrozine and Par. (1997).
4. Solvent effects, solvatochromism and Marcus theory application for the solvatochromism of iron (II) diimine cyanide complexes. Effect of temperature on the aquation of tris ferrozine iron (II) complex (1997).
5. Kinetics and mechanism of oxidation of cysteine by complexation processes using iron (III) and nitrogen chelate organic ligands DPKTH and ferrozine (1998).
6. Kinetics and Mechanism of oxidation of new coccine by V (v) in the presence of oxalic acid (1999).
7. Solvatochromism of ferrocypen in various aqueous organic and organic- organic mixtures. Aquation kinetics of the tris ferrozine complex of iron (II) in PEG (300) and tertiary butanol (1999).
8. Kinetics, Mechanism and analytical application of cyanide abstraction from hexacyano ferrate (II) by mercury (II) in the presence of Feren S.
9. Kinetics and Mechanisms of aquation reaction of tris (Ferene) iron (II) complex. Analytical applications in kinetic determinations 2001.

10. Kinetic studies of the hydrolysis of furfurylidene-furoyl hydrazones derivatives. Solvatochromism and fluorimetric determination of iron(III)

### **Administrative experience:**

Head of the Chemistry Department (1994-1996).

### **Awards:**

Hisham Hijjawi award for applied Sciences. Agriculture and water analysis (1998).

Referee in Journals and promotion degrees in Universities.

Referee for Al-Najah award 2007.

### **Membership:**

A distinguished member of the Arab Healthy Water Organization –AHWA.

### **Research interests:**

1. Solution Kinetics of Oxidation.
2. Solvation and solvachromism.
3. Landolt systems- Kinetic determinations.
4. Spectrophotometric determination of elements and compounds.

### **List of Publications:**

1. The thermal decomposition of fluorinated esters. *Int.J.Chem.Kin.*13, 463 (1981).
2. The thermal decomposition of fluorinated esters II the effect of substitution. *Int.J.Chem.Kin.*14, 291, (1982).
3. The thermal decomposition of fluorinated esters III esters without  $\beta$  Hydrogen atoms *Int.J.Chem.Kin.*14, 739, (1982).
4. Sensitive spectrophotometric determination of Bismuth (III) with 2-(5-bromo-2 pyridylazo)-5-diethylaminophenol *Microchem.J.*32, 83, (1995).
5. Spectrophotometric determination of Cadmium (II) with 2-(5-bromo-2 pyridylazo)-5-diethylaminophenol *Microchem.J.*34, 251, (1986).
6. Selective spectrophotometric determination of Palladium (II) with 2-(5-bromo-2 pyridylazo)-5-diethylaminophenol *Anal.Lett* 19 (1&2)99, (1986).

7. Spectrophotometric determination of trace amounts of Mercury with 3-(2-tryazolylazo)-2,6-diamino-Pyridine and gelatin *Spec.Lett.* 19 (8), 929(1986).
8. The mass spectra and disproportionation studies of a nitrogen compound of Mercury (I) with 1,10-phenanthroline. *Spec. Lett.* (721)(7).509. (1988).
9. Laboratory experiments in physical chemistry (documentation manuscripts and publishing center). An-Najah National University-Nablus (1984) refereed by Dr. Peter Arkins (Oxford Press).
10. Kinetics study of the complexation of palladium (II) with 2-(5-bromo-2-pyridylazo)-5-diethylaminophenol. *An-Najah J.Res.Sect.II.1* (4).12. (1987).
11. Kinetics and mechanism of the hydrolysis of benzylidene benzoyl hydrazone. *An-Najah J.Res.Sec (II) 1* (6) 34. (1990).
12. Kinetics studies of peroxyanion bleaching of model stains. (Poster presentation) 5th international conference on the mechanisms of reaction in solution. University of Kent.Canterbury.U.K.2-6/July (1990).
13. Spectrophotometric determination of trace amounts of cobalt and copper with 3-(2-thiazolylazo)-2,6-diaminopyridine. *Spect.Lett.* 25, (7).1049, (112).
14. Reactions of tris-diimine and diimine-cyanide complexes of iron (II) with peroxyanions in solution *Polyhedron N.* (16).2015. (1992).
15. Kinetics and mechanism of oxidation of bromide ions by sodium perborate by transforming to a Landolt process. *React.Kinet.Catal.Lett.* 48 (1)43, (1992).
16. Effect of Molybdenum Catalysis on the perborate-bromide reaction Kinetics and Mechanism and some theoretical considerations. *React.Kinet.Catal.Lett.* 48 (1)49, (1992).
17. Catalytic determination of Molybdenum by means of the sodium perborate bromide ascorbic acid Landolt reaction using potentiometric measurements. *Anal.Lett.* 25 (26), 1111, (1992).
18. Transfer Chemical Potentials for the sulfate and tetra-cyano 2, 2-bipyridyl ferrate (II) anions for acetonitrile-Water mixtures. *J.Chem.Res (S)* 288, (1992).
19. Iron-diimine-cyanide complexes as probes for aqueous micellar systems *J.Chem.Soc.Farad.Trans.* 89, 531(1993).

20. Solvatochromism of ternary iron (II) dimine cyanide complexes in 2-ethyl-2-(hydroxymethyl) 1, 3-propranediol (trimenthylol propane).Spec. Lett. 26 (1) 129, (1993).
21. Solvent effects and correlation with Reichardts  $E_T$  values on charge transfer spectra of bis (2, 2-bipyridyl) biscyano-iron (II).Monatshefte Fur Chemie 124, 877, (1993).
22. Kinetics and mechanism of the oxidation of cobalt (II) by iron (III) in the presence of phenanthroline.An-Najah.J.Res(II) (8), 62(1994).
23. A spectroscopic study of preferential solvation of  $Fe(bipy)_2(CN)_2$  in binary aqueous 2-ethoxy ethanol mixtures.Spect.Lett.27 (3), 333 (1994).
24. Donor and acceptor number effects for solvatochromic behavior of bis(2,2-bipyridyl) –bis-cyano iron (II) in binary aqueous mixtures. Mh.Chem.125, 655 (1994).
25. A sensitive catalytic method for the determination of copper by its catalytic effect on the potassium bromate indigo carmine reaction. Instrumentation. Science and Tech.22 (4), 335 (1994).
26. Preferential solvation of  $Fe(phen)_2(CN)_2$  in binary aqueous acetone and 2 methoxyethanol mixtures.Mh. Chem. 126(6-7).631.1995.
27. A catalytic method for the determination of trace amounts of mercury uptaken by broad beans plants.MGMC 19(2) 103 (1996).
28. Atrazine detection using reflectometric interference spectroscopy in several ground and surface water samples in Palestine.J.Al-Azhar University in Gaza (5).41, (2002).
29. Kinetics and mechanism of hydrolysis of 2-furfurylidene furoyl hydrazones derivatives Int. J Chem .Kinetics (In course of publication)
30. A highly sensitive spectrofluorimetric method for the determination of traces of iron by the oxidation of di-2-pyridylketonebenzoyl hydrazones in acidic medium. Instrumentation Science and Technology (In course of publication.
31. Kinetics and Mechanism Kinetic determination of Captopril by  $Fe^{+3}$  in the presence of ferrozine .  
4<sup>th</sup> Palestinian chemical conference at Al-Quds University, April 2007.
32. Kinetics and Mechanism of oxidation of Captopril by  $Fe^{+3}$  in the presence of ferrozine, Polyhedron. (In course of publication.)