

Curriculum Vitae

PERSONAL

Name Nizam Ahmad Diab
Date of Birth April 21, 1966
Place of Birth DeirIstia
Marital Status Married (4 children)
Nationality Palestinian
Address Arab American University, P.O. Box 240 Jenin
Tel: ++972 (04) 2418888, Fax: +972 4251 817
Mobile: ++972 (0599) 775 653
Email: nizam.diab@aaup.edu

EDUCATION

1999-2003 PhD, Chemistry/Ruhr-University Bochum in the working group of Electroanalytical and Sensors under supervision of Prof. Dr. Wolfgang Schuhmann (DAAD scholarship) with thesis title:
“Miniaturized Electrochemical Sensors for Local Measurements in the Vicinity of Living Cells”

1996-1999 MSc., Chemistry, An-Najah National University, Nablus/ Palestine

1988-1990 MSc., Chemistry, Middle East Technical University, Ankara/ Turkey
Thesis title: *“Determination of Selenium in Biological Fluids and Tissues in Healthy and Diseased Children by Hydride Generation Atomic Absorption Spectrometry”*.

1984-1988 BSc., Chemistry, Yarmouk University, Irbid/ Jordan.

1984 General Secondary Education Certificate Examination

EXPERIENCES

07.08.2016-Now	<i>Vice President for Training Affairs at the Arab American University (AAUP)</i>
09/2014- Now	Associate professor at the chemistry department at (AAUP)
2012-Now	<i>Acting President (several times)</i>
2012-2016	<i>Vice President for Community Affairs at the Arab American University (AAUP)</i>
2005-2008	<i>Dean of the Arts & Sciences Faculty at the Arab American University-Jenin (AAUP)</i>
2003-2004	<i>Chairman of the Chemistry Department at (AAUP)</i>
2003- 2014	Assistant professor at the chemistry department at (AAUP)
2001-2003	Supervision on bachelor and diploma students in analytical chemistry department in Ruhr University Bochum/ Germany
1996-1999	Head of the Educational Technologies Division/ Ministry of Education- Palestine
1997-1997	Teaching Assistant, An-najah National University
1990-1996	Teacher of Chemistry and Science/Ministry of Education
1988	Research Assistant, Yarmouk University

PROJECTS

- **Modified Graphene Nanomaterials for Biomedical Applications**
- **Determination and Studying the Behavior of Imidazole Drugs at the DNA modified Electrodes (2004-2005) funded by Academic Education Development (AED).**
- **Electrochemical Sensors for Determination and Monitoring of Reactive Dyes and Their Hydrolysis Products in Environmental Samples (2005-2007) funded by Union of Arab Universities.**
- **Sage Essential Oils and Biochemistry of Neurological Effect (2006-2007) funded by the Ministry of Education and Higher Education**
- **Test project for the efficiency of drinking water for some chemical elements (Pb, Hg, Zr, As, Se, Na).**

TEACHING

- 1) **Instrumental Analysis (Junior level 01051363)**
- 2) **Analytical chemistry (Sophomore classes 01051262)**
- 3) **Analytical chemistry for medical students (Sophomore classes 01051260)**
- 4) **Applied Chemistry (Senior Level 01051371)**
- 5) **General Chemistry I (Freshman Classes 01051101)**
- 6) **General Chemistry II (Freshman Classes 01051102)**
- 7) **Instrumental Chemical Analysis Laboratory (Junior level 01051366)**
- 8) **Analytical chemistry labs (Sophomore levels 01051260, 01051265)**

CURRENT FIELDS OF INTERESTS

- ** Electrochemical sensors for quantification of Superoxide in biological samples.**
- ** Miniaturized of NO sensors to detect the excreted of nitric oxide from biological samples.**
- ** Using scanning electrochemical microscopy (SECM) to measure the excreted NO from single living cell.**
- ** Improvement of DNA electrochemical sensors for determination of imidazole derivatives in drug analysis.**
- ** Determination and monitoring of dyes and other toxic organic compounds in wastewater and food using different electrochemical techniques.**
- ** Improvement of some analytical techniques to enhance their sensitivity and selectivity.**

PUBLICATIONS

1. *Nizam Diab, Dulce M. Moralesa, Corina Andronesca, Muayad Masoud, Wolfgang Schuhmann, A sensitive and selective graphene/cobalt tetrasulfonated phthalocyanine sensor for detection of dopamine Sensors and Actuators B: Chemical , 2019, 17-23.*
2. *Nizam Diab, Voltammetric behavior of 5-nitrobenzimidazole at DNA-modified glassy carbon electrodes, International Journal of Chemistry, 2014, 35, 1573-1579.*
3. *Nizam Diab, Ibrahim Abu-Shqair, Radi Salim and Mohammad Al-Subu, The Behavior of Ciprofloxacin at a DNA Modified Glassy Carbon Electrodes, International Journal of Electrochemical Science, 2014, 9, 1771-1783*
4. **Nizam Diab**, Ibrahim Abu-Shqair, Mohammad Al-Subu and Radi Salim, *Kinetics of Oxidation of Some Fluoroquinolones by Hexacyanoferrate(III) in Alkaline Medium, International Journal of Chemistry, 2013, 34, 1388-1394.*
5. Ibrahim Abu-Shqair, **Nizam Diab**, Radi Salim, Mohammad Al-Subu, *Spectroscopic Studies on the Binding of Some Fluoroquinolones with DNA Asian Journal of Applied Sciences, 2013, 1, 179- 184*

6. Michaela Nebel, Stefanie Grützke, **Nizam Diab**, Albert Schulte, Wolfgang Schuhmann, *Visualization of Oxygen Consumption of Single Living Cells by Scanning Electrochemical Microscopy: The Influence of the Faradaic Tip Reaction*, **Angew. Chem. Int. Ed.** 2013, 52, 6335–6338
7. Michaela Nebel, Stefanie Grützke, **Nizam Diab**, Albert Schulte, Wolfgang Schuhmann, *Microelectrochemical visualization of oxygen consumption of single living cells*, **Faraday Discuss.**, 2013, 164, 1–13
8. Ismail Warad, Mohammed Al-Nuri, Maher Abu Eid, Zeid Al-Othman, Saud Al-Resayes, **Nizam Diab**, *Kinetics and Mechanism of Oxidation of L-Cysteine by Bis-3-di-2-pyridylketone-2-thiophenylhydrazone-iron(III) Complex in Acidic Medium*, **E-Journal of Chemistry**, 2010, 7(S1), S527-S535.
9. Ismail Warad, **Nizam Diab**, Saud Al-Resayes, Refaat Mahfouz, Yahia Mabkhoot and Ibraheem, *Synthesis, Characterization and Reactivity of Diamine-bis(triphenylphosphine)ruthenium(II) Complexes as Catalysts for Selective and Direct Hydrogenation of Cyanamid Aldehyde*, **Arabian J. Chem.** 1(2008) 93-110
10. **Nizam Diab**, Joshua Oni, Wolfgang Schuhmann, *Electrochemical nitric oxide sensor preparation: a comparison of two electrochemical methods of electrode surface modification*, **Bioelectrochemistry**, 66 (2005) 105-110
11. Joshua Oni, **Nizam Diab**, Sabina Reiter, Wolfgang Schuhmann, *Metallophthalocyanine-modified glassy carbon electrodes: effects of film formation conditions on electrocatalytic activity towards the oxidation of nitric oxide*, **Sensors and Actuators B**, 105 (2005) 208-213
12. Joshua Oni, Alain Pailleret, Sonnur Isik, **Nizam Diab**, Ina Radtke, Andrea Blöchl, Michael Jackson, Fethi Bedioui, Wolfgang Schuhmann, *Functionalised electrode array for the detection of nitric oxide released by endothelial cells using different NO-sensing chemistries*, **Anal. Bioanal. Chem.** 378 (2004) 1594–1600.
13. **N. Diab**, J. Oni, A. Schulte, I. Radtke, A. Blochl, W. Schuhmann, *Pyrrole functionalised metalloporphyrins as electrocatalysts for the oxidation of nitric oxide*, **Talanta**, 61 (2003) 43-51

14. Joshua Oni, **Nizam Diab**, Ina Radtke, Wolfgang Schuhmann, *Detection of NO release from endothelial cells using Pt micro electrodes modified with a pyrrole-functionalised Mn(II) porphyrin*, ***Electrochimica Acta***, 48 (2003) 3349-3354
15. **Nizam Diab**, Ali AbuZuhri, Wolfgang Schuhmann, *Sequential-injection stripping analysis of nifuroxime using DNA-modified glassy carbon electrodes*, ***Bioelectrochemistry***, 61 (2003) 57-63
16. **Nizam Diab**, Wolfgang Schuhmann, *Electropolymerized manganese porphyrin/polypyrrole films as catalytic surfaces for the oxidation of nitric oxide*, ***Electrochimica Acta*** 47 (2001) 265-273
17. K. Mengubas, **N. Diab**, I. Gokmen, O. Ataman, A. Cavdar, S. Cin, *Selenium status of normal Turkish children*, ***Biological Trace Element Research***, 54 (1996) 163-172.

CONFERENCES

1. **Nizam Diab** and Wolfgang Schuhmann
 "Electrochemical sensors based on Manganese porphyrins for detection of free radicals" **Frontiers of Chemical Sciences III: Research and Education In the Middle East, Istanbul/Turkey 8 -13 December 2007.**
2. **Nizam Diab** and Wolfgang Schuhmann
 "Electrochemical Sensors for Detection of Nitric Oxide in in the Vicinity of Living Cells"
Petra International Conference of Chemistry, PETRA/Jordan 25-28 June 2007
3. Joshua Oni, S. Isik, **Nizam Diab** and Wolfgang Schuhmann
 "Electrochemical Microsensors: Potential Tools for the Early Diagnosis of Neurodegenerative Diseases"
37th National Convention of the South African Chemical Institute Chemistry for a better life, Pretoria/ South Africa 04 - 09 July 2004
Nizam Diab, Lusiana Pitta, Albert Schulte, Mathue Etienne, Wolfgang Schuhmann
 "Constant-Distance Mode SECM for the Visualization of Cell Metabolism Activity"
53rd Annual Meeting of the International Society of Electrochemistry, Düsseldorf, Germany, 15-20 September 2002
4. Victoria Ryabova, Thomas Erichsen, **Nizam Diab**, Bernard Speiser, Wolfgang Schuhmann
 "Combinatorial Microelectrochemistry Screening of Eectrocatalytic Properties of a Porphyrin Library for the Oxidation of NO"
53rd Annual Meeting of the International Society of Electrochemistry, Düsseldorf, Germany, 15-20 September 2002.
5. M. Groppe, **N. Diab**, J. Oni, S. Thanos, W. Schuhmann, P. Heiduschka
 "Measurement of NO produced by lesioned Rat Retina Using NO-Selective Microelectrodes"

- 53rd Annual Meeting of the International Society of Electrochemistry, Düsseldorf, Germany, 15-20 September 2002**
6. **Nizam Diab**, Wolfgang Schuhmann
"Metal-porphyrin Modified Microelectrodes for Nitric Oxide Detection"
 63. **AGEF-Symposium (Arbeits Gemeinschaft Electrochemischer Forschungsinstitutionen e.V)**, Düsseldorf, Germany, 20-21 April 2001
 7. **Nizam Diab**, Wolfgang Schuhmann
"Electropolymerized Manganese Porphyrin/Pyrrrole Films as Catalytic Surfaces for the Oxidation of Nitric Oxide"
ELMINOS-Seminar (Electrochemische Mikro- und Nano-Systeme), Düsseldorf, Germany, 20 December 2000
 8. Peter Heiduschka, **Nizam Diab**, Katja Habermüller, Wolfgang Schuhmann
"Improvement of Microsensors for detection of NO"
LifeCom-Sondersymposium Elektrochemie und Life Sciences, Düsseldorf, Germany, 28-29 March 2000
 9. **Nizam Diab**, Joshua Oni, Albert Schulte, Inna Radtke, Anderea Bloechl, Wolfgang Schuhmann
"Monitoring NO Release from Cells Using a NO-Selective Microsensor"
53rd Annual Meeting of the International Society of Electrochemistry, Düsseldorf, Germany, 15-20 September 2002
 10. Victoria Ryabova, Thomas Erichsen, **Nizam Diab**, Wolfgang Schuhmann
"A Combinatorial Electrochemical Approach for the Development of Optimized Amperometric Microsensors for the Determination of NO"
7th World Congress on Biosensors, Koyoto, Japan, 15-17 May 2002
 11. **Nizam Diab**, Wolfgang Schuhman
"Metalloporphyrins as Catalytic Surfaces for NO Detection"
70. AGEF-symposium (Arbeits Gemeinschaft Electro-chemischer Forschungsinstitutionen e.V), Düsseldorf, Germany, 26 April 2002
 12. **Nizam Diab**, Wolfgang Schuhmann
"Metal-porphyrin Modified Microelectrodes for Nitric Oxide Detection"
ELACH 5 (Elektro Analytische Chemie, Freiburg im Breisgau, Germany, 30 September - 04 Oktober 2001
 13. **Nizam Diab**, Ali AbuZuhri, Wolfgang Schuhmann
"Sequential Injection Stripping Analysis (SISA) of Nifuroxime Using DNA-modified Glassy Carbon Electrodes".
8th International Conference on ElectroAnalysis (ESEAC), Bonn, Germany, 11 -15 June 2000

Awarded Scholarships

- 1) PhD scholarship 1999-2003 by German Academic Exchange Service (DAAD)
- 2) Short visit research scholarship (2 months) July 2007 by DAAD.
- 3) Short visit scholarship (2 months) July 20017 by Welfare Association (Zamala)

Master & PhD Theses

Committee member for MSc theses (External examiner):

1. **Comparative studies on Iron/Copper alloys corrosion with/without using novel substituted amines as inhibitors** by Isra Abusaba of An-Najah University, Nablus, Palestine, **January 2019**.
2. **Preparation, Identification and Antimicrobial Efficiency of Tin-Copper Bimetallic Nanoparticles**, by Nora Hamdan of An-Najah University, Nablus, Palestine, **January 2019**.
3. **Synthesis, Spectral, Thermal, Electrochemical Characterization of New Family of Semi-Octahedral Diamine / Copper (II) Complexes and their Biological Activities**, by Bahaa of Abd Al-Ghani of An-Najah University, Nablus, Palestine, **June 2017**.
4. **Environmental Exposure Assessment of Cadmium, Lead, Copper and Zinc in Different Palestinian Canned Food** by Ghadeer Sayeh of An-Najah University, Nablus, Palestine, **April 2016**.
5. **Synthesis, Characterization, Antibacterial Activities of Novel Polydentate Schiff's Bases and Their Transition Metal Complexes** by Yasmin Dmeri of An-Najah University, Nablus, Palestine, **September 2015**.
6. **Determination of Some Fluoroquinolone Antibacterial with DNA-Modified Electrodes and their Oxidation by Potassium Hexacyanoferrate(III)** By Abu-Shqair (PhD thesis June 2006)
7. **Kinetic studies of the hydrolysis of furfuralidene furoyl hydrazone derivatives, Solvatochromism and fluorimetric determination of iron(III)** by Mr. Mahmoud Kabajeh of An-Najah University, Nablus, Palestine, **February 2005**.
8. **HPLC Determination of Four Textile Dyes and Studying Their Degradation Using Spectrophotometric Technique** by Mr. Safwat Saleh of An-Najah University, Nablus, Palestine, **March 2005**.
9. **Determination of Lead and Cadmium in Food by Anodic Stripping Voltammetry, and Oxidation of Galactose** by Mr. Shadi Adas of An-Najah University, Nablus, Palestine, **June 2004**.

NAMES OF REFERENCES

- 1) Prof. Dr. Wolfgang Schuhmann,
Analytische Chemie, Elektroanalytik und Sensorik
Ruhr-University-Bochum
Universitaetsstr. 150, Gebaeude NC 04/788
D-44780 Bochum
Tel.: ++49 (0) 234 32-26200, Fax: ++49 (0) 234 32-14 683
wolfgang.schuhmann@ruhr-uni-bochum.de
- 2) Prof. Dr. Ali Abu Zuhri
President of the Arab American University-Jenin
Tel.: ++972 2418888, Fax: ++ 972 2510810
E-mail: Ali.Zedan@aaup.edu