
¹Dr.Mohammad Farouq Khanfar

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German Jordanian University
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Personal Information

Born in Kuwait, Feb., 21st, 1973
Citizen of Jordan and of Canada

Teaching Experience

Associate Professor, School of Applied Medical Sciences, German Jordanian University,
April 2020-present.

Assistant Professor, School of Applied Medical Sciences, German Jordanian University,
September 2011-present.

Teaching and Research Assistant, Department of Chemistry, York University, 2004-2009.

Teaching and Research Assistant, Department of Chemistry, Memorial University of
Newfoundland, 2001-2003.

Teaching Assistant, Teachers College in Dammam, Saudi Arabia, 1999- July 2001.

Lab Instructor, Faculty of Pharmacy, Philadelphia University, Amman, 1997- August
1999.

Courses Taught

General Chemistry, Course and Lab

Analytical Chemistry, Course and Lab

Instrumental Analysis, Course and Lab

Physical Chemistry, Course and Lab

Practical Organic Chemistry and Inorganic Chemistry Labs

Education

2010, Ph.D. in Electrochemistry, York University, Toronto, ON, Canada. Thesis advisor:
Prof. Sylvie Morin

2003, M.Sc. in Electrochemistry, Memorial University of Newfoundland, St.John's, NF,
Canada. Thesis Advisor: Prof. Peter Pickup

¹ Updated December 2021

1997, M.Sc. in Fluorescence Spectroscopy, Yarmouk University, Irbid, Jordan.
Thesis Advisor: Prof. Khader Al-Hassan

1994, B.Sc. in Chemistry, Yarmouk University, Irbid, Jordan

Research Interests

Fluorescence Spectroscopy
Surface Electrochemistry
Scanning Probe Microscopy
Chromatographic Analysis
DFT Calculations

List of Publications

Ghadeer A. R. Y. Suaifan , **Mohammad Khanfar** , Mayadah B. Shehadeh , Asmaa Alnajajrah Raghad Abuhamdan and Sameer Ahmad Hasan. An Electrochemical Sensor for the Detection of Albendazole Using Glassy Carbon Electrode Modified with Platinum-Palladium Nanocomposites. Biosensors 2022, 12, 1026.

<https://doi.org/10.3390/bios12111026>

Mohammad Khanfar, Taleen Kopti, Natalie Gharaibeh, Ziad Abu El-Rub, Differential Pulse Voltammetry as an Alternative Method for Tracking Hydrochlorothiazide Electrolytic Degradation, Jordanian Journal of Engineering and Chemical Industries, Vol. 4, No.3, pp:70-77 (2021).

Mohammad F. Khanfar, Eyad S. M. Abu-Nameh, Nawal Al Azizi, Rund Abu Zurayk, Aya Khalaf, Munib M. Saket, and Nasim Alnuman, Electrochemical Determination of Sunset Yellow and Tartrazine at Carbon Electrodes Modified by Fe-Zr Oxide, Jordan Journal of Chemistry, volume 15(3) 2020,119–126.

N Alshwawreh, O Hussien, **M Khanfar**, Role of Organic Additives in the Fabrication of Micro Copper Rods by Localized Electrochemical Deposition, IOP Conf. Series: Materials Science and Engineering 894 (2020) 012011

Esra'a Albarahmieh , **Mohammad Khanfar** , Emad Alzubi, Fabrication Modulation of Zein-based Fibers for Oral Delivery of Hydrochlorothiazide, Pharmaceutical Technology, Pharmaceutical Technology-08-02-2020, Volume 44, Issue 8, 40–46

Mohamad K. Khawaja, **Mohammad F. Khanfar**, Talin Oghlenian, and Waed Alnahr, Fabrication and electrochemical characterization of graphene-oxide supercapacitor electrodes with activated carbon current collectors on graphite substrates, Computers and Electrical Engineering 85 (2020) 106678

Eyad S. M. Abu-Nemeh, Naela Al Absi, Mohammad A. Al-Wahish, Hamdallah A. Hodali, and **Mohammad F. Khanfar**, Electrochemical Detection of Tadalafil at Glassy Carbon Electrodes Modified with Ruthenium(II) Complex, Int. J. Electrochem. Sci., 15(2020) 6396 – 6404

Mohammad F. Khanfar, Eyad S. M. Abu-Nameh, Munib M. Saket, Lujain T. Al Khateeb, Akram Al Ahmad, Zeinab Asaad, Zaina Salem, and Nasim Alnuman, Detection

of Hydrochlorothiazide, Sulfamethoxazole, and Trimethoprim at Metal Oxide Modified Glassy Carbon Electrodes, *International Journal of Electrochemical* 1,5 (2020) 1771 – 1787

M.F. Khanfar, E. S. M. Abu-Nameh, A. T. Afaneh, M. M. Saket, A. Ahmad, W. Faraj, M. Khalil, H. Al Khotaba, M. Al Bujog, Voltammetric detection of hydrochlorothiazide at molybdenum oxide modified screen-printed electrodes, *Bulgarian Chemical Communications*, 51(3):305-311 (2020).

Mohammad F. Khanfar, Naela Al Absi, Eyad S. M. Abu-Nameh, Munib M. Saket, Natalie Khorma, Raya Al Daoud, and Nasim Alnuman, Ag/Au Modified Nafion Coated Glassy Carbon Electrode for the Detection of Metronidazole, *International Journal of Electrochemical Science*, 14 (2019) 3265.

Mohammad F. Khanfar , Nour J. Abu Eisheh, Loiy Al-Ghussain and Ala'aldeen T. Al-Halhou, li Lab on a Chip for the Colorimetric Determination of Nitrite in Processed Meat Products in the Jordanian Market, *Micromachines*, 10(2019)36.

Abdussalam K. Qaroush, Fatima A. Alsoubani, Ala'a M. Al-Khateeb, Enas Nabih, Esraa Al-Ramahi, **Mohammad F. Khanfar**, Khaleel I. Assaf and Ala'a F. Eftaiha, An efficient atom-economical chemoselective CO₂ cycloaddition using lanthanum oxide/tetrabutyl ammonium bromide, *Sustainable Energy Fuels*, 2018, 2, 1342–1349

Mohammad F. Khanfar , Wisam Al-Faqheri and Ala'aldeen Al-Halhouli, Low Cost Lab on Chip for the Colorimetric Detection of Nitrate in Mineral Water Products, *Sensors* 2017, 17, 2345, 1-9

Khanfar M. F.; Morin S.; Oxygen Reduction at Cobalt Phthalocyanine Modified Au (111) Electrodes. *ECS Transactions* (2010), 25(23), 33-45.

Song, Chaojie; Khanfar, **Mohammad F.**; Pickup, Peter G. Mo oxide modified catalysts for direct methanol, formaldehyde and formic acid fuel cells. *Journal of Applied Electrochemistry* (2006), 36(3), 339-345.

Al-Hassan, Khader A.; **Khanfar, Mohammad F.**; Fluorescence probes for cyclodextrin interiors. *Journal of Fluorescence* (1998), 8(2), 139-152.

Conferences and Presentations

Mohamad K. Khawaja, **Mohammad F. Khanfar**, Talin Oghlenian, Waed Alnahar, Fabrication and Electrochemical Characterization of Carbon Based Supercapacitor Electrodes, 2019 10th International Renewable Energy Congress (IREC) DOI: 10.1109/IREC.2019.8754605

Al-Gharabli, S, Abu El-Rub, Z, and **Khanfar, M.**, "High Throughput Screening of Oil Content in Jordanian Oil Shale Using ATR-FTIR and Refractive Index Techniques ",the 7th Jordan International Chemical Engineering (JICHe 07) Conference, Amman, Jordan,2014

Maryam Hariri, Mahdieh Atighi,**Mohammad F. Khanfar**

Alexandre Brolo, and Sylvie Morin “Electrochemical and Spectroelectrochemical Study of Reduction of Oxygen on Cobalt Phthalocyanines” 223rd ECS Meeting, 2013 The Electrochemical Society

Mohammad F. Khanfar, Susan H. Zheng, and Sylvie Morin “Electrochemistry of Metal Porphyrines Monolayers Adsorbed on Gold Single Crystal Surfaces”, 93rd Canadian Chemical Society Conference and Exhibition, May-June 2010, Toronto Metro Convention Center, Toronto, ON, Canada (oral presentation)

Mohammad F. Khanfar and Sylvie Morin “Metal Phthalocyanines Modified Gold Single Crystal Electrodes”, Surface Canada Conference, June 2009, McMaster University, Hamilton, ON, Canada (oral presentation)

Mohammad F. Khanfar and Sylvie Morin “Electrochemistry of Metal Phthalocyanines Monolayers”, The 58th Annual Meeting of the International Society of Electrochemistry, September 2007, Banff, AB, Canada (poster presentation)

Mohammad F. Khanfar, Suzan Zheng, and Sylvie Morin ”Study of Metal Phthalocyanines Modified Gold Single-Crystal Electrodes”, 90th Canadian Chemical Society Conference and Exhibition, May 2007, Winnipeg Convention Center, Winnipeg, MB, Canada (oral presentation)

Mohammad F. Khanfar and Sylvie Morin “Metal Phthalocyanines Modified Gold Single Crystal Electrodes”, Surface Canada Conference, May 2006, Queens University, Kingston, ON, Canada (poster presentation)

Mohammad F. Khanfar and Sylvie Morin “Cobalt Phthalocyanines Modified Electrodes”, The Canadian Section of the Electrochemical Society, Young Authors Symposium, August 2005, Guelph University, Guelph, ON, Canada (poster presentation)

List of Funded Projects

Investigating the Performance of Transition Metal Compounds as Catalysts for Fuel Cells, 69800 JD, Scientific Research Support Foundation, 2014-2017, in collaboration with Dr. Monther Khanfar and Dr. Zayed Al Hamamreh from Jordan University

Utilization of Lab on a Chip Technology for the Colorimetric Determination of Chemical Compounds, 15000JD, Abdul Hameed Shoman Foundation, 2015-2017, in collaboration with Dr. Alaa Al Halhouli from German Jordanian University.

Investigation of the Electrochemical Stability of Active Pharmaceutical Ingredients, 16500 JD, Research Seed Fund, 2014-2016, in collaboration with Prof. Khalid Barqawi from Yarmouk University and Prof. Raed Qawasmi from Jordan University.

Memberships

Member of the Electrochemical Society Inc. (ECS) and the Canadian Section of the ECS, 2002-present.

Administrative Experience

Acting Head, Department of Pharmaceutical and Chemical Engineering, School of Applied Medical Sciences, German Jordanian University, September 2016-September 2020.

Acting Vice Dean, School of Applied Medical Sciences, German Jordanian University, September 2020-September 2021.

German Year Exchange Coordinator, Department of Pharmaceutical and Chemical Engineering, School of Applied Medical Sciences, German Jordanian University, September 2020-present.

Links

https://www.researchgate.net/profile/Mf_Khanfar

<https://scholar.google.com/citations?user=PNu2FJsAAAAJ&hl=ar>