FACULTY CURRICULUM VITAE

Name: Dr. Marziyeh Nazari
Rank: Associate Professor - Mathematics & Physics

Personal Information

Nationality:	Iranian/Australian
AU Joining Date:	25 Sep. 2016
E-Mail Address:	m.nazari@au.edu.kw

Professional Information

Education:	- Ph.D. in Physics, Victoria University, Melbourne, Australia [Jan. 2012 – Dec. 2016] - Master's in applied physics, Islamic Azad University, Central Tehran Branch, Iran [Sep. 2004 – Sep. 2006] - Bachelor's in applied physics, Alzahra University, Tehran, Iran [Sep. 2000 – July 2004] - Project Execution: Running the Project, Google Career Certificates, USA, August 2024 - Generative AI for University Leaders, Vanderbilt University, USA, June 2024 - Generative AI for Educators & Teachers, Vanderbilt University, USA, June 2024 - Foundation Certificate in Artificial Intelligence, BCS, England, May 2023 - Advanced Excel Macros, Infocenter Training Institute, Kuwait, May 2019 - Using Advanced Teaching and Learning Strategies and Tactics for Engaging Students, Australian University, Kuwait, March 2017 - Certificate IV in TESOL, Ozford College of Business, Melbourne, Australia [Jan. 2012 – March 2012]

FACULTY CURRICULUM VITAE

Specialization:	Optical Physics / Materials Science - Vast experimental experience in design and synthesis of fiber optic sensory systems - Extensive hands-on experience in synthesis of porous hybrid materials (e.g., metal organic frameworks) - Proficient in advanced characterization techniques, e.g., SEM, TEM, EDX, XRD, UV-Vis, FTIR, NMR, TGA, and Gas Adsorption Analysis - Highly skillful in LATEX, Matlab, HTML, OriginPro, and Generative AI
Current Academic Position:	❖ Associate Professor - Mathematics & Physics
Current Professional Positions:	❖ April 2025 – Present, Visiting Scientist @ Department of Materials Science and Engineering, Monash University, Clayton, Victoria 3800, Australia ❖ August 2022 – Present, Visiting Fellow @ Institute for Sustainable Industries and Liveable Cities (ISILC), Victoria University, Melbourne, Victoria 8001, Australia
Previous Administrative Positions Held:	❖ 2014 – 2016, IEEE Student Chapter Chair @ Victoria University, Melbourne, Australia
Previous Academic Positions Held:	- 2023, Visiting Scientist @ CSIRO, Melbourne, Australia - 2022, Visiting Scientist @ CSIRO, Melbourne, Australia - 2019 – 2021, Visiting Fellow @ Institute for Sustainable Industries and Liveable Cities (ISILC), Victoria University, Melbourne, Australia - 2019, Visiting Scientist @ CSIRO, Melbourne, Australia - 2010, Visiting Scientist @ College of Sciences, Massey University, Palmerston North, New Zealand - 2006 – 2008, Research Fellow @ Water & Energy Research Center, Sharif University of Technology, Tehran, Iran
Fellowships and Honors:	- 2016, Media coverage of my paper "UiO – 66 MOF End – Face – Coated Optical Fiber in Aqueous Contaminant Detection" on 05/04/2016 by the Optical Society of America (OSA) with 240 million potential audiences - 2015, Victoria University Write-Up Scholarship - 2012, Victoria University Ph.D. Scholarship - 2011, Australian National University Ph.D. Scholarship - 2010, Massey University Research Fellowship - 2010, Delaware State University (USA) Ph.D. Research Fellowship @ Center for Research and Education in Optical Sciences and Applications (CREOSA)
Teaching Experience:	- Nov. 2023 – Present, Associate Professor @ Mathematics & Physics, College of Engineering, Australian University (AU), Kuwait - Sep. 2017 – Nov. 2023, Assistant Professor @ Mathematics & Physics, College of Engineering, Australian University (AU), Kuwait - Sep. 2016 – Sep. 2017, Lecturer @ Mathematics & Physics, College of Engineering, Australian University (AU), Kuwait

	- Feb. 2011 – July 2016, Mathematics and Physics Tutor @ Independent Tuition College, Melbourne, Australia - Sep. 2006 – July 2010, Adjunct Lecturer @ College of Sciences, Islamic Azad University, Varamin Branch, Tehran, Iran
Industrial and Technical Experience:	- 2020 – 2024, Supervision/Co-Supervision of four Graduation Projects @ Mechanical Engineering, College of Engineering, Australian University (AU), Kuwait - 2012 – 2016, Postgraduate Research Student @ CSIRO, Melbourne, Australia - 2012 – 2016, Chemistry Laboratory Custodian @ CSIRO, Melbourne, Australia - 2012 – 2016, Chemistry Laboratory Supervision of Interns / Undergraduate Students @ CSIRO, Melbourne, Australia - 2006 – 2008, Co-Supervision of three Masters by Coursework Students @ Department of Electrical Engineering, Islamic Azad University, North Tehran Branch, Iran
Research Interests:	- Optical Fiber Chemical Sensors - Advanced Drug Delivery Systems - Photonics - Nanobiotechnology
Research Grants:	- PI; KFAS Grant Number: PN18-15EC-01 with the value of 9,800 KD - PI; AU Grant Number: IRC-2017/2018-SOE-MT-PR01 with the value of 1,125 KD - Co – I: AU Grant Number: IRC-2017/2018-SOE-ME-PR02 with the value of 1,125 KD
Research and Publications including Journal and Books:	- M. Nazari, F. Zadehahmadi, M. M. Sadiq, A. L. Sutton, H. Mahdavi, M. R. Hill; (**2024**): "Challenges and solutions to the scale-up of porous materials", Commun. Mater., Vol. 5 (1) - A. Amini, N. Firouzkouhi, M. Nazari, N. Ghareeb, C. Cheng, B. Davvaz, M. Rashidi; (**2024**): "Artificial intelligent Global Online Learning (GOL) theory by generalized *n*-ary fuzzy relation", Artif. Intell. Rev., Vol. 57 (3) - N. Firouzkouhi, A. Amini, M. Nazari, F. Alkhatib, H. Bordbar, C. Cheng, B. Davvaz, M. Rashidi; (**2023**): "Advanced Artificial Intelligence System by Intuitionistic Fuzzy Γ-Subring for Automotive Robotic Manufacturing", Artif. Intell. Rev., Vol. 56 (9) - R. Soltani, M. Nazari, A. Marjani, M. Faisal, N. Pirestani, A. B. Albadarin, S. Soltani, C. H. Su, C. H. Chang, M. Pishnamazi, M. J. Ansari, S. Shirazian; (**2022**): "Bio-based 3D Dendritic Silica Nanosphere: A Green Superior Adsorbent", J. Clean. Prod., Vol. 335 - Y. Cao, M. Noori, M. Nazari, A. N. K. Lup, A. Soltani, V. E. Moghadam, A. Salehi, M. Aghaei, Md L. Rahman, M. S. Sarjadi, S. M. Sarkar, C. H. Su; (**2022**): "Molecular Docking Evaluation of Celecoxib on the Boron

Nitride Nanostructures for Alleviation of Cardiovascular Risk and Inflammatory", Arab. J. Chem., Vol. 15 (1)

- S. Gao, A. Khan, M. Nazari, H. Mirzaei, A. N. K. Lup, M. T. Baei, R. Chandiramouli, A. Soltani, A. Salehi, M. Javan, M. H. Jokar, M. Pishnamazi, A. Nouri; (**2021**): "Molecular Modeling and Simulation of glycine functionalized $B_{12}N_{12}$ and $B_{16}N_{16}$ nanoclusters as potential inhibitors of proinflammatory cytokines", J. Mol. Liq., Vol. 343

- M. Nazari, A. Amini, N. T. Eden, M. C. Duke, C. Cheng, M. R. Hill; (**2021**): "Highly – Efficient Sulfonated UiO – 66 (Zr) Optical Fiber for Rapid Detection of Trace Levels of Pb^{2+}", Int. J. Mol. Sci., Vol. 22 (11)

- M. Borzouyan Dastjerdi, A. Amini, M. Nazari, C. Cheng, V. Benson, A. Gholami, Y. Ghasemi; (**2020**): "Novel Versatile 3D Bio – Scaffold Made of Natural Biocompatible Hagfish Exudate for Tissue Growth and Organoid Modeling", Int. J. Biol. Macromol. Vol. 158

- A. Amini, M. Rahimi, H. Behmadi, M. Nazari, V. Benson, C. Cheng, B. Samali; (**2020**): "2, 6 – Pyridinedicarbohydrazide – Salicylal hydrazone – base Derivative with High Detection Limit and Binding Constant for Emissive Ion Chemosensing in Aqueous Solution", J. Photochem. Photobiol., Vol. 392

- M. Nazari, A. Amini, M. R. Hill, C. Cheng, B. Samali; (**2020**): "Physical and Chemical Reaction Sensing in a Mixed Aqueous Solution via Metal – Organic Framework Thin Film Coated Optical Fiber", Microw Opt Technol Lett., Vol. 62 (1)

- A. Amini, M. Rahimi, M. Nazari, C. Cheng, B. Samali; (**2019**): "One-pot Facile Simultaneous in situ Synthesis of Conductive Ag – polyaniline Composites Using Keggin and Preyssler – type Phosphotungstates", RSC Adv., Vol. 9 (5)

- M. Nazari, M. R. Martinez, R. Babarao, A. Younis, S. F. Collins, M. C. Duke, M. R. Hill; (**2017**): "Aqueous Contaminant Detection via UiO – 66 Thin Film Optical Fiber Sensor Platform with Fast Fourier Transform Based Spectrum Analysis", J. Phys. D, Vol. 51 (2)

- M. Shaibani, S. J. D. Smith, P. C. Banerjee, K. Konstas, A. Zafari, D. E. Lobo, M. Nazari, A. F. Hollenkamp, M. R. Hill, M. Majumder; (**2017**): "Framework – Mediated Synthesis of Highly Microporous Onion – Like Carbon: Energy Enhancement in Supercapacitors without Compromising Power", J. Mater. Chem. A, Vol. 5 (6)

- M. Nazari, M. R. Martinez, G. Tobias, J. P. Barrio, F. Nazari, S. F. Collins, A. J. Hill, M. C. Duke, M. R. Hill; (**2016**): "Metal – Organic Framework Coated Optical Fibers as Light – Triggered Drug Delivery Vehicles", Adv. Funct. Mater., Vol. 26 (19).

- M. Nazari, M. A. Forouzandeh, C. M. Divarathne, F. Sidiroglou, M. R. Martinez, K. Konstas, B. W. Muir, A. J. Hill, M. C. Duke, M. R. Hill, S. F.

	Collins; (**2016**): "UiO – 66 MOF End – Face – Coated Optical Fiber in Aqueous Contaminant Detection", Opt. Lett., Vol. 41 (8)
Paper Presentations at Professional Conferences:	- A. Amini, M. Rahimi, M. Nazari, L. Al-Hajji, "Fast Selectivity Turn-on/off Emissive Fluorescent Behavior of Eco – synthesized 2, 6 – Pyridinedicarbohydrazide – Salicylal Hydrazone – base Derivative towards Nanoparticles", Arab International Conference and Exhibition on Nanotechnology, 1st – 3rd March **2021**, Kuwait - A. Amini, M. Nazari, R. Mbarki, A. A. AlAnazi, H. Abdulrazzaq, "High Efficiency Performance of Quartz Fibers for Filtering Soot Aerosols", 1st International Conference on Applications of Air Quality in Science and Engineering Purposes, 10th – 12th Feb. **2020**, Kuwait - M. Nazari, S. F. Collins, M. C. Duke, M. R. Hill; "MOF-Coated Optical Fiber Sensor for Detection of 4 – Aminopyridine in Water", OSA Technical Digest SeM4E.2, OSA Advanced Photonics Congress, 2nd – 5th July **2018**, Zurich, Switzerland - M. Nazari, M. R. Martinez, F. Nazari, A. A. Younis, S. F. Collins, M. C. Duke, M. R. Hill; "Light – Triggered 5 – Fluorouracil Release via UiO – 66 Coated Optical Fiber", Proc. SPIE 10413, Novel Biophotonics Techniques and Applications IV, 25th – 29th June **2017**, Munich, Germany - Saad, A. A. Younis, M. Karimi, M. Nazari, Z. Dong, B. Buckham, C. Crawford; "Kriging – Bat Design Optimization Algorithm for Floating Offshore Wind Turbine Support Structures", International Conference on Renewable Energy and Resources, 24th – 28th July **2017**, Vancouver, Canada - M. Nazari, M. R. Hill, M. C. Duke, F. Sidiroglou, S. F. Collins, "Aqueous Contaminant Detection via a Metal Organic Framework Thin Film Coating on an Optical Fiber End – Face", Australian and New Zealand Conference on Optics and Photonics (ANZCOP 2015); 29th November – 3rd Dec. **2015**, Adelaide, Australia - M. Nazari, M. Hill, M. Duke, F. Sidiroglou, and S. Collins, "Selective Sensing of Alcohols in Water Influenced by Chemically Zeolite Coatings on Optical Fiber Sensors", Proc. SPIE 9157, 23rd International Conference on Optical Fiber Sensors, 2nd – 6th June **2014**, Santander, Spain - M. Nazari, M. C. Duke, M. R. Hill, S. F. Collins and F. Sidiroglou, "Zeolite – Based Optical Fiber Sensor for Selective Sensing of Alcohols in Water", Australia and New Zealand Conference on Optics and Photonics (ANZCOP 2013), 8th – 11th Dec. **2013**, Perth, Australia

	- M. Nazari, M. M. Oskooie-Tabrizi; "Beam Coherency in Single Crystal High-Power GaAs Diode Laser", 14th Symposium of Crystallography and Mineralogy of Iran, Feb. **2007**, Birjand, Iran
College Service including committee Membership:	- Member of CoE – QAA (Quality Assurance Agency for Higher Education) Committee - Member of CDIO 2021 Asian Regional Meeting Organizing Committee (Marketing & Purchase)
National Service:	- Ongoing Research Collaboration since 2018 with Dr. Latifa A. Al-Hajji (KISR)
College Committees:	- Curriculum Design - Auditing, Accreditation & QM - Technology & Virtual Reality - Labs and Workshops - Validation & Moderation (Department Committee) - Student Appeal & Complaints (Department Committee)