CURRICULUM VITAE

NAEL YASRI

Research Fellow and lecturer, Department of Chemical and Petroleum Engineering, University of Calgary, Alberta, T2L 1Y1, Canada.

Keywords: Environmental Chemistry, Environmental technology, Electrochemistry, Bio-electrochemistry, Electrochemistry for environmental applications (i.e., water remediation, heavy metal recovery, Electro-Adsorption, H_2 production, organic reforming, CO_2 electrochemical reduction, energy storage (Redox flow batteries).

EDUCATION

HDR (Habilitation to Direct Research), University of Perpignan (France) and the University of Aleppo (Syria), 2009.
Thesis Title: Electrochemistry In environmental protection and control systems,
Funded: TEMPUS Program 34064-2006 (SY),
The Jury; Prof. P. Mialhe (University of Perpignan), Prof. J.P. Combronne (Université de Toulouse), Prof. A. Yakan (University of Aleppo), and K. Al Abdullah (University of Aleppo).

Ph.D. in Environmental Technologies, Institute for the Environment, Brunel University, London, UK, 2001.
Thesis title: Developments of Electrochemistry in Environmental Technology,
Supervisors: Professor John Donaldson and Dr. Sue Grimes.

BSc. With Honors in Chemistry and Physics, University of Aleppo, Syria (1985-1989).

ACADEMIC APPOINTMENTS

Associate Research Scientist and lecturer: (March 2017–present)
Chemical and Petroleum Engineering, University of Calgary, Alberta, Canada,
Teaching duty: Winter 2018 course Electrochemical Engineering **ENCH 530/630**
Winter 2023 co-instructor Electrochemical Engineering **ENCH 530/630**
Research duty: mentoring students and post-doctoral researchers working on multi-disciplinary research projects.

Research fellow, (Feb 2015–March 2017)
Department of Chemical and Biochemical Engineering, University of Western Ontario, Canada. Worked on the development of Microbial Electrolysis Cells for hydrogen production.
Western University Certified in **"Teaching in the Canadian Classroom",** 2015

Research fellow, (Oct 2013–Oct 2014)
Biological Systems Engineering, **University of Wisconsin,** US, worked on developing Electrochemical systems for pollutants monitoring and remediation of effluents contaminated with heavy metals complexed with organic and/or inorganic species.

Associate professor, Aleppo University, Department of Chemistry, Syria (2011–2013)
Assistant professor, Aleppo University, Department of Chemistry, Syria (2004–2011)
Reader, Aleppo University, Department of Chemistry, Syria (2001–2004)
Teaching duties: Undergraduate courses including: 1) Kinetic chemistry, 2) Electrochemistry, 3) Environmental chemistry. Postgraduate courses including: 1) Advance electrochemistry, 2) Environmental technologies (including remediation processes).
Research Duties: Established a research group focused on the environmental monitoring of contaminated sites and pollutant control of industrial end-of-pipe.

TEACHING EXPERIENCE

ENCH 530, co-instructor; Electrochemical Engineering, **University of Calgary,** undergrad level 2023
ENCH 630, co-instructor Electrochemical Engineering, **University of Calgary,** postgrad level 2023
ENCH 619.80, Material electrochemistry, contribute to Raman, XPS, and Electrochemical characterization, **University of Calgary,** postgrad level, 2021,
ENCH 530, instructor; Electrochemical Engineering, **University of Calgary,** undergrad level 2018
ENCH 630, instructor Electrochemical Engineering, **University of Calgary,** postgrad level 2018
Electrochemistry, Chemistry department, University of Aleppo, undergrad level, 2001-2013
Environmental chemistry, Chemistry, University of Aleppo, undergrad level, 2005-2013
Kinetic chemistry, Chemistry department, University of Aleppo, undergrad level, 2010
Advance electrochemistry, Chemistry department, University of Aleppo, postgrad level, 2005-2013
Environmental technologies, Chemistry department, University of Aleppo, postgrad level, 2007-2013

AREA OF RESEARCH EXPERTISE:

- Microbial electrochemical processes for H_2 production
- Catalyst design for co-electrolysis of Biomass oxidation and H_2 production
- Electrochemical CO_2 reduction and sustainable energy.
- Catalytic design for electrochemical processes
- System design of energy storage battery (All-Vanadium Flow batteries)
- Synthesizing metal, metal oxides, hydroxides, and metal-organic nanostructures.
- Process design for electroanalytical sensor
- Electrochemical wastewater treatment (heavy metal/organic)
- Electrocoagulation for produce water recycling (Oil and gas industries)

GRADUATED STUDENT'S THESIS

Ahmed Halabi, Master thesis, Sensor Design for the Determination of Lead in biological systems, 2012, University of Aleppo.
Akram Yaghmour, Master thesis, Chemical and electrochemical treatment of corn wet milling effluent, 2011, University of Aleppo.
Maha Mosallb, Master thesis, Development of analytical methods for formaldehyde determination in air and water, 2010, University of Aleppo.
Kavor Barsoumian, Master thesis, Fenton's electro-oxidation process of dyes: intermediates and mechanisms studies, 2008, University of Aleppo.
Karbis Eranoss Master thesis, The Treatment of Some Dye Solution and Industrial Dye Effluent by Applying Anodic Oxidation Method, 2007, University of Aleppo.

Mentored students

Tareq Al-Attas, Current Ph.D student, Electrocatalysis, University of Calgary.
Ashutosh K Singh, Ph.D thesis, Heteroatom Doped Carbon Electrode Materials for Redox Flow Battery Application, **2021**, University of Calgary.
Markus Ingelsson, Master thesis, Investigating Electrode Polarity Reversal as a Performance Enhancement Strategy in Electrochemical Water Treatment Processes, **2021**, University of Calgary.
Tianpei Shu, Master thesis, Treatment of Oil-Sands Produced Water by Electrocoagulation, **2019**, University of Calgary.
Farbod Sharif, Ph.D Thesis, Water treatment by adsorption with electrochemical regeneration using graphene based materials, **2018**, University of Calgary.
Fatemeh ShakeriHosseinabad, Preparation for Ph.D, Preparation of Iodide-Based Complexing Agent for the Zinc-Iodide Flow Battery, **2018,** University of Calgary.
Jialang Li, Master thesis, Flow Mode in All-Vanadium-Redox-Flow Battery, **2018,** University of Calgary.

Hyeongu Yeo, Master Thesis, The Effects of Furfural on Biological Hydrogen Production in Batch and Microbial Electrolysis Cell**, 2016**, Western University (Canada).

Marwa A. Rabah (Mentor), PhD thesis, Preparation of Tungsten-based catalysts for superacid applications, 2012, University of Aleppo

Rana M. Kazan (Mentor), Master thesis, Development of analytical methods for Amino Acids in Leverages, 2014, University of Aleppo

ACADEMIC COMMUNITY INVOLVEMENT

Editorial and reviewer

Editorial Advisory Board of Peer-reviewed journal Frontiers in Carbon-Based Materials

Editorial Advisory Board of The Current Research in Chemical Sciences (CRCSci).

Reviewer for several journals, e.g., Journal of Food Science, Journal of Power Sources, Journal of Environmental Chemical Engineering and Research Journal of Aleppo University.

Conferences organization and committee work

Raman Microscopy Workshop, sponsored by WiTec Corporation (Germany) and Spectra Research Corporation (SRC; Canada), organized by the CREATE program at the University of Calgary. April 18, 2018

First Syrian Chemistry Conference on Environmental Chemistry, November 2006 Aleppo University, Syria.

First Syrian Chemistry Conference on Environmental Chemistry, November 2007 Aleppo University, Syria.

PUBLICATIONS

***h**index* – 24, Citations – 1465, Total publications–35, Book chapter-2, Book-1, Patent-2**

Patent

1. Nael Yasri, Sundaram Gunasekaran; Method to remediate effluents containing metals complexed with organic and/or inorganic species, IPC8 Class: AC02F900FI, USPC Class: 205742, Publication date: 2016-02-11, Patent application number: 20160039698.
2. MD Golam Kibria, Tareq Ali Al-Attas, Mohd Adnan Khan and Nael Yasri, Multi-Metal Electrocatalytic System for Methane Oxidation. Publication date: 2024-10-17, United State patent number: US20240344211A1

Book & Chapters

B1- Nael Yasri, J. Hu, M.G. Kibria, E. Roberts, Electrocoagulation Separation Processes, in: Multidisciplinary Advances in Efficient Separation Processes, ACS Symposium Series, 1348, Chapter 6, 167-203.

B2- Nael Yasri, Sundaram Gunasekaran, Electrochemical Technologies for Environmental Remediation, in: N.A. Anjum, S.S. Gill, N. Tuteja (Eds.) **Enhancing Cleanup of Environmental Pollutants**: Volume 2: Non-Biological Approaches, Springer International Publishing, Cham, 2017, pp. 5-73.

B3- Nael Yasri, and Hassan Sedeek, ***Environmental Chemistry***, textbook for chemistry students, Book, Publication of Aleppo University, 2011.

Peer-Reviewed Journal publications

J1- **Nael Yasri** and Edward P.L. Roberts, Electrochemical regeneration of adsorbents: An Electrochemist's perspective, Current Opinion in Electrochemistry, 2024, 46, P.101504. https://doi.org/10.1016/j.coelec.2024.101504 [I.F. 7.9]

J2- Jialang Li, X. Li, E. El Sawy, S. Maslovara, **Nael Yasri**, Viola Birss, E. P.L. Roberts, Investigation of the impact of the flow mode in all-vanadium-redox-flow battery using macroporous and mesoporous carbon electrodes, *Materials Today Communications*. https://doi.org/10.1016/j.mtcomm.2024.109773. [I.F. 3.7]

J3- T. Al-Attas, MA Khan, T. Goncalves, **Nael Yasri**, S. Roy, A. S. Zeraati, P. Kumar, K.Miller, P. Ajayan, I. D. Gates, J. Hu, V. Thangadurai, S. Siahrostami, Md Kibria, Bioinspired multimetal electrocatalyst for selective methane oxidation, Chemical Engineering Journal, 2023, 474, P.145827. https://doi.org/10.1016/j.cej.2023.145827 [I.F. 16.74]

J4- J. Wang, H. Zhao, P. Liu, **Nael Yasri**, N. Zhong, Md G. Kibria, J. Hu, Selective superoxide radical generation for glucose photoreforming into arabinose, Journal of Energy Chemistry, 2022 (74), 324-331. https://doi.org/10.1016/j.jechem.2022.07.028. [I.F. 13.59]

J5- M. Mahmood, **Nael Yasri**, B.F. Hojaghan, E.P.L. Roberts, Influence of operating conditions on the removal of silica and hardness by continuous electrocoagulation, , Journal of Environmental Chemical Engineering, 2022. 10(6), P. 108899, https://doi.org/10.1016/j.jece.2022.108899, [I.F. 7.7]

J6- M.A. Khan, S.K. Nabil, T. Al-Attas, **Nael Yasri**, S. Roy, M.M.Rahman, S. Larter, P. M. Ajayan, J. Hu, and Md G. Kibria, Zero-crossover electrochemical CO_2 reduction to ethylene with co-production of valuable chemicals, *Chem Catalysis (Cell Press)*, (2022) 2(8), 2077. https://doi.org/10.1016/j.checat.2022.06.018. [I.F. 11.5]

J7- P.V. Nidheesh, A.A. Oladipo, **Nael Yasri**, A.R.Laiju, V.R. Cheela, A. Thiam, Y. Asfaha, S.Kanmani, E.P.L. Roberts, Emerging applications, reactor design and recent advances of electrocoagulation process, Review, Process Safety and Environmental Protection, (2022) 166, 600. https://doi.org/10.1016/j.psep.2022.08.051, [I.F. 7.92]

J8- **Nael Yasri**, M. Nightingale, K. Cleland, E. Roberts, The impact of a magnetic field on electrode fouling during electrocoagulation, Chemosphere, (2022) 303, 135207. https://doi.org/10.1016/j.chemosphere.2022.135207. [I.F. 8.94]

J9- **Nael Yasri**, M. Ingelsson, M. Nightingale, A. Jaggi, M. Dejak, K. Kryst, T. Oldenburg, E. Roberts, Investigation of electrode passivation during electrocoagulation treatment with aluminum electrodes for high silica content produced water, Water Science & Technology, 2022, 85 (3), 925–942. https://doi.org/10.2166/wst.2022.012

J10- T. Al-Attas, N. Marei, X. Yong, **Nael Yasri**, V. Thangadurai, G. Shimizu, S. Siahrostami, Md Kibria, Ligand-Engineered Metal–Organic Frameworks for Electrochemical Reduction of Carbon Dioxide to Carbon Monoxide, **ACS Catalysis**, 2021, 12, 7350–7357, https://doi.org/10.1021/acscatal.1c01506, [I.F. 13.7]

J11- K. Singh, M. Pahlevaninezhad, **Nael Yasri**, E. P. L. Roberts, Degradation of Carbon Electrodes in the All-Vanadium Redox Flow Battery, **ChemSusChem** 2021, DOI: https://doi.org/10.1002/cssc.202100082. [I.F. 9.14]

J12- **Nael Yasri**, T. Al-Attas, J Hu, MG Kibria, Electropolymerized metal-protoporphyrin electrodes for selective electrochemical reduction of CO_2**, Catalysis Science & Technology**, 2021, DOI: 10.1039/D0CY02150D. https://doi.org/10.1039/D0CY02150D [I.F. 6.17]

J13- M.A. Khan, T. Al-Attas, **Nael Yasri**, Heng Zhao, Stephen Larter, Jinguang Hu and Md Golam Kibria, Techno-economic analysis of a solar-powered biomass electrolysis pathway for coproduction of hydrogen and value-added chemicals. **Sustainable Energy & Fuels**, 2020. 4(11): p. 5568-5577. https://doi.org/10.1039/D0SE01149E. [I.F. 6.83]

J14- M. Ingelsson, **Nael Yasri**, E. Roberts, Electrode passivation, faradaic efficiency, and performance enhancement strategies in electrocoagulation—a review, **Water Research**, 2020, 187, 116433. https://doi.org/10.1016/j.watres.2020.116433. [I.F. 13.4].

J15- F. Sharif, A. Zeraati, P. Anzabi, **Nael Yasri**, M. Page, S.Holmes, U.Sundararaj, M.Trifkovica, E.Roberts, Synthesis of a high-temperature stable electrochemically exfoliated graphene, **Carbon**, 2020, 157, 681-692. https://doi.org/10.1016/j.carbon.2019.10.042 [I.F. 11.30].

J16- **Nael Yasri**, E. Roberts, S. Gunasekaran, The electrochemical perspective of bioelectrocatalytic activities in microbial electrolysis and microbial fuel cells (Review paper), **Energy Reportes.** 2019, Vol 5, Page 1116-1136. https://doi.org/10.1016/j.egyr.2019.08.007 [I.F. 5.2].

J17- A. Singh, **Nael Yasri**, K. Karan, E. Roberts, Electrocatalytic Activity of Functionalized Carbon Paper Electrodes and their Correlation to the Fermi Level Derived from Raman Spectra, **ACS Applied Energy Materials,** 2019, Vol. 2(3), 2324-2336. [I.F. 6.95]

J17- M. Rabah, **Nael Yasri**, M.N. Alaya, Impact of aging on the structural, textural, and acid properties of WO3 - SO42- - SnO2 solid acids, **Journal of Alloys and Compounds**, 2019, 790, 452-465. [I.F. 6.37].

J19- R. M.Kazan, H. A.Seddik, Z. M.Marstani, **Nael. Yasri**, Determination of amino acids content in tea species using liquid chromatography via pre-column fluorescence derivatization, **Microchemical Journal,** 2019, Vol 150, Page 104103. [I.F. 5.30].

J20- N. Flores, F. Sharif, **Nael Yasri,** E. Brillas, I. Sirés, and E. P. L. Roberts, "Removal of tyrosol from water by adsorption on carbonaceous materials and electrochemical advanced oxidation processes," **Chemosphere**, vol. 201, 2018. [I.F. 8.94]

J21- P. J. Panikulam, **Nael. Yasri,** and E. P. L. Roberts, "Electrocoagulation using an oscillating anode for kaolin removal," **J. Environ. Chem. Eng.,** vol. 6, no. 2, 2018. [I.F. 7.7]

J22- **Nael Yasri,** G. Nakhla, The performance of 3-D graphite doped anodes in microbial electrolysis cells**,** **Journal of Power Sources,** 342 (2017) 579-588. https://doi.org/10.1016/j.jpowsour.2016.12.081 [[I.F. 9.79].

J23- **Nael Yasri** and G. Nakhla, "Impact of interfacial charge transfer on the start-up of bioelectrochemical systems," **J. Environ. Chem. Eng.,** vol. 5, no. 4, pp. 3640–3648, 2017. https://doi.org/10.1016/j.jece.2017.07.014 [[I.F. 7.7]

J24- Susan Grimes, **Nael Yasri,** A.J. Chaudhary, Recovery of critical metals from dilute leach solutions – Separation of indium from tin and lead, I**norganica Chimica Acta,** 461 (2017) 161-166. [I.F. 3.11].

J25- **Nael Yasri**, George Nakhla, Electrochemical Behavior of Anode-Respiring Bacteria on Doped Carbon Electrodes, **ACS Applied Materials & Interfaces,** 8 (2016) 35150-35162. https://doi.org/10.1021/acsami.6b09907 [[I.F. 10.38].

J26- **Nael Yasri,** A. Sundramoorthy and S. Gunasekaran, Azo Dye Functionalized Graphene Nanoplatelets for Selective Detection of Bisphenol A and Hydrogen Peroxide, **RSC Advances,** ***5****,* 87295-*87305, 2015.* **DOI** https://doi.org/10.1039/C5RA16530J [I.F. 4.03]

J27- **Nael Yasri**, A. Yaghmour, S. Gunasekaran, Effective removal of organics from corn wet milling steepwater effluent by electrochemical oxidation and adsorption on 3-D granulated graphite electrode, **J. Environ. Chem. Eng.,** vol. Vol. ***, no 2,*** *930-937, 2015.* https://doi.org/10.1016/j.jece.2015.03.019 [I.F. 7.7]

J28- **Nael Yasri,** H. Seddik, M. Mosallb, Spectrophotometric determination of formaldehyde based on the telomerisation reaction of Tryptamine. **Arabian Journal of Chemistry, 8,** 487-494, 2015. https://doi.org/10.1016/j.arabjc.2011.02.005 [I.F. 6.21]

J29- **Nael Yasri,** A. Sundramoorthy, W. Chang and S. Gunasekaran, Highly Selective Mercury Detection at Partially Oxidized Graphene/Poly (3,4-ethylenedioxythiophene):Poly (styrenesulfonate) Nanocomposite Film Modified Electrode, **Frontiers in Materials 1 (2014).** [I.F. 3.24]

J30- **Nael Yasri,** A. Halabi, G. Istamboulie, T. Noguer, Chronoamperometric determination of lead ions using PEDOT:PSS modified carbon electrodes, **Talanta *85***, 2528- 2533, 2011. https://doi.org/10.1016/j.talanta.2011.08.013 [I.F. 6.55]

J31- J. Donaldson, S. Grimes, **Nael Yasri,** B. Wheals, J. Parrick and W. Errington, Anodic Oxidation of the Dye Materials Methylene blue, acid blue 25, reactive blue 2 and reactive blue 15 and the Characterisation of Novel Intermediate Compounds in the Anodic Oxidation of Methylene Blue. **Journal of Chemical Technology and Biotechnology, *77,*** 756-760 (online: 2002). [I.F. 3.71]

J32- A.J. Chaudhary, J. Donaldson, S. Grimes, **Nael Yasri,** Separation of nickel from cobalt using electrodialysis in the presence of EDTA. **Journal of Applied Electrochemistry, *30,*** 439-445, 2000. [I.F. 2.91]

CONFERENCES

C1- Mudasar Mahmood, Nael Yasri, Edward Roberts, Application of Polarity Reversal and Performance Analysis of Continuous Electrocoagulation, Electrochemical Society Meeting, 2022 Abstracts 242, Issue 27, 1061-1061.

C2- Mudasar Mahmood, Nael Yasri, Edward PL Roberts, Continuous Treatment of Oil-Sands Produced Water By Electrocoagulation, Electrochemical Society Meeting, 2021, Abstracts 240, Issue 23, 768-768.

C3- Ashutosh Singh, Maria Perez-Page, Nael Yasri, Stuart Holmes, Edward Roberts; **Production of High-Quality Graphene using a Novel Electrochemical Intercalation-Exfoliation Approach**, 12th European Symposium on Electrochemical Engineering, 31st January 2020, Amsterdam.

C4- A. K. Singh, M. Perez-Page, N. Yasri, S. Holmes, and E. P. L. Roberts; **Production of High-Quality Graphene Using a Novel Electrochemical Intercalation-Exfoliation Approach,** 14 May 2020, Montreal, Canada.

C5- A. K. Singh, N. Yasri, M. Pahlevaninezhad, and E. P. L. Roberts; **Degradation of Carbon Electrodes in the Vanadium Redox Flow Battery**, 11 May 2020, Montreal, Canada.

C6- N. Yasri, M. Nightingale, A. Jaggi, T. Shu, B. Fuladpanjeh, T. Oldenburg, M. Trifkovic, B. Mayer, E. Roberts, **Electrocoagulation for the treatment of Produced Water**, Alberta Innovate annual meeting, May 22-23 May, 2019, Edmonton, Canada.

C7- T. Shu, B. Hojaghan, N. Yasri, M. Nightingalea, M. Trifkovic and E.P.L. Roberts, **Performance of Treatment of Oil-Sands Produced Water By Electrocoagulation**, Industrial Electrochemistry and Electrochemical Engineering General Session, 233rd Electrochemical Society Meeting, May 13-17, 2018, Seattle, WA, USA.

C8- E. Roberts, B. Hojaghan, T. Shu, N. Yasri, M. Trifkovic. *Removal of silica from oil-sands produced water by electrocoagulation*. in *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY*. 2018. AMER CHEMICAL SOC 1155 16TH ST, NW, WASHINGTON, DC 20036 USA.

C9- E. Roberts, T. Shu, B. Hojaghan, N. Yasri, M. Trifkovic., *Removal of Silica from in-Situ Produced Water By Electrocoagulation.* Meeting Abstracts, 2018. **MA2018-02**(27): p. 917.

C10- T. Shu, B. Hojaghan, N. Yasri, M. Nightingalea, and E.P.L. Roberts, **Treatment of Oil-Sand Produced Water using Electrocoagulation**, 67th Canadian Chemical Engineering Conference, EDMONTON, AB, OCTOBER 22-25, 2017, Canada.

C11- A.K. Singh, N. Yasri, K. Karan and E.P.L. Roberts, **Nitrogen Doping on Carbon Paper Electrodes,** General Electrocatalysis Session, 233rd Electrochemical Society Meeting, May 13-17, 2018, Seattle, WA, USA.

C12- A.K. Singh, N. Yasri, K. Karan and E.P.L. Roberts, **Effect of Pretreatment on Carbon Materials,** Nanoporous Carbons Session, 233rd Electrochemical Society Meeting, May 13-17, 2018, Seattle, WA, USA.

C13- N. Yasri, G. Nakhla, "**Do anodes have to be conductive? Comparative behavior of anode-respiring bacteria on conductive and non-conductive doped carbon anodes**", accepted for Venice 2016 - Sixth International Symposium on Energy from Biomass and Waste, Italy.

C14- N. Yasri, G. Nakhla, "Does it have to be a conductive doping? **Behavior of anode-respiring bacteria on doped carbon for microbial fuel cells and related bioelectrochemical systems**", Microbial Electrochemical Technology Workshop, May 11, 2016, University of Waterloo, Canada.

C15- N. Yasri, A. Sundramoorthy and S. Gunasekaran, S**ingle-step preparation of naphthalene-based azo graphene film for electrochemical detection of Bisphenol A,** CAMBR Netwoking Seminar, April 27, 2015 Western University, London Ontario, Canada.

C16- G. Eranoss, N. Yasri, M. Touma, **Applying Electrochemical Technique for Dye Destruction and Removal From Aqueous Solutions and Textile Wastewater**; *A conference paper, presented in the Second Chemistry Conference*, 28-30 April. 2008, Aleppo University, Syria.

C17- N. Yasri, S. Grimes, **A Novel Combination of Adsorption and Electrolytic Processes for the Removal of Lead and Cadmium from Dilute Solution**; First Syrian Chemistry Conference on Environmental Chemistry, 19-23 Nov. 2006, Aleppo University, Syria.

C18- N. Yasri, S. Grimes, **The Application of Electrochemical Technique in the Environmental Technology;** Scientific week 2003, Aleppo University, Syria.

Peer-review Journal in Arabic language (The titles and abstracts are translated to English)

JA1- A. Halabi, N. Yasri, Lead Determination applying electrochemical method using carbon modified electrode sensor, ***Research Journal of Aleppo University, 76,*** 2011**.**

JA2- M. Mosallb, N. Yasri, H. Seddik, A Developed Spectrophotometric Method for the Determination of Formaldehyde, ***Research Journal of Aleppo University,*** **74**, 2010**.**

JA3- N. Yasri, Electrochemical Removal of Copper from Simulated Plating Effluents: "Copper From Gluconate Medium". ***Research Journal of Aleppo University,*** **69**, 2010**.**

JA4- A. Yaghmour, N. Yasri, Chemical and electrochemical Treatment of industrial starch wastewater resulted from wet processing operation. ***Research Journal of Aleppo University, 68***, 2009.

JA5- N. Yasri, A Study of Combining Electrochemical Cathode with Activated Carbon Cloth for Copper removal from Dilute Effluent Solutions, ***Research Journal of Aleppo University,*** **63**, 2009**.**

JA6- K. Barsoumian, N. Yasri, Electrooxidation of methylene blue dye by Fenton's reagent and the characterisation of intermediate compounds, ***Research Journal of Aleppo University, 63***, 2009.

JA7- K. Barsoumian, N. Yasri, The application of electrooxidation method using Fenton's reagent for the treatment of Direct red 23 dye and some Textile Wastewater. ***Research Journal of Aleppo University,*** **59**, 2008**.**

JA8- G. Eranoss, N. Yasri, M. Touma, The Treatment of Reactive Red 120, Direct Green-6 and real textile wastewater effluents applying Anodic Oxidation Method. ***Research Journal of Aleppo University, 57***, 2007.

JA9- G. Eranoss, N. Yasri, M. Touma, Degradation of Neutral Red Dye by Anodic Oxidation under Different Treatment Conditions. ***Research Journal of Aleppo University,*** **52**, 2007**.**

PROPOSAL PREPARATION

Bio-electrochemical treatment of Mature Fine Tailing, NSERC Alliance Project in partnership with Pathways Alliance Inc., 40-TE0098-23-576-0, University of Calgary, 2023.

Electrocoagulation for Oil-Sands Produced Water Treatment, University of Calgary, Idea to Innovation" (I2I) NSERC, PI: Dr. Edward Roberts, University of Calgary, 2020.

Electrokinetic Remediation of Salt Impacted Sites, University of Calgary and Northern Alberta Institute of Technology, NSERC Innovation Links Project, PI: Dr. Edward Roberts, University of Calgary, 2020.

Oil-Sands Produced Water Treatment by Electrocoagulation, University of Calgary, Water Innovation Program, Alberta Innovates – Energy and Environment Solutions, E323713, PI: Dr. Edward Roberts, University of Calgary, 2017-2019.

Efficient Water Treatment by Electrocoagulation, 2018, University of Calgary and the University of Waterloo, NSERC Strategic Partnership Grants, PI: Dr. Edward Roberts, University of Calgary, 2018.

Electrochemical Water Treatment Using Expanded Graphite, NSERC Engage plus, University of Calgary and BioLargo Water Inc as a research partner, PI: Dr. Edward Roberts, University of Calgary, 2017. (Discontinued by the partner company)

A Multicomponent Electrochemical System for Remediating Water Contaminated with Heavy Metals Complexed with Inorganic and Organic Ligands, University of Wisconsin-Madison, Porposal ID. 1438489, National Science Foundation, Division of Chemical, Bioengineering, Environmental, and Transport Systems, PI: Dr. Edward Roberts, University of Calgary, 2013.

VISITING SCHOLAR

Within the frame of program funded by the Institute of International Education's Scholar Rescue Fund (IIE-SRF) two scientific stays:

2015-2016; Western University, Chemical and Biochemical Engineering, London, ON, Canada.

2013-2014; University of Wisconsin-Madison, Biological Systems Engineering, US.

Summer 2008 and Summer 2009; Université de Perpignan Via Domitia, Perpignan, France, Centre of Phytopharmacie. Worked on developing electrochemical biosensors for pesticide, herbicide, and heavy metals detection in water, soil and food.

ACADEMIC COMMUNITY SERVICE

- Member in the Scholar at Risk (SAR) and Scholar Rescue Found (SRF-IIE) programs. Both are not-for-profit organizations that support researchers in warzone countries. I represented SRF-IIE researchers in various occasions such as:
  The Canadian House of Commons, Human Right Day, December 8, 2016, Ottawa.
  AAAS conference on Science and Human Rights, Washington DC, USA, October 24, 2019.
- Supporting researchers at the University of Aleppo, Syria to publish their research finding in peer-review journal.
- Local Syrian Minister community board of Science and Education

CERTIFIED training

Advance Instrument operation training for confocal Raman Imaging, WITec Academy Course, WITec, Germany. 2017

Confocal Raman Spectroscopy data and Image Processing, WITec Academy Course, WITec, Germany. 2017

Teaching in the Canadian Classroom, Western University, Canada. 2015

PROFESSIONAL REFERENCES

Doctoral Thesis Advisor

Dr. John Donaldson, Professor, Retired.

Dr. Sue Grimes, Professor, Department of Aerospace Engineering, Imperial College London, 233 Skempton Building South Kensington Campus, Tel: +44 (0)20 7594 5966, E-mail: s.grimes@imperial.ac.uk

Researchers:

Dr. Sundaram Gunasekaran, Professor, Biological Systems Engineering, University of Wisconsin, 231 Agricultural Engineering Building 460 Henry Mall, Madison, WI 53706, Tel: +1(608) 262-1019, email: guna@wisc.edu

Dr. Edward Roberts, Professor, Department of Chemical and Petroleum Engineering, University of Calgary, 2500 University Dr. NW: ENB 204b, Tel: +1(403)220-4466, email: edward.roberts@ucalgary.ca

Dr. Jinguang HU, Assistant Professor, Department of Chemical and Petroleum Engineering, University of Calgary, 3535 Research Rd NW : URC2E-213, Tel: 403.220.3990, email: jinguang.hu@ucalgary.ca

Dr. MD Kibria, Assistant Professor, Department of Chemical and Petroleum Engineering, University of Calgary, 3535 Research Rd NW : URC2E-215, Tel: 403.338.3320, email: md.kibria@ucalgary.ca

External researcher

Dr. Muhammad Hamid Zaman, Professor, Howard Hughes Medical Institute, Departments of Biomedical Engineering and International Health, Boston University, MA 02215, Tel.: 617 358 5881, E-mail: zaman@bu.edu

Reference to My education and Faculty position at the University of Aleppo (Syria), please refer to the Institute of International Education-Scholar Rescue Fund, contact person:

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