

## Curriculum Vitae

### Personal Information

**Name** Rakan Mohammad Altarawneh  
**Gender** Male  
**Date of Birth** 31.07.1985  
**Place of Birth** Karak/Jordan  
**Nationality** Jordanian  
**Marital Status** Single  
**Occupation** Assistant Professor  
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### Education

Memorial University of Newfoundland, NL, Canada

**Doctor of Philosophy, Electroanalytical Chemistry** – Prof. Peter Pickup 09/2015 – 08/2018

*Thesis:* Product distributions and efficiencies for ethanol oxidation in proton exchange membrane electrolysis cells.

Mu'tah University, Alkarak, Jordan

**Master of Science, Analytical Chemistry** – Prof. Mufeed Batarseh 2008 - 2012

*Thesis:* Multiresidue Analysis of Pesticides in Soil Profile from the Jordan Valley using GC-ECD.

Mu'tah University, Alkarak, Jordan

**Bachelor of Science, Chemistry** 2003 - 2007

Secondary Education certificate for **Scientific stream** from Karak, Jordan. 2002 - 2003

### Language

Arabic : Native Arabic

English : Very Good Command in Reading, Writing and Speaking

## Awards

<b>Recognition of Excellence</b>	05/2018
<i>Awarded by the Dean of Graduate Studies - Memorial University of Newfoundland, NL, Canada</i>	
<b>Research Excellence Award</b>	03/2018
<i>Awarded by the Graduate Students' Union - Memorial University of Newfoundland, NL, Canada</i>	
<b>Chen Award</b>	01/2018
<i>Awarded by the Department of Chemistry - Memorial University of Newfoundland, NL, Canada</i>	
<b>Honour Award</b>	07/2012
<i>Awarded by the Deanship of Graduate Studies- Mu'tah University, Alkarak, Jordan</i>	

## Sponsorships

<b>2015 - 2018</b>	Full scholarship from Mu'tah University, Ph.D., Memorial University, NL - Canada.
<b>2003 – 2007</b>	Full scholarship from His Majesty King Abdullah Bin Husain II, B.Sc., Mu'tah University, Al-Karak-Jordan

## Grants

<b>2020</b>	Mu'tah University Grant No. 349/2020. "Evaluation of antioxidant and inhibitory activity of medicinal plant extracts in Jordan", Fund of 18000 USD. Jordan.
<b>2021</b>	Mu'tah University Grant (under processing). " Making and characterizing new anode catalysts with higher performance for proton exchange membrane fuel cells", Fund of 150000 USD. Jordan.

## Memberships

The Electrochemical Society (ECS)	United States
Chemical institute of Canada (CIC)	Canada

## Research and Teaching Experience

<b>2018 - Present</b>	<b>Assistant Professor</b> at Chemistry Department/ Faculty of Science - Mu'tah University, Jordan.
<b>2015 - 2018</b>	<b>Ph.D candidate</b> at Chemistry Department/ Memorial University of Newfoundland, NL, Canada.
<b>2012 - 2014</b>	<b>Teaching Assistant</b> for general chemistry students, medical, engineers and biology students at Chemistry Department - Mu'tah University, Jordan
<b>2011 - 2012</b>	<b>Research Assistant</b> in the area of Environmental and Sustainable Chemistry such as Multiresidue Analysis of Pesticides in Water and soil using GC-ECD and GC-MS, Prince Faisal Center for Dead Sea, Environmental and Energy Research\ Mu'tah University, AlKarak, Jordan.
<b>2007- 2011</b>	<b>Chemistry Teacher:</b> Teaching chemistry and science courses in different schools for different levels in the Ministry of Education /Jordan.

## Training Courses

- Gas Chromatograph equipped with Electron Capture Detector (**GC/ECD**).
- Gas Chromatography Mass Spectrometry (**GC/MS**).
- Gas Chromatograph equipped with Flame Ionization Detector (**GC/FID**).
- Training at Nuclear Magnetic Resonance spectroscopy (**NMR**).
- **MUCDL:** Mu'tah University Computer Driving License, Mu'tah University, 2015.
- **ICDL:** International Computer Driving License, 2012.

## Skills and Capabilities

- Having excellent skills in teaching chemistry.
- Working in a challenging job condition.
- Highly Motivated in Social Interpersonal Communication with others.
- Has a good ability to work under pressure.
- The ability to use Internet and the scientific research approaches.
- Able to take leadership appropriately.

- Being familiar with the latest sciences.
- **IELTS** with score 6, 2014.
- **TOFEL** (Test of English as a Foreign Language), 2010.

## Publications and Presentations

1. **R. M. Altarawneh**, "Overview on the Vital Step toward Addressing Platinum Catalyst Poisoning Mechanisms in Acid Media of Direct Ethanol Fuel Cells (DEFCs)." *Energy & Fuels* 35.15 (2021): 11594-11612.
2. A. Tarawneh, I. Salamon, **R. M. Altarawneh**, J. Mitra, and A. Gadetskaya. "Assessment of Lichens as Biomonitors of Heavy Metal Pollution in Selected Mining Area, Slovakia." *Pakistan Journal of Analytical & Environmental Chemistry* 22.1 (2021): 53-59.
3. H. Hang, **R. M. Altarawneh**, T. M. Brueckner, and P. G. Pickup, Mixed metal oxide supports for ethanol oxidation catalysts, *Journal of The Electrochemical Society*, 167 054518 (2020).
4. **R. M. Altarawneh**, "Levels of selected heavy metals (Pb, Ni, Cd, and Cr) in various widely consumed fruits and vegetables in Jordan." *International Journal of Environmental Analytical Chemistry* 101.7 (2019): 1026-1033.
5. **R. M. Altarawneh**, Faradaic Efficiencies for Methanol Oxidation in Proton-Exchange Membrane Electrolysis and Fuel Cells with Various Anode Catalysts, *Int. J. Electrochem. Sci.*, 14, 7016 (2019).
6. B. Chen, T. M. Brueckner, **R. M. Altarawneh** and P. G. Pickup, Composition dependence of ethanol oxidation at ruthenium-tin oxide/carbon supported platinum catalysts, *J. Electrochem. Soc.*, 165, J3019 (2018).
7. **R. M. Altarawneh** T. M. Brueckner, B. Chen and P. G. Pickup, Product distributions and efficiencies for ethanol oxidation at PtNi octahedra, , *J. Power Sources*, 400, 369 (2018).
8. **R. M. Altarawneh** and P. G. Pickup, Determination of the stoichiometry of ethanol oxidation from the flow rate dependence of the current in a proton exchange membrane electrolysis cell, *J. Electrochem. Soc.*, 156, F479 (2018).
9. **R. M. Altarawneh** and P. G. Pickup, Pt and PtRu catalyst bilayers increase efficiencies for ethanol oxidation in proton exchange membrane electrolysis and fuel cells, *J. Power Sources*, 366, 27 (2017).
10. **R. M. Altarawneh** and P. G. Pickup, Product Distributions and Efficiencies for Ethanol Oxidation in a Proton Exchange Membrane Electrolysis Cell *J. Electrochem. Soc.*, 164, F861 (2017).
11. **R. M. Altarawneh**, P. Majidi and P. G. Pickup, Determination of the efficiency of ethanol oxidation in a proton exchange membrane electrolysis cell, *J. Power Sources*, 351, 106 (2017).
12. Poster Presentations (\*Presenter)

- R. M. Altarawneh** and P. G. Pickup, “Product distributions and efficiencies for ethanol oxidation in proton exchange membrane electrolysis and fuel cells”. 42<sup>nd</sup> Annual Science Atlantic Chemistry Conference (ChemCon 2017), Memorial University of Newfoundland, Canada.
13. P. Majidi, **R. M. Altarawneh**, N. D. W. Ryan and P. G. Pickup, Determination of the efficiency of methanol oxidation in a direct methanol fuel cell, *Electrochim. Acta*, 199, 210 (2016).
14. Oral Presentations (\*Presenter)  
**Rakan M Altarawneh\***, Mufeed Batarseh. “Multi residue Analysis of Pesticides in Soil Profile from the Jordan Valley using GC-ECD”. Regional Workshop of DAAD-EXCEED Project “Wastewater Treatment and Reuse” 3rd-6th June 2013, Konya-Turkey
15. **Rakan Tarawneh**, Mufeed Batarseh. Multiresidue Analysis of Pesticides in Agriculture Soil from Jordan Valley. 2013. *Jordan Journal of chemistry*. Vol. 8, No. 3.

## **References**

Will be furnished upon request.