

FULL NAME: RUZNIZA MOHD ZAWAWIDate of Birth: 27th May 1980**EDUCATION**

Name of University	Durham University			
Award (e.g. PhD)	PhD (Chemistry)			
Title of thesis	Electrochemical Chiral Biosensors			
Dates studied	from: 2007	to: 2010	Date awarded:	10 th Oct. 2011

CURRENT ROLE

Job Title	Senior Lecturer		
Dates from/to	Oct. 2011-present		
Employer's Name	Universiti Putra Malaysia		
Employer's Address	Department of Chemistry, Faculty of Science, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, MALAYSIA.		
Number of Student Supervised	<i>directly</i>	<i>indirectly</i>	
	1 PhD student 2 MSc. students 5 undergraduate students	4 PhD students 3 MSc. students	

EXPERTISEElectrochemistry
Chiral Sensor**FIELD OF STUDY**Analytical Chemistry
Material Sciences
Sensor Technology**PUBLISHED MATERIALS**

- 1) Ruzniza Mohd Zawawi, Nor Azah Yusof, Siti Nur Zawani Mohammad Zain and Faruq Mohammad. Sensory Measurement of Mercury and Cadmium Ions In Water Using Silicon Nanowires-Modified Screen Printed Carbon Electrode. Asian Journal of Chemistry. 2016. 28 (7). 1429-1434.
- 2) Fadel Mohamed Binyehemd, Ahmad Makmom Abdullah, Zulkarnain Zainal and Ruzniza Mohd Zawawi. Trend and Status of SO₂ Pollution as a Corrosive Agent at Four Different Monitoring Stations in the Klang Valley, Malaysia. International Journal of Advanced Scientific and Technical Research. 2016. 3(6). 302-316.
- 3) Ngai Koh Sing, Tan Wee Tee, Zulkarnain Zainal, Ruzniza Mohd Zawawi and Juan Joon Ching. Electrochemical Sensor Based on Single-Walled Carbon Nanotube/ ZnO Photocatalyst Nanocomposite Modified Electrode for the Determination of Paracetamol. Science of Advanced Materials. 2016. 8(4). 788-796.
- 4) Ismail, A.H. Mustafa, M.N. Abdullah, A.H. Zawawi, R.M. and Sulaiman, Y. Effect of Electropolymerization Potential on the Properties of PEDOT/ZnO Thin Film Composites. Journal of Electrochemical Society. 2016. 163(2). G7-G14.
- 5) Zubair, N.A., Rahman, N.A., Lim, H.N., Zawawi, R.M. and Sulaiman, Y. Electrochemical properties of

PVA-GO/PEDOT nanofibers prepared using electrospinning and electropolymerization techniques. *RSC Advances*. 2016. 6(21). 17720-17727.

6) Rahman, S.F.A., Yusof, N.A., Hashim, U., Hushiarian, R., M. Nuzaihan, M.N., Hamidon, M.N. Zawawi, R.M. and Fathil, M.F.M. Enhanced sensing of dengue virus DNA detection using O₂ plasma treated-silicon nanowire based electrical biosensor. *Analytica Chimica Acta*. 2016. 942. 74-85.

7) Kasinathan, B., Zawawi, R.M. and Lim, H.N. Voltammetric studies and characterization of biocompatible graphene/collagen nanocomposites modified glassy carbon electrode towards enantio-recognition of chiral molecules. *Journal of Applied Electrochemistry*. 2015. 45. 1085-1099.

8) Kasinathan, B. and Zawawi, R.M. Carbon-based nanomaterials for drugs sensing: A Review. *Material Science Forum*. 2015. 807. 13-39.

9) Ngai, K.S., Tan, W.T., Zainal, Z., Zawawi, R.M. and Juan, J.C. Single-walled carbon nanotube/tungsten-modified glassy carbon electrode as a novel sensor for the electrochemical determination of ascorbic acid. *Sensor Letters*, 2015, 13(5), 411-418.

10) Ngai, K.S., Tan, W.T., Zainal, Z., Zawawi, R.M. and Juan, J.C. Electrocatalytic study of paracetamol at a single-walled carbon nanotube/nickel nanocomposite modified glassy carbon electrode. *Advances in Materials Science and Engineering*, 2015, 1-8.

11) Zidan, M., Zawawi, R.M., Erhayem, M. and Salhin, A. Electrochemical detection of paracetamol using graphene oxide-modified glassy carbon electrode. *Int. J. Electrochemical Science*. 2014, 9, 7605-7613.

12) Rahman S.F.A, Yusof, N.A. Hamidon, M.N., Zawawi, R.M. and Hashim, U. Top-down fabrication of silicon nanowire sensor using electron beam and optical mixed lithography. *IEEE International Conference on Semiconductor Electronics, Proceedings, ICSE*. 2014. 64-67.

13) Ngai, K.S., Tan, W.T., Zainal, Z., Zawawi, R.M. and Zidan, M. Voltammetry detection of ascorbic acid at glassy carbon electrode modified by single-walled carbon nanotube/zinc oxide. *Int. J. Electrochemical Science*. 2013, 8, 10557-10567.

14) Nordin, N., Zakaria, M.R., Halmi, M.I.E., Ariff, A.B., Zawawi, R.M. and Wasoh, H. Isolation and screening of high efficiency biosurfactant-producing bacteria *Pseudomonas* sp. *Journal of Biochemistry, Microbiology and Biotechnology*. 2013. 1. 25-31.

15) Ngai, K.S., Tan, W.T., Zainal, Z., Zawawi, R.M. and Zidan, M. Electrochemical oxidation of ascorbic acid mediated by single-walled carbon nanotube/tungsten oxide nanoparticles modified glassy carbon electrode. *Int. J. Electrochemical Science*. 2012. 7. 4210-4222.

16) Katakya, R. and Zawawi, R.M. Modification of the chiral selectivity of D-glucose oxidase and L-lactate oxidase in a collagen matrix. *Physical Chemistry Chemical Physics*. 2010. 12(32), 9183-9187.

OTHER DETAILS

Professional Services:

- Journal Reviewer. Inhibition of *Ganoderma boninense* using chitosan nanoparticles simultaneously loaded with hexaconazole and dazomet fungicides. *SAMN* 2017.
- Journal Reviewer. Synthesis of nanocrystalline PbS thin film using microwave-assisted chemical bath deposition. *SAMN* 2017.
- Journal Reviewer. Fabrication of sensitive enzymatic biosensor based on multi-layered reduced graphene oxide added PtAu nanoparticles-modified hybrid electrode. *Journal of Applied Electrochemistry*. 2016.
- Journal Reviewer. Structural and electrical studies of starch based biopolymer electrolyte. *Malaysian Journal of Analytical Sciences*. 2016.
- Journal Reviewer. Effect of calcination temperatures on the electrochemical performances of nickel oxide/reduction graphene oxide (NiO/RGO) composites synthesized by hydrothermal method. *Journal of Applied Electrochemistry*. 2015.
- Journal Reviewer. Preparation and characterization study of titanium dioxide nanofiber prepared by electrospinning method. *Advanced Materials Conference*. 2015.
- Journal Reviewer. Surface modified ordered mesoporous carbon as an electrode material for supercapacitor. *Jurnal Teknologi*. 2015.

- Journal Reviewer. Modification of titanium dioxide nanoparticles with copper oxide co-catalyst for photocatalytic degradation of 2,4-dichlorophenoxyacetic acid. *Malaysian Journal of Analytical Sciences*. 2015.
- Journal Reviewer. An improved SPR biosensor using multilayer graphene. *Advanced Materials Conference*. 2015.
- Journal Reviewer. Complexation of Bis-2-(benzylideneamino)phenol to cobalt (II) and zinc(II) and their spectroscopic studies. *Borneo Journal of Resource Science and Technology*. 2012.
- Advisor of Nobel Laureates Outreach Camp Scientist of Tomorrow Project. 2016.
- Advisor of Science Project for 'Tunas Saintis MRSM Se-Malaysia' Competition. 2014.
- Scholarship evaluation panellist. Human Life Advancement Foundation. 2014.

Awards:

- Excellent Service Award – UPM (2017)
- Early Career Chemist Award by the 2015 International Congress of Pacific Basin Societies (Pacifichem 2015) in Honolulu, Hawaii, USA (2015).
- Travel grant award by The Electrochemical Society for the 216th ECS meeting in Vienna, Austria (2009)

Professional Societies:

- Malaysian Institute of Chemistry – Member (2016-present)
- International Society of Electrochemistry – Member (2016-present)
- American Chemical Society – Member (2016-present)
- Malaysia International Chemical Science Chapter of the American Chemical Society – Committee member (2016-present)
- Royal Society of Chemistry – Associate member (2015-present)
- Sensor Malaysia Society – Member (2015-present)
- Malaysian Analytical Sciences Society (2014-present)
- Persatuan Pegawai Akademik UPM – Member (2014-present)