

# Curriculum Vitae



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<b>Faculty :</b>	Faculty of Applied Sciences, UiTM Shah Alam
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<b>Grade of Position :</b>	DM54
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## BASIC PROFILE

### CARRER HISTORY:

<b>Appointments</b>	<b>Date/Year of Appointment</b>
Lecturer (DM46)	1996
Senior Lecturer (DM52)	2008
Associate Professor (DM54)	2017

### ACADEMIC QUALIFICATIONS:

<b>UNIVERSITY</b>	<b>LEVEL</b>	<b>AREA OF SPECIALIZATION</b>	<b>DURATION</b>
SOUTHAMPTON UNIVERSITY, UK	PhD	ELECTROCHEMISTRY	Dec 2002 – Apr 2006
EDINBURGH UNIVERSITY, UK	MSc	ENVIRONMENTAL CHEMISTRY	Sept 1994 – Oct 1995

## **TEACHING EXPERIENCES:**

### **Lecturing**

- CHM 674 (Advanced Electrochemistry) & CMT555 (Electrochemistry and Corrosion Science)

### **Supervision**

- PhD (4 students – 1 graduated)
- MSc (6 students – 3 graduated)
- BSc (22 students since 2011)

### **Demonstrating**

- Electroanalytical Techniques Experiments / Research Projects – Cyclic Voltammetry, Chronoamperometry, Chronopotentiometry, Potentiometry, DME, HDME, Coulometry

### **Curriculum Development**

- Resource Person for CHM674 (Advanced Electrochemistry)
- Resource Person for FSG 602 (Industrial Training)
- Curriculum Reviewer for AS 202 (BSc Chemistry) and AS 245 (BSc Applied Chemistry)

### **Seminar & Group Work**

- Member of Electrochemical Materials and Sensors (EMaS) Research Group – RIG UiTM (under core FMIA)
- Committee for Electrochemistry and Sensor Workshop 2015
- Committee for Electrochemistry and Sensor Seminar 2016

### **Panel Assessments**

- Viva (as Internal Examiner for 1 PhD student and 3 MSc students)
- Pre-Viva
- Progress Monitoring of MSc and PhD students
- Final Year Projects for BSc
- Industrial Training Presentation
- Interviewer for New Lecturer/ TPM
- Panel for FRGS, RAGS, ARAS Grants Applications

## **ADMINISTRATIVE EXPERIENCES:**

Head of Programme for AS 225 (BSc Applied Chemistry) 2008 – 2009

Head of Programme for AS 229 (BSc Environmental technology) 2001 – 2002

Head of Occupational Safety and Health, Faculty of Applied Sciences – 2010 – 2012

Auditor Exam Questions for CMT codes  
Outcome Based Education (OBE) Committee  
Mentor for New Lecturer  
Academic Advisor for AS202 and AS245 Students

**RESEARCH INTERESTS:**

- Synthesis of Novel Materials using Electrochemical Techniques
- Characterization and Developments of the Synthesized Products

**RESEARCH ACTIVITIES:**

- Set up Research Group (EMaS)
- Apply Research Grants (Internal, National and International)
- Supervise Postgraduate and Undergraduate Students
- Join Innovation Exposition and Competition
- Organize Seminar & Workshop
- Reviewer for Journals & Proceedings (MJAS, Journal of New materials for Electrochemical Systems, ICMMT 2013)
- Technical Committee for ICMMT 2014

**PROFESSIONAL DEVELOPMENT ACTIVITIES:**

Post-Doctoral Attachment at IBM Almaden Research Center, San Jose, California for a research on ‘Antimicrobial Coatings’ from 1 September 2013 to 28 February 2014 (Organized by NanoMalaysia and Sponsored by MOHE)

**INNOVATION AWARDS:**

1. IID Special Edition 2010 (Silver)
2. RIID Melaka 2012 (Gold, Silver, Bronze)
3. IIDEX 2015 (Gold)
4. PECIPTA 2015 (Bronze)
5. BIOMALAYSIA 2016

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- Antimicrobial Copper Coated Touch Surfaces (MyIPO CRS Reg No: CRLY00002511)

## **CONFERENCES JOINED & ATTENDED:**

- Advanced Materials Conference 2016 (AMC) – Langkawi
- International Science and Technology Conference (ISTEC 2016)- Penang
- The 4th International Conference on Advanced Materials Research (ICAMR 2014) - Macau
- 2013 4th International Conference on Material and Manufacturing Technology (ICMMT2013)- Seoul
- 2012 IEEE Symposium on Humanities, Science and Engineering - Kota Kinabalu
- 2011 IEEE Symposium on Humanities, Science and Engineering – Kuala Lumpur
- International Seminar on The Research Progress in Science & Technology (Bandung, Indonesia) 2010
- The International Conference for Nanomaterials Synthesis and characterization (INSC2011) – Seri Kembangan
- International Conference on NANO-Scietch 2011 (Shah Alam)

## **POSTGRADUATE SUPERVISION**

### **MASTER (RESEARCH) SUPERVISION COMPLETED (Includes Co-supervision)**

	<b>Students Name</b>	<b>Institutions</b>	<b>Year Enrolled</b>	<b>Year End</b>
1	Nik Norziehana Che Isa (Main Supervisor)	UiTM	2010	2013
2	Nur Aziati Tahar @ Yusoff (co-Supervisor)	UiTM	2007	2010
3	Wan Danial Shahizuan Wan Ghazali (Main Supervisor)	UiTM	2009	2016
4	Siti Zairyn Fakurol Rodzi (Main Supervisor)	UiTM	2011	2016
5	Muhammad Hafizuddin Mohd Zaki (Main Supervisor)	UiTM	2015	2018
6	Syaidah Athirah Dzolin (Co-Supervisor)	UiTM	2015	2018

### **PhD (RESEARCH) SUPERVISION COMPLETED (Includes Co-supervision)**

	<b>Students Name</b>	<b>Institutions</b>	<b>Year Enrolled</b>	<b>Year End</b>
1	Nor Zakiah Hashim (Co Supervisor)	UiTM	2009	2015
2	Nik Norziehana Che Isa (Main Supervisor)	UiTM	2013	2017

### **ON-GOING POSTGRADUATE (RESEARCH) SUPERVISION (Includes Co-supervision)**

	<b>Students Name</b>	<b>Institutions</b>	<b>Year Enrolled</b>	<b>Year End</b>
1	Muhammad Farhan Zainal (Main Supervisor)	UiTM	2012	-
2	Nur Nadira Hazani (Co-Supervisor)	UiTM	2016	2019

### On-Going PhD SUPERVISION (Includes Co-supervision)

	Students Name	Institutions	Year Enrolled	Year End
1	Siti Nor Safurah Ab Malek (Main Supervisor)	UiTM	2012	2018
2	Ruhani Ibrahim (Co-Supervisor)	UiTM	2012	2019

### RESEARCH FUNDINGS

<b>Project No</b>	: 600-IRMI/GIP 5/3 (0026/2016)
<b>Type</b>	: Internal Grant - UiTM
<b>Title</b>	: Pt-Cu Alloy Electrocatalysts Supported on Ti for Methanol Oxidation in Alkaline Medium
<b>Head</b>	: YUSAIRIE BIN MOHD (DR)
<b>Member(s)</b>	:
<b>Grant Type</b>	: UiTM – GERAN INISIATIF PENYELIAAN (GIP)
<b>Year Start</b>	: 2016-09
<b>Cost (RM)</b>	: 30,000.00

<b>Project No</b>	: 600-RMI/FRGS 5/3 (139/2015)
<b>Type</b>	: National Grant (MOHE)
<b>Title</b>	: Antimicrobial Coatings of Copper
<b>Head</b>	: YUSAIRIE BIN MOHD (DR)
<b>Member(s)</b>	:
<b>Grant Type</b>	: FRGS.
<b>Year Start</b>	: 2015-11
<b>Cost (RM)</b>	: 101,000.00

<b>Project No</b>	: 14/G206
<b>Type</b>	: International Grant (JAPAN)
<b>Title</b>	: Fabrication of Copper Loaded Titania Nanotubes for Solar Energy Conversion
<b>Head</b>	: LIM YING CHIN (DR)
<b>Member(s)</b>	: YUSAIRIE BIN MOHD (DR)
<b>Grant Type</b>	: MTSF (MALAYSIA TORAY SCIENCE FOUNDATION).
<b>Year Start</b>	: 2014
<b>Cost (RM)</b>	: 20,000.00

<b>Project No</b>	: 600-RMI/ERGS 5/3 (9/2012)
<b>Type</b>	: National Grant (MOHE)
<b>Title</b>	: PREPARATION AND CHARACTERIZATION OF NANOPOROUS PANI-NIO // WO3 CELLS FOR MULTICOLOUR ELECTROCHROMIC WINDOWS
<b>Head</b>	: YUSAIRIE BIN MOHD (DR)
<b>Member(s)</b>	:
<b>Grant Type</b>	: ERGS.
<b>Year Start</b>	: 2012-07-01
<b>Cost (RM)</b>	: 78,000.00

<b>Project No</b>	: 600-RMI/ST/FRGS 5/3/Fst (43/2010)
<b>Type</b>	: National Grant (MOHE)
<b>Title</b>	: Electrochemical Preparation And Characterization Of Various Conducting Polymers Deposited Onto Wo3-ito/glass
<b>Head</b>	:
<b>Member(s)</b>	: YUSAIRIE BIN MOHD (DR)
<b>Grant Type</b>	: FRGS (S&T)
<b>Year Start</b>	: 2010-03-1
<b>Cost (RM)</b>	: 39,200.00

<b>Project No</b>	: 600-RMI/ST/FRGS 5/3/Fst (222/2010)
<b>Type</b>	: National Grant (MOHE)
<b>Title</b>	: Synthesis Of Hybrid Hydroxyapatite (hap) Coatings Using Electrodeposition Method
<b>Head</b>	:
<b>Member(s)</b>	: YUSAIRIE BIN MOHD (DR)
<b>Grant Type</b>	: FRGS (S&T)
<b>Year Start</b>	: 2010-12-27
<b>Cost (RM)</b>	: 68,000.00

<b>Project No</b>	: 600-RMI/ST/FRGS 5/3/Fst (8/2009)
<b>Type</b>	: National Grant (MOHE)
<b>Title</b>	: Preparation And Characterization Of Nanoporous Tungsten Oxide (wo3) Films Electrodeposited On Polystyrene Template-coated Ito/glass Electrode
<b>Head</b>	: <b>YUSAIRIE BIN MOHD (DR)</b>
<b>Member(s)</b>	:
<b>Grant Type</b>	: FRGS (S&T).
<b>Year Start</b>	: 2009-08-15
<b>Cost (RM)</b>	: 41,000.00

<b>Project No</b>	: 600-RMI/ST/FRGS 5/3/Fst (14/2008)
<b>Type</b>	: National Grant (MOHE)
<b>Title</b>	: The Impact Of Uv-modified Expoxidised Natural Rubber On Pmma/enr 50 Blends Electrolyte For Lithium Ion Battery *
<b>Head</b>	:
<b>Member(s)</b>	: YUSAIRIE BIN MOHD (DR)
<b>Grant Type</b>	: FRGS (S&T).
<b>Year Start</b>	: 2008-11-01
<b>Cost (RM)</b>	: 129,200.00

<b>Project No</b>	: 600-IRDC/ST/FRGS.5/3/1152
<b>Type</b>	: National Grant (MOHE)
<b>Title</b>	: Novel Anionic Clay Adsorbents (textile Dyes) Removal From Dyehouse Effluents
<b>Head</b>	:
<b>Member(s)</b>	: YUSAIRIE BIN MOHD (DR)
<b>Grant Type</b>	: FRGS (S&T)
<b>Year Start</b>	: 2006-12-15
<b>Cost (RM)</b>	: 30,000.00

## Dana Kecemerlangan UiTM

<b>Project No</b>	: 600-RMI/DANA 5/3/RIF (761/2012)
<b>Type</b>	: Internal Grant - UiTM
<b>Title</b>	: Electrocatalytic Oxidation of Methanol at Doped Ni- Coated Titanium Mesh Electrodes in Alkaline Medium
<b>Head</b>	:
<b>Member(s)</b>	: YUSAIRIE BIN MOHD (DR)
<b>Grant Type</b>	: RESEARCH INTENSIVE FACULTY FUND.
<b>Year Start</b>	: 2012-12-01
<b>Cost (RM)</b>	: 32,000.00

<b>Project No</b>	: 600-RMI/ST/DANA 5/3/Dst (62/2010)
<b>Type</b>	: Internal Grant - UiTM
<b>Title</b>	: Electrodeposition Of Hydroxyapatite Coatings Onto Niti Shape Memory Alloy And The Corrosion Behaviour Of The Coated Alloy
<b>Head</b>	: <b>YUSAIRIE BIN MOHD (DR)</b>
<b>Member(s)</b>	:
<b>Grant Type</b>	: DANA KECEMERLANGAN (S&T)
<b>Year Start</b>	: 2010-11-01
<b>Cost (RM)</b>	: 8,000.00

<b>Project No</b>	: 600-IRDC/ST/DANA 5/3/Dst (61/2008)
<b>Type</b>	: Internal Grant - UiTM
<b>Title</b>	: Preparation And Characterization Of Radiated Polymers For Various Electrochemical Applications *
<b>Head</b>	:
<b>Member(s)</b>	: YUSAIRIE BIN MOHD (DR)
<b>Grant Type</b>	: DANA KECEMERLANGAN (S&T).
<b>Year Start</b>	: 2008-05-15
<b>Cost (RM)</b>	: 42,000.00

<b>Project No</b>	: 600-IRDC/ST/DANA 5/3/Dst (63/2008)
<b>Type</b>	: Internal Grant - UiTM
<b>Title</b>	: Preparation And Characterization Of Irradiated Poly (methyl Methachrylate) Films For Application In Photovoltaic Cell *
<b>Head</b>	:
<b>Member(s)</b>	: YUSAIRIE BIN MOHD (DR)
<b>Grant Type</b>	: DANA KECEMERLANGAN (S&T).
<b>Year Start</b>	: 2008-05-29
<b>Cost (RM)</b>	: 10,000.00

## PUBLICATIONS

<b>Title of publication</b> <i>Tajuk penerbitan</i>	<b>Name of journals/books/Proceedings</b> <i>Nama jurnal/buku</i>	<b>Year published</b> <i>Tahun diterbitkan</i>
Synthesis, Characterization and Anticorrosion Studies of Organotin (IV) Complex of 2-acetylpyridine 4-ethyl-3-thiosemicarbazone	ASM Science Journal	2018
Retardation of Mild Steel Corrosion in Analogous Schiff Bases with Different Electronic Environment	DOI: 10.14419/ijet.v7i3.11.15922	2018
Understanding the Characteristics, Enhanced Optical and Photoelectrochemical Performance of Copper-loaded Titania Nanotubes Synthesized via Successive Ionic Layer Adsorption Reaction (SILAR)	Journal of Materials Science Materials in Electronics, Vol. 29(16), 14210-14221	2018
Trace Determination of Cadmium Content in Malaysian Herbs using Graphene-Ionic Liquid Modified SPCE	Journal of Sensors and Sensor System, Vol. 7, 481-487	2018
Surface pre-treatment of aluminium by cleaning, chemical etching and conversion coating	AIP Conference Proceeding, 1901 (1): 120006	2017
Structural and Catalytic Activity of Pt / Ti Electrode for Methanol Oxidation Reaction	Accepted to be published in International Journal of Hydrogen Energy	2017
Antibacterial Activity of Copper Coating Electrodeposited on 304 Stainless Steel Substrate	Accepted to be published in AIP Proceeding	2017
Electrodeposition of Copper Coating on 304 Stainless Steel Substrate: Physicochemical Properties and Antibacterial Activity	Accepted to be published in Pertanika Journal of Science & Technology (JST)	2017
Synthesis and Electrocatalytic Activity of	Australian Journal of Basic and Applied Sciences, Vol. 9 (29) pp. 9-15	2015



Pt/Ni/Ti Electrocatalyst for Methanol Oxidation in Alkaline Medium		
Characterization of PEDOT Films for Electrochromic Applications	Polymer-Plastics Technology and Engineering, Vol. 54 (3) pp. 276-281	2015
Electrical Properties Investigation of Newly Synthesized PEMA Ionogels Composite	Conference paper: 14 <sup>th</sup> Asian Conference on Solid State Ionics (ACSSI2014)	2014
Synthesis of NiO Electrochromic Films via Two-step Method	Advanced Materials Research, Vol.384, pp 381	2014
Preparation and Characterization of Electrochromic Polyaniline (PANI) Thin Films	IEEE, Business Engineering and Industrial Applications Colloquium	2013
Electrochromic Performance of NiO Films in Alkaline Medium	Advanced Materials Research, Vol. 748, pp.51	2013
Electrodeposition of hydroxyapatite (HAp) coatings on etched titanium mesh substrate	Science and Engineering (CHUSER), 2012 IEEE	2012
Electrodeposition and characterization of Polyaniline films	Science and Engineering Research (SHUSER), 2012 IEEE	2012
Effect of chitosan on the formation of hydroxyapatite (HAP) coatings on titanium by electrodeposition technique	Science and Engineering (CHUSER), 2012 IEEE	2012
Influence of pH Solution on the Electrodeposition of Tungsten Oxide (WO <sub>3</sub> ) Films onto Indium Tin Oxide (ITO)-glass Substrate	Journal of Science and Technology (JST), UTHM	2012
The influence of deposition temperature on the electrodeposition of NiO films on ITO-glass substrate	Science and Engineering Research (SHUSER), 2012 IEEE	2012

Electrochemical Deposition and Characterization of Hydroxyapatite (HAp) on Titanium Substrate	APCBEE Procedia (Elsevier)	2012
(E)-N <sup>1</sup> -(4-Chlorobenzylidene)-N <sup>4</sup> -Phenylbenzene-1,4-Diamine as Mild Steel Corrosion Inhibitor in 1M HCl	APCBEE Procedia (Elsevier)	2012
Corrosion Inhibition of Mild Steel by N-phenyl-1, 4-phenylenediamine and its Schiff Base Derivatives in 1M HCl	Advanced Materials Research	2012
Electrodeposition and Characteristics of Highly Ordered Macroporous $\beta$ -PbO <sub>2</sub> Electrodes	Journal of Science & Technology (JST), UTHM Vol. 3, No.1, pp. 109 -122 ISSN: 2229-8460	2011
Effect of Annealing Process On ZnO Nanorod Prepared At Different Potentials Using Electrodeposition Technique	AIP Conf. Proc. 1341, 77 (2011)	2011
The fabrication of Lead Dioxide layers on a Titanium Substrate	Electrochimica Acta (Scopus)	2006
The influence of deposition conditions and dopant ions on the structure, activity and stability of Lead Dioxide anode coatings	Journal of The Electrochemical Society (ISI)	2005

### Final Year BSc Students' Projects:

No	Title	Year
1	Electrochemical Detection of Hg(Ii) Using Gold Nanoparticles Modified Screen Printed Carbon Electrode – Maisarah Ahamad @ Salim	2018
2	Synthesis of Colloidal Silver Nanoparticles by Chemical Reduction Method and Its Antimicrobial Activity – Majidah Abdullah	2018
3	Synthesis of AuNPs/SPCE for Glucose Sensor - Muhamad Zulhilmi Zamri	2018

4	Local Fruit Leaves Extracts as Inhibitors for Corrosion Protection of Mild Steel in 1M H <sub>2</sub> SO <sub>4</sub> - Muhammad Amirul Mohd Yazid	2018
5	Synthesis of Colloidal Silver Nanoparticles by Chemical Reduction Method for Antimicrobial Application - Fathiah Nuraina Zulkipli	2018
6	Synthesis of high surface area of platinum electrode for chlor alkali process – Suhaili Sairi	2017
7	Catalytic activity and stability of high surface area of Pt/Ti toward methanol oxidation in alkaline media – Macvickyle Rainer Abid	2017
8	Electrocatalytic activity and stability of Pd/Ti catalysts towards methanol oxidation in alkaline media – Siti Norledah Muhamad	2017
9	Synthesis of Nanogold/PANi by ElectroChemical Method - HABSAH ANSAH	2016
10	Synthesis of Nanosilver/Plastic for Antimicrobial Applications - FITRIYAH MUNIRAH NOR AZMAN	2016
11	Synthesis of Copper Coating on Fabric -FARHANA 'ATIQAHA	2016
12	Corrosion Protection of Mild Steel by Copper Coatings - NURFATIN HUDA HUSAINI	2016
13	Electrodeposition of Copper-Nickel Alloy Coatings for Corrosion Protection of Mild Steel in 0.5M Sodium Chloride Solution - MOHAMMAD HAFIZUDDEN MOHD ZAKI	2015
14	Stability Study of Colloidal Copper Nanoparticles for Doping into PVA-nanofiber – NUR ADAWIYAH MANSOR	2015
15	The Effect of Annealing Temperature on Electrodeposited Tungsten Oxide (WO <sub>3</sub> ) Films - LIYANA MOHAMAD RASLI	2015
16	Antimicrobial Activity of Electrodeposited Polyaniline Coatings Combined with Silver Nanoparticles – MOHD JAMIL ANONG ADINI (BEST THESIS awarded by ANALIS)	2015
17	Determination of Lead in Water Samples Using Anodic Stripping Voltammetry (ASV) – NAJIAH SYAHIRAH MOHD YANI	2015
18	Improved Corrosion Resistance on Steel by Copper Coatings – NABILA HANISAH JASMAN	2015
19	Electrodeposition of Silver (Ag) on Titanium and Its Antimicrobial Activity – NUR ZULFA TAHIR	2013

20	Electroplating of Copper on Steel Surface- MOHD HAFIDZ HARUN	2013
21	Degradation of Methyl Orange (MO) and Methylene Blue (MB) using Electrocoagulation Method – NURUL HUDA DIN	2013
22	Synthesis and Characterization of Polyaniline Films Electrodeposited on ITO-Glass Substrate – MUHAMMAD FARHAN ZAINAL	2012
23	Electrodeposition of Polyaniline (PANI) Films on Aluminum Substrate – NOR HADIA MOHD NOH	2012
24	Corrosion Protection of Steel by Wild Plant Flowers Extracts – NURRAIHAN ABDUL WAHID	2012
25	Electrochemical Deposition and Characterization of Poly 3,4 Ethylenedioxythiophene (PEDOT) – SAIFUL RIDZUAN SAMSURI	2012
26	Preparation and Characterization of Tungsten Oxide (WO <sub>3</sub> ) for Electrochromic Device Application – KHAIRUL RIDHWAN MADZLAN	2012
27	Electrodeposition and Characterization of Pure and Doped Tin Oxide (SnO <sub>2</sub> ) as Anode for Electrochemical Oxidation of Phenol – NUR DALILA MOHAMAD	2012
28	Electrodeposition of Polyaniline (PANI) Coatings for Corrosion Protection of Steel – MOHD SHARMIZI ALI	2012
29	An Investigation of Chromate Inhibitors on Steel in Different pH Solutions – NURHAFIZA YUSSOF	2011
30	Natural Inhibitors Extracted from Nutmeg (Myristina Fragrans) Plant for Corrosion Protection of Carbon Steel – MAHFUZH IYLIA MOHD ITHNIN	2011