



## CURRICULUM VITAE



**Sim Wei Chung**

MARDILab (Kota Kinabalu)

Technology Commercialisation & Business Centre (CB)

Malaysian Agricultural Research and Development Institute (MARDI)

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### Academic Qualification

1. PhD. Chemistry (Analytical Chemistry), Suranaree University of Technology, Thailand, 2019
2. MSc. Chemistry (Natural Product Chemistry, Universiti Putra Malaysia, Malaysia, 2010
3. BSc. (Hons) Petroleum Chemistry, Universiti Putra Malaysia, Malaysia, 2007

### Research Area / Research Expertise

Food Chemical Analysis, Electrochemistry, Natural Product Chemistry

### Professional Qualification / Membership / Affiliation

1. Membership (Registered Chemist), Malaysian Chemistry Institute (IKM), 2012

### Appointments

Position	Duration
1. Research Officer, Technology Commercialisation & Business Centre, MARDI	Oct 2019 to date
2. PhD Candidate, Institute of Science, Suranaree University of Technology, Thailand	July 2016 – Oct 2019
3. Research Officer, Technical Services & Laboratory Centre, MARDI	Dec 2011 – Jun 2016

## Publications

### International Journal

1. A. Aunkham, A. Schulte, **W. C. Sim**, W. Chumjan and W. Suginta, *Vibrio campbellii* chitoporin: Thermostability study and implications for the development of therapeutic agents against *Vibrio* infections, International Journal of Biological Macromolecules (2020) (SJR Quartile = Q1, IF 2019 = 5.162)
2. **W. C. Sim**, N. Kutrakul, P. Khunkaewla and A. Schulte, A three-electrode 30–60 µL mini-cell for ecologically conscious analytical voltammetry with common macro- and microelectrodes, ACS Sustainable Chemistry & Engineering 8(13)(2020), 5082-5090 (SJR Quartile = Q1, IF 2019 = 7.632)
3. **W. C. Sim**, J. Sripirom, P. Khunkaewla, W. Suginta and A. Schulte, Simple and Economical Analytical Voltammetry in 15 µL-Volumes: Paracetamol Voltammetry in Blood Serum as a Working Example, Analytical Chemistry 90 (17) (2018) 10105-10110 (SJR Quartile = Q1, IF 2019 = 6.785)
4. **W. C. Sim**, G. C. L. Ee, C. J. Lim and M. A. Sukari, Cratoxylum glaucum and Cratoxylum arborescens (Guttiferae)-two potential source of antioxidant agents, Asian Journal of Chemistry 23 (2) (2011), 569-572 (SJR Quartile = Q4, IF 2018 = 3.698)
5. S. S. Teh, G. C. L. Ee, M. Rahmani, **W. C. Sim**, S. H. Mah and S. H. Teo, Two new pyranoxanthones from Mesua beccariana (Guttiferae), Molecules 15 (10) (2010), 6733-6742 (SJR Quartile = Q1, IF 2018 = 3.06)
6. **W. C. Sim**, G. C. L. Ee and S. M. Aspollah, α-mangostin and β-mangostin from Cratoxylum glaucum, Research Journal of Chemistry and Environment 15 (2011) (SJR Quartile = Q4)
7. G. C. L. Ee, **W. C. Sim**, H. C. Kwong, M. I. Mohamed Tahir and S. Silong, 1, 3, 6-Trihydroxy-7-methoxy-2, 8-bis (3-methylbut-2-enyl)-9H-xanthen-9-one, Acta Crystallographica Section E: Structure Reports Online 66 (12) (2010), o3362-o3363 (SJR Quartile = Q4, IF 2010 = 0.413)

### **Conference**

1. **W. C. Sim**, P. Khunkaewla and A. Schulte, A 3-electrode  $\mu$ L-cell for Green (Bio-)electroanalysis with Common Micro- and Macroelectrodes, XXV International Symposium on Bioelectrochemistry and Bioenergetics, Limerick, Ireland, 26 – 30 May 2019
2. **W. C. Sim**, P. Khunkaewla and A. Schulte, A Laminated Copper Microband Array Electrode for Electrochemical Detection with Microelectrode Properties, Pure and Applied Chemistry International Conference 2019 (PACCON 2019), Bangkok, Thailand, 7 – 8 February 2019
3. **W.C. Sim**, H. Souki, F. A. Mohammed Nuri, Accredited Analytical Services to Community in Sabah and Sarawak, Kuching, Sarawak, 6 – 9 April 2015
4. G. C. L. Ee, **W. C. Sim** and M. Aspollah, Free Radical Scavenging Effects of *Cratoxylum glaucum* and *Cratoxylum arborescens* (Guttiferae), Malaysian Science and Technology Congress 2010
5. **W. C. Sim**, G. C. L. Ee and M. Aspollah, *Cratoxylum glaucum* and *C. arborescens* (Guttiferae)- Two Potential Antioxidant Sources, Fundamental Science Congress, Universiti Putra Malaysia, 18 – 19 May 2010
6. **W. C. Sim**, G. C. L. Ee and M. Aspollah, Nuclear Magnetic Resonance Analysis of Xanthones and anthraquinones from *Cratoxylum arborescens* and *Cratoxylum glaucum*, 10th Asian Conference on Analytical Sciences (ASIANALYSIS X), 11 – 13 August 2009
7. **W. C. Sim**, G. C. L. Ee and M. Aspollah, Secondary Metabolites from *Cratoxylum glaucum* and *C. arborescens*, Fundamental Science Congress, Universiti Putra Malaysia, 17 – 18 June 2009
8. **W. C. Sim**, G. C. L. Ee and M. Aspollah, Secondary Metabolites from *Cratoxylum glaucum* and *C. arborescens*, 2nd Penang International Conference for Young Chemists (ICYC), Universiti Sains Malaysia, 18 – 20 June 2008

**Book / Quality System**

1. **W. C. Sim**, H. Hassan, H. Souki, N. Napiah, N. Ismail and N. Bahari, Quality Manual (TS Laboratory MARDI Kota Kinabalu), Issue 2, MS ISO/IEC 10725, 2016
2. **W. C. Sim**, H. Hassan, H. Souki, N. Napiah, N. Ismail and N. Bahari, Standard Operating Procedure (TS Laboratory MARDI Kota Kinabalu), Issue 2, MS ISO/IEC 10725, 2016
3. **W. C. Sim**, H. Hassan, H. Souki, N. Napiah, N. Ismail and N. Bahari, Bench Manual (TS Laboratory MARDI Kota Kinabalu), Issue 2, MS ISO/IEC 10725, 2016
4. **W. C. Sim**, H. Souki, N. James, R. Singkina and R. Radde, MARDI Sabah Two Decades, Coffee Table Book, 2015
5. **W. C. Sim**, F. A. Mohammed Nuri, H. Hassan, N. Napiah, N. Ismail, N. Bahari, Quality Manual (TS Laboratory MARDI Kota Kinabalu), Issue 1, MS ISO/IEC 10725, 2012
6. **W. C. Sim**, F. A. Mohammed Nuri, H. Hassan, N. Napiah, N. Ismail, N. Bahari, Standard Operating Procedure (TS Laboratory MARDI Kota Kinabalu), Issue 1, MS ISO/IEC 10725, 2012
7. **W. C. Sim**, F. A. Mohammed Nuri, H. Hassan, N. Napiah, N. Ismail, N. Bahari, Bench Manual (TS Laboratory MARDI Kota Kinabalu), Issue 1, MS ISO/IEC 10725, 2012

### **Thesis**

1. **W. C. Sim**, Tool Development for Advanced Small-volume / Microelectrode Voltammetry and Application, PhD thesis, Suranaree University of Technology, Nakhon Ratchasima, Thailand, 2019
2. **W. C. Sim**, Secondary Metabolites from Stem Bark of Geronggang (*Cratoxylum arborescens* (Vahl) Bl.) and Ketemau (*Cratoxylum Glaucum* K.) and Their Biological Activities, Master thesis, Universiti Putra Malaysia, Malaysia, 2010
3. **W. C. Sim**, Comparison on Effect of Doping Cr and Fe to Vanadyl Pyrophosphate Catalyst Synthesised by Hydrothermal Method, Bachelor thesis, Universiti Putra Malaysia, Malaysia, 2007

Research Grants				
No.	Project Title	Amount (RM)	Year	Source of Fund
1	Maintenance and Improvement of MS ISO IEC 17025 Accreditation System for Food Chemical Lab (Kota Kinabalu)	5,500,000	2014-2015	RMK-10 (Mega Project)
2	Food Analysis Laboratory (Kota Kinabalu) Accreditation	20,000	2012	Management

### **Supervision / Co-supervision**

#### **Mentee / Supporting Staff**

<b>No.</b>	<b>Name</b>	<b>Institution</b>	<b>Title</b>	<b>Status</b>
1.	Norafifah Hamdan	MARDI	-	Ongoing (Feb. 2019 to date)
2.	Erwinda Jamlis	MARDI	-	Ongoing (June 2015 to Jan. 2019)
3.	Noramni Mohd Syukri	MARDI	-	Completed (June 2006 - 2008)
4.	Zulizah Md Talip	MARDI	-	Completed (2012 - 2015)

<b>Professional Courses / Training</b>	
<b>Title</b>	<b>Duration</b>
1. Lab Management, Safety and Chemical Waste Disposal Workshop	3-4 December 2015
2. Procedures of Method Validation & Verification Course	5-6 September 2015
3. Measurement Uncertainty in Chemical Analysis Course	3-4 March 2015
4. Hazard Identification, Risk Assessment and Risk Control & Introduction to Air Quality Index Course	8-10 October 2014
5. Hazard Identification, Risk Assessment and Risk Control Course	14-15 May 2013
6. Introduction to MS ISO/IEC 17025 Course	21-22 May 2012
7. Refworks Software Seminar	26 October 2010
8. Delta NMR Data Processing Workshop	19 – 20 Nov 2009