#### WAN MOHD ASYRAF BIN WAN MAHMOOD

Lot 107, Jalan Desa Impian 2, Taman Desa Impian, 43000, Kajang, Selangor.

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RG : 11.22 [111 citation]
H-index Google Scholar : 4 [111 citation]



#### **Research interest**

My current research is centred around the green and analytical chemistry with the use of green solvents for the extraction of beneficial bioactive compounds from biomass, mainly microalgae. I am interested in exploring the use of biomasses in creating a more sustainable biorefineries process. My area of expertise is Analytical Chemistry and Organic Chemistry.

#### Work and research experience

Year	Work/ Research Experiences	
2020 – current	Senior Lecturer (DS51), Universiti Teknologi Malaysia (UTM)	
2019 - 2020	Analytical Chemist, Oro Clean Chemie Sdn. Bhd.	
2016 – 2019	Research assistant to the Bioprocess and Bioengineering Group	
	Supervisor: Dr. Maria Gonzalez- Miquel and Prof Constantinos	
	Theodoropoulus, The University of Manchester, UK	
	• Lab Supervisor for MSc Advanced Chemical Engineering 2017	
2015	Research assistant to the Leigh Group (catenane.net)	
	Supervisor: Professor David Leigh and Tugrul Nalbantoglu, The	
	University of Manchester, UK	
2014	Research Assistant	
	Supervisor: Puan Rumiza binti Abd. Rashid, UiTM Shah Alam,	
	Malaysia	

#### **Education**

Year	Level	Institution	Qualification
2016 - 2020	Doctoral	The University of Manchester,	PhD Industrial Chemistry
		UK	
2014 - 2015	Master	The University of Manchester,	MSc Chemistry
		UK	GPA: 70.17%
2011 - 2014	Bachelor's degree	Universiti Teknologi Mara	BSc. (Hons) Chemistry
		(UiTM), Malaysia	(Forensic Analysis)
			CGPA: 3.84
2008 - 2011	Diploma	Universiti Teknologi Mara	Diploma in Microbiology
		(UiTM), Malaysia	CGPA: 3.65

# **Publications**

Year	Publications
2021	• Amin, N.A.A.M.; Mokhter, M.A.; Salamun, N.; <u>Wan Mahmood, W.M.A.</u> Phosphate Adsorption from Aqueous Solution Using Electrospun Cellulose Acetate Nanofiber Membrane Modified with Graphene Oxide/Sodium Dodecyl
	Sulphate. Membranes 2021, 11, 546 [Q1, IF=4.106].
	• Wan M. Asyraf Wan Mahmood, Constantinos Theodoropoulos, Maria Gonzalez-Miquel. (2019). Sustainable microalgal biofuel production from <i>Chlorella vulgaris</i> and <i>Nannochloropsis</i> sp. using renewable terpenic solvents. <i>Bioresource Technology</i> . Submitted January 2021.
2019	• Gonzalo Figueroa-Torres, Wan M. Asyraf Wan Mahmood, Jon Pittman,
	Constantinos Theodoropoulos. Microalgal Biomass as a Biorefinery Platform for Biobutanol and Biodiesel Production. <i>Biochemical Engineering Journal</i> .
	• Wan M. Asyraf Wan Mahmood, Constantinos Theodoropoulos, Maria Gonzalez-Miquel. (2019). Polyol-based deep eutectic solvents for extraction of natural polyphenolic antioxidants from <i>Chlorella vulgaris</i> . ACS Sustainable Chemistry and Engineering. 7, 5, 5018-5026. [Q1, IF=6.14]
2017	• Wan M. Asyraf Wan Mahmood, Constantinos Theodoropoulos, Maria
	Gonzalez-Miquel. (2017). Enhanced microalgal lipid extraction using bio-based
	solvents for sustainable biofuel production. Green Chemistry. 19. 5723-5733. [Q1,
	IF=9.125]
2015	• Wan Mohd Asyraf, W.M., Almie Amira, M.K., Siti Aisyah, S., Nurul Syahnidz
	Adila, Z., Khairulmazidah, M., and Rumiza, A.R. (2015). Paraquat dichloride
	detection from forensic blowfly samples. <i>Malaysian Applied Biology</i> . <b>44(1)</b> . 133-138. [SCOPUS]
	• Almie Amira, M.K., Wan Mohd Asyraf, W.M., Siti Aisyah, S., Nurul Syahnidz
	Adila, Z., Khairulmazidah, M., and Rumiza, A.R., (2015). Analysis of paracetamol
	in forensic blowfly samples from paracetamol-intoxicated carcasses. <i>Malaysian Applied Biology</i> . <b>44(1)</b> . 31-35. [SCOPUS]

# **Professional Membership**

Year	Memberships
2021	American Chemical Society, Member
	ANALIS, Member
2019	Royal Society of Chemistry, Associate Member.

# **Taught modules**

Year	Modules
Semester 2	<ul> <li>SSCK 1203 Analytical Chemistry for Engineering</li> </ul>
2020/2021	SSCC 2861 Analytical Chemistry Practical I
	<ul> <li>SSCK 1831 Organic Chemistry for Engineering Practical</li> </ul>
	MSCN 1853 Forensic Practical
Semester 1	MSCN 1853 Forensic Practical
2020/2021	SSCC 3233 Instrumental Analysis

# **Conferences/ Symposiums/ Seminars**

Year	Conferences/Symposium/Seminar
2021	International Conference of Science and Technology (ICreST 2021), June 2021 [O]
2018	<ul> <li>Chemical Engineering and Analytical Sciences Showcase 2018, October 2018,         The University of Manchester, UK [P]</li> <li>8<sup>th</sup> IUPAC International Conference on Green Chemistry, September 2018,         Bangkok, Thailand [O]</li> </ul>
	<ul> <li>Bright Spark Symposium, September 2018, The University of Manchester, UK         [P]</li> <li>Chemical Engineering and Analytical Science Postgraduate Conference, May 2018, Manchester Institute of Biotechnology, The University of Manchester, UK         [O]</li> <li>Center for Process Integration Seminar, January 2018, The University of</li> </ul>
	Manchester, UK [O]
2017	<ul> <li>10<sup>th</sup> World Congress of Chemical Engineering, October 2017, Barcelona, Spain [P]</li> <li>Chemical Engineering and Analytical Sciences Showcase 2017, October 2017, The University of Manchester, UK [P]</li> <li>Bright Spark Symposium, September 2017, The University of Bath, UK [O, P]</li> <li>8<sup>th</sup> International Conference on Green and Sustainable Chemistry, July 2017, Melbourne, Australia [P]</li> <li>Chemical Engineering and Analytical Science Postgraduate Conference, May 2017, Manchester Institute of Biotechnology, The University of Manchester, UK [P]</li> <li>Chemical Engineering Day 2017, March 2017, The University of Birmingham, UK [O, P]</li> </ul>
	<ul> <li>Center for Process Integration Seminar, March 2017, The University of Manchester, UK [O, P]</li> </ul>
2016	• Chemical Engineering and Analytical Science Postgraduate Conference, May 2016, James Chadwick Building, The University of Manchester, UK [P]

2014	<ul> <li>The 13<sup>th</sup> Symposium Malaysian Society of Applied Biology, 8-10 June 2014, T.</li> </ul>	he
	Legend Resort Cherating, Pahang, Malaysia [P]	

<sup>\* [</sup>O] Oral [P] Poster

### **Trainings**

Year	Training
2021	Chemical Data Analysis, Universiti Teknologi Malaysia, UTM
2017	<ul> <li>Solvent Selection and Substitution, University of York, UK, August</li> </ul>
2016	<ul> <li>COSMO-RS, University of Regensburg, Germany, September</li> </ul>

### Awards/ Honors/ Prizes

Year	Awards/Honors/Prizes
2021	Best Presenter Award, Track Physical Sciences, ICreST 2021
2018	Student Scholarship for the 8 <sup>th</sup> IUPAC International Conference on Green
	Chemistry, Bangkok, Thailand
2014	<ul> <li>Silver Medal IIDEX 2014, UiTM Shah Alam "ASH: From Waste to Criminal Investigation Tool"</li> <li>Bronze Medal IIDEX 2014, UiTM Shah Alam "Blowfly Maggots as the Physical Evidence for Forensic Cases"</li> <li>BSc (Hons) Chemistry (Forensic Analysis), Vice Chancellor and Best Student Award, 81st UiTM Convocation.</li> </ul>
2011-2013	BSc (Hons) Chemistry (Forensic Analysis): Dean's List Awards
2008-2011	Diploma in Microbiology: Dean's List Awards

### References

1. Name: Dr. Maria Gonzalez-Miquel

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Email: maria.gonzalezmiquel@manchester.ac.uk

2. Name: Puan Rumiza binti Abd. Rashid

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