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## Chong Jun Wei, Roy

Currently a PhD student working on a research project entitled “Development of systematic algae strain and biomass detection method and database with automation engineering”.

### Work Experience

**August 2020-current**

**Sales Consultant (FREELANCE)**

#### **Responsibilities:**

- a) Working with “VBR Creative” an online business in various ecommerce platforms such as Lazada and Shopee.
- b) Providing consultation to customers in selling smart home products and attracting online traffic.

### Research Experience

**September 2020-current**

**Review & research paper and Publication**

#### **Journal article (First author)**

1. **Jun Wei Roy Chong**, Kuan Shiong Khoo, Kit Wayne Chew, Huong-Yong Ting, Iwamoto Koji, Roger Ruan, Zengling Ma, Pau Loke Show. Artificial intelligence-driven microalgae autotrophic batch cultivation: A comparative study of machine and deep learning-based image classification models. *Algal Research*, 103400. [IF: 5.520 (2024)]
2. **Jun Wei Roy Chong**, Doris Ying Ying Tang, Hui Yi Leong, Kuan Shiong Khoo, Pau Loke Show, Kit Wayne Chew. Bridging artificial intelligence and fucoxanthin for the recovery and quantification from microalgae. *Bioengineered*, 2244232. [IF: 6.832 (2023)]
3. **Jun Wei Roy Chong**, Kuan Shiong Khoo, Kit Wayne Chew, Huong-Yong Ting, Pau Loke Show. Trends in digital image processing of isolated microalgae by incorporating classification algorithm. *Biotechnology Advances*, 108095. [IF: 16.000 (2023)]
4. **Jun Wei Roy Chong**, Kuan Shiong Khoo, Kit Wayne Chew, Dai-Viet N. Vo, Deepanraj Balakrishnan, Fawzi Banat, Heli Siti Halimatul Munawaroh, Koji Iwamoto, Pau Loke Show. Microalgae identification: Future of image processing and digital algorithm. *Bioresource Technology*, 128418. [IF: 11.400 (2023)]
5. **Jun Wei Roy Chong**, Xuefei Tan, Kuan Shiong Khoo, Hui Suan Ng, Woranart Jonglertjunya, Guo Yong Yew, Pau Loke Show. Microalgae-based bioplastics: Future solution towards mitigation of plastic wastes. *Environmental Research*, 112620 [IF: 8.431 (2022)]
6. **Jun Wei Roy Chong**, Kuan Shiong Khoo, Guo Yong Yew, Wai Hong Leong, Jun Wei Lim, Man Kee Lam, Yeek-Chia Ho, Hui Suan Ng, Heli Siti Halimatul Munawaroh, Pau Loke Show. Advances in

production of bioplastics by microalgae using food waste hydrolysate and wastewater: A review. *Bioresource Technology*, 125947 [IF: 11.400 (2021)]

7. **Jun Wei Roy Chong**, Guo Yong Yew, Kuan Shiong Khoo, Shih-Hsin Ho, Pau Loke Show. Recent advances on food waste pretreatment technology via microalgae for source of polyhydroxyalkanoates. *Journal of Environmental Management*, 112782 [IF: 8.910 (2021)]

8. **Jun Wei Roy Chong**, Yi Jing Chan, Siewhui Chong, Yeek Chia Ho, Mardawani Mohamad, Wen Nee Tan, Chin Kui Cheng, Jun Wei Lim. Simulation and Optimisation of Integrated Anaerobic-Aerobic Bioreactor (IAAB) for the Treatment of Palm Oil Mill Effluent. *MDPI journal of processes*, 1124 [IF: 3.500 (2021)]

### **Book Chapter (First author)**

1. **Jun Wei Roy Chong**, Zatul Iffah Mohd Arshad, Kit Wayne Chew, Pau Loke Show. Chapter 2 - Polymer-salt interaction. *Principles of Multiple-Liquid Separation Systems*, 21-44.

### **Education**

**June 2021- Current      PhD Chemical Engineering, University of Nottingham, Malaysia**

**Qualification:** Ongoing

Research output with h-index of 9 within less than 2 years. Authored 13 journal papers, 3 book chapters, and total citation count of 368. Highlighted published work entitled “Artificial intelligence-driven microalgae autotrophic batch cultivation: A comparative study of machine and deep learning-based image classification models”, “Digitalised prediction of blue pigment content from *Spirulina platensis*: Next-generation”, “Bridging artificial intelligence and fucoxanthin for the recovery and quantification from microalgae”, “Trends in digital image processing of isolated microalgae by incorporating classification algorithm”, and “Use of image processing and digital algorithm for microalgae identification”.

**2020- June 2021      MSc Chemical Engineering, University of Nottingham, Malaysia**

**Qualification:** 1<sup>st</sup> Class Honours

Process synthesis & design (Phthalic Anhydride production & water recycling), Power generation & Carbon capture (review on CO<sub>2</sub> ocean sequestration), Food processing (review on Impact of Covid-19 Towards Food Aspect in Malaysia), Industrial dehydration (Analytical modelling on moisture content of Salak fruit), Adv computational methods (Dynamic simulation, PID controller, optimisation of 2 stage compression system, and thermodynamic behaviour of refrigerant system), Adv biochemical engineering (Downstream processing), Water treatment engineering (review on Hard water treatment using lime soda/ ion exchange)

**2018-2020      BEng Chemical Engineering, Swansea University, UK**

**Qualification:** 2<sup>nd</sup> Class Honours, Division One

Separation Processes, Biochemical, Reactor Design, Fluid flow, Process Modelling, Thermodynamics of Process Design, Process Design Simulations (Unisim and Aspen Hysys), Pilot plant operation A and B (Hands on experience of pilot scale equipment relating to various chemical processes), Final year design project on production of 100,000 tons of polyvinyl chloride (PVC)

**2014-2015      Foundation in Engineering, University of Nottingham, Malaysia Campus**

**Qualification:** 2<sup>nd</sup> Class Honours, Division One

Calculus, Computer Methods, Electricity and Magnetism, Study Skills, Mathematical Techniques, Thermal Science, Basic Engineering Mechanics, Introduction to C programming

### Position of Responsibilities

**2018: Charity Work at Ti-Ratana Food and Fun Fair (Malaysia)**

**2015: Team Leader of 30-hour famine by World Vision (Malaysia)**

**2013: Extracurricular Activity Game (Badminton)- Level Committee members**

**2012: Sport House Assistant (Malaysia)**

### Awards and recognition

- Merit Scholarship for academic excellence
- Appreciation and Committee Award from the 6th International Conference and Postgraduate Colloquium for Environmental Research (POCER) 2022
- Certificate of appreciation in recognition of his outstanding contribution to the Organising Committee from the ICWES-POCER-2024 conference held in KLCC
- Best poster award and outstanding student award in recognition of outstanding achievements in the field of environment from the ICWES-POCER-2024 conference
- Selected as an outstanding candidate for poster and oral presenter in the 3rd international symposium on Carbon & Functional Materials For Energy & Environment 2024 in Vietnam
- Certificate of outstanding research in the Sakura Science Program 2023 in Toyo University, Japan
- Postgraduate Assistant Award 2023/24 from the University of Nottingham Malaysia

### Professional Membership

IChemE membership – Associate Member

LinkedIn - <https://www.linkedin.com/in/roy-chong-jun-wei-616b2b147>

### References