

## CURRICULUM VITAE

Microalgae Research enthusiast with a Ph.D. in Molecular Biotechnology, with experiences in microalgal isolation, identification, cultivation, and pigment analysis. Actively seeking a challenging researcher or lecturer role in microalgae-focused institutes/laboratories. Passionate about contributing to fundamental microalgae research addressing societal well-being and industrial needs. Backed by strong academic background, extensive laboratory experience, and a commitment to sustainable solutions, I aim to contribute to cutting-edge research in microalgae biotechnology.



A. Personal Details			
Full Name (Title):	Tan Hui Teng (Ms.)	Citizenship:	Malaysian
Date of Birth:	28-10-1994	Race:	Chinese
Current Designation:	Ph.D.		

B. Address and Contacts	
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C. Academic Qualification			
Certificate/Qualification	Name of School/Institution	Year	Area of Specialization
Doctorate of Philosophy	Universiti Putra Malaysia	2023	Molecular Biotechnology
Bachelor of Science (Honours)	Universiti Putra Malaysia	2018	Biochemistry
Malaysian Higher School Certificate (STPM)	SMK Triang	2013	Biology

D. Language Proficiency					
Language	Poor	Moderate	Good	Very Good	Excellent
English				/	
Malay				/	
Chinese					/

E. Scientific Experience and Specialization				
Organization	Position	Start Date	End Date	Experience/Expertise
Institute of Bioscience, Universiti Putra Malaysia	Research Assistant	Aug 2023	Ongoing	<ul style="list-style-type: none"><li>Isolated, identified, and maintained diatom</li><li>Conducted screening for quorum-sensing inhibitors (QSI) in the associated bacteria of diatoms</li></ul>

				<ul style="list-style-type: none"> <li>Optimized media formulation for the mass-cultivation of probiotics</li> </ul>
Department of Aquaculture, Faculty Agriculture, Universiti Putra Malaysia	Research Enumerator	May 2023	July 2023	<ul style="list-style-type: none"> <li>Executed quorum-sensing inhibitor (QSI) screenings of microalgae.</li> </ul>
Institute of Bioscience, Universiti Putra Malaysia	Ph.D.	Mac 2021	Sept 2023	<ul style="list-style-type: none"> <li>Isolated and identified the associated bacteria community of cyanobacteria</li> <li>Performed metagenomic (amplicon sequencing) analysis of bacterial communities</li> <li>Demonstrated expertise in the preservation of both microalgae and bacteria</li> <li>Conducted gene expression studies focusing on phycobiliprotein biosynthesis genes</li> <li>Managed the mass cultivation of microalgae in a photobioreactor</li> </ul>
	Master	Feb 2019	Mac 2021 (Converted to Ph.D. candidate)	<ul style="list-style-type: none"> <li>Accomplished isolation and cultivation of cyanobacteria</li> <li>Performed morphological and molecular Identification of cyanobacteria</li> <li>Conducted molecular toxicity assessments of cyanobacteria</li> <li>Optimized the extraction process of phycobiliproteins from cyanobacteria</li> </ul>
	Graduate Research Assistant	Mac 2019	Mac 2020	<ul style="list-style-type: none"> <li>Contributed to the production of gelatin hard capsules</li> <li>Conducted stability tests on gelatin film</li> <li>Isolated and identified Malaysia indigenous microalgae</li> <li>Conducted chemical flocculation harvesting of microalgae</li> </ul>
	Research Assistant	Sept 2018	Feb 2019	<ul style="list-style-type: none"> <li>Optimized the acid pretreatment of harvested jellyfish</li> <li>Successfully extracted collagen and gelatin from jellyfish</li> </ul>

Plant Biotechnology Research Centre, Agro-Biotechnology Institute (ABI), National Institutes of Biotechnology Malaysia	Research Intern	May 2017	August 2017	<ul style="list-style-type: none"> <li>Managed the preparation of Tiger Milk Mushroom seeds/spawn and sawdust</li> <li>Conducted the inoculation of spawn and incubation of sawdust blocks</li> <li>Executed proteomics analysis, including protein extraction and MALDI-TOF analysis</li> </ul>
Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia	Undergraduate Researcher	May 2017	May 2018	<ul style="list-style-type: none"> <li>Cultivated and maintained microalgae</li> <li>Molecular identified microalgae</li> <li>Conducted analysis of growth, pigments and metabolites</li> </ul>

<b>F. Employment/Working Experience</b>				
<b>Employer</b>	<b>Designation</b>	<b>Department</b>	<b>Start Date</b>	<b>End Date</b>
Universiti Putra Malaysia	Practical demonstrator for <i>Live Food Production In Aquaculture</i> course	Department of Aquaculture, Faculty of Agriculture, Universiti Putra Malaysia	Oct 2023	Ongoing (January 2024)
	Research assistant	Institute of Bioscience	Aug 2023	Ongoing (January 2024)
	Research Enumerator	Department of Aquaculture, Faculty of Agriculture, Universiti Putra Malaysia	May 2023	July 2023
	Practical demonstrator for <i>Limnology</i> course		Oct 2022	Feb 2023
	Graduate Research Assistant	Institute of Bioscience	Mac 2019	Mac 2020
	Research Assistant		Sept 2018	Feb 2019
Agro-Biotechnology Institute (ABI), National Institutes of Biotechnology Malaysia	Research Intern	Plant Biotechnology Research Centre	May 2017	Aug 2017

<b>G. Honours, Awards and Participations</b>				
<b>Name of Awards</b>	<b>Title</b>	<b>Award Authority</b>	<b>Award Type</b>	<b>Year</b>
Academic awards	Best Poster Presentation	Taylor's University	National	2018
	Vice Chancellor's List	Universiti Putra Malaysia	University	2014-2018
	Dean's List			
Exchange Program	Ishikawa Japanese Studies Program	Ishikawa Japanese Studies Center, Ishikawa	University	2017

		Foundation for International Exchange		
<b>Scholarship</b>				
Sponsorship	Excellent Students' Program (PPC) scholarship	Public Service Department	Malaysia	2019-2023
	Special Graduate Research Allowance Scheme	Universiti Putra Malaysia	University	2019
	Sponsorship of Local Degree Programme (PIDN)	Public Service Department	Malaysia	2014-2018
<b>Participations in Research-related Activities</b>				
National Seminar on Live Food Culture and Application in Aquaculture		Universiti Terengganu Malaysia (UMT)	National	27 <sup>th</sup> July 2023
3 Minute Thesis Competition (Oral Presenter)		International Development Research Centre, Canada (IDRC-CRDI)	International	4 <sup>th</sup> June 2023
Global Algae Summit (Poster Presenter)		<i>Leave A Nest</i> Malaysia	National	17 <sup>th</sup> Aug 2023
COSMOS International Conference (CIC) 2022 (Oral & poster presenter)		Universiti Putra Malaysia (UPM)	International	23-25 <sup>th</sup> Aug 2022
ASEAN-FEN Annual International Fisheries Symposium, IFS 2019 (Poster presenter)		Universiti Putra Malaysia (UPM)	International	18-21 <sup>st</sup> Nov 2019
29 <sup>th</sup> Interservice Biochemistry Seminar (Poster presenter)		Taylor's University, Malaysia	National	12 <sup>th</sup> May 2018
27 <sup>th</sup> Interservice Biochemistry Seminar (Crew member)		Universiti Putra Malaysia (UPM)	National	14 <sup>th</sup> May 2016

<b>H. List of publications</b>	
Journal	<p>N.D. Baharuddin, S. Muthukhrisnan, Clement.R. de Cruz, Z. Kassim, H.H. Hasnan, M. Ihsanudin, Khaw, Y. S., <b>Tan, H.T.</b>, N. A. I., Nazarudin, M. F., I. Natrah. (2024). Evaluation of diatom <i>Halamphora</i> sp. and harpacticoid copepod <i>Amphiascooides neglectus</i> as live food for black tiger shrimp <i>Penaeus monodon</i> postlarvae. <i>Aquaculture</i>. 586: 740773. <b>(JCR-Q1)</b></p> <p>Sopawong, A., Yusoff, F.M., Zakaria, M.H., Amin, S. M., <b>Tan, H.T.</b>, Hashim, A. (2023). Synergistic combination of plants and microbial-rich substrates improves water quality in an integrated plant-substrate system. <i>Asian Fisheries Science</i>. 36: 203-218. <b>(Scopus)</b></p> <p><b>Tan, H. T.</b>, Yusoff, F. M., Khaw, Y. S., Nazarudin, M. F., Noor Mazli, N. A. I., Ahmad, S. A., Shaharuddin, N. A., &amp; Toda, T. (2023). Characterisation and selection of freshwater cyanobacteria for phycobiliprotein contents. <i>Aquaculture International</i>, 31(1), 447–477. <b>(JCR-Q1)</b></p> <p><b>Tan, H. T.</b>, Yusoff, F. M., Khaw, Y. S., Noor Mazli, N. A. I., Nazarudin, M. F., Shaharuddin, N. A., Katayama, T., &amp; Ahmad, S. A. (2022). A review on a hidden gem: phycoerythrin from blue-green algae. <i>Marine Drugs</i>, 21(1), 28. <b>(JCR-Q1)</b></p> <p>Khaw, Y. S., F. M. <b>Tan, H. T.</b>, Noor Mazli, N. A. I., Nazarudin, M. F., Shaharuddin, N. A., Omar, A.R., &amp; Takahashi, K. (2022). Fucoxanthin production of microalgae under different culture factors: a systematic review. <i>Marine Drugs</i>, 20, 592. <b>(JCR-Q1)</b></p> <p><b>Tan, H. T.</b>, Yusoff, F. M., Khaw, Y. S., Ahmad, S. A., &amp; Shaharuddin, N. A. (2021). Uncovering research trends of phycobiliproteins using bibliometric approach. <i>Plants</i>, 10(11), 1–28. <b>(JCR-Q1)</b></p>

<p>Khaw, Y.S.; Yusoff, F.M.; <b>Tan, H.T.</b>; Noor Mazli, N.A.I.; Nazarudin, M.F.; Shaharuddin, N.A.; Omar, A.R. (2021). The critical studies of fucoxanthin research trends from 1928 to june 2021: A bibliometric review. <i>Marine Drugs</i>, 19, 606. <b>(JCR-Q1)</b></p> <p>Khaw, Y.S.; <b>Tan, H.T.</b>; Sopawong, A.; Shaharuddin, N.A.; Omar, A.R.; Yusoff, F.M. (2021). A recommendation for a pre-standardized marine microalgal dry weight determination protocol for laboratory scale culture using ammonium formate as a washing agent. <i>Biology</i>, 10, 799. <b>(JCR-Q1)</b></p> <p><b>Tan, H. T.</b>, Khong, N. M. H., Khaw, Y. S., Ahmad, S. A., &amp; Yusoff. M. (2020). Optimization of the freezing-thawing method for extracting phycobiliproteins from <i>Arthrospira</i> sp. <i>Molecules</i>, 25(3894). <b>(JCR-Q2)</b></p>
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### I. Past Research Project

Project No.	Project Title	Role	Year	Source of fund	Status
1.	Amplification of carotenoid biosynthesis gene and total carotenoid content analysis upon stress treatment in <i>Chlorella</i> sp.	Member (Final Year Project)	2017-2018	Higher Institution Centre of Excellence (HICOE) Research Grant	Completed
2.	Large scale production of tuber of Tiger's Milk Mushroom ( <i>Lignosus rhinocerus</i> )	Member (Internship)	2017	Ministry of Science, Technology and Innovation (MOSTI) Research Grant	Completed (Internship ended)
3	Halal gelatin upscaling and capsule prototype production from jellyfish gelatin	Member (Research Assistant)	2018-2020	Prototype Development Research Grant (PRGS)	Completed
4.	Growth and phycobiliprotein production of non-toxic cyanobacteria through symbiotic bacteria-microalgae interaction and co-cultivation	Member (Ph.D. Project)	2019-2023	COSMOS-SATREPS grant	Completed
5.	Quorum sensing inhibitor screening of microalgae isolated from shrimp farm	Member (Research assistant)	2023	IDRC-CRDI (Innovet-AMR 2.0)	On-going

### J. Publishing ID and Social Networking

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Scopus	57218716102	Tan, Hui Teng
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Google Scholar	<a href="https://bitly.ws/32meN">https://bitly.ws/32meN</a>	TAN HUI TENG

<b>K. REFEREES</b>			
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