

台大演講相關資訊

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主要經歷

國立雲林科技大學 產業科技學士學位學程 主任

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代表著作

1. Hong-Kai Huang, Cheng-Hsuan Hsu, Po-Kai Hsu, Yi-Ming Cho, Tzung-Han Chou, and Yu-Shen Cheng* (2022). Preparation and evaluation of particle board from insect rearing residue and rice husks using starch/citric acid mixture as a natural binder. *Biomass Conversion and Biorefinery* 12: 633–641
2. Marttin Paulraj Gundupalli, Yu-Shen Cheng, Santi Chuetor, Debraj Bhattacharyya, Malinee Sriariyanun. (2021). Effect of dewaxing on saccharification and ethanol production from different lignocellulosic biomass. *Bioresource Technology* 339: 125596
3. Nina Hartini, Thangavel Ponrasu, Jia-Jiuan Wu, Malinee Sriariyanun, and Yu-Shen Cheng* (2021). Microencapsulation of Curcumin in Crosslinked Jelly Fig Pectin Using Vacuum Spray Drying Technique for Effective Drug Delivery. *Polymers*, 13(16), 2583.
4. Thangavel Ponrasu, Jhao-Syuan Gu, Jia-Jiuan Wu, and Yu-Shen Cheng* (2021). Evaluation of jelly fig polysaccharide as a shell composite ingredient of colon-specific drug delivery. *Journal of Drug Delivery Science and Technology*, 61: 101679.
5. Thangavel Ponrasu, Bei-Hsin Chen, Tzung-Han Chou, Jia-Jiuan Wu, and Yu-Shen Cheng* (2020). Fast Dissolving Electrospun Nanofibers Fabricated from Jelly Fig Polysaccharide/Pullulan for Drug Delivery Applications. *Polymers*, 13(2): 241.
6. Thangavel Ponrasu, Ren-Fang Yang, Tzung-Han Chou, Jia-Jiuan Wu, and Yu-Shen Cheng* (2020). Core-shell encapsulation of lipophilic substance in jelly fig (*Ficus awkeotsang* Makino) polysaccharides using an inexpensive acrylic-based millifluidic device. *Applied Biochemistry and Biotechnology*, 191(1):360-375.
7. Thangavel Ponrasu, Tien-Hsin Cheng, Lin Wang, Yu-Shen Cheng*, Hui-Min David Wang* (2020). Natural biocompatible polymer-based polyherbal compound gel for rapid wound contraction and promote re-epithelialization: An in vivo study. *Materials Letters*, 261: 126911.
8. Yu-Shen Cheng*, Zer-Yu Wu, and Malinee Sriariyanun (2019). Evaluation of *Macaranga tanarius* as a biomass feedstock for fermentable sugars production. *Bioresource Technology*, 294:122195.

講者資訊

講者介紹

鄭宇伸博士為現任國立雲林科技大學化學與材料工程系教授兼任未來學院院長。他擁有加州大學 Davis 分校生物系統工程博士學位(生物技術專業)。國立中興大學生物化學碩士。他目前的研究重點是昆蟲生物精煉、可再生生質的高值系統開發，以及

	<p>利用天然聚合物製備生物材料等，此外，鄭宇伸博士在微藻研究、蛋白質表達系統和生化工程與生化分離程序方面也擁有豐富的經驗。</p>
演講標題	<p>Atypical biorefinery based on insects and fungi: development and practice 基於昆蟲和真菌之非典型生物精煉的發展與實踐</p>
演講摘要	<p>With the growth of the global population and the development of the agro-industrial industry, organic wastes are rapidly generated and accumulated. If they cannot be reused, it will not only bring corresponding challenges to the relevant industrial economy and regulations, but also cause environmental pollution problems. The application of biorefinery to transform organic wastes not only solves the related problems caused by the unresourced reuse of organic waste, but also provides a potential new way for the production of raw materials required for future industrial development. However, the general biorefinery technology focuses on the development and optimization of microbial production platforms, and there are still many bottlenecks to be overcome. This talk will introduce the atypical biorefinery platform mediated by insects and fungi and its application and development in the carbon reduction circular economy.</p> <p>隨著全球人口成長與農工產業的發展，有機廢棄物快速的產生與累積，如果未能將其資源化再利用，不僅會對相關產業經濟與法規產生相對應的挑戰，也衍生環境污染問題，利用生物精煉來轉化有機廢棄物，除了可解因有機廢棄物未資源化再利用所產生的相關問題之外，也為未來產業發展所需的原料生產提供了一種具有潛力的新方法。然而一般生物精煉技術著重在微生物生產平台的開發及優化，尚有許多瓶頸有待克服。本次演講將介紹有關以昆蟲與真菌為媒介的非典型生物精煉平台與其在減碳循環經濟的應用與發展。</p>