

林育正教授於 2016 年取得美國德州大學奧斯汀分校化學工程博士學位，隨後加入日本三菱重工業擔任製程研發工程師，參與第二代二氧化碳捕捉技術的開發工作，包括新型胺溶劑及其商業化製程。2021 年起，他加入國立清華大學化學工程學系擔任助理教授，研究重點在於透過創新方法提升二氧化碳捕捉效率並降低能耗，例如混合溶劑循環捕捉製程、半水相具位阻效應的胺溶劑、吸收塔設計中溶劑性質的基礎研究，以及二氧化碳捕捉製程強化等。林教授致力於連結基礎研究與工業應用，主持多項產學合作計畫，並與國際產業夥伴緊密合作，加速下一代二氧化碳捕捉系統的商業化。他的研究對於推動能源效率、永續發展與商業可行性的二氧化碳捕捉技術，於鋼鐵生產與化學工業等領域具有重要貢獻。

Dr. Yu-Jeng Lin received his Ph.D. in Chemical Engineering from the University of Texas at Austin in 2016 and subsequently joined Mitsubishi Heavy Industries in Japan as a Process R&D Engineer, where he contributed to the development of second-generation CO₂ capture technologies, including advanced amine solvents and processes for commercial deployment. In 2021, he joined the Department of Chemical Engineering at National Tsing Hua University as assistant professor, where his research focuses on advancing CO₂ capture efficiency and reducing energy consumption through innovations such as hybrid solvent loop processes, semi-aqueous sterically hindered amine solvents, fundamental studies of solvent properties in absorber design, and process intensification strategies. Bridging fundamental research with industrial applications, Dr. Lin has led several industry-funded projects, working closely with global partners to accelerate the commercialization of next-generation CO₂ capture systems. His work plays a critical role in enabling energy-efficient, sustainable, and commercially viable CO₂ capture technologies across key industries, including plastics manufacturing, steel production, and chemical processing.