

國立清華大學第 24 屆新進人員研究獎得獎人簡介

陳馨怡博士於台大材料所碩士班畢業後，加入中研院原分所特聘研究員魏金明博士團隊，以第一原理計算研究金屬團簇異構物之穩定性。之後於 2012 年取得倫敦大學化學系博士學位，師從英國皇家學會院士 Prof. Richard Catlow FRS，並在米蘭比可卡大學材料科學系義大利猓猓之眼國家科學院院士 Prof. Gianfranco Pacchioni 實驗室進行博士後研究，在此期間陳博士分別致力於利用第一原理模擬計算來探究均相及異相關觸媒反應。在各國高等教育訓練下，體驗各教育方式，文化思維，做事嚴謹與研究細膩。於 2016 年 8 月於清大任職，結合材料科學、表面化學、物理化學、計算科學等領域知識，建立了以能源催化為主軸之 Energy Material Modelling Group (EMMG)，利用第一原理計算開發新型能源材料、設計奈米觸媒、理解二維材料特性、並推演各催化反應之理論模擬法，近期，也投入半導體材料設計及機制探討。目前已發表 44 篇優質 SCI 期刊，如 Sci Adv, JACS、JMCA, Nano Lett, ACS Nano, ACS Catalysis, PRL, Small 等 Top 15% 之 Q1 期刊。

陳博士亦與國內外諸多研究團隊合作，建立清大與國內外之聯繫窗口。國內合作單位有台大、清大、陽交大、成大、中央、中國醫、明志科大、同步輻射中心等；國外合作團隊跨含英國 Oxford, UCL, Glasgow, UoL、義大利、日本、新加坡、越南、中國、香港等。

除研究外，陳博士盡心盡力於培養人才，鼓勵學生參加各國內外報告競賽，於任職之五年內 PI 及學生共發表研究成果 109 次，並有 31 件學生獲獎。

陳馨怡博士在此想感謝曾教導後學的所有師長、研發處、原子科學院與工程與系統科學系的同仁、合作團隊及 EMMG family，特別是父母、先生、女兒、家人，於各方面的無條件的愛、支持及付出。也希望能把這份愛繼續傳播，在這群英集聚的環境，一同遨遊未知、激勵、成長、付出與奉獻。

Dr. Hsin-Yi Tiffany Chen received her Ph.D. degree under the supervisor of Prof. Richard Catlow FRS, Department of Chemistry at University of London in 2012, and she did her postdoctoral research in Prof. Gianfranco Pacchioni's group, Department of Materials Science at University of Bicocca in Milan. She has applied first-principles calculations in homogeneous and heterogeneous catalysis, respectively. After 9-year's educational training in the UK and Europe, she had experienced culture shocks, learned different ways of conducting tasks/research/thinking profoundly and prudently. Dr. Chen joined National Tsing Hua University in August 2016. Dr Chen combined her knowledge in materials science, physics, chemistry, computational science and other fields to establish **Energy Material Modelling Group (EMMG)** to develop intelligent ways of designing new materials/catalysts and optimizing their performance by first-principles calculations. The materials of investigation involve catalysis, energy storages, 2D materials, semiconductors, and etc. Dr Chen has cooperated with several domestic and international research teams in the United Kingdom, Italy, Japan, Singapore, Vietnam, China, Hong Kong, etc. Dr Chen has published 44 high-quality SCI journals; some of them were published in Top 15% of Q1 journals such as *Sci Adv*, *JACS*, *JMCA*, *Nano Lett*, *ACS Nano*, *ACS Catalysis*, *PRL*, *Small*. In addition, Dr. Chen is dedicated to teaching, education and cultivate talents. Over the past five years, Dr Chen's team has participated 106 presentations and received 31 student awards.

Dr Chen would like to take this opportunity to thank the support from all of her teachers, Office of Research Development, College of Nuclear Science, Department of Engineering System Science, collaborators, EMMG family, especially for the unconditional love, support and dedication from her parents, Carmine and Maria in all aspects. Dr Chen is hoping to continue to spread this love to others, to contribute the knowledge and efforts, and aims to make the world a better and beautiful place.