

Biography



Prof. Fu-Ming Wang was born in Taipei, Taiwan. He received the B.S. and M.S. chemical engineering degree from National Taipei University of Technology and National Taiwan University of Science and Technology (NTUST). He received his Ph.D. degree in electrochemical engineering and lithium battery technology from National Tsing Hua University in 2009 in Taiwan. From 2004~2010, he is working as a senior researcher at the energy storage division in Industrial Technology Research Institute in Taiwan and develops electrochemical storage, polymer electrolytes, functional electrolyte, in-situ/ operando spectrum, and ionic transfer mechanism studies. From 2010~2025, he services as Distinguished Professor, Professor, Associate Professor, and Assistant Professor at NTUST and focuses on the research of lithium-ion battery, biosensor, operando/ in-situ electrochemical observations, and advanced energy storages. He had already published more than 150 SCI papers and 50 patents and is collaborating with several companies such as Gogoro, E-one Moli, CPC, Nanoloy, Aleee, and RioTinto, respectively. He was served as Chair of 2023 ICGET conference and the Director of Taiwan Electrochemical Society. He was also served the Chair of 30th ISE Topic Meeting (2021). Currently, he is serving as the Executive Director of Taiwan Electrochemical Society since 2021.

CURRENT POSITION

- Guest Editor, *Electrochimica Acta* (SCI, IF:6.6-2023): Switzerland Sep'24 ~ Mar'25
- Co-appointed Professor, Department of Chemical Engineering, Chung Yuan Christian University: Taiwan Aug'24 ~ present
- Distinguished Professor, Graduate Institute of Applied Science and Technology, National Taiwan University of Science and Technology: Taiwan Jan'24 ~ present
- Co-appointed Professor, Graduated Institute of Energy and Sustainability Technology, National Taiwan University of Science and Technology: Taiwan Aug'22 ~ present
- Member representatives, National Tsing Hua University Alumni Association: Dec' 24 ~ present
- Executive Director, Taiwan Electrochemical Society: Taiwan Nov'21 ~ present
- Editorial Board, *Sustainable Chemical Engineering*: Singapore Aug'19 ~ present
- Consultant/ Distinguished Researcher, Industrial Technology Research Institute (ITRI): Taiwan Mar'10 ~ present

SELECTED PUBLICATIONS

- Chusnul Khotimah, Rio Akbar Yuwono, **Fu-Ming Wang***, Nae-Lih Wu*, Chun-Chen Yang, Nae-Lih Wu, Citra Deliana Dewi Sundari, Arif Cahyo Imawan, Ching-Kai Chang, Ping-Hsuan Hsu, Pin-Cheng Huang, Guan-Yi Liu, Yi-De Tsai, Shu-Chih Haw, Ferry Iskandar, "Investigation of Space Group Effects of High-Voltage Spinel $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$: Unveiling the Influences of Fluorinate Benzimidazole Salt Additive", *Chem. Eng. J.* **494** (2024) 152988

- Alagar Ramar, Kidiyoor Sanjana and **Fu-Ming Wang***, “Carbides and Nitrides: Advanced Materials for Engineering the Electrochemistry of Silicon Anodes for High Energy Density Lithium-Ion Battery”, *Chem. Eng. J.* **491** (2024) 151921
- Rio Akbar Yuwono, Chusnul Khotimah, **Fu-Ming Wang***, Nae-Lih Wu*, Arif Cahyo Imawan, Pin-Cheng Huang, Guan-Yi Liu, Shu-Chih Haw, Hwo-Shuenn Sheu, “Investigations of an organic coverage to Ni-rich cathode materials: Effects on deteriorated, cathode electrolyte interphase, and chemical crossover”, *J. Energy Storage* **92** (2024) 112184
- Laurien Merinda, **Fu-Ming Wang***, Nae-Lih Wu*, Ulya Qonita, Wei-Hsiang Huang, Lester Tiong, Ching-Kai Chang, Ping-Hsuan Hsu, Chih-Wen Pao, Jeng-Lung Chen, Chi-Liang Chen, Ting-Shan Chan, “Carbonate deprotonation on Ni-rich layered cathode: Development of a new cis oligomer as an organic coverage”, *J. Mater. Chem. A* **12** (2024) 28886
- Alagar Ramar, Ruben Foeng, Jeyaraman Divyavalli, Pei-Yun Kao, Ching-Kai Chang, Laurien Merinda, Bai-Tai Liu, **Fu-Ming Wang***, “Redox State-Driven Synthesis of Mesoporous and Microsphere Poly(phenylenediamine) for Transition Metal-Free and All-Polymer Dual-Ion Battery”, *Small Methods* (2024) DOI: 10.1002/smt.202401298
- Rio Akbar Yuwono, **Fu-Ming Wang***, Nae-Lih Wu*, Yan-Cheng Chen, Hsi Chen Jin-Ming Chen, Shu-Chih Haw, Jyh-Fu Lee, Rui-Kun Xie, Hwo-Shuenn Sheu, Po-Ya Chang, Chusnul Khotimah, Laurien Merind, Rocan Hsing” Preparation and investigation of a minimum cation mixing LiNiO₂ and its electrochemical performance in lithium-ion battery”, *Chem. Eng. J.* **456** (2023) 141065