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OBJECTIVE

My research interests are mainly in synthesizing and developing nanomaterials, energy storage/harvest materials, mesoporous material, wearable technology, and smart textile. Through years of research experience, I obtained a great amount of experience and knowledge on the application of wearable technology. Recently, I have not only focused on technology development, and connect with foreign research institutes. Based on my lead, I successfully combined 2 National Research Institutions (TTRI/Taiwan, NRC/Canada) and won the **2022 Gold EDISON AWARD and 2022 R&D 100**.

PROFESSIONAL QUALITIES

- **2022 Gold EDISON AWARD**
- **2022 R&D 100**
- Manufacture of innovative flexible conductive ink or paste
- Flexible electronics/devices
- Mesoporous material
- Wearable technology
- Nano-powder synthesis and detection
- Electrochemical deposition
- Electrochromic material synthesis
- Energy material synthesis and detection
- Supercapacitor
- Material analysis and detection
- Electrochemical synthesis and detection
- Smart textile material design
- Low resistance elasticity conductive slurry synthesis
- SEM, XRD, TEM, XPS
- International Affairs Connection
- Government program application and execution
- Establish of cross-field integration program



EDUCATION

Chung Hua University, Hsin-Chu, Taiwan

Ph D. Institute of Engineering and Science

2004 – 2009

HIGHLIGHT

- I. 2022 Gold EDISON AWARD (2022)**
- II. 2022 R&D 100 (2022)**
- III. International Cooperation Project (with NRC of Canada) — The Development of Smart Textile Module System Integration Platform (2018 – 2021)**
- IV. International Cooperation Project (with SSSUP of Italy, / Fraunhofer IZM of Germany) — Research on Forward-looking Technology of Tactile Feedback Textiles (2022 – 2023)**
- V. A+ Industrial Innovation R&D Program of International Cooperation Project (with AIQ SMART CLOTHING INC. Of Taiwan / RWTH Aachen Institute of Textile Technology and ENTWURFREICH GmbH of Germany) (2022 – 2024)**
- VI. Ministry of Economic Affairs Program (Taiwan) (2013 – 2018)**
 - a. Advanced functional fiber textile key technology development program (2016 – 2018)
 - b. Technology Development Project (TDP) (2014)
 - c. Preview and Innovation Technology Development Project (PITDP) (2015 & 2016)
 - d. Small Business Innovation Research Project (SBIR) (2013, 2015, & 2016)
- VII. Excellent Research Projects of National Taiwan University (2010 – 2013)**
- VIII. Invited Scholar (International Center for Materials Nanoarchitectonics, National Institute for Materials Science (NIMS), Japan (2012)**
- IX. Project Manager (International Project Management Association, IPMA)**
- X. Invited Reviewer for Royal Society of Chemistry (RSC) (2010 – 2017)**
 - a. Energy & Environmental Science (EES)
 - b. New Journal of Chemistry (NJC)
 - c. Chemical Communications (ChemComm)
 - d. Advances
 - e. Journal of Material Chemistry A

2022愛迪生發明金獎 (2022)

2022世界百大發明獎 (2022)

經濟部國際合作計畫(與加拿大國家研究院)，智慧紡織整合平台系統 (2018 - 2021)

經濟部國際合作計畫(與義大利/聖安娜高等研究院，德國/弗勞恩霍夫協會之信度與微整合研究所) (2022 - 2023)

經濟部A+企業創新研發淬鍊計畫(輔導台灣愛克智慧科技股份有限公司，德國/阿亨工業大學紡織研究所，ENTWURFREICH公司) (2022 - 2024)

經濟部科專計畫 (2013 – 2018)

- a. 先進功能纖維紡織關鍵技術開發計畫 (2016 – 2018)
- b. 技術開發計畫 (TDP) (2014)
- c. 創新前瞻技術計畫 (PITDP) (2015 & 2016)
- d. 小型企業創新研究計畫 (SBIR) (2013, 2015, & 2016)

台灣大學優秀研究計畫 (2010 – 2013)

國際專案管理師(IPMA)

英國皇家化學學會出版社，邀請審稿員 (2010 – 2017)

- a. Energy & Environmental Science (EES)
- b. New Journal of Chemistry (NJC)
- c. Chemical Communications (ChemComm)
- d. Advances
- e. Journal of Material Chemistry A

EXPERIENCES

Chung Hua University, Hsin-Chu, Taiwan	2024 – Now
Taiwan Textile Research Institute, Tai-Pei, Taiwan	2014 – 2024
Gomore Material Technology Company, Tai-Pei, Taiwan	2013 – 2014
National Taiwan University, Tai-Pei, Taiwan	2010 – 2013
National Institute for Materials Science (NIMS), Tsukuba, Japan	2012 – 2012
Industrial Technology Research Institute (ITRI), Hsin-Chu, Taiwan	2002 – 2008
中華大學，光電與材料工程系 助理教授	2024 – 現在
財團法人紡織產業綜合研究所，產品部 研究員	2014 – 2024
廣懋材料科技有限公司，研發部 研發專員	2013 – 2014
國立台灣大學 博士後研究	2010 – 2013
日本獨立行政法人物質材料研究機構 邀請學者	2012
工業技術研究院，材料與化工研究所 助理研究員	2002 - 2008