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Professor

B.S. in Agricultural Chemistry
National Taiwan University, 1998
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National Taiwan University, 2000
Ph.D. in Materials Science and Engineering
The University of Tokyo, Japan, 2005
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Research and Professional Interests
Nanoporous materials (metal-organic frameworks (MOFs), mesoporous materials)
Biomedical applications (drug delivery system, 3D culture of stem cells)
Energy applications (biofuels from cellulose and microalgae)
Photo-electronic applications (dye-sensitized solar cells and super-capacitors)

Journal Papers

1. Y. V. Kaneti, S. Dutta, M. S. A. Hossain, M. J. A. Shiddiky, K. L. Tung, F. K. Shieh, C. K. Tsung, **K. C. W. Wu** and Y. Yamauchi, "Strategies for Improving the Functionality of Zeolitic Imidazolate Frameworks: Tailoring Nanoarchitectures for Functional Applications", *Advanced Materials*, 29(38), 2017(Oct), (IF: 18.96)
2. S. Dutta, J. Kim, Y. Ide, J. H. Kim, M. S. A. Hossain, Y. Bando, Y. Yamauchi and **K. C. W. Wu**, "3D network of cellulose-based energy storage devices and related emerging applications", *Materials Horizons*, 4(4), 522-545, 2017(Jul), (IF: 10.706)
3. E. Haque, M. M. Islam, E. Pourazadi, S. Sarkar, A. T. Harris, A. I. Minett, E. Yanmaz, S. M. Alshehri, Y. Ide, **K. C. W. Wu**, Y. V. Kaneti, Y. Yamauchi and M. S. A. Hossain, "Boron-Functionalized Graphene Oxide-Organic Frameworks for Highly Efficient CO₂ Capture", *Chemistry-an Asian Journal*, 12(3), 283-288, 2017(Feb), (IF: 4.592)
4. Y. V. Kaneti, J. Tang, R. R. Salunkhe, X. C. Jiang, A. B. Yu, **K. C. W. Wu** and Y. Yamauchi, "Nanoarchitected Design of Porous Materials and Nanocomposites from Metal-Organic Frameworks", *Advanced Materials*, 29(12), 2017(Mar), (IF: 18.96)
5. Kyubin Shim, Jeonghun Kim, Yoon-Uk Heo, Bo Jiang, Cuiling Li, Mohammed Shahabuddin, **Kevin C.-W. Wu**, Md Shahriar A Hossain, Yusuke Yamauchi and Jung Ho Kim, "Synthesis and Cytotoxicity of Dendritic Platinum Nanoparticles with HEK-293 Cells", *Chemistry - An Asian Journal*, 12(1), 21-26, 2017(Jan), (IF: 4.592)
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7. R. Panyadee, P. Posoknistakul, W. Jonglertjunya, P. Kim-Lohsoontom, N. Laosiripojana, B. M. Matsagar, **K. C. W. Wu** and C. Sakdaronnarong, "Sequential Fractionation of Palm Empty Fruit Bunch and Microwave-Assisted Depolymerization of Lignin for Producing Monophenolic Compounds", *Acs Sustainable Chemistry & Engineering*, 6(12), 16896-16906, 2018(Dec)
8. Y. T. Liao, B. M. Matsagar and **K. C. W. Wu**, "Metal-Organic Framework (MOF)-Derived Effective Solid Catalysts for Valorization of Lignocellulosic Biomass", *Acs Sustainable Chemistry & Engineering*, 6(11), 13628-13643, 2018(Nov)

9. B. M. Matsagar, C. Van Nguyen, M. S. A. Hossain, M. T. Islam, Y. Yamauchi, P. L. Dhepe and **K. C. W. Wu**, "Glucose isomerization catalyzed by bone char and the selective production of 5-hydroxymethylfurfural in aqueous media", *Sustainable Energy & Fuels*, 2(10), 2148-2153, 2018(Oct)
10. C. L. Li, M. Iqbal, J. J. Lin, X. L. Luo, B. Jiang, V. Malgras, **K. C. W. Wu**, J. Kim and Y. Yamauchi, "Electrochemical Deposition: An Advanced Approach for Templated Synthesis of Nanoporous Metal Architectures", *Accounts of Chemical Research*, 51(8), 1764-1773, 2018(Aug), (IF: 20.268)
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14. C. Young, J. J. Lin, J. Wang, B. Ding, X. G. Zhang, S. M. Alshehri, T. Ahamad, R. R. Salunkhe, S. A. Hossain, J. H. Khan, Y. Ide, J. Kim, J. Henzie, **K. C. W. Wu**, N. Kobayashi and Y. Yamauchi, "Significant Effect of Pore Sizes on Energy Storage in Nanoporous Carbon Supercapacitors", *Chemistry-a European Journal*, 24(23), 6127-6132, 2018(Apr), (IF: 5.16)
15. R. R. Salunkhe, J. Wang, A. Alowasheer, J. J. Lin, V. Malgras, Y. Bando, M. B. Zakaria, A. A. Alshehri, J. Kim, Y. Yamauchi and **K. C. W. Wu**, "Three-Dimensional Macroporous Graphitic Carbon for Supercapacitor Application", *Chemistryselect*, 3(16), 4522-4526, 2018(Apr), (IF: 1.505)
16. J. Wang, Y. L. Xu, B. Ding, Z. Chang, X. G. Zhang, Y. Yamauchi and **K. C. W. Wu**, "Confined Self-Assembly in Two-Dimensional Interlayer Space: Monolayered Mesoporous Carbon Nanosheets with In-Plane Orderly Arranged Mesopores and a Highly Graphitized Framework", *Angewandte Chemie-International Edition*, 57(11), 2894-2898, 2018(Mar), (IF: 11.994), Selected as Front Cover.
17. H. Y. Lian, S. Dutta, S. Tominaka, Y. A. Lee, S. Y. Huang, Y. Sakamoto, C. H. Hou, W. R. Liu, J. Henzie, Y. Yamauchi and **K. C. W. Wu**, "Curved Fragmented Graphenic Hierarchical Architectures for Extraordinary Charging Capacities", *Small*, 14(27), 2018(Jul), (IF: 9.598)
18. B. M. Matsagar, S. A. Hossain, T. Islam, Y. Yamauchi and **K. C. W. Wu**, "A Novel Method for the Pentosan Analysis Present in Jute Biomass and Its Conversion into Sugar Monomers Using Acidic Ionic Liquid", *Jove-Journal of Visualized Experiments* (136), 2018(Jun), (IF: 1.232)
19. P. Y. Hsu, T. Y. Hu, S. R. Kumar, C. H. Chang, **K. C. W. Wu**, K. L. Tung and S. J. Lue, "Highly Zeolite-Loaded Polyvinyl Alcohol Composite Membranes for Alkaline Fuel-Cell Electrolytes", *Polymers*, 10(1), 2018(Jan), (IF: 3.364)

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31. C. V. Nguyen, W. H. Chiang and **K. C. W. Wu**, "Water- and Thermal-Stable Silver-Based Photoluminescent Metal-Organic Coordination Polymer for Highly Selective Lead Ion Sensing", *Bulletin of the Chemical Society of Japan*, 92(9), 1430-1435, 2019(Sep), (IF: 4.431)

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35. E. Doustkhah, J. J. Lin, S. Rostamnia, C. Len, R. Luque, X. L. Luo, Y. Bando, **K. C. W. Wu**, J. Kim, Y. Yamauchi and Y. Ide, "Development of Sulfonic-Acid-Functionalized Mesoporous Materials: Synthesis and Catalytic Applications", *Chemistry-a European Journal*, 25(7), 1614-1635, 2019(Feb), (IF: 5.16)
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39. C. C. Chueh, C. I. Chen, Y. A. Su, H. Konnerth, Y. J. Gu, C. W. Kung and **K. C. W. Wu**, "Harnessing MOF materials in photovoltaic devices: recent advances;challenges;and perspectives", *Journal of Materials Chemistry A*, 7(29), 17079-17095, 2019(Aug), (IF: 10.733), Selected as Front Cover
40. L.-H. Yeh, Z.-Y. Huang, Y.-C. Liu, M.-J. Deng, T.-H. Chou, H.-C. Ou Yang, T. Ahamad, Saad M. Alshehri and **K. C. W. Wu**, "A nanofluidic osmotic power generator demonstrated in polymer gel electrolytes with substantially enhanced performance", *Journal of Materials Chemistry A*, 7(47), 26791-26796, 2019(Nov), (IF: 10.733)
41. Y. C. Liu, C. Y. Chen, G. S. Lin, C. H. Chen, **K. C. W. Wu**, C. H. Lin and K. L. Tung, "Characterization and molecular simulation of Pebax-1657-based mixed matrix membranes incorporating MoS₂ nanosheets for carbon dioxide capture enhancement", *Journal of Membrane Science*, 582, 358-366, 2019(Jul), (IF: 7.015)
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90 Metal-Organic Framework", *Journal of Physical Chemistry C*, 123(1), 631-636, 2019(Jan), (IF: 4.309)

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54. Brian Yulianto, Ni Luh Wulan Septiani, Yusuf Valentino Kaneti, Muhammad Iqbal, Gilang Gumilar, Minjun Kim, Jongbeom Na, **Kevin C.-W. Wu**, and Yusuke Yamauchi.* "Green

synthesis of metal oxide nanostructures using naturally occurring compounds for energy and environmental applications", *New Journal of Chemistry*. 2019. 43, 15846-15856. (IF: 3.069)

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56. Li-Hsien Yeh,* Zih-Ying Huang, Yi-Cheng Liu, Ming-Jay Deng, Tzung-Han Chou, Hsing-Chiao Ou Yang, Tansir Ahamad, Saad M. Alshehri, and **Kevin C.-W. Wu**. "A nanofluidic osmotic power generator demonstrated in polymer gel electrolytes with substantially enhanced performance ", *Journal of Materials Chemistry A*. 2019. 7, 26791-26796. (IF: [10.733](#))
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59. Hung-Li Wang, Chang-Yen Hsu, **Kevin C.-W. Wu**,* Yi-Feng Lin,* De-Hao Tsai.* "Functional Nanostructured Materials: Aerosol, Aerogel, and de novo Synthesis to Emerging Energy and Environmental Applications ", *Advanced Powder Technology*. 2020, 31, 104-120. (IF: [3.250](#))
60. Chao-Wei Huang,* Van Huy Nguyen, Shi-Rong Zhou, Shu-Yu Hsu, Jia-Xuan Tan, and **Kevin C.-W. Wu**.* Metal-Organic Frameworks: Preparations and Applications of Highly Efficient Heterogeneous Photocatalysis. *Sustainable Energy & Fuels*. 2020, 4, 504-521. (IF: [4.912](#))
61. Babasaheb M. Matsagar,* Chang-Yen Hsu, Season S. Chen, Tansir Ahamad, Saad M Alshehri, Daniel C. W. Tsang,* and **Kevin C.-W. Wu**.* Selective hydrogenation of furfural to tetrahydrofurfural alcohol over Rh-loaded carbon catalyst in aqueous solution under mild conditions. *Sustainable Energy & Fuels*. 2020, 4, 293-301. (IF: [4.912](#))
62. Shanta Dutta, Iris K.M. Yu, Daniel C.W. Tsang,* Zhishan Su, Changwei Hu, **Kevin C.-W. Wu**, Alex C.K. Yip, Yong Sik Ok, and Shi Sun Poon. Influence of green solvent on levulinic acid production employing lignocellulosic paper waste. *Bioresource Technology*. 2020, 298, 122544. (IF: [6.669](#))
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66. Yu-Te Liao, Nguyen Van Chi, Nozomu Ishiguro, Allison P. Young, Chia-Kuang Tsung,* and **Kevin C.-W. Wu**.* Engineering a Homogeneous Alloy-Oxide Interface Derived from Metal-Organic Frameworks for Selective Oxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid. *Applied Catalysis B: Environmental*. 2020, 270, 118805. (IF: [14.229](#))
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70. Amornrat Sangjan, Pornthip Ngamsiri, Nikom Klomkliang, **Kevin C.-W. Wu***, Babasaheb M. Matsagar*, Sakhon Ratchahat, Chen-Guang Liu, Navadol Laosiripojana, Chularat Sakdaronnarong.* Effect of microwave-assisted wet torrefaction on liquefaction of biomass from palm oil and sugarcane wastes to bio-oil and carbon nanodots/nanoflakes by hydrothermolysis and solvothermolysis. *Renewable Energy*. 2020, 154, 1204-1217. (IF: [4.357](#))
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Conference Papers

1. **(Keynote talk)** “Functional Nanospace Materials: Green Synthesis and Energy Applications”, 2017 International Conference on Nanospace Materials, Shanghai, China, Aug. 25-27, 2017.
2. **(Plenary talk)** “De Novo Synthesis of Functional Metal-Organic Frameworks (MOFs) for Catalysis Applications”, 2017 Osaka-Kansai International Symposium on Catalysis (OKCAT), Osaka, Japan, Oct. 27-28, 2017.

3. **(Invited Speaker) Kevin C.W. Wu**, MOF-based Nanocatalysts for Lignocellulosic Biomass Conversion, International Symposium on Relations between Homogeneous and Heterogeneous Catalysis (ISHHC18), Sydney, Australia. 22-25 July, 2018.
4. **(Keynote Speaker) Kevin C.W. Wu**, Functional Nanoporous Materials for Lignocellulosic Biomass Conversion, The 8th Tokyo Conference on Advanced Catalytic Science and Technology (TOCAT8), Yokohama, Japan. 5-10 August, 2018.
5. **(Plenary Speaker) Kevin C.W. Wu**, Harnessing of Micro-, Meso-, and Macroporous Materials in Chemical Engineering Applications, The 6th International Symposium on Process Intensification, Taipei, Taiwan. 7-8 November, 2018.
6. **(Invited Speaker) Kevin C.W. Wu**, Metal-Organic Frameworks (MOFs)-derived Nanoporous Materials for Photocatalysis and Solar Cells, IWGCP3, 中国 武汉 2019 年 3 月 23-26 日
7. **(Invited Speaker) Kevin C.W. Wu**, Functional nanoporous materials for lignocellulosic biomass conversion and chemical engineering applications, ACS Spring Meeting - 2019 ACS Sustainable Chemistry and Engineering Lectureship Awards: Symposium in Honor of Kevin Wu, Florida, USA. 31 March – 3 April, 2019.
8. **(Invited Speaker) Kevin C.W. Wu**, Metal-Organic Frameworks (MOFs) Derived Effective Solid Catalysts for Lignocellulosic Biomass Valorization, BEEM2019, The Hong Kong Polytechnic University, Hung Hom, 14th June, 2019 (Fri).
9. **(Invited Speaker) Kevin C.W. Wu**, Water-based Synthesis of Metal-Organic Frameworks (MOFs) derived Nanocatalysts for Lignocellulosic Biomass Conversion. APCAT-8, Bangkok, Thailand August 4th-7th, 2019.
10. **(Invited Speaker) Kevin C.W. Wu**, de novo Synthesis of Metal NPs-Loaded Metal-Organic Frameworks (M@MOFs) for Heterogeneous Catalysis, 2019 ICNM, Queensland, Australia from 3rd Oct 2019.
11. **(Invited Speaker) Kevin C.W. Wu**, Water-based Synthesis of Metal-Organic Frameworks (MOFs) Derived Catalysts for Lignocellulosic Biomass Conversion, Green China, 中国 北京 Oct 17, 2019
12. **(Invited Speaker) Kevin C.W. Wu**, Production of Fine Chemicals from Rice Straw Using MOF-derived Catalysts in Aqueous Reaction Systems, International Symposium on Porous Materials 2019, Tokyo, Japan. 11-19 November, 2019.
13. **(Invited Speaker) Kevin C.W. Wu**, Metal-Organic Frameworks (MOFs) Derived Nanomaterials for Catalytic Conversion of Lignocellulosic Biomass, Materials Research Meeting 2019, Yokohama, Japan. 10-14 December, 2019.
14. **(Invited Speaker) Kevin C.-W. Wu**, MOFs for Sustainable Society, National Taiwan University – Sogang University 3rd ChemE Online Symposium on Energy & Biomolecular Engineering (on-line meeting). 23 Feb., 2020.
15. **(Invited Speaker) Kevin C.-W. Wu**, Water-based Synthesis of Metal-Organic Frameworks, Osaka City University ReCAP annual meeting (on-line meeting). 8 March, 2020.
16. **(Invited Speaker) Kevin C.-W. Wu**, Nanoporous Materials for Sustainable Applications, National Taiwan University – MIT Joint Conference on ESG x Sustainability (on-line meeting). 11 May, 2020.

17. **(Keynote Speaker) Kevin C.W. Wu**, Pd-Loaded Metal-Organic Frameworks (Pd@VNU-2) for Radiation/Photothermal Combined Cancer Therapy, Taipei, Taiwan (Hybrid meeting). 7-8 August, 2021.
18. **(Invited Speaker) Kevin C.W. Wu**, Metal-Organic Frameworks (MOFs) for Effective and Selective Catalysis, Taiwan-Japan-Korea Conference (on-line meeting). 28 October, 2021.
19. **(Keynote Speaker) Kevin C.W. Wu**, Nanoarchitecting Structure and Functionality of Metal-Organic Frameworks (MOFs) for Effective and Selective Catalysis, 2nd Eurasia Nanotechnology Conference (Virtual), Khazar University, Baku, Azerbaijan. 17-18 December, 2021.
20. **(Keynote Speaker) Kevin C.W. Wu**, Water-based Synthesis of Metal-Organic Frameworks (MOFs) for Green and Sustainable Chemical Engineering. YONSEI-CBE International Workshop Series: Nanomaterials (Virtual). 4 January, 2022.
21. **(Keynote Speaker) Kevin C.W. Wu**, Functional Metal-Organic Frameworks (MOFs) and Their Derivates for Clean Energy Production and Waste Conversion. 12th International Conference on Environmental Catalysis (ICEC2022) (on-site). July 30-Aug. 2, 2022.
22. **(Keynote Speaker) Kevin C.W. Wu**, Metal-Organic Frameworks (MOFs)-Driven Carbon Neutral Society. International Conference on Nanospace Materials. (on-site), Pattaya, Thailand. Dec. 10-12, 2022.
23. **(Keynote Speaker) Kevin C.W. Wu**, Metal-Organic Frameworks (MOFs)-Driven Carbon Neutral Society: Heterogeneous Catalysis, Membrane Separation, and Power Generation. 8th Asian Conference on Coordination Chemistry. (hybrid) Taipei, Taiwan. 7-11 August, 2022.
24. **(Keynote Speaker) Kevin C.W. Wu**, Metal-Organic Frameworks (MOFs)-Driven Carbon Neutral Society: Heterogeneous Catalysis, Membrane Separation and Power Generation. The 1st International Conference on Bioprocess and Sustainability (on-site), Tsukuba, Japan. Mar. 25-26, 2023.
25. **(Keynote Speaker) Kevin C.W. Wu**, Metal-Organic Frameworks (MOFs)-Driven Carbon Neutral Society: Heterogeneous Catalysis of Plastics and Biomass Conversion. 2nd International Symposium on Advanced Functional Materials. (on-site), Kuala Lumpur, Malaysia. Feb. 16-17, 2023.

Books/Chapters

1. **Kevin C.-W. Wu***. "Synthesis of Multi-functionalized Mesoporous Silica Nanoparticles for Cellulosic Biomass Conversion," RSC Green Chemistry Series: Heterogeneous Catalysis for Today's Challenges. Thomas Graham House, Cambridge CB4 0WF, UK (July 2014). ISBN 9781849736275
2. **Kevin C.-W. Wu**, Ken Miki. "臺大教授帶你留學日本" 書泉, TW (January 2021). ISBN : 9789864512065

Patents

1. “含有藥物及藥物載體之複合物”中華民國、發明專利、發明人：吳嘉文、洪辰諭(台灣專利號碼：I421100; 公開號：201236700) 201401~203103
2. “製作中孔性過渡金屬氧化物粒子的方法”中華民國、發明專利、發明人：吳嘉文、郭義榮 (台灣專利號碼：I462775 公開號: 201302302) 201412~203107
3. “複合材料”中華民國、發明專利、發明人：吳嘉文、廖祐德、游佳欣(公開號：201322997) 2011/12~2033/06
4. “奈米顆粒材料及其應用”中華民國、發明專利、發明人：吳嘉文、黃厚升 (公開號：201344726) 2012/04~2033/11
5. “牙齒漂白催化劑及其應用”中華民國、發明專利、發明人：吳嘉文、李伯訓,黃麗君、林俊彬(台灣專利號碼：I461216 公開號: 201223553) 201411~203012
6. “脂肪酸烷酯之製備方法”中華民國、發明專利、發明人：吳嘉文、江亞東、吳紀聖、林錕松、黃郁慈(台灣專利號碼：I468518 公開號:201439326) 201501~203304
7. “一種木質素裂解之方法及酚類化合物之組成物”中華民國、發明專利、發明人：吳嘉文、馬沙、王正彥、韓柏群(台灣專利號碼：I711602 公開號: 202039409) 2020/12/1~2039/4/28
8. “聚對苯二甲酸乙二酯之解聚合方法”中華民國、發明專利、發明人：吳嘉文、楊任軒、焦鈺雯、廖威勝(台灣專利號碼：I766579 公開號: 202231762) 2022/6/1~2041/2/8
9. “鈣鈦礦太陽能電池及其製造方法”中華民國、發明專利、發明人：李佳蕓、關居振、吳嘉文、何國川(台灣專利號碼：I699370 公開號: 202037599) 2020/7/21~2039/3/31

Honors and others

1. 王毓璞同學/指導教授:吳嘉文教授參加 2014 年中華民國界面科學學會年會暨論文發表會在壁報展示競賽部分獲得佳作
2. 為期刊 Chemical Communications 撰寫專題文章並被期刊引用為封面圖
3. 榮獲 2014 日本化學學會 The Distinguished Lecture Award (最佳演說獎) for Inorganic Porous Materials
4. 白井宏明/指導教授:吳嘉文教授北海道大學日籍交換學生在台研究成果獲日學術會議肯定
5. "Energy & Environmental Science"期刊封面

6. "Green Chemistry "期刊封面
7. 發表在期刊"Science and Technology of *Advanced Materials* (STAM)"上的文章獲選為 Best Paper Award 2014
8. 碩士研究生鄧有衡同學/指導教授:吳嘉文教授 The International Conference on Nanocatalysts and Nanomaterials for Green Technologies」最佳海報競賽榮獲銀獎, 2014
9. Best poster award : 陳靖天同學 /指導教授吳嘉文教授 2014 年台灣化學工程學會 61 周年年會暨國科會化工學門成果發表會 觸媒及反應工程組海報優等獎 2014/12/13-14.
10. Best poster award : 鄧有衡同學 /指導教授吳嘉文教授 2014 年台灣化學工程學會 61 周年年會暨國科會化工學門成果發表會 薄膜分離組海報優等獎 2014/12/13-14.
11. 論文被 *Chemcatchem* 接受並選為期刊封底(2015/03/17)
12. *ChemSusChem* 接受並選為期刊封面內頁文章(2015/03/18)
13. 擔任國際重要期刊 *Scientific Reports* 的編輯委員(2015/06/069)
14. SCI 國際期刊 *Scientific Reports* (Nature Publishing Group) (IF: 5.578)的 Editor and Editorial Board Member.
15. SCI 國際期刊 *Advanced Powder Technology* (IF: 1.612)的 Editor and Editorial Board Member.
16. SCI 國際期刊 *Journal of Nanoscience and Nanotechnology* (IF: 1.149)的 Guest Editor.
17. SCI 國際期刊 *Science and Technology of Advanced Materials* (IF: 3.752)的 Guest Editor.
18. 榮獲 104 度吳大猷先生紀念獎(2015/10/08)
19. 臺大 SMART Center」與日本研究機構 NIMS 共同合作完成研究成果-應用奈米顆粒萃取海藻油脂,可將廢食用油轉化為綠色能源,研究成果已發表於永續資源國際知名期刊 *ChemSusChem*, 獲選為期刊封面。(2015/11/18)
20. 功能性奈米孔洞材料研究室(吳嘉文教授主持)學術文章被接受發表至 *Chemcatchem* 並被選為封面, 2016
21. 榮獲科技部「吳大猷先生紀念獎」, 2016
22. 指導王正彥同學, 中油新能源創意競賽榮獲第 3 名實用獎, 2016
23. 榮獲第 2 屆台灣觸媒年會最佳研究論文獎, 2016

24. 指導 廖祐德同學，參加「第 34 屆觸媒暨反應工程研討會」學生英語演講競賽第一名，2016
25. 指導 康庭慈同學，榮獲 2016 國際生質物催化轉化會議學生海報競賽第 2 名，2016
26. 指導 王正彥同學，榮獲 104 年度大專學生研究計畫研究創作獎，2016
27. 2016 Green Tech 東元科技創意競賽亞軍，2016
28. 指導 陳珮鵬同學，參加"有機/無機混成材料與紡織品工業基礎計術深耕計畫. 2016 年專題論文競賽."榮獲佳作的成績，2016
29. 指導 葉俊毅同學，榮獲「第 63 屆台灣化學工程學會年會」壁報論文競賽優勝獎，2016
30. 指導 張家豪同學，榮獲「第 63 屆台灣化學工程學會年會」壁報論文競賽優勝獎，2016
31. 指導 王正彥同學，榮獲「第 63 屆台灣化學工程學會年會」中文口頭報告競賽優勝獎，2016
32. 指導 郭偉琪同學，榮獲「第 63 屆台灣化學工程學會年會」壁報論文競賽佳作，2016
33. 2017 年 11 月: 榮獲化學學會傑出青年化學家獎
34. 2017 年 9 月: 榮獲化工學會賴再得獎
35. 2018 年 5 月: 榮獲 106 度科技部傑出研究獎
36. 2019 年: 李長榮教育基金會傑出青年教授獎
37. 2019 年: 2019 Outstanding Researcher Award from Asia-Pacific Associations of Catalysis Societies (APCAS).
38. 2020 年: 榮獲 Materials Advances (RSC Publisher) 期刊選為 2020 年的傑出審稿者 (Outstanding Reviewer)
39. 2022 年: 台北國際觸媒會議(2022 Taipei International Conference on Catalysis)有 2 位學生獲得口頭及 3 位獲得海報競賽獎.
40. 2022 年: 第一屆欣興電子技術交流海報競賽暨發表會，學生以新興再生能源裝置—金屬有機骨架材料衍生之高效滲透能源發電裝置獲得第三名.
41. 2022 年: 指導綠色永續材料與精密元件博士學位學程獲得 110 學年度台大工學院研究生院長獎.

42. 2022 年: 獲選為 2022 年高被引學者 (2021, 2022 連續二年獲得)
43. 2022 年: 受邀擔任化工領域頂尖學術期刊 Chemical Engineering Journal 副主編 (Associate Editor), 台灣唯一一位.
44. 2022/11 陳芳燦學者獎
45. 2022 華立創新材料大賽優選獎
46. 2022 年 12 月: 擔任 SCI 國際期刊 Green Chemistry (IF: 11.034) 的 Advisory Board.
47. 2023 年 2 月: 擔任 SCI 國際期刊 Hybrid Advances (Elsevier) 的 Advisory Board.
48. 2023 年 4 月: 2023 年李昭仁基金會研究學者獎

International Cooperation Projects

1. 參加台歐盟 M-ERA.net 三年期國合計畫 (開發以金屬有機骨架為固態電解質分離膜之新型鋰電池)
2. 參加澳洲雪梨大學 SGD Collaboration 計畫
3. 參加教育部高教深耕計畫特色領域中心推動台灣-奧地利合作計畫