



## Dr. Hua Wei Chen

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### 簡歷 Short Bio

- Dr. Chen got his PhD degree at National Taiwan University of Science and Technology in 2007. In 2017, he is currently a professor at the Department of Chemical and Materials Engineering, National Ilan University (NIU), Taiwan. Dr. Chen have published more than 68 international journal papers and 21 patents.

### 研究方向 Research Topics

- Green synthesis and characterization of magnetic nanoparticles with graphene and carbon quantum dot.
- Advance oxidation process (Ozone, Potocatalysts, Fenton/biomass fuel cell).
- Biomaterial and cosmetic material.
- Air quality and human health.

### 獲獎 Awards

- Lin, Y. F., Chen, H. W., Chen, Y. C., and Chiou, C. S., “Application of magnetite modified with polyacrylamide to adsorb phosphate in aqueous solution,” J. Taiwan Inst. Chem. Eng., Vol. 44, pp.45-51, (2013). (**Taiwan Institute of Chemical Engineers Outstanding Paper Award**)

### 近三年著作 Published papers (2020~2022)

1. Wang, Y. T., Chiou, C. S., Chang, S. Y., and Chen, H. W.\*, “Enhancement of Electrical Properties by a Composite FePc/CNT/C Cathode in a Bio-Electro-Fenton Microbial Fuel Cell System, Photocatalytic Activity and Recovery of Recyclable Photocatalysts,” J. Nanosci. Nanotechnol. Vol. 20, pp. 3252-3257 (2020). [SCI: 1.134; Category: CHEMISTRY, MULTIDISCIPLINARY; Rank 137/177; Q4]
2. Chen, H. W.\* and Lin, M. F., “Characterization, biocompatibility, and optimization of electrospun SF/PCL/CS composite nanofibers,” Polymers Vol. 12(7), 1436 (2020). [SCI: 4.329; Category: POLYMER SCIENCE; Rank 102/143; Q1; MOST 107-2221-E-197-001-MY2]
3. Chen, H. W.\* and Chang, Y. W., “Encapsulation of Clitoriaternatea extract in liposomes by synergistic combination of probe-type ultrasonication and high-pressure processing,” J. Food. Saf. e12859 (2020). [SCI: 1.953; Category: FOOD SCIENCE & TECHNOLOGY; Rank 102/143; Q3; MOST 108-2622-E-197-004-CC3]
4. Chen, H. W.\* and Chang, S. H., “Magnetic nanoadsorbents with amino-functionalized polymers for magnetic separation removal of copper ion,” *Environ. Technol.* Vol. 43(6), pp. 805-814 (2022).

[SCI: 3.247; Category: ENVIRONMENTAL SCIENCES; Rank 125/274; Q2; MOST 108-2622-E-197-004-CC3]

5. Chen, H. W.\*, Chang, Y. W. and Wu, P. F., “A new approach for the microencapsulation of Clitoria Ternatea petal extracts by a high-pressure processing method,”*Pharmaceutics* (2020) Vol. 13, pp. 22-33 (2021). [SCI: 6.321; Category: Pharmacology & Pharmacy; Rank 29/276; Q1; MOST 108-2622-E-197-004-CC3]
6. Chen, H. W.\*, Chiou, C. S., Wu, Y. P., Chang, C. H. and Lai, Y. H., “Magnetic nanoadsorbents derived from magnetite and graphene oxide for simultaneous adsorb of nickel ion, methylparaben, and reactive black 5,”*Desalin. Water Treat.* Vol. 224, pp. 168-177 (2021). [SCI: 1.254; Category: ENGINEERING CHEMICAL; Rank 110/143; Q4; MOST 109-2622-E-197-002-CC3]
7. Chen, H. W.\*, Lin, M. F., Lai, Y. H. and B.Y. Chen, “Skin-friendly dressing with alcohols treatment for enhancement of mechanical and biocompatible properties,”*J. Taiwan Inst. Chem. Eng.* Vol. 129, pp. 256-263 (2021). [SCI: 5.876; Category: ENGINEERING CHEMICAL; Rank 25/143; Q1; MOST 109-2622-E-197-002-CC3]
8. Chen, H. W.\* and Wu, P. F., “A novel method for the microencapsulation of curcumin by high-pressure processing for enhancing the stability and preservation,”*Int. J. Pharm.* Vol. 613, 121403 (2022). [SCI: 5.875; Category: Pharmacology & Pharmacy; Rank 37/276; Q1; MOST 109-2622-E-197-002-CC3]
9. Chen, W. T., Chen, H. W., Chou, C. C. and Tsai, Y. P., “Two Ecological Engineering Technologies to Treat River Pollution in Changhua County, Taiwan,”*CLEAN - Soil, Air, Water* , 2200115 (2022). [SCI: 1.770; Category: MARINE & FRESHWATER BIOLOGY; Rank 57/110; Q3]
10. Chen, W. T., Wu, H. T., Chang, I. C., Chen, H. W.\*, Fang, W. P., “Preparation of curcumin-loaded liposome with high bioavailability by a novel method of high pressure processing,”*Chem. Phys. Lipids* Vol. 244, 105191 (2022) [SCI: 3.329; Category: BIOPHYSICS; Rank 32/71; Q2; MOST 109-2622-E-197-002-CC3]
11. Chen, H. W., Kuo, Y. L., Chen, C. H., Chiou, C.S., Lai, Y. H., Chen, W. T., “Biocompatible nanofiber based membranes for high-efficiency filtration of nano-aerosols with low air resistance,”*Process Saf. Environ. Prot.* Vol. 167, pp. 695-707 (2022). [SCI: 7.926; MOST 111-2622-E-197-003]
12. Chen, W. T., Wu, H. T., Chang, I. C., Chen, H. W.\*, Fang, W. P., “Improving the stability and bioactivity of curcumin using chitosan-coated liposomes through a combination mode of high-pressure processing,”*LWT - Food Sci. Technol.* Vol. 168, 113946 (2022) [SCI: 6.056; MOST 110-2622-E-197-005]