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現任:

中華民國國科會工程處覆審委員

中華民國公共工程委員會採購申訴審議委員會委員

中華民國界面科學會理事

中華民國化學產業協進會監事兼生化工程組召集人

中華民國經濟部技術處 SBIR 審查委員

中華民國經濟部產業科技發展獎審查委員

Education

Chemical Engineering, Oklahoma State University, U.S.A.	Ph.D.
Chemical Engineering, Rose-Hulman Institute of Technology, Indiana, U.S.A.	M.D
Chemical Engineering, National Central University, Jhongli, Taiwan	Bachelor

Current Positions

05/2012-present	Atomic and Molecular Physics, The Scientific World Journal	Editorial Board
04/2008-present	Biotechnology Journal (SCI), WILEY-VCH Verlag GmbH & Co.	Editorial Board
11/2012-present	Bioprocess and Biosystems Engineering (SCI)	Editorial Board
03/2009 - 02/2011	College of Engineering, National Central University	Associate Dean
04/2007 - 02/2009	R&D office of National Central University	Deputy Dean
07/2005 - 01/2006	Department of Chemical Engineering, University of Washington, Seattle, U.S.A.	Visiting Professor

08/2002 - 07/2005	Department of Chemical and Materials Engineering, National Central University	Chairman
09/2000 - 01/2001	Department of Biochemistry and Molecular Biology, Monash University, Australia	Visiting Professor
08/1996 - present	Department of Chemical and Materials Engineering, National Central University	Professor
01/1994 - 09/1994	Massachusetts Institute of Technology, U.S.A.	Visiting Scientist
08/1989 - 07/1996	Department of Chemical and Materials Engineering, National Central University	Associate Professor
08/1988 - 07/1989	Life Science Division, Stanford Research Institute, International, U.S.A.	Postdoctoral Fellow

Publications

- Kuo TC and Chen WY "The use of a kinesin-cro fusion protein as the nano shuttle to transport specific DNA" Current Nanoscience (in press, accepted 2012/05/10)
- Lin SF, Chen WY, Chang TY "Sensitive metal layer assisted guided mode resonance biosensor with a spectrum inversed response and strong asymmetric resonance field distribution" Optics Express, 2012
- Tsai, CW, Chen WY, Ruaan RC "Retention Prediction of Peptide Enantiomers in Reversed-Phase Liquid Chromatography Assisted by Molecular Dynamics Simulation" Langmuir, 2012 (Submitted) (SCI)
- Chen WY*, Lin SF, Chang, CY, "光學免標定式波導共振生物感測器與其應用" 化工技術月刊, 2012 (六月刊)
- Lin PH, Tsai CW, Wu J.W., Ruaan RC, and Chen WY*, "Molecular Dynamics Simulation of Induced-Fit Binding Process of DNA Aptamer and L-Argininamide", Journal of Biotechnology", 2012 (Accepted) (SCI)
- Tsai CW, Kao WH, Chang LC, Ruaan RC, and Chen WY*, "Structural Stability-Chromatographic Retention Relationship on Exenatide Diastereomers Separation", Analytical and Bioanalytical Chemistry 2012 (revised) (SCI)
- Tsao CW, Lin CH, Cheng YC, Chien CC, Chang CP and Chen WY* "Nanostructured silicon surface modifications for as a selective matrix-free laser desorption/ionization mass spectrometry" Analysts, 2012 (Accepted DOI: 10.1039/c2an35189g) (SCI)
- Kuo TC, Lee PC and Chen WY* "The nonclassical aptamer-binding thermodynamics and stoichiometry and the accompanied structural changes of streptavidin protein" Journal of Physical Chemistry B, 2012
- Lin SF, Wang CM, Tsai YL, Ding TJ, Yang TH, Chen WY, and Chang JY, "A model for fast predicting and optimizing the sensitivity of surface-relief guided

mode resonance sensors”, *Sensors and Actuator B*. 2012

- Chiang YC, Chang Y, Chen WY, and Ruaan RC, “Biofouling Resistance of Ultrafiltration Membranes Controlled by Surface Self-Assembled Coating with PEGylated Copolymers”, *Langmuir* 28, 1399-1407
- Hu WP, Huang LY, Kuo TC, Hu WW, Chang Y, Chen CS, Chen HC, Chen WY* “Optimization of DNA Directed Immobilization on Mixed oligo (ethylene glycol) (OEG) Monolayers for Immunodetection”, *Analytical Biochemistry* 423, 26–35 (2012)
- Cheng YC, Chen KH, Wang JS, Hsu WL, Chien CC, Chen WY, and Tsao CW, “Rapid Analysis of Abused Drugs Using Nanostructured Silicon Surface Assisted Laser Desorption/Ionization Mass Spectrometry”, *Analyst* 137 (3)654-661 (2012) (SCI)
- Chen WY, Huang JT, Cheng YC, Chien CC, and Tsao CW, “Fabrication of nanostructured silicon by metal-assisted etching and its effects on matrix-free laser desorption/ionization mass spectrometry”, *Analytica Chimica Acta*, 687, 97-104, (2011) (SCI)
- Chen WY*, Huang LY, and Hu WP, “表面電漿共振生物感測器簡件與運用”, *化工*, 58 (4),3-17 (2011)
- Wang SSS, Lin MS, Fang YH, Lee KW, Chen SL, and Chen WY*, “Using isothermal titration calorimetry to real-time monitor the heat of metabolism: a case study using PC12 cells and A β (1-40)”, *Colloid and Surface B: Biointerface*, 83, 307-312, (2011) (SCI)
- Liu JT, Lin PS, Hsin YM, Tsai JZ, Chen WY “Surface plasmon resonance biosensor for microalbumin detection” *Journal of the Taiwan Institute of Chemical Engineers*, 42, 696-700 (2011) (SCI)
- Lin SF, Ding TJ, Liu JT, Lee CC, Yang TH, Chen WY* and Chang JY* “A Guided Mode Resonance Aptasensor for Thrombin Detection” *Sensors* 11, 8953-8965 (2011) (SCI)
- Lue JH, Ding TJ, Yang TH, Chang JY, and Chen WY “Real-time Monitoring on Peptide Synthesis by GMR Biosensors” *Proceedings - 2011 4th International Conference on Biomedical Engineering and Informatics, BMEI* 4, 1858-1861 (2011) (SCI)
- Tsai, J.-Z., Chen, C.-J., Liu, J.-T., Hsin, Y.-M., Chen, WY, Hsueh, K.-H. “Development of capacitance measurement system for human serum albumin detection” *Electronics Letters* 46 (10) , 678-680 (2010)
- Huang HI, Cheng YC, Chen WY, Tsao CW, Huang CJ, Liu HT, and Chien CC*, “Comparative proteomic analysis of Placenta-Derived Multipotent Cells (PDMCs) and its differentiated Neuron”, *The Chinese Journal of Pain*, 20,

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- Lin PH, Kao YH, Chang Y, Cheng YC, Chien CC, and Chen WY*, "Daunomycin interaction with DNA: Microcalorimetric studies of the thermodynamics and binding mechanism", *Biotechnology Journal*, 5, 1069-1077, (2010) (SCI)
- Chang Y*, Yandi W, Chen WY, Shih YJ, Yang CS, Chang Y, Ling QD, and Higuchi A, "Tunable Bioadhesive copolymer hydrogels of thermoresponsive poly(N-isopropyl acrylamide) containing zwitterionic polysulfobetaine", *Biomacromolecules*, 11, 1101-1110, (2010) (SCI)
- Hung YT, Lin MS, Chen WY, and Wang SSS*, "Investigating the Effects of Sodium Dodecyl Sulfate on the Aggregative Behavior of Hen Egg-White Lysozyme at Acidic pH", *Colloids and Surfaces B: Biointerfaces*, 81, 141-151, (2010) (SCI)
- Higuchi A, Siao YD, Yang ST, Hsieh PV, Fukushima H, Chang Y, and Chen WY*, "Peroxidase Activity of DNA Aptamer-Pt Complexes Prepared with Cisplatin", *Journal of Biomaterials Science: Polymer Edition*, 21, 67-82, (2010) (SCI)
- Chang Y, Shu SH, Shih YJ, Chu CW, Ruaan RC, and Chen WY*, "Hemocompatible Mixed-Charge Copolymer Brushes of Pseudozwitterionic Surfaces Resistant to Nonspecific Plasma Protein Fouling", *Langmuir*, 26, 3522-3530, (2010) (SCI)
- Roselin LS, Lin MS, Lin PH, Chang Y, and Chen WY*, "Recent trends and some applications of Isothermal Titration Calorimetry in Biotechnology", *Biotechnology Journal*, 5, 85-98, (2010) (SCI)
- Chang Y*, Chu WL, Chen WY, Zheng J, Liu L, Ruaan RC, and Higuchi A, "A systematic SPR study of human plasma protein adsorption behavior on the controlled surface packing of self-assembled poly(ethylene oxide) triblock copolymer surfaces", *Journal of Biomedical Materials Research: Part A*, 93, 400-408, (2010) (SCI)
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- Chang Y*, Chen WY, Yandi W, Shih YJ, Chu WL, Liu YL, Ruaan RC, and Higuchi A, "Dual-Thermoresponsive Phase Behavior of Blood Compatible Zwitterionic Copolymers Containing Nonionic Poly(N-isopropyl acrylamide)", *Biomacromolecules*, 10, 2092-2100, (2009) (SCI)
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