

# Curriculum Vitae



**Name:** Professor Ying-Chien Chung

**Department:** Department of Biological Science and Technology

**Institution:** China University of Science and Technology,

**Address:** No. 245, Sec 3 Yen-Chu Yuan Rd.

**City:** Taipei

**Post Code:** 115

**Country:** Taiwan

**E-mail Add:** ccchung0208@gmail.com

**Field of expertise:** Industrial Microbiology, Environmental Microbiology, Biosensor, Biological Engineering, Bioremediation, Microbial fuel cell, Fermentation, Cosmetic Microbiology

## Brief:

Dr. Ying-Chien Chung gained his PhD degree in engineering from the National Chiao-Tung University in 1997. Professor Chung has served as Professor in the Department of Biological Science and Technology, China University of Science and Technology. He has authored over 150 papers (100 in SCI journals and 50 in Proceedings) in the past years. Among his editorial positions, he has served as editorial board member for several international journals in the fields of biotechnology, microbiology and environment. Professor Chung has featured widely in green technology, environmental biotechnology, cosmetic biotechnology, biosensor, biological engineering, bioremediation, microbial fuel cell and fermentation. Professor Chung has been the recipient of numerous academic awards, grants, and fellowships, including the Who's Who in the World (2009-2015, 2017-2018), Who's

Who in Asia (2017), Scientific Award of Excellence for 2011, Man of the year 2012, Cambridge Certificate for Outstanding Scientific Achievement (2012, 2015) and Top 100 Scientists (2012, 2015) ; He completed 45 R&D projects funded by various Government and private agencies ; He was granted 23 patents for his invention and 6 technology transfers with the enterprises.

### Honor:

- Outstanding Research Award (2006 and 2007) by National Science Council
- Presided of National Science Council research project (2001~)
- The committee member of National Science Council research project primary review (2004, 2007, 2010, 2012, 2015)
- Conference speaker on “Development and application of biotechnology in agriculture” (2004)
- Conference speaker on “Application of microbiology in the waste recycling” (2005)
- Conference speaker on “The development of health, food and environmental protection in new era between Taiwan and Mainland China” (2005)
- Conference speaker on “The development of food, health and organic agriculture between Taiwan and Mainland China” (2006)
- Conference speaker on “Emission and mitigation of greenhouse gases in agricultural and industrial production” (2006)
- Conference host on “The development of food, health and environmental protection between Taiwan and Mainland China” (2007)
- Annual conference speaker of the ASM (2006-2012, 2016)
- Annual conference speaker of the FEMS (2013, 2015, 2017)
- Journal Reviewer (service for thirty kinds of Journals)
- Listed on Who's Who in the World (2009, 2010, 2012, 2013, 2014, 2015, 2017,

2018)

- Listed on Scientific Award of Excellence for 2011
- Listed on Man of the year 2012
- Won a honor from The CAMBRIDGE CERTIFICATE for Outstanding Scientific Achievement (2012, 2015)
- Listed on Top 100 Scientists-2012, 2015

**Publication:** 1996-Present

[1]Huang, Chihpin, **Chung, Y. C.**, and Liou, M. R. “Adsorption of Cu(II) and Ni(II) by pelletized biopolymer” *Journal of Hazardous Materials* **1996**, 45(2-3), 265-277.

[2]**Chung, Y. C.**, Huang, Chihpin, and Tseng, C. P. “Reduction of H<sub>2</sub>S/NH<sub>3</sub> production from pig feces by controlling environmental conditions” *Journal of Environmental Science and Health* **1996**, A31(1), 139-155.

[3]**Chung, Y. C.**, Huang, Chihpin, and Tseng, C. P. “Microbial oxidation of hydrogen sulfide with biofilter” *Journal of Environmental Science and Health* **1996**, A31(6), 1263-1278.

[4]**Chung, Y. C.**, Huang, Chihpin, and Hsu, B. M. “Hydrogen sulfide removal by immobilized autotrophic and heterotrophic bacteria in the bioreactors” *Biotechnology Techniques* **1996**, 10(8), 595-600.

[5]**Chung, Y. C.**, Huang, Chihpin, and Tseng, C. P. “Kinetics of hydrogen sulfide oxidation by immobilized autotrophic and heterotrophic bacteria in bioreactors” *Biotechnology Techniques* **1996**, 10(10), 743-748.

[6]**Chung, Y. C.**, Huang, Chihpin, and Tseng, C. P. “Operation optimization of *Thiobacillus thioparus* CH11 biofilter for hydrogen sulfide removal” *Journal of Biotechnology* **1996**, 52(1), 31-38.

[7]**Chung, Y. C.**, Huang, Chihpin, and Tseng, C. P. “Biodegradation of hydrogen

- sulfide by a laboratory-scale immobilized *Pseudomonas putida* CH11 biofilter” *Biotechnology Progress* **1996**, 12(6), 773-778.
- [8]**Chung, Y. C.**, Huang, Chihpin, and Tseng, C. P. “Removal of hydrogen sulphide by immobilized *Thiobacillus* sp. strain CH11 in a biofilter” *Journal of Chemical Technology and Biotechnology*. **1997**, 69(1), 58-62.
- [9]**Chung, Y. C.**, Huang, Chihpin, and Li, C. F. “Removal characteristics of H<sub>2</sub>S by *Thiobacillus novellus* CH3 biofilter in autotrophic and mixotrophic environments” *Journal of Environmental Science and Health* **1997**, A32(5), 1435-1450.
- [10]**Chung, Y. C.**, Huang, Chihpin, and Tseng, C. P. “Biotreatment of ammonia from air by an immobilized *Arthrobacter oxydans* CH8 biofilter” *Biotechnology Progress* **1997**, 13(6), 794-798.
- [11]**Chung, Y. C.**, Huang, Chihpin, Pan, J. R., and Tseng, C. P. “Advanced study of H<sub>2</sub>S removal by *Thiobacillus novellus* CH3 biofilter in autotrophic and mixotrophic environments” *Journal of Environmental Engineering-ASCE*. **1998**, 124(4), 362-367.
- [12]**Chung, Y. C.**, and Huang, Chihpin “Biotreatment of ammonia in air by an immobilized *Nitrosomonas europaea* biofilter” *Environmental Progress* **1998**, 17(2), 70-76.
- [13]Pan J. R., Huang, Chihpin, Chen, S., and **Chung, Y.C.**, “Evaluation of a modified chitosan biopolymer for coagulation of colloidal particles” *Colloids and Surfaces A* **1999**, 147(3), 359-364.
- [14]**Chung, Y. C.**, Huang, Chihpin, Tseng, C.P., and Pan J. R. “Biotreatment of H<sub>2</sub>S- and NH<sub>3</sub>-containing waste gases by co-immobilized cells biofilter” *Chemosphere* **2000**, 41(3), 329-336.
- [15]**Chung, Y. C.**, Huang, Chihpin, Liu, C. H. and Bai, Hsunling, “Biotreatment of H<sub>2</sub>S and NH<sub>3</sub>-containing waste gases by fluidized bed bioreactor” *Journal of the Air and Waste Management Association* **2001**, 51(2), 163-172.

- [16] **Chung, Y. C.\***, Liu, C. H, and Huang, Chihpin “Feasibility of fluidized-bed bioreactor for remediating waste gas containing H<sub>2</sub>S or NH<sub>3</sub>”, *Journal of Environmental Science and Health* **2001**, A36(4), 509-520 .
- [17] Hsu, B. M., Huang, Chihpin, Lai, Y. C., Tai, H. S. and **Chung, Y. C.** “Evaluation of immunomagnetic separation method for detection of *Giardia* at various reaction time and reaction volume” *Parasitology Research* **2001**, 87(6), 472-474.
- [18] **Chung, Y. C.**, Huang, Chihpin, and Tseng, C. P., “Biological elimination of H<sub>2</sub>S and NH<sub>3</sub> from wastegases by biofilter packed with immobilized heterotrophic bacteria” *Chemosphere* **2001**, 43(8), 1043-1050.
- [19] Chen, Y. M., **Chung, Y. C.\***, Wang, L. W., Chen, K. T. and Li, S. Y. “Antibacterial properties of chitosan in waterborne pathogen” *Journal of Environmental Science and Health* **2002**, A37(7), 1379-1390.
- [20] **Chung, Y. C.**, Ho, K. L., and Tseng, C. P. “H<sub>2</sub>S gas treatment by a chemical-biological process” *Journal of Environmental Science and Health* **2003**, B38(5), 663-679.
- [21] Chen, W. H. and **Chung, Y. C.** “Transient mass transfer and vortex bifurcation of an aerosol droplet in motion” *Aerosol Science and Technology*, **2003**, 37(1), 1-19.
- [22] Chou, H. N., **Chung, Y. C.**, and Chen, C. Y. “Evidence of paralytic shellfish poisoning toxin in milkfish in south Taiwan” *Food Additives & Contaminants*, **2003**, 20(6), 560-565.
- [23] **Chung, Y. C.\***, Wang, H. L., Chen, Y. M. and Li, S. L. “Effect of abiotic factors on the antibacterial activity of chitosan against waterborne pathogens”. *Bioresource technology*, **2003**, 88(3), 179-184.
- [24] **Chung, Y. C.**, Lin, Y. Y., and Tseng, C. P., Operational characteristics of effective removal of H<sub>2</sub>S and NH<sub>3</sub> waste gases by activated carbon biofilter”. *Journal of the Air & Waste Management Association*, **2004**, 54(4), 450-458.

- [25] **Chung, Y. C.**, Lin, Y. Y., and Tseng, C. P., Control of H<sub>2</sub>S waste gas emissions with a biological activated carbon filter.” *Journal of Chemical Technology and Biotechnology*, **2004**, 79(6), 570-577.
- [26] Chen, W. H., **Chung, Y. C.**, and Liu, J. L., Analysis on energy consumption and performance of reheating furnaces in a hot strip mill. *International Communications in Heat and Mass Transfer*, **2005**, 32(5), 695-706.
- [27] **Chung, Y. C.\***, Kuo, C. L., and Chen, C. C., Preparation and important functional properties of water-soluble chitosan produced through Maillard reaction. *Bioresource Technology*, **2005**, 96(13), 1473-1482.
- [28] **Chung, Y. C.**, Lin, Y. Y., and Tseng, C. P., Removal of high concentration of NH<sub>3</sub> and coexistent H<sub>2</sub>S by biological activated carbon (BAC) biotrickling filter. *Bioresource Technology*, **2005**, 96(16), 1812-1820.
- [29] **Chung, Y. C.\***, Li, Y. H., and Chen, C. C., Pollutant Removal from aquaculture wastewater using the biopolymer chitosan at different molecular weights. *Journal of Environmental Science and Health* **2005**, A40(9), 1775-1790.
- [30] **Chung, Y. C.**, Su, Y. P., Chen, C. C., Jia, G., Wang, H. I., Wu, J. C.G., and Lin, J. G. “Relationship between antibacterial activity of chitosan and surface characteristics of cell wall” *Acta Pharmacologica Sinica*, **2004**, 25(7), 932-936.
- [31] Chen, C. Y., and **Chung, Y. C.\***, Removal of phthalate esters from aqueous solution by chitosan bead. *Journal of Environmental Science and Health* **2006**, A41(2), 235-248.
- [32] Chen, C. C., Lu, C. S., and **Chung, Y. C.**, Photocatalytic degradation of ethyl violet in aqueous solution mediated by TiO<sub>2</sub> suspensions. *Journal of Photochemistry and Photobiology A: Chemistry*. **2006**, 181(1), 120-125.
- [33] Chen, C. C., and **Chung, Y. C.\***, Arsenic removal using a biopolymer chitosan sorbent. *Journal of Environmental Science and Health*. **2006**, A41(4), 645-658.

- [34] **Chung, Y. C.**, Ho, K. L., and Tseng, C. P., Treatment of high H<sub>2</sub>S concentrations by chemical absorption and biological oxidation process. *Environmental Engineering Science*. **2006**, 23(6), 942-953.
- [35] Chen, C. C., Lu, C. S., **Chung, Y. C.**, and Jan, J. L., UV light induced photodegradation of malachite green on TiO<sub>2</sub> nanoparticles. *Journal of Hazardous Materials*. **2007**, 141(3), 520-528.
- [36] **Chung, Y. C.\***, Improvement of aquaculture wastewater using chitosan of different degrees of deacetylation. *Environmental Technology*. **2006**, 27(11), 1199-1208.
- [37] Chen, C. Y., Chen, C. C., and **Chung, Y. C.\***, Removal of phthalate esters by  $\alpha$ -cyclodextrin-linked chitosan bead. *Bioresource Technology* **2007**, 98(13), 2578-2583.
- [38] Wu, L. C., Wei, C. B., Yang, S. S., Chang, T. H., Pan, H. W., and **Chung, Y. C.\*** Relationship between carbon dioxide/methane emissions and the water quality/sediment characteristics of Taiwan's main rivers. *Journal of the Air & Waste Management Association*, **2007**, 57(3), 319-327.
- [39] **Chung, Y. C.**, Ho, K. L., and Tseng, C. P., Two-stage biofilter for effective NH<sub>3</sub> removal from waste gases containing high concentrations of H<sub>2</sub>S. *Journal of the Air & Waste Management Association*, **2007**, 57(3), 337-347.
- [40] Chen, C. C., Liao, H. J., Cheng, C. Y., Yen, C. Y., and **Chung, Y. C.\***, Biodegradation of crystal violet by *Pseudomonas putida*. *Biotechnology Letters*, **2007**, 29(3), 391-396.
- [41] **Chung, Y. C.**, Tsai C.F., Li C.F., Preparation and characterization of water-soluble chitosan produced by Maillard reaction. *Fisheries Science*, **2006**, 72(5): 1096-1103.
- [42] Liao, H. J., **Chung, Y. C.**, and Tattiyakul, J., Biaxial extensional viscosity of sheeted noodle dough. *Cereal Chemistry*, **2007**, 84(5), 506-511.

- [43] **Chung, Y. C.**\*, and Chen, C. Y., Antibacterial characteristics and activity of acid-soluble chitosan. *Bioresource Technology*, 2008, 99 (8), 2806-2814
- [44] Ho, K. L., **Chung, Y. C.**, and Tseng, C. P., Continuous deodorization and bacterial community analysis of a biofilter treating nitrogen-containing gases from swine waste storage pits. *Bioresource Technology*, **2008**, 99 (8), 2757-2765
- [45] Ho, K. L., **Chung, Y. C.**, Lin, Y. H., and Tseng, C. P., Microbial populations analysis and field application of biofilter for the removal of volatile-sulfur compounds from swine wastewater treatment system. *Journal of Hazardous Materials*, **2008**, 152(2):580-588.
- [46] Chen C. Y., **Chung, Y. C.**\*, Removal of phthalate esters from aqueous solution by molybdate impregnated chitosan beads. *Environmental Engineering Science* **2007**, 24(6), 834-841.
- [47] Wu, L. C., Chang, T. H., **Chung, Y. C.**\*, Removal of Hydrogen Sulfide and Sulfur Dioxide by Carbons Impregnated with Triethylenediamine. *Journal of the Air & Waste Management Association*, **2007**, 57(12), 1461-1468.
- [48] **Chung, Y. C.**, Evaluation of gas removal and bacterial community diversity in a biofilter developed to treat composting exhaust gases. *Journal of Hazardous Materials*, **2007**, 144(1-2), 377-385.
- [49] **Chung, Y. C.**, The system and method of the wastegas treatment using biotechnology. Patent I225425, Taiwan, 2004.
- [50] **Chung, Y. C.**, The packing materials of biofilter to improve the efficiency of the wastegas treatment. Patent I261528, Taiwan, 2006.
- [51] **Chung, Y. C.**, Devices of combing photocatalysis and biotechnology for wastegas treatment. Patent M308108, Taiwan, 2007.
- [52] **Chung, Y. C.** and Chen C., Introduction to Biotechnology (book). Wun-ching Publisher, Taiwan, 2002.



- [53] **Chung, Y. C.**, Introduction to Industrial Hygiene (book). Wun-ching Publisher, Taiwan, 2003.
- [54] Chen, C. Y., Chang, T. H., Kuo, J. T., Chen, Y. F., **Chung, Y. C.\***, Characteristics of molybdate-impregnated chitosan beads (micb) in terms of arsenic removal from water and the application of a micb-packed column to remove arsenic from wastewater. *Bioresource technology*, **2008**, 99(16), 7487-7494.
- [55] Ho, K. L., **Chung, Y. C.**, Lin, Y. H., and Tseng, C. P., Biofiltration of trimethylamine, dimethylamine, and methylamine by immobilized *Paracoccus* sp. CP2 and *Arthrobacter* sp. CP1. *Chemosphere*, **2008**, 72(2), 250-256
- [56] **Chung, Y. C.\***, and Chen, C. Y., 2008, Antibacterial characteristics and activity of acid-soluble chitosan. *Bioresource technology*, 99(8), 2806-2814.
- [57] Ho, K. L., **Chung, Y. C.**, and Tseng, C. P., 2008, Continuous deodorization and bacterial community analysis of a biofilter treating nitrogen-containing gases from swine waste storage pits. *Bioresource technology*, 99(8), 2757-2765.
- [58] Ho, K. L., **Chung, Y. C.**, Lin, Y. H., and Tseng, C. P., 2008, Microbial populations analysis and field application of biofilter for the removal of volatile-sulfur compounds from swine wastewater treatment system. *Journal of Hazardous Materials*, 152(2):580-588.
- [59] Tsu-Hua Chang, Li-Chun Wu, Ya-Ting You, **Ying-Chien Chung\***. 2009, Removal of Ethylene and Bioaerosol by Chlorine Dioxide Using a Chemical Scrubbing System in a Fruit and Vegetable Storage Facility. *Journal of Environmental Science and Health, Part A*, 44(3), 258-264.
- [60] Li-Chun Wu and **Ying-Chien Chung\***, 2009, Replacement of Hazardous Chromium Impregnating Agent from Silver/Copper/Chromium-Impregnated Active Carbon Using Triethylenediamine to Remove Hydrogen Sulfide, Trichloromethane, Ammonia, and Sulfur Dioxide Gases. *Journal of the Air & Waste Management*

*Association*, 59(3), 258-265.

[61] **Ying-Chien Chung**, Chih-Yu Chen. 2009, Degradation of Di-(2-ethylhexyl) phthalate (DEHP) by TiO<sub>2</sub> photocatalysis. *Water, Air, & Soil Pollution*. 200, 191-198.

[62] Chih-Yu Chen, Pei-SsuWu, **Ying-Chien Chung\***. 2009, Coupled Biological and Photo-Fenton Pretreatment System for the Removal of di-(2-ethylhexyl) phthalate (DEHP) from Water. *Bioresource technology*, 100 (19), 4531-4534.

[63] **Ying-Chien Chung**, Chih-Yu Chen. 2009, Degradation of Azo Dye Reactive Violet 5 by TiO<sub>2</sub> Photocatalysis. *Environmental Chemistry Letters*. 7(4):347–352.

[64] **Ying-Chien Chung**, Chih-Yu Chen. 2009, Competitive Adsorption of a Phthalate Esters Mixture by Chitosan Bead and  $\alpha$ -cyclodextrin-linked Chitosan Bead. *Environmental Technology* 30(13), 1343-1350.

[65] Chih-Yu Chen, Jong-Tar Kuo, Chiu-Yu Cheng, Tzu-Yu Chen, I-Hsin Ho, **Ying-Chien Chung\***. 2009, Biological decolorization of dye solution containing malachite green by *Pandoraea pulmonicola* YC32 using a batch and continuous system. *Journal of Hazardous Materials*, 172, 1439-1445.

[66] Chiu-Yu Cheng, Hui-Ching Mei, Chia-Fen Tsao, Yi-Ru Liao, Hsiao-Han Huang, **Ying-Chien Chung\***, 2010, Bacterial Diversity of the bacterial community in a bioreactor during ammonia gas removal. *Bioresource technology*, 101(1), 434-437.

[67] Chiu-Yu Cheng, Jong-Tar Kuo, Yu-Cheng Lin, Yi-Ru Liao, **Ying-Chien Chung\***, 2010, Comparisons of *Vibrio fischeri*, *Photobacterium phosphoreum*, and Recombinant Luminescent *Escherichia coli* using as Fast BOD Measurement. *Journal of Environmental Science and Health, Part A*, 45(2), 233-238.

[68] Jong-Tar Kuo, Chiu-Yu Cheng, Hsiao-Han Huang, Chia-Fen Tsao, **Ying-Chien Chung\***, 2010, A Rapid Method for the Detection of Representative Coliforms in Water Samples: Polymerase Chain Reaction-Enzyme-linked Immunosorbent Assay (PCR-ELISA) *Journal of Industrial Microbiology and Biotechnology*, 37(3), 237-244.

- [69]**Ying-Chien Chung\***, Chiu-Yu Cheng, Tzu-Yu Chen, Jo-Shan Hsu, Chun-Chi Kui, 2010, Structure of the Bacterial Community in a Biofilter during Dimethyl Sulfide (DMS) Removal Processes. *Bioresource Technology* 101(18), 7165–7168.
- [70]Chih-Yu Chen, Li-Chun Wu, Hsuan-Yu Chen, **Ying-Chien Chung\***, 2010, Inactivation of *Staphylococcus aureus* and *Escherichia coli* in Water Using Photocatalysis with Fixed TiO<sub>2</sub>. *Water, Air, & Soil Pollution*. 212 (1-4), 231-238.
- [71]Chih-Yu Chen, **Ying-Chien Chung\***, 2011, Comparison of acid-soluble and water-soluble chitosan as coagulants in removing bentonite suspensions. *Water, Air, & Soil Pollution*. 217 (1-4), 603-610.
- [72]**Ying-Chien Chung**, Jan-Ying Yeh, Cheng-Fang Tsai, 2011, Antibacterial characteristics and activity of water-soluble chitosan derivatives prepared by Maillard reaction. *Molecules*, 16(10), 8504-8514
- [73]Li-Chun Wu, Cheng-Lang Kuo, **Ying-Chien Chung\***, 2011, Removal of high concentrations of NH<sub>3</sub> by a combined photoreactor and biotrickling filter system. *Journal of Environmental Science and Health, Part A*, 46:14, 1675-1682.
- [74]Chiing-Chang Chen, Chih-Yu Chen, Chiu-Yu Cheng, Pei-Yi Teng, **Ying-Chien Chung\***, 2011, Decolorization characteristics and mechanism of Victoria Blue R removal by *Acinetobacter calcoaceticus* YC210. *Journal of Hazardous Materials*, 196, 166-172.
- [75]Chih-Yu Chen, Hui-Ching Mei, Chiu-Yu Cheng, Jian-Hong Lin, **Ying-Chien Chung\***, 2012, Enhancing the Conversion of Organic Waste into Biofertilizer with Thermophilic Bacteria. *Environment Engineering Science*, 29(7), 726-730.
- [76]Micky Shien, Showhand Huang, **Ying-Chien Chung\***, 2011, Properties, applications and production of Coenzyme Q<sub>10</sub>. *The Journal of International Esthetic Science*, 8(3), 5-23.
- [77]Chih-Yu Chen, **Ying-Chien Chung\***, 2012, Antibacterial effect of water-soluble

chitosan on representative dental pathogens *Streptococcus mutans* and *Lactobacilli brevis*. *Journal of Applied Oral Science*, 20(5), 620-627.

[78]Chih-Yu Chen, Jong-Tar Kuo, **Ying-Chien Chung\*** 2013, Effect of matured compost as an inoculating agent on odor removal and maturation of vegetable and fruit waste compost. *Environmental Technology*, 34(3), 313-320.

[79]**Ying-Chien Chung**, Li-Chun Wu, Chih-Yu Chen, 2013, The removal of kaolinite suspensions by acid-soluble and water-soluble chitosans. *Environmental Technology* 34(3),283-288.

[80]Li-Chun Wu, Hsia-Wei Liu, Ching-Kuo Chen, Jong-Tar Kuo, Hsien-Kan Chou, **Ying-Chien Chung\***, 2013, The Effect on a New Sintered Calcium Sulfate Ceramic to Osteoprogenitor MC 3T3-E1. *Advanced Materials Research*, 677, 201-206.

[81]Chih-Yu Chen, Jong-Tar Kuo, Hui-An Yang, **Ying-Chien Chung\***, 2013, A coupled biological and photocatalysis pretreatment system for the removal of crystal violet from wastewater. *Chemosphere*, 92(6), 695-701.

[82]Kuo-Ling Ho, Wei-Chih Lin, **Ying-Chien Chung**, Yu-Pei Chen, Ching-Ping Tseng, 2013, Elimination of high concentration hydrogen sulfide and biogas purification by chemical-biological process. *Chemosphere*, 92(10), 1396-1401.

[83]**Chung, Y. C.**, Chang, Y. C., Chen, Y. P., Lin, W. C., Lin, H. H., Tseng, C. P., 2013, Analysis of microbial diversity and optimal conditions for enhanced biogas production from swine waste anaerobic digestion. *Journal of Renewable and Sustainable Energy*, 5(5), 053143, doi: 10.1063/1.4822256

[84]Chih-Yu Chen, Tzu-Yu Chen, **Ying-Chien Chung\***, 2014, A comparison of bioelectricity in microbial fuel cells (MFCs) with aerobic and anaerobic anodes. *Environmental Technology*, 35(3), 286–293.

[85]Hsieh, M. C. **Chung, Y. C.**\*, 2014, Measurement of biochemical oxygen demand from different wastewater samples using a mediator-less microbial fuel cell biosensor.

*Environmental Technology*, 35(17), 2204-2211.

[86]Chen, C. Y., Yen, S. H., **Chung, Y. C.**,\* 2014, Combination of photoreactor and packed bed bioreactor for the removal of ethyl violet from wastewater. *Chemosphere*, 117, 494-501.

[87]Chen, C. Y., Wu, C. Y., **Chung, Y. C.**,\* 2015, The coagulation characteristics of humic acid by using acid-soluble chitosan, water-soluble chitosan, and chitosan coagulant mixtures. *Environmental Technology*, 36(9), 1141-1146.

[88]Wu, L. C., Huang, C., Wang, H. H., **Chung, Y. C.**,\* 2014, High bioelectricity generation by microbial fuel cells (MFCs) inoculated *Enterococcus faecium* YC 201. *Advanced Materials Research*, 838-841, 2461-2465.

[89]Cheng, C. Y., Liang, F. Y., **Chung, Y. C.**,\* 2014, Electricity generation from crystal violet using a single-chambered microbial fuel cell inoculated *Aeromonas hydrophila* YC 57. *Advanced Materials Research*, 860-863, 466-471.

[90]Cheng, C. Y., Li, C. C., **Chung, Y. C.**,\* 2014, Continuous electricity generation and pollutant removal from swine wastewater using a single-chambered air-cathode microbial fuel cell. *Advanced Materials Research*, 953-954, 158-162.

[91]Kuo, J. T., Chen, C. Y., Wu, C. J., Chen, Y. T., Weng, N. C., **Chung, Y. C.**,\* 2015, Bioaerosol removal from outpatient clinic by vaporized water-soluble chitosan. *Advanced Materials Research*, 1073-1076, 770-774.

[92] Chih-Yu Chen, Guey-Horng Wang, I-Hung Tseng, **Ying-Chien Chung**\*, 2016, Analysis of bacterial diversity and efficiency of continuous removal of Victoria Blue R from wastewater by using packed-bed bioreactor. *Chemosphere* 145, 17-24.

[93] Min-Chi Hsieh, Chiu-Yu Cheng, Man-Hai Liu, **Ying-Chien Chung**\*, 2016, Effects of Operating Parameters on Measurements of Biochemical Oxygen Demand Using a Mediatorless Microbial Fuel Cell Biosensor. *Sensors*, 16(1), 35;

doi:10.3390/s16010035

- [94] Chih-Yu Chen, Chiu-Yu Cheng, Ching-Kuo Chen, Min-Chi Hsieh, Ssu-Ting Lin, Kuo-Ying Ho, Jo-Wei Li, Chia-Pei, Lin and **Ying-Chien Chung\***, 2016, Hexavalent Chromium removal and bioelectricity generation by *Ochrobactrum* sp. YC211 under different oxygen conditions. *Journal of Environmental Science and Health, Part A*, 51(6), 502-508.
- [95] Guey-Horng Wang, Chih-Yu Chen, Chia-Pei Lin, Chun-Ling Huang, Chia-hui Lin, Chiu-Yu Cheng, **Ying-Chien Chung\***, 2016, Tyrosinase inhibitory and antioxidant activities of three *Bifidobacterium bifidum*-fermented herb extracts. *Industrial Crops and Products* 89, 376–382.
- [96] Guey-Horng Wang, Chiu-Yu Cheng, Man-Hai Liu, Tzu-Yu Chen, Min-Chi Hsieh, **Ying-Chien Chung\***, 2016, Utility of *Ochrobactrum anthropi* YC152 in a Microbial Fuel Cell as an Early Warning Device for Hexavalent Chromium Determination. *Sensors* 16(8), 1272; doi:10.3390/s16081272.
- [97] Chia-Pei Lin, Min-Chi Hsieh, **Ying-Chien Chung\***, 2016, An Analysis of Bacterial Contamination in Cosmetic Products. *The Journal of International Esthetic Science*. 13:2, 59–74.
- [98] Guey-Horng Wang, Chih-Yu Chen, Teh-Hua Tsai, Ching-Kuo Chen, Chiu-Yu Cheng, Yi-Hsin Huang, Min-Chi Hsieh, **Ying-Chien Chung\***, 2017, Evaluation of tyrosinase inhibitory and antioxidant activities of *Angelica dahurica* root extracts for four different probiotic bacteria fermentations. *Journal of Bioscience and Bioengineering*, 123(6), 679-684.
- [99] Chih-Yu Chen, Guey-Horng Wang, Teh-Hua Tsai, Wan-Tzu Chen, **Ying-Chien Chung\***, 2017, Continuous bioelectricity generation through treatment of Victoria blue R: A novel microbial fuel cell operation. *Journal of Environmental Science and Health, Part A*, 52(9), 916-920.
- [100] Chih-Yu Chen, Teh-Hua Tsai, Pei-Ssu Wu, Shuo-En Tsao, Yu-Shan Huang,

**Ying-Chien Chung\***, 2018, Selection of electrogenic bacteria for microbial fuel cell in removing Victoria blue R from wastewater. *Journal of Environmental Science and Health, Part A*, 53(2), 108-115.

[101] Li-Chun Wu, Teh-Hua Tsai, Man-Hai Liu, Jui-Ling Kuo, Yung-Chu Chang and **Ying-Chien Chung\***, 2017, A Green Microbial Fuel Cell-Based Biosensor for In Situ Chromium (VI) Measurement in Electroplating Wastewater. *Sensors* 17(11), 2461. doi: 10.3390/s17112461.

[102] Chih-Yu Chen, Teh-Hua Tsai, Chih-Hao Chang, Chih-Fang Tseng, Shih-Yun Lin, and **Ying-Chien Chung\***, 2018, Airlift bioreactor system for simultaneous removal of hydrogen sulfide and ammonia from synthetic and actual waste gases. *Journal of Environmental Science and Health, Part A*, 53(8), 694-701.

[103] Jyh-Ming Hua, Pan-Pei Wen, **Ying-Chien Chung**, Man-Hai Liu. 2017, Reducing bitterness and increasing antioxidant activity of sesame by a novel ultrasound technique. *International Journal of Bioprocess & Biotechnological Advancements*, 3(1): 88-92.

[104] Guey-Horng Wang, Yi-Min Lin, Jong-Tar Kuo, Chia-Pei Lin, Chin-Feng Chang, Min-Chi Hsieh, Chiu-Yu Cheng, **Ying-Chien Chung\***, 2018, Comparison of Biofunctional Activity of *Asparagus cochinchinensis* (Lour.) Merr. Extract before and after Fermentation with *Aspergillus oryzae*. *Journal of Bioscience and Bioengineering* (accepted).