國立中正大學理學院
College of Science, National Chung Cheng University

Dr. Chien-Yen Chen

Professor

Department of Earth and Environmental Sciences

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Biography

Chien-Yen Chen has completed his PhD from Department of Engineering Science at University of Oxford in 2005. He worked as a postdoctoral associate at Earth Science Department in Oxford University in 2016. He was a visiting researcher at Engineering Department in University of Cambridge from 2011 to 2011. He now serves as the Dean of the College of Science at National Chung Cheng University in Taiwan and the president for Taiwan Chapter, International Medical Geology Association (IMGA). His research works focused on the bio-geo-chemical-microbiology which contained elemental biogeochemistry of water, sediment, soil and rock in surface and subsurface system such as groundwater, mud volcano, hot spring, lake and marine system and soil formation. His research of nanotechnoilogy is also inspired by natural architectures particularly by microorganisms and this green technology also contribute the pollution control of waste material and the synthesis of nanoparticles and application in environmental cleanup, and genetic population analyses with activity of different bacteria, fungi, algae and lichen.

Research interest:

Biomimicry and biomineralization

Biological synthesis of nanoparticles for environmental science

Groundwater for sustainable development

Environmental microbiology

Remediation for soil and groundwater

Selected publication:

1. Scarab (*Anomala expansa*)' AIP Advances **5**, 127227

2. Shashi B. Atla[a], Wun-Rong Lin[b], Ting-Che Chien[a], Min-Jen Tseng[c], Jwu-Ching Shu[e], Chien-Cheng Chen[d], **Chien-Yen Chen[a,f,*]** (2018, Jul). Fabrication of Fe3O4/ZnO magnetite core shell and its application in photocatalysis using sunlight. *Materials Chemistry and Physics*, 216,380-386.

3. How-Ji, ChenYi-Hsun, HuangChien-Cheng, ChenJyoti, Prakash Maity, **Chien-Yen Chen** (2018, May). Microbial Induced Calcium Carbonate Precipitation(MICP) Using Pig Urine as an Alternative to Industrial Urea. *Waste and BiomassValorization*, P1-9.

4. Chun-Mei Hsu [1], Yi-Hsun Huang [2], Vanita Roshan Nimje [3], Wen-Chien Lee [1], How-Ji Chen [2], Yi-Hao Kuo [2], Chung-Ho Huang [4], Chien-Cheng Chen [5] and **Chien-Yen Chen [6,7,*]** (2018, Apr). Comparative Study on the Sand Bioconsolidation through Calcium Carbonate Precipitation by Sporosarcina pasteurii and Bacillus subtilis. *Crystals*, 8, 189.

Chau, Lai-Kwan 周禮君
Professor
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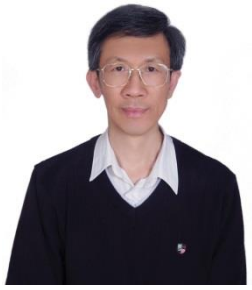

B.S., Chinese University of Hong Kong (1980)
M.S., University of Houston (1986)
Ph.D., Iowa State University (1990)
Assistant Research Scientist, Department of Chemistry, University of Arizona (1990-94)
Senior Fellow, Center for Bioengineering, University of Washington (1994-95)
Assoc. Professor, National Chung Cheng University (1995-2003)
Professor, National Chung Cheng University (2003-)

Research Interests

1. Nanoplasmonic biosensors
2. Raman-barcoded bead biosensors
3. Nanomaterials: sol-gel, nanoparticles, and molecular films

Selected Publications

- Yu, W.-N.; Manik, D. H. N.; Huang, C.-J.; Chau, L.-K. "Effect of elimination on antifouling and pH-responsive properties of the carboxybetaine materials." *Chem. Commun.* **2017**, *53*, 9143-9146.
- Tseng, Y.-T.; Lu, H.-Y.; Li, J.-R.; Tung, W.-J.; Chen, W.-H.; Chau, L.-K. "Facile functionalization of polymer surfaces in aqueous and polar organic solvents via 3-mercaptopropylsilatrane." *ACS Appl. Mater. Interfaces* **2016**, *8*, 34159-34169.
- Lin, H.-Y.; Huang, C.-H.; Hsieh, Liu, L.-H.; W.-H.; Lin, Y.-C.; Chu, C.-C.; Wang, S.-T.; Kuo, I-T.; Chau, L.-K.; Yang, C.-Y. "On-line SERS detection of single bacterium using novel SERS nanoprobes and a microfluidic dielectrophoresis device." *Small* **2014**, *10*, 4700-4710.
- Lin, H.-Y.; Huang, C.-H.; Lu, S.-H.; Kuo, I-T.; Chau, L.-K. "Direct detection of orchid viruses using nanorod-based fiber optic particle plasmon resonance immunosensor." *Biosens. Bioelectron.* **2014**, *51*, 371-378.
- Chang, T.-C.; Wu, C.-C.; Wang, S.-C.; Chau, L.-K.; Hsieh, W.-H. "Using a fiber optic particle plasmon resonance biosensor to determine kinetic constants of antigen-antibody binding reaction." *Anal. Chem.* **2013**, *85*, 245-250.
- Tay, L.-L.; Huang, P.-J.; Tanha, J.; Ryan, S.; Wu, X.; Hulse, J.; Chau, L.-K. "Silica encapsulated SERS nanoprobe conjugated to the bacteriophage tailspike protein for targeted detection of *Salmonella*." *Chem. Commun.* **2012**, *48*, 1024-1026.
- Chiang, C.-Y.; Hsieh, M.-L.; Huang, K.-W.; Chau, L.-K.; Chang, C.-M.; Lyu, S.-R. "Fiber-optic particle plasmon resonance sensor for detection of interleukin-1β in synovial fluids." *Biosens. Bioelectron.* **2010,** *26*, 1036-1042.
- Huang, P.-J.; Tay, L.-L.; Tanha, J.; Ryan, S.; Chau, L.-K. "Single-domain antibody-conjugated nanoaggregate embedded beads for targeted detection of pathogenic bacteria." *Chem. Eur. J.* **2009**, *15*, 9330-9334.
- Huang, P.-J.; Chau, L.-K.; Yang, T.-S.; Tay, L.-L.; Lin, T.-T. "Nanoaggregate-embedded beads as novel Raman labels for bio-detection." *Adv. Funct. Mater.* **2009**, *19*, 242-248.
- Chen, C.-D.; Cheng, S.-F.; Chau, L.-K.; Wang, C. R. C. "Sensing capability of the localized surface plasmon resonance of gold nanorods." *Biosens. Bioelectron.* **2007**, *22*, 926-932.
- Chau, L.-K.; Lin, Y.-F.; Cheng, S.-F.; Lin, T.-J. "Fiber-optic chemical and biochemical probes based on localized surface plasmon resonance." *Sens. Actuators B*, **2006**, *113*, 100-105.
- Cheng, S.-F.; Chau, L.-K. "Colloidal Gold Modified Optical Fiber for Chemical and Biochemical Sensing", *Anal. Chem.* **2003**, *75*, 16-21.
- Chau, L.-K., Chang, H.-T., Eds., *From Bioimaging to Biosensors - Noble Metal Nanoparticles in Biodetection*, Pan Stanford Publishing, Singapore, 2013.

Dr. Shau-Chun (Paul) Wang
Professor and Director
Department of Chemistry and Biochemistry; Center for Nano Bio-detection Technologies
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Biography

Prof. Shau-Chun Wang is currently a professor in the Department of Chemistry and Biochemistry, National Chung Cheng University, Chia-Yi, Taiwan, where he has served as Director of the Center for Nano Bio-detection Technologies since 2013. Prof. Wang obtained his B.S. degree in Chemistry and M.S. degree in Analytical Chemistry in National Taiwan University in 1991 and 1993, respectively. He was a junior instructor in National Taiwan University 1993 - 1994. He obtained his PhD in Analytical Chemistry in the University of Michigan in 1999. He worked in Pfizer Global Research and Development in U.S. as a post doctoral research fellow before joined the faculty of his department in 2001. Prof. Wang was a visiting scholar to the Department of Chemical and Biomolecular Engineering, the University of Notre Dame in the summers of 2001, 2002, and 2003. Prof. Wang was awarded Young Chemist Medal by Chemical Society located in Taipei in 2008. Prof. Wang's main research interests include electrokinetics fundamentals and their applications to develop novel microfluidic devices such as mixers, pumps, concentrators, and particle sorters for bioanalysis. Prof. Wang assumed a position in Feb. 2015 to July 2017 as the Deputy Dean for Research and Development of his university, in charge of technology promotion.

Research interest:

Lab-on-a-chip/ microfluidics technologies

Electrokinetics fundamentals

Biosensing technologies

Plasmonics detection technologies

Selected publication:

1. Shih-Rong Su, Yuan-Yu Chen, Kuan-Ying Li, Yu-Cheng Fang, Chih-Hsien Wang, Chiou-Ying Yang, Lai-Kwan Chau*, **Shau-Chun Wang*** (2019, Mar). Electrohydrodynamically enhanced drying droplets for concentration of Salmonella bacteria prior to their detections using antibody-functionalized SERS-reporter submicron beads. ***Sensors and Actuators B: Chemical***, 239, 9–16.
2. Yuan-Yu Chen, Yu-Cheng Fang, Shih-Yun Lin, Yi-Jyun Lin, Shih-Ying Yen, Chen-Han Huang, Chiou-Ying Yang*, Lai-Kwan Chau*, **Shau-Chun Wang*** (2017, Apr). Corona-induced micro-centrifugal flows for concentration of Neisseria and Salmonella bacteria prior to their quantitation using antibodyfunctionalized SERS-reporter nanobeads. *Microchimica Acta*, 184, 1021–1028.
3. Teh-Sheng Lai, Ting-Chou Chang, **Shau-Chun Wang*** (2017, Feb). Gold nanoparticle-based colorimetric methods to determine protein contents in artificial urine using membrane micro-concentrators and mobile phone camera. *Sensors and Actuators B: Chemical*, 239, 9–16.
4. Hsiao-Ping Chen, Chia-Chun Tsai, Hung-Meng Lee, **Shau-Chun Wang***, Hsueh-Chia Chang* (2013, Jul). Selective dynamic concentration of peptides at poles of cation-selective nanoporous granules. *Biomicrofluidics* , 7, 044110.
5. Chang, T.-C; Wu, C.-C.; **Wang, S.-C.***; Chau, L.-K.*; Hsieh, W.-H. (2013, Jan). Using A Fiber Optic Particle Plasmon Resonance Biosensor To Determine Kinetic Constants of Antigen–Antibody Binding Reaction. *Analytical Chemistry*, 85, 245–250.
6. Chuang, Y. ; Lee, C.-Y. ; Lu, S.-H. ; **Wang, S.-C.*** ; Chau, L.-K.* ; Hsieh, W.-H. (2010, Jan). Using ac Field Induced Electro-osmosis to Accelerate Biomolecular Binding in Fiber Optic Sensing Chips with Micro-Structures. *Analytical Chemistry*, 83, 1123 - 1127.

Wei-Ping Hu **E-mail:** chewph@ccu.edu.tw
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Education

National Taiwan University, Taipei, Taiwan, B.A. in Chemistry, 1988

University of Minnesota, Minneapolis, Minnesota, USA, Ph.D. in Chemistry, 1995

Professional Experience

The Scripps Research Institute, La Jolla, California, USA

Department of Molecular Biology

Research Associate: 1995-1997

National Chung Cheng University, Chia-Yi, Taiwan

Department of Chemistry and Biochemistry

Assistant Professor: 1997-2001

Associate Professor: 2001-2006

Professor: 2006-present

Chairman of the Science and Technology Course Committee, Center of General Education: 2013-2016

Director, Center of General Education: 2016-present

Teaching

General Chemistry, Mathematical Methods in Chemistry, Physical Chemistry, Computational Chemistry, Quantum Chemistry, From Atoms to Universe (General Education)

Areas of Research Expertise

Reaction Dynamics, Theoretical/Computational Chemistry, Quantum Chemistry, Noble-Gas Chemistry, Photochemistry, Molecular Modeling

Awards

Chinese Chemical Society Outstanding Young Scholar Award, 2005

National Chung Cheng University Outstanding Research Award, 2006

Selected Publication (2014-2018)

1. Po-Chun Liu and Wei-Ping Hu (2014), The MC-DFT Approach Including the SCS-MP2 Energies to the New Minnesota-Type Functionals, *Journal of Computational Chemistry*, **35**, 1560.
2. Yi-Shiue Lin, Shu-Yu Lin, Yuan T. Lee, Chien-Ming Tseng, Chi-Kung Ni, Chen-Lin Liu, Cheng-Cheng Tsai, Jien-Lian Chen, and Wei-Ping Hu (2014), Core Excitation, Specific Dissociation, and the Effect of the Size of Aromatic Molecules Connected to Oxygen: Phenyl Ether and 1,3-Diphenoxybenzene, *The Journal of Physical Chemistry A,* **118**, 7803.
3. Yi-Shiue Lin, Cheng-Cheng Tsai, Huei-Ru Lin, Tsung-Lin Hsieh, Jien-Lian Chen, Wei-Ping Hu*, Chi-Kung Ni*, and Chen-Lin Liu* (2015) Highly Selective Dissociation of a Peptide Bond Following Excitation of Core Electrons, *Journal of Physical Chemistry A*, **119**, 6195.
4. Ruiyang Xiao, Ian Zammit, Zongsu Wei, Wei-Ping Hu, Matthew MacLeod,and Richard Spinney (2015) Kinetics and Mechanism of the Oxidation of Cyclic Methylsiloxanes by Hydroxyl Radical in the Gas Phase: An Experimental and Theoretical Study, *Environmental Science & Technology* **49**, 13322.
5. Chia-Yu Peng, Jiun-Yi Shen, Yi-Ting Chen, Pei-Jhen Wu, Wen-Yi Hung, Wei-Ping Hu*, and Pi-Tai Chou* (2015) Optically Triggered Stepwise Double-Proton Transfer in an Intramolecular Proton Relay: A Case Study of 1,8-Dihydroxy-2-naphthaldehyde, *Journal of the American Chemical Society* **137**, 14349.
6. Cheng-Cheng Tsai, Po-Chun Liu, and Wei-Ping Hu* (2016) Theoretical Study on the Noble Gas Exchange Reactions of $Ng + HNBNg'^{+} \rightarrow Ng' + HNBNg^{+}$ (Ng, Ng ′ = He, Ne, Ar, Kr, and Xe), *Journal of Physical Chemistry B* **120**, 1780.
7. Yi-Ting Chen, Pei-Jhen Wu, Chia-Yu Peng, Jiun-Yi Shen, Cheng-Cheng Tsai, Wei-Ping Hu*, and Pi-Tai Chou* (2017) A study of the competitive multiple hydrogen bonding effect and its associated excited-state proton transfer tautomerism. *Phys. Chem. Chem. Phys.* **19**, 28641-28646.
8. Shuang Luo, Lingwei Gao, Zongsu Wei, Richard Spinney, Dionysios D. Dionysiou, Wei-Ping Hu, Liyuan Chai, Ruiyang Xiao* (2018) Kinetic and mechanistic aspects of hydroxyl radical–mediated degradation of naproxen and reaction intermediates. Water Research **137**, 233-241.

Biography of Prof. Chia Chen Hsu

Distinguished Professor
Department of Physics
National Chung Cheng University
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Education

Ph.D. Degree: Department of Physics, University of Arizona, USA, 1984/08- 1991/09

Master Degree: Institute of Optical Sciences, National Central University, Taiwan, 1982/09- 1984/06

B.S. Degree: Department of Physics, National Central University, Taiwan, 1977/09- 1981/06

Work Experience

2016/01-present, Distinguished Professor, Department of Physics,
National Chung Cheng University, Taiwan

2001/08 - present, Professor, Department of Physics, National Chung Cheng University, Taiwan

2015/09-2016/01, Invited Professor, Laboratoire de photonique quantique et moléculaire, École normale supérieure de Cachan, France

2006/05-2006/08, Visiting Professor, Department of Physics, University of British Columbia, Canada

1991/08-2001/07 Associate Professor, Department of Physics, National Chung Cheng University, Taiwan

Awards

2009, Outstanding research award, National Chung Cheng University

2016, Distinguished Professor, National Chung Cheng University

Research Interests

Nanophotonics, Nonlinear Optics, Organic Electronics, Polymer Optics

Selected publications

1. D. T. Vu, H. W. Chiu, R. Nababan, Q. M. Le, S. W. Kuo, L. K. Chau, C. C. Ting, H. C. Kan, and **C. C. Hsu*,** 2018 "Enhancing upconversion luminescence emission of rare earth nanophosphors in aqueous solution with thousands fold enhancement factor by low refractive index resonant waveguide grating" ACS Photonics, **5**, 3263.
2. A. T. Nguyen, W. C. Lai, B. D. To, D. D. Nguyen, Y. P. Hsieh, M. Hofmann, H. C. Kan, and **C. C. Hsu***, 2017 "Layer control of tubular graphene for corrosion inhibition of nickel wires" ACS Applied Materials and Interfaces, **9**, 22911.
3. J. H. Lin, H. Y. Liou, C. D. Wang, C. Y. Tseng, C. T. Lee, C. C. Ting, H. C. Kan*, and **C. C. Hsu***, 2015." Giant enhancement of upconversion fluorescence NaYF4:Yb^{3+},Tm^{3+} nanocrystals with resonant waveguide grating substrate", ACS Photonics, **2,** 530.
4. J. H. Lin, C. Y. Tseng, C. T. Lee, J. F. Young, H. C. Kan, **C. C. Hsu***, 2014. "Strong guided mode resonant local field enhanced visible harmonic generation in an azo-polymer resonant waveguide grating" Optics Express, **22**, 2790.
5. J. H. Lin, C. Y. Tseng, C. T. Lee, H. C. Kan, **C. C. Hsu*,** 2013. "Guided-mode resonance enhanced excitation and extraction of two-photon photoluminescence in a resonant waveguide grating "Optics Express, **21**, 24318.

Research projects executed in the past five years

Investigation of enhancement of light and material interactions based on subwavelength nano Structures (PI)	8/1/2012-7/31/2015	NSC, Taiwan
The study of enhancement of up conversion efficiency of rare earth luminescent materials (PI)	8/1/2014-7/31/2015	MOST, Taiwan
Flexible tubular graphene architectures: fabrication and physical properties (PI)	8/1/2015-7/31/2018	MOST, Taiwan
Resonant waveguide grating enabled high sensitivity wide-field optical microscopy (GRATEOM) (Taiwan-France joint project) (PI)	1/1/2018-10/31/2021	MOST, Taiwan
Photo-physics of multifunctional upconversion nanocomposites for nanoscale thermal sensing, biosensing and photothermal therapy applications (PI)	8/1/2018-7/31/2021	MOST, Taiwan

Dr. Michael Chan

Professor

Department of Biomedical Sciences

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Biography

Michael Chan has completed his PhD from Department of Anatomical and Cellular Pathogy at the Chinese University of Hong Kong in 2003. He worked as a postdoctoral researcher at the Department of Molecular Virology, Immunology and Molecular Genetics at the Ohio State University from 2004-2007. He now serves as Professor and Chair of the Department of Biomedical Sciences, at National Chung Cheng University in Taiwan. His research works focused on the role of aberrant signalling pathway in the epigenetic alteration of tumor suppressor genes (TSGs) and immunoevasion in gastric, ovarian and bladder cancer. Recently, he has also developed a mathematical model to predict how aberrant signalling confer epigenetic silencing of microRNA during ovarian carcinogenesis.

Research interest:

Cancer Immuno-Epigenomics.

Cancer Systems Biology

Bioinformatics

Selected publication:

1. Xiong L, Wu F, Wu Q, Xu L, Cheung OK, Kang W, Mok MT, Szeto LL, Lun CY, Lung RW, Zhang J, Yu KH, Lee SD, Huang G, Qang CM, Liu J, Yu Z, Yu DY, Chou JL, Huang WH, Feng B, Cheung YS, Lai PB, Tan P, Wong N, **Chan MW**, Huang TH, Yip KY, Cheng AS, To KF. Aberrant Enhancer Hypomethylation Drives Hepatic Carcinogenesis through Global Transcriptional Reprogramming. ***Nature Communications***, 2018 (accepted).
2. Cheng FH, Li HY, Hwang TW, Chen YC, Huang RL, Chang CB, Yang W, Lin RI, Lin CW, Chen GC, Mai SY, Lin JM, Chuang YM, Chou JL, Kuo LW, Li C, Cheng AS, Lai HC, Wu SF, Tsai JC*, and **Chan MW***. E2F6 Functions as a Competing Endogenous RNA, and Transcriptional Repressor, to Promote Ovarian Cancer Stemness. ***Cancer Science***, 2018 (on line).
3. Hsieh HY, Jou YC, Tung CL, Tsai YS, Wang YH, Chi CL, Lin RI, Hung SK, Chuang YM, Wu SF, Li C, Shen CH, **Chan MW***, Hsu CD. Epigenetic silencing of the dual-role signal mediator, ANGPTL4 in tumor tissues and its overexpression in the urothelial carcinoma microenvironment. ***Oncogene*** 37:673-686, 2018.
4. Hsieh HY, Shen CH, Lin RI, Feng YM, Huang SY, Wang YH, Wu SF, Hsu CD, and **Chan MW***. Cyproheptadine exhibits antitumor activity in urothelial carcinoma cells by targeting GSK3β to suppress mTOR and β-catenin signaling pathways. ***Cancer Letters*** 370:56-65, 2016.

Dr. Kuang-Tse Huang
Associate Professor
Department of Chemical Engineering
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Email: chmkth@ccu.edu.tw

Biography

Kuang-Tse Huang has completed his PhD from Department of Chemical Engineering at Texas A&M University in 1999. He worked as a postdoctoral associate at Department of Chemical Engineering in University of California, Los Angeles from 2000-2001. His research works focused on the mechanism of nitric oxide uptake by cells, hemoglobin-based blood substitutes and drug design for sepsis.

Research interest:

Nitric oxide uptake by erythrocytes and smooth muscle cells

Hemoglobin-based blood substitutes

Thermotolerant yeasts

Drug design for sepsis

Optica fiber biosensors

Selected publication:

1. Y.C. Chu, K.T. Huang, CRP/oxLDL co-incubates impair endothelial functions through CD32, LOX-1, and keratin 1 with dependence on their ratio, J Taiwan Inst Chem E 2016, 64:16-21 (SCI)
2. Y.C. Chu, K.T. Huang, Keratin-1 is a novel binding protein for C-reactive protein on the membrane of endothelial cells, J Taiwan Inst Chem E 2015, 55:7-11 (SCI)
3. K.T. Huang, T.J. Lin, M.H. Hsu, Determination of Cyclic GMP Concentration Using a Gold Nanoparticle-modified Optical Fiber, Biosens Bioelectron 2010, 26:11-15 (SCI)
4. Y.L. Lin and K.T. Huang, Comparison of Nitric Oxide-induced Oxidation of Recombinant Oxyhemoglobin Subunits Using a Competition Experiment. Nitric Oxide 2009, 21:44-51 (SCI)
5. Y.L. Lin and K.T. Huang, Hemoglobin conjugated with a Band 3 N-terminus derived peptide as an oxygen carrier. Artif Cells Blood Substit Immobil Biotechnol 2009, 37(1):32-40 (SCI)

Dr. Yuan-Yao Li
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Biography

1998 Ph.D. in Chemical Engineering, University of Bath, UK.
1998-2001 Postdoctoral Associate, University of Tokyo, Japan.
2001-2019 Assistant Professor, Associate Professor, Professor, CCU, Taiwan
2008-2019 Joint Appointment Professor, Graduate Institute of Opto-mechatronics Engineering.
2018-2019 Visiting Scholar, Department of Chemistry, Stanford University, USA.
2013-2018 Associate Editor, Journal of the Taiwan Institute of Chemical Engineers, Elsevier. (2017 Impact Factor: 3.849, 24/137, in Chemical Engineering).
SCI papers: 82, Hi-index: 32, total cited no.: 2675. Patents : 4 (US), 13 (Taiwan)

Yuan-Yao Li's research focuses on the synthesis of nanomaterials and their applications in energy, opto-electronics and gas sensing. The nanomaterials include a variety of carbon, metal and metal oxide nanomaterials such as graphene quantum dots, carbon nanotubes, metal–organic frameworks, metal-doped carbon fibers and urchin-like metal oxides. These materials were used for specific applications due to their unique characteristics in the fields of the energy, opto-electronics and so on. The Zn-air battery, lithium ion battery, proton exchange membrane fuel cell and supercapacitors are core research topics in the group.

Research interest:

Carbon nanomaterials: carbon nanotubes, carbon nanofibers, graphene, activated nanocarbon
Nanomaterials by nanotechnology: chemical vapor deposition, electrospining, electrospraying
Energy storage: Li ion battery, fuel cell, metal air battery, supercapacitor
Field emission application: field emission display, field emission lighting, field emission x-ray

Selected publication:

1. Youh M. J., Tseng C. L., Jhuang M. H., Chiu S. C., Huang L. H., Gong J. A., **Li Y. Y.**, 2015, Flat Panel Light Source with Lateral Gate Structure Based on SiC Nanowire Field Emitters, Scientific Reports, 5, 10976.
2. Hsieh Y.P., Hofmann M., Chang K.W., Jhu J.G., **Li Y.Y**., Chen K.Y., Yang C.C., Chang W.S., and Chen L.C., 2014, Complete corrosion inhibition through graphene defect passivation, ACS Nano, 8(1), 443-448.
3. Shih Y.W., Tseng G.W., Hsieh C.Y., **Li Y.Y.**, and Sakoda, A., 2014, Graphene quantum dots derived from platelet graphite nanofibers by liquid-phase exfoliation, Acta Materialia, 78,314-319.
4. Chen Y.S. , Hu C.C., **Li Y.Y.**, 2010, Effects of cathode impedance on the performances of power-oriented lithium ion batteries, Journal of Applied Electrochemistry, 40(2), 277-284.
5. Lin, K.M., Chang, K.H., Hu, C.C., **Li, Y.Y.**, 2009, Mesoporous RuO2 for the next generation supercapacitors with an ultrahigh power density, Electrochimica Acta , 54(19), 4574-4581.

Dr. Joyce Shuchun Yu
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Education

B.S. in Chemistry, Chung Yuan Christian University, 1985
Ph.D. in Chemistry, Purdue University, 1991
Postdoctoral, Lawrence Berkeley National Lab & University of California at Berkeley, 1991-1993
Associate Professor, National Chung Cheng University, 1993-

Research interest:

- Development of novel synthetic methods in particular with the use of organometallic compounds as a catalyst to explore new reactions.
- Investigation of catalytic synthetic methodology that reduces or eliminates the use or generation of hazardous substances in chemical reactions.
- Ligand designs and fundamental study of organometallic reactions.

Selected publication:

1. Chang, T.-C. and Yu, Shuchun Joyce*, **2015**, "Microwave-Assisted Catalytic Acetylation of Alcohols by Gold-Nanoparticle-Supported Gadolinium Complex." *Synth. Commun., 45*(5), 651–662. (SCI) NSC-99-2119-M-194-005. 5-year IF = 1.08.
2. Chou, C.-C.; Wu, K.-L.; Chi, Yun*; Hu, W.-P.; Yu, S. J.; Lee, G.-H.; Lin, C.-L.; Chou, P.-T., **2011**, "Ru(II) Sensitizers with Heteroleptic Tridentate Chelates for Dye-Sensitized Solar Cells" *Angew. Chem. Int. Ed. Engl., 50*, 2054-2058. (SCI) NSC-99-2119-M-194-005. 5-year IF = 12.5, citation index = 139.
3. Young, J.-N.; Chang, T.-C.; Tsai, S.-C.; Yang, L. and Yu, Shuchun Joyce, **2010**, "Preparation of a nonleaching, recoverable and recyclable palladium-complex catalyst for Heck coupling reactions by immobilization on Au nanoparticles" *Journal of Catalysis*, *272*, 253–261. (SCI) NSC-97-2113-M-194-010-MY2. 5-year IF = 6.92, citation index = 16.
4. Lin, Y.-Y; Tsai, S.-C. and Yu, Shuchun Joyce, **2008**, "Highly Efficient and Recyclable Au Nanoparticle-Supported Palladium(II) Interphase Catalysts and Microwave-Assisted Alkyne Cyclotrimerization Reactions in Ionic Liquids" *J. Org. Chem., 73*, 4920-4928. (SCI) NSC-94-2113-M-194-008. 5-year IF = 4.72, citation index = 30.
5. Lin, Y.-Y; Tsai, S.-C. and Yu, Shuchun Joyce, **2008** "Recyclable Au Nanoparticles Supported Palladium(II) Catalyst" *Synfacts*, *9*, 995 (Contributor: Y. Uozumi, Y. M. A. Yamada, C. K. Jin). The paper " **2008**, *J. Org. Chem., 73*, 4920-4928 " has been selected by the Editorial Board of ***SYNFACTS*** for its important insights as "*SYNFACT* of the month", and has been published in ***SYNFACTS*** issue 09/08, highlighting some aspects of the above mentioned *JOC* paper.

Dr. Ming-Ko Chiang
Associate Professor
Department of Biomedical Science
Website: http://admbio.ccu.edu.tw/new/teacher_cmk.html
Email: biomkc@ccu.edu.tw

Biography

Dr. Ming-Ko Chiang received his Ph.D. degree from the Program of Cell and Developmental Biology at Harvard Medical School. He worked as a postdoctoral research fellow at the Molecular and Cellular Biology Department at Harvard University. His research works focus on the molecular mechanisms that regulate the development and the functions of the pancreas. Defects in these mechanisms may contribute to diseases such as diabetes mellitus and pancreatic cancer. He is also working on identifying the components of various herbal extracts that can be used to treat type II diabetic patients.

Research interest:

Generic networks that regulate the pancreatic development

In vitro differentiation of stem cells into pancreatic β cells

Identifying components of herbal extracts that can be used to treat type II diabetes

Molecular pathogenesis of *Klebsiella pneumonia* infections in diabetes patients

Selected Publication:

1. M.C. Lu, Y.T. Chen, **M.K. Chiang**, Y.C. Wang, P.Y. Hsiao, Y.J. Huang, C.T. Lin, C.C. Cheng, C.L. Liang, Y.C. Lai, Colibactin Contributes to the Hypervirulence of pks+ K1 CC23 Klebsiella pneumoniae in Mouse Meningitis Infections, Front Cell Infect Microbiol, 7 (2017) 103.

2. S.Y. Chen, R.H. Teng, M. Wang, P.L. Chen, M.C. Lin, C.H. Shen, C.N. Chao, **M.K. Chiang**, C.Y. Fang, D. Chang, Rhodiolae Kirliowii Radix et Rhizoma and Crataegus pinnatifida Fructus Extracts Effectively Inhibit BK Virus and JC Virus Infection of Host Cells, Evid Based Complement Alternat Med, 2017 (2017) 5620867.

3. T.S. Chang, K.L. Wei, C.K. Lu, Y.H. Chen, Y.T. Cheng, S.Y. Tung, C.S. Wu, **M.K. Chiang***, Inhibition of CCAR1, a Coactivator of beta-Catenin, Suppresses the Proliferation and Migration of Gastric Cancer Cells, Int J Mol Sci, 18 (2017).

4. M.J. Tsai, H.F. Yang-Yen, **M.K. Chiang**, M.J. Wang, S.S. Wu, S.H. Chen, TCTP is essential for beta-cell proliferation and mass expansion during development and beta-cell adaptation in response to insulin resistance, Endocrinology, 155 (2014) 392-404.

5. C.K. Lu, Y.C. Lai, Y.F. Lin, H.R. Chen, **M.K. Chiang***, CCAR1 is required for Ngn3-mediated endocrine differentiation, Biochem Biophys Res Commun, 418 (2012) 307-312.

6. C.K. Lu, Y.C. Lai, H.R. Chen, **M.K. Chiang***, Rbms3, an RNA-binding protein, mediates the expression of Ptf1a by binding to its 3'UTR during mouse pancreas development, DNA and cell biology, 31 (2012) 1245-1251.

Dr. Cheng-I (Sophia) Lee

Associate Professor

Department of Biomedical Sciences

Website:

http://admbio.ccu.edu.tw/admbio_v4.2/index.php?content=lab/lab.lcy.content&content=lab/lab.lcy.contents

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Biography

Dr. Cheng-I Lee has completed her PhD from Yale University in USA and her postdoctoral study from Biomedical Research Center in University of Maryland in USA. She has strong interest in interdisciplinary studies. She started her independent research in National Chung Cheng University in 2007. She works on phytochemical treatment and photo-induced therapy on tumors, *Candida* species and misfolding of amyloid proteins.

Research interests:

Application of phytochemicals

Photodynamic therapy

Protein misfolding

Selected publication:

1. Wen-Hsuan Tsai, Kun-Hua Yu, Yi-Cheng Huang and **Cheng-I Lee***, "EGFR-targeted photodynamic therapy by curcumin-encapsulated chitosan/TPP nanoparticles" *International Journal of Nanomedicine* (2018) **13**, 903-916.
2. Yi-Hsuan Hsieh, Wen-Ching Chuang, Kun-Hua Yu, Cheng-Ping Jheng and **Cheng-I Lee***, "Sequential Photodynamic Therapy with Phthalocyanine Encapsulated Chitosan-Tripolyphosphate Nanoparticles and Flucytosine Treatment against *Candida tropicalis*" *Pharmaceutic*s (2019) **11**, 16.
3. Yi-Hsuan Hsieh, Jun-Hui Zhang, Wen-Ching Chuang, Kun-Hua Yu, Xian-Bin Huang, Yao-Chang Lee and **Cheng-I Lee***, "An *in Vitro* Study on Effect of Combined Treatment with Photodynamic and Chemical Therapies on *Candida albicans*" *International Journal of Molecular Science* (2018) **19**, 337.

Dr. Hau-Ren Chen
Associate Professor
Department of Biomedical Sciences
Website:
http://admbio.ccu.edu.tw/2011/eng/db_teachers/teacher_chr.pdf
Email: biohrc@ccu.edu.tw

Biography

Hau-Ren Chen has completed his PhD degree from Institute of Microbiology and Immunonology at National Yang-Ming University (Taiwan) in 1998. He worked as a postdoctoral fellow with Dr. Soo-Chen Cheng at the Institute of Molecular Biology (Academia Sinica, Taiwan) and with Dr. Paul Ahliquist at the Institute for Molecular Virology (University of Wisconsin at Madison, USA), respectively. He now is the faculty of Department of Biomedical Sciences, College of Science at National Chung Cheng University in Taiwan. His research works focused on two fields: the first one is for virology and infectious diseases, especially the positive strand RNA viruses dengue virus (DENV) and nervous necrosis virus (NNV). His lab identified a transcriptional factor TAF7 as the interacting protein of DENV core protein, and proved that interaction between TAF7 can facilitate the translocation of TAF7 from cytoplasm to nucleus and play an important role for viral replication. In addition, his lab also identifified RNF2 as the interacting protein of NNV capsid protein. However, the fucntion of this ubiquitin E3 ligase RNF2 remains elusive. The second one is for oral cancer-related researches, especially the identification of biomarkers of oral cancers and study on the carcinogenesis by betel quid. In addition, his lab also is looking for the natural products as potetial drugs for oral cancers therapy, inclulding the plants, chinese herbals and microalgae.

Research interest:

The replication and pathogenesis mechanisms of RNA viruses
The production of antibodies by novel linear array epitope (LAE) techenique
The identification of new biomarkers of oral cancers
The studies on the carcinogenesis by betel quid
The development of new drugs for oral cancers therapy

Selected publications in the past five years:

1. Chen, S.-F., Liu, G.-H., Chao, W.-Y., Shi, C.-S., Lin, C.-Y., Lim, Y.-P., Lu, C.-H., Lai, P.-Y. Hau-Ren **Chen, H.-R.**, and Lee, Y.-R. (2016, Apr). Piperlongumine suppresses proliferation of human oral squamous cell carcinoma through cell cycle arrest, apoptosis and senescence. *Int J Mol Sci.*, 2016 Apr 23;17(4). pii: E616.
2. Huang, C.-C., Chien, C.-Y., Chiang, W. -F., Lin, C.-S., Hour, T.-C., **Chen, H.-R.**, Wang, L.-F., Ko, J.-Y., Chang, C.-H. and Chen, J.Y.-F. (2015, Feb). p22phox confers resistance to cisplatin, by blocking its entry into the nucleus. *Oncotarget*, 6(6):4110-25.
3. Ji, W.-T., Chuang, Y.-C., Cheng, P.-H., Lee, C.-C., Chen, J.Y.-F, Yang, S.-R., Chen, J.-H., Wang, C.-J. and **Chen, H.-R.** (2014, Oct). Areca nut extracts exert different effects in oral cancer cells depending on serum concentration: A clue to the various oral alterations in betel quid chewers. *Toxicology Reports*. 2014; 1: 1087–1095.
4. Lai, P.-Y., Hsu,C.-T., Wang, S. -H., Lee, J.-C., Tseng, M.-J., Hwang, J., Ji, W.-T. and **Chen, H.-R**. (2014, Oct). Production of a neutralizing antibody against envelope protein of dengue virus type 2 using the linear array epitope technique. *Journal of General Virology*, 95(Pt 10):2155-65.
5.Ji, W.-T., **Chen, H.-R.**, Lin, C.-H., Lee, J.-W. and Lee, C.-C. (2014, Feb). Monocyte Chemotactic Protein 1 (MCP-1) Modulates Pro-Survival Signaling to Promote Progression of Head and Neck Squamous Cell Carcinoma. *PLoS One*, 9(2): e88952.

Dr. Jong-Yuh Cherng

Associate Professor

Department of Chemistry and Biochemistry

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Biography

Jong-Yuh Cherng has completed his Ph.D. from Faculty of Pharmacy at Utrecht University of the Netherlands in 1999. He now serves as the chairman of the supervisory board of Taiwan Academy of Anti-Aging and Regenerative Medicine (T3ARM) in Taiwan. In recent years, the aim of his lab is to study the design and synthesis of cationic polymers for the improvement of DNA transfection efficiency. Moreover, his research interests are also in the field of finding and characterizing potential drugs from natural products. That is, he found great activities of Chlorella on its ability of anti-oxidation and anti-atherosclerosis. In his first track of research (polymers), a series of cationic polymers with urethane backbone for a safe and high-expression method in DNA transfection is designed. These work was success to publish in Biomacromolecules, Journal of biomedical materials research, Bioconjugate chemistry, Journal of controlled release, Current pharmaceutical biotechnology, European Journal of pharmaceutical Sciences, International journal of pharmaceutics, Ultrasonics Sonochemistry, Biomaterials. In his second track (*Chlorella*), he has published the findings in Molecules, International journal of immunopathology & pharmacology, American Journal of Chinese Medicine and marine drugs.

Research interest:

Transfectin expression of polycations/DNA complexes in eukaryotes

Evaluation of pharmacological activities of potential drugs

Development of novel drug delivery systems

Selected publication:

1. Shih Mei-Fen; Pan Kuang-Hung; Liu Chia-Chyuan; Shen Chia-Rui; Cherng Jong Yuh* Treatment of β-thujaplicin counteracts di(2-ethylhexyl)phthalate (DEHP)-exposed vascular smooth muscle activation, inflammation and atherosclerosis progression. *Regulatory toxicology and pharmacology* 92, 333-337 **(2018)**
2. Wu Ching-Yuan; Cherng Jong-Yuh; Yang Yao-Hsu; Lin Chun-Liang; Kuan Feng-Che; Lin Yin-Yin; Lin Yu-Shih; Shu Li-Hsin; Cheng Yu-Ching; Liu Hung Te; Lu Ming-Chu; Lung Jthau; Chen Pau-Chung; Lin Hui Kuan; Lee Kuan-Der; Tsai Ying-Huang. Danshen improves survival of patients with advanced lung cancer and targeting the relationship between macrophages and lung cancer cells. *Oncotarget* 8, 90925-90947. **(2017)**
3. Cherng, J. Y.* ; Lin, C. H. Covalent attachment of an influenza hemagglutinin-derived peptide to urethane-based cationic polymers affects their transfection efficiency in DNA delivery and their course in cell entry. *Reactive & functional polymers* 98, 9-16. **(2016)**
4. Vaidyanathan S.; Cherng, J. Y.*; Sun A.C.; Chen C.Y.* Bacteria-Templated NiO Nanoparticles/Microstructure for an Enzymeless Glucose Sensor. *International journal of molecular sciences* 17, 1104. **(2016)**
5. Hung, W. C.; Cherng, J. Y.* Self-assembly of PEG-oligonucleotide-based matrices and lipoplexes as DNase-responsive delivery systems. *Polymer* 67, 148-156. **(2015)**
6. Hung, W. C.; Cherng, J. Y.* Maleimide-functionalized PEI600 grafted polyurethane: synthesis, nano-complex formation with DNA and thiol-conjugation of the complexes for dual DNA transfection. *Polymers* 7, 2131-2145. **(2015)**
7. Shih M.F.; Pan K.H.; Cherng, J. Y.* Possible mechanisms of di(2-ethylhexyl) phthalate-induced MMP-2 and MMP-9 expression in A7r5 rat vascular smooth muscle cells. *International journal of molecular sciences* 16, 28800-28811. **(2015)**
8. Lyu S. R.*; Chiang C. Y.; Cherng, J. Y.; Huang Y. C.; Li C. H.; Lin Y. J.; Chang C. M.; Chau L. K.* Role of medial abrasion phenomenon in the pathogenesis of knee osteoarthritis. *Medical Hypotheses* 85, 207-211. **(2015)**

Hung-Chun Chao 趙鴻椿

Gender: Male
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Website: http://www.eq.ccu.edu.tw/english/faculty/teacher_HCC.php

FORMATION

1996-2001 **B. Sc.** Department of Earth Sciences, National Cheng Kung University, Tainan, Taiwan, R. O. C.
Research work: Time series analysis of major element compositions in mud volcano fluids, Juo-shui-tan, Chiayi, Taiwan
Supervisor: Chen-Feng You (Department of Earth Sciences, NCKU)

2001-2003 **M. Sc.** Department of Earth Sciences, National Cheng Kung University, Tainan, Taiwan, R. O. C.
Research work: Chemical, isotopic compositions and fluxes of mud volcano gases.
Supervisor: Chen-Feng You (Department of Earth Sciences, NCKU)
Commmittee: H. R. Yang, K. S. Ho and C. F. You

2003-2010 **Ph. D.** Department of Earth Sciences, National Cheng Kung University, Tainan, Taiwan, R. O. C.
Research work: Chemical compositions, boron and chlorine isotopes of marine and mud volcano pore waters and the implication to gas hydrate studies.
Supervisor: Chen-Feng You (Department of Earth Sciences, NCKU)
Commmittee: S. Luo, D. C. Li, T. Y. Ho, K. S. Ho and C. F. You

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APPOINTMENTS

2010.09-2011.02 Post-Doctoral Fellow at Department of Earth Sciences, National Cheng Kung University.

2011.03-2011.12 Post-Doctoral Fellow at Department of Geosciences, National Taiwan University.

2012.01-2013.05 Post-Doctoral Fellow at Department of Geography, National Changhua University of Education.

2013.06-2014.02 Post-Doctoral Fellow at Institute of Marine Geology and Chemistry, National Sun Yat-sen University.

2014.03-2014.07 Post-Doctoral Fellow at Earth Dynamic System Research Center, National Cheng Kung University

2014.08-present Assistant Professor at Department of Earth and Environmental Sciences, National Chung Cheng University

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RESEARCH INTERESTS

- Chemical composition and evolution of marine pore waters.
- Boron, chlorine, strontium and lithium isotopes in natural surface waters.
- The origin of mud volcano fluids.
- Burial age dating by cosmogenic nuclides.
- Gas hydrate in marine sediment.
- The source of the soil and soil evolution.
- Stable Sr isotopes and their linkage with weathering and soil evolution.
- New analytical technique for Cl isotope by TIMS.
- The origin of hot springs (hydrothermal fluids).
- Implication of D and O isotopes in air moisture vs precipitation.

TECHNICAL SKILL

Mass Spectrometry:

Thermal Ionization (Triton TI, Thermo Fisher Scentific)

Inductively Coupled Plasma (Element II, Thermo Fisher Scentific)

Multi-Collector Inductively Coupled Plasma (Neptune, Thermo Fisher Scentific)

Other Isotope Analyzer:

H_2O Isotope analyzer (Picarro L-1102i)

Other Analytical Instruments:

ICP-OES (iCAP 6500, Thermo Fisher Scentific; 5100, Agilent)

Gas Chromatography (Varian CP-4900)

Atomic Absorption Spectrometry (Perkin-Elmer AAnalyst 300, Graphite and Flame)

UV-Visible spectrophotometer (Varian Cary WinUV)

Liquid Ion Chromatography (Alltech; ICS-3000, Dionex)

Separation Chemistry:

Dowex® 50W-X8 (Cl isotope)

Micro-sublimission (B isotope)

Sr spec® (Sr isotope)

AG 50W-X8 (Li isotopes)

THESIS

Chao, Hung-Chun (2003) Chemical Compositions of the Mud Volcano Gases on land in Taiwan: Possible Impact on Global Methane Sources. M. Sc. Thesis, Department of Earth Sciences, National Cheng Kung University.

Chao, Hung-Chun (2010) Geochemical Characteristics of Pore Fluids Separated from Marine Sediments and Mud Volcanoes on Land Southwestern Taiwan. Ph.D. Thesis, National Cheng Kung University.

JOURNALS (SCI)

Chao, H. C., and You, C. F. (2006) Distribution of B, Cl and Their Isotopes in Pore Waters Separated from Gas Hydrate Potential Areas, Offshore Southwestern Taiwan. *Terrestrial, Atmospheric and Oceanic Sciences (TAO)* **17**(4), 961-979.

Chao, H. C., You, C. F., Sun, C. H. (2010) Gases in Taiwan Mud Volcanoes: Chemical Composition, Methane Carbon Isotopes, and Gas Fluxes. A*pplied geochemistry* **25**(3), 428-436, doi:doi:10.1016/j.apgeochem.2009.12.009.

Chao, H. C., You, C. F., Wang, B. S., Chung, C. H. and Huang, K. F. (2011) Boron isotopic composition of mud volcano fluids: Implications for fluid migration in shallow subduction zones. *Earth and Planetary Science Letters*, **305**(1), 32-44, doi:10.1016/j.epsl.2011.02.033.

Chao, H. C., You, C. F., Liu, H. C., Chung, H. C. (2013) The origin and migration of mud volcano fluids in Taiwan: Evidence from hydrogen, oxygen, and strontium isotopic compositions. *Geochimica et Cosmochimica Acta*, **114**, 29-51, doi:dx.doi.org/10.1016/j.gca.2013.03.035.

Chao, H. C., You, C. F., Liu, H. C., Chung, H. C. (2015) Evidence for stable Sr isotope fractionation by silicate weathering in a small sedimentary watershed in southwestern Taiwan. *Geochimica et Cosmochimica Acta*, **165**, 324-341.

Chang, C. T., You, C. F.*, Aggarwal, S. K., Chung, C. H., **Chao, H. C.**, Liu, H. C. (2016) Boron and strontium isotope ratios and major/trace elements concentrations in tea leaves at four major tea growing gardens in Taiwan. Environmental Geochemistry and Health, DOI:10.1007/ s10653-015-9757-1.

JOURNALS (OTHER)

Chao, H. C., and You, C. F. (2010) Chemical compositions of the mud volcano gases on land in Taiwan and fluxes of greenhouse gases. *Journal of National Taiwan Museum*, **63**(2), 1-23. (in Chinese with English abstract)

Dr. Liang-Chi Wang

Assistant Professor

Department of Earth and Environmental Sciences

Website: http://www.eq.ccu.edu.tw/english/faculty/professor/teacher_21.html

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Biography

Liang-Chi Wang has completed his PhD from Institute of Ecology and Evolutionary Biology at National Taiwan University in 2011. He worked as a postdoctoral researcher at Department of Palynology and Climatic Dynamics in University of Göttingen, Germany from 2013 to 2014. He was a curator at National Taiwan Museum from 2014 to 2018. Now, he is the assistant professor of the Department of Earth and Environmental Sciences at National Chung Cheng University in Taiwan since 2018. His research works focused on the Quaternary geology which contained palynology, paeolimnology, and climatic dynamic. His research interests focused on lake development and climate changes of the lowland and high altitude lakes in East Asia. Major expertise are multivariate statistics, microfossil analysis (pollen, diatom), whilst geochemistry and stable isotope were also experienced..

Research interest:

Palynology and Climatic Dynamics

Paleoenvironmental Research

Electron Microscope

Selected publication:

1. Wang, L.-C.*, Y.-P. Chang, H.-C. Li, S.-H. Chen, J.-T. Wu, T.-Q. Lee, L.-J. Shiau (2018, Aug). Revealing the vegetation, fire and human activities in the lowland of eastern Taiwan during Late Holocene. Quaternary International. (in press).
2. Wang, L.-C. , H. Behling, S.-J. Kao, H.-C. Li, K. Selvaraj, M.-L. Hsieh, Y.-P. Chang* (2015). Late Holocene environment of subalpine northeastern Taiwan from pollen and diatom analysis of lake sediments. Journal of Asian Earth Sciences, 114(3), 447-456.
3. Wang, L.-C.*, H. Behling, T.-Q. Lee, H.-C. Li, C.-A. Huh, L.-J. Shiau, Y.-P. Chang* (2014). Late Holocene environmental reconstructions and their implications on flood events, typhoon, and agriculture activities in NE Taiwan. Climate of the Past, 10, 1857-1869.
4. Wang, L.-C., H. Behling, Y.-M. Chen, M.-S. Huang, C.-T. A. Chen, J.-Y. Lou, Y.-P. Chang*, H.-C. Li.* (2014). Holocene monsoonal climate changes tracked by multiproxy approach from a lacustrine sediment core of the subalpine Retread Lake in Taiwan. Quaternary International.
5. Wang, L.-C., H. Behling, T.-Q. Lee, C.-A. Huh, L.-J. Shiau, H.-C. Li, S.-H. Chen*, J.-T. Wu*. (2013). Increased precipitation during the Little Ice Age in northern Taiwan inferred from diatoms and geochemistry in a sediment core from a subalpine lake.. Journal of Paleolimnology, 49: 619-631.
6. Wang, L.-C., J.-T. Wu*, T.-Q. Lee, P.-F. Lee, S.-H. Chen* (2011). Climate changes inferred from integrated multi-site pollen data in northern Taiwan. Journal of Asia Earth Sciences, 1164-1170.
7. Wang, L.-C., T.-Q. Lee, S.-H. Chen, C.-L. Chou, J.-T. Wu* (2010). Diatom flora of Liyu Lake, Hualien, eastern Taiwan. Taiwania, 228-242.

Application of Admission