

Year	No of Graduate	Name of Graduate	Advisor/Institute	Current Job Position / Country	Publications
2006	1	Dr. R.T. Guo (CBMB-2003)	Dr. Andrew H.-J. Wang 王惠鈞博士 中研院生化所	Postdoctoral Fellow in Scripps Research Institute/USA	<ol style="list-style-type: none"> 1. Guo, R. T., Cao, R., Ko, T. P., Chang, T.H., Jeng, W.Y., Kuo, C.J., Chen, C. K.-M., Hudock, M. P., Zhang, Y., Song, Y., Liang, P.H., Oldfield, E., and Wang, A.H.-J. (2007) Bisphosphonates target multiple sites in both cis- and trans-prenyltransferases. <i>Proc. Natl. Acad. Sci. USA</i> 104, 10022-10027. 2. Chang, T. H., Guo, R. T., Ko, T. P., Wang, A. H.-J., and Liang, P. H. (2006) Crystal structure of type-III geranylgeranyl pyrophosphate synthase from <i>Saccharomyces cerevisiae</i> and the mechanism of product chain length determination. <i>J. Biol. Chem.</i> 281, 14991-15000. 3. Sun, H. Y., Ko, T.P., Kuo, C.J., Guo, R. T., Chou, C. C., Liang, P.H., and Wang, A.H.-J. (2005) Homodimeric hexaprenyl pyrophosphate synthase from the thermoacidophilic crenarchaeon <i>Sulfolobus solfataricus</i> displays asymmetric subunit structures. <i>J. Bacteriol.</i> 187, 8137-8148. 4. Guo, R. T., Ko, T. P., Chen, A.P.-C. Kuo, C. J., Wang, A. H. -J., and Liang, P.H. (2005) Crystal structures of undecaprenyl pyrophosphate synthase in complex with magnesium, isopentenyl pyrophosphate and farnesyl thiopyrophosphate: Roles of the metal ion and conserved residues in catalysis. <i>J. Biol. Chem.</i> 280, 20762-20774. 5. Chu, H. M*., Guo, R. T., Lin T. W., Chou, C. C., Shr, H. L., Lai, H.L., Tang, T. Y., Cheng, K. J. Selinger, B. L., and Wang, A. H.-j. (2004) Structures of <i>Selenomonas ruminantium</i> Phytase in complex with persulfated phytate: DSP phytase fold and

					<p>mechanism for sequential substrate hydrolysis. <i>Structure</i>. 12,2015-2024.</p> <p>6. Guo, R. T., Kuo, C. J., Ko, T. P., Chou, C. C., Liang, P. H., and Wang, A. H.-J. (2004) A molecular ruler for chain elongation catalyzed by octaprenyl pyrophosphate synthase and its structure-based engineering to produce unprecedented long-chain trans-prenyl products. <i>Biochemistry</i>. 43, 7678-7876.</p> <p>7. Guo, R. T., Kuo, C. J., Ko, T. P., Chou, C. C., Ko, T. P., Shr, H. L., Liang, P. H., and Wang, A. H.-J. (2004) Crystal structure of octaprenyl pyrophosphate synthase from hyperthermophilic <i>Thermotoga maritime</i> and mechanism of product chain length determination. <i>J. Biol. Chem.</i> 279, 4903-4912.</p> <p>8. Guo, R. T., Ko, T. P., Chou, C. C., Shr, H.L., Chu, H. M., Tsai, Y.H., Liang, P.H., and Wang, A. H.-J. (2003) Preliminary X-ray diffraction analysis of octaprenyl pyrophosphate synthase crystals from <i>Thermotoga maritime</i> and <i>Escherichia Coli</i>. <i>Acta Crystallogr. Sect. D Biol. Crystallogr.</i> 59,2265-2268.</p>
2007	4	Dr. C.Y. Ou (MCB-2003)	Dr. Cheng-Ting Chien 簡正鼎博士 中研院分生所	Postdoctoral Fellow in the Neuroscience Institute at Stanford University/USA	<p>1. Ou CY, Wang CH, Jiang J, Chien CT. (2007) Suppression of Hedgehog signaling by Cul3 ligases in proliferation control of retinal precursors. <i>Dev Biol.</i> 1;308(1):106-19.</p> <p>2. Zhang Q, Zhang L, Wang B, Ou CY, Chien CT, Jiang J. (2006) A hedgehog-induced BTB protein modulates hedgehog signaling by degrading ci/Gli transcription factor. <i>Dev Cell.</i> 10(6):719-29.</p> <p>3. Ou CY, Pi H, Chien CT. (2003) Control of protein degradation by E3 ubiquitin ligases in <i>Drosophila</i> eye development. <i>Trends Genet.</i> 19(7):382-9.</p>
		Dr. C.C.	Dr. Shang-Cheng Hung	Postdoctoral Fellow	<p>1. Wang CC, Kulkarni SS, Lee JC, Luo SY, Hung SC. (2008) Regioselective one-pot protection of</p>

		<p>Wang (CBMB-2002)</p>	<p>洪上程博士 清華化學所、中 研院基因體中心 合聘</p>	<p>at Swiss Federal Insitute of Technology Zurich/ Switzerland</p>	<p>glucose. <i>Nat Protoc.</i>, 3(1):97-113.</p> <p>2. Wang CC, Lee JC, Luo SY, Kulkarni SS, Huang YW, Lee CC, Chang KL, Hung SC. (2007) Regioselective one-pot protection of carbohydrates. <i>Nature</i>, 446(7138):896-9.</p> <p>3. Lee JC, Chang SW, Liao CC, Chi FC, Chen CS, Wen YS, Wang CC, Kulkarni SS, Puranik R, Liu YH, Hung SC. (2004) From D-glucose to biologically potent L-hexose derivatives: synthesis of alpha-L-iduronidase fluorogenic detector and the disaccharide moieties of bleomycin A2 and heparan sulfate. <i>Chemistry</i>, 10(2):399-415</p>
		<p>Dr. S. Sabu (MST-2002)</p>	<p>Dr. Huan-Cheng Chang 張煥正博士 中研院原分所</p>	<p>Bruker Daltonics Inc. Taiwan Branch/ Taiwan</p>	<p>1. Y.Cai, W.-P.Peng, S.-J.Kuo, S.Sabu, C.-C.Han and H.-C.Chang (2002) Optical detection and charge state analysis of MALDI-generated particles with molecular weights larger than 5MDa. <i>Analytical Chemistry</i>, 74(17):4434-4440.</p> <p>2. Xianglei Kong, I.-A. Ann Tsai, Sahadevan Sabu, Chau-Chung Han, Yuan T. Lee, Huan-Cheng Chang, Shih –Yu Tu, Andy H. Kung , Chih-Che Wu (2004) Progressive Stabilization of Zwitterionic Structures in H+(Ser)2-8 Studied by Infrared Multiphoton Dissociation Spectroscopy. <i>Angew. Chem. Int. Ed.</i> 45,1 – 6</p> <p>3. Wei-Hao Chen, Sheng-Chung Lee, Sahadevan Sabu, Huei-Chun Fang, Shu-Chien Chung, Chau-Chung Han, and Huan-Cheng Chang (2006) Solid-Phase Extraction and Elution on Diamond (SPEED):A Fast and General Platform for proteome analysis with Mass Spectrometry. <i>Anal. Chem.</i>,78, 4228-4234.</p> <p>4. Wang YS, Sabu S, Wei SC, Josh Kao CM, Kong X, Liao SC, Han CC, Chang HC, Tu SY, Kung AH, Zhang JZ. (2006) Dissociation</p>

					<p>of heme from gaseous myoglobin ions studied by infrared multiphoton dissociation spectroscopy and Fourier-transform ion cyclotron resonance mass spectrometry. <i>J. Chem. Phys.</i> 125 (13)133310.</p> <p>5. Sabu S, Yang FC, Wang YS, Chen WH, Chou MI, Chang HC, Han CC. (2007) Peptide analysis: Solid phase extraction-elution on diamond combined with atmospheric pressure matrix-assisted laser desorption/ionization-Fourier transform ion cyclotron resonance mass spectrometry. <i>Anal. Biochem.</i> 367, 190-200.</p> <p>6. Sahadevan Sabu, Wei-Hao Chen, Fu-Chia Yang, Hua-Wen Lin, Huan-Cheng Chang and Chau-Chung Han Fragmentation of Protonated Pseudomolecular Ions of Metyhlated L-arginines in the Gas Phase. (to be submitted to JACS)</p> <p>7. Sahadevan Sabu, Wei-Hao Chen, Chau-Chung Han, Huan-Cheng Chang. A Fast and robust mass spectrometry method of finding the relative abundance of N^G, N^G asymmetric dimethylarginine and N^G: N^G symmetric dimethylarginine from human urine without chromatography. (Manuscript in preparation)</p> <p>8. Xianglei Kong, L. C. Lora Huang, Sabu Sahadevan, Chau-Chung Han, and Huan-Cheng Chang (Accelerated MALDI mass analysis with functionalized diamond nanocrystals and prestructured membrane filters. (Manuscript in preparation)</p>
		<p>Dr. Sajal Biring (MST-2003)</p>	<p>Dr. Yuh-Lin Wang 王玉麟博士</p>	<p>Silicon Touch Technolgy Inc., Taiwan (www.siti.</p>	<p>1. Sajal Biring, Kun-Tong Tsai, Ujjal Kumar Sur, and Yuh-Lin Wang, "Electrochemically replicated smooth aluminum foils for anodic alumina nanochannel arrays", <i>Nanotechnology</i></p>

			中研院原分所	COM. tw) as a material engineer	<p>19, 015304 (2008).</p> <p>2. Shi-Wei Chu, Szu-Wu Chen, Tsung-Han Tsai, Tzu-Ming Liu, Shr-Bin Wu, Sajal Biring, Juen-Kai Wang, Yuh-Lin Wang, Kevin Chen, Bai-Lin Lin, Chi-Kuang Sun, "Resonance-enhanced functional third harmonic optical microscopy", Proceedings of SPIE 5323, 306-313 (2004)</p>
2008	4	Dr. Chen-Lin Liu (MST-2004)	Dr. Chi-Kung Ni 倪其焜博士 中研院原分所	Postdoctoral Fellow in UC Berkeley/USA	<ol style="list-style-type: none"> 1. Chen-Lin Liu, H.C. Hsu, Y.C. Hsu, and C.K. Ni, Energy transfer of highly vibrationally excited naphthalene III: Rotation effects, <i>J. Chem. Phys.</i> (submitted) 2. Chen-Lin Liu, H.C. Hsu, Y.C. Hsu, and C.K. Ni (2008), Energy transfer of highly vibrationally excited naphthalene II: Vibrational energy dependence, isotope and mass effects, <i>J. Chem. Phys.</i> 128(16):164316. 3. Chen-Lin Liu, H.C. Hsu, Y.C. Hsu, and C.K. Ni, (2007) Energy transfer of highly vibrationally excited naphthalene I: Translational collision energy dependence, <i>J. Chem Phys.</i> 127, 104311 4. Chen-Lin Liu, H.C. J.J. Lyu, and C.K. Ni, (2006) Energy transfer of highly vibrationally excited azulene. III. Collisions between azulene and argon, <i>J. Chem. Phys.</i> 125, 204309 5. V. Bernshtein, I. Oref, Chen-Lin Liu, H.C. Hsu, C.K. Ni, (2006) Experimental and computational investigation of energy transfer between azulene and krypton, <i>Chem. Phys. Letters</i>, 429,317 6. H.C. Hsu, Chen-Lin Liu, J.J. Lyu, and C.K. Ni, (2006) Energy transfer of highly vibrationally excited azulene. II. Photodissociation of azulene-Kr van der Waals clusters at 248 and 266nm, <i>J. Chem. Phys.</i> 124, 134303 7. Chen-Lin Liu, H.C. Hsu, J.J. Lyu, and C.K. Ni, (2006) Energy transfer of highly vibrationally excited azulene: Collisions between azulene

				<p>and Krypton, <i>J. Chem. Phys.</i> 124, 54302</p> <p>8. H.C. Hsu, J.J. Lyu, Chen-Lin Liu, C.L. Huang, and C.K. Ni, (2006) Generation and characterization of highly vibrationally excited molecular beam, <i>J. Chem. Phys.</i>, 124, 54301</p> <p>9. C.L. Huang, Chen-Lin Liu, C.K. Ni, and Jon T. Hougen, (2005) Electronic spectra of molecules with two C_{3v} internal roots: Torsional analysis of the $\tilde{A}^1A_{u-x}^1A_g$ LIF spectrum of biacetyl, <i>Journal of Molecular Spectroscopy</i> 233, 122.</p> <p>10. Chen-Lin Liu, H.C. Hsu, J. J. Lyu, and C.K. Ni, (2005) Supercollisions and energy transfer of highly vibrationally excited molecules, <i>J. Chem. Phys.</i> 123, 131102 (Communication)</p> <p>11. Chen-Lin Liu, H.C. Hsu, and C.K. Ni, (2005) Time-sliced ion imaging study of I_2 and I_2^+ photolysis at 532 nm, <i>Phys. Chem. Chem. Phys.</i>, 7, 2151-55. (Cover Article)</p> <p>12. Liu CL, Hsu HC, Ni CK (2005) Supercollisions and energy transfer of highly vibrationally excited molecules. <i>J Chem Phys.</i>, 123(13):131102. (Inside front cover)</p> <p>13. C.L. Huang, H.H. Liu, Chen-Lin Liu, A.H. Kung, and C.K. Ni, (2002) Rationally resolved laser-induced fluorescence of biacetyl in $\tilde{A}^1A_{u-x}^1A_g$, <i>J. Chem. Phys.</i> 117, 5/65.</p>	
		<p>Dr. Chi-Hung Lin (CBMB-2002)</p>	<p>Dr. Kay Hooi Hkoo 邱繼輝博士 中研院生化所</p>	<p>Postdoc in IBC Academia Sinica/Taiwan</p>	<p>1. Lin CH, Lin CW, Khoo KH. (2008) Proteomic identification of specific glycosyltransferases functionally implicated for the biosynthesis of a targeted glyco-epitope. <i>Proteomics</i>, 8(3):475-83.</p> <p>2. Fan YY, Yu SY, Ito H, Kameyama A, Sato T, Lin CH, Yu LC, Narimatsu H, Khoo KH. (2008) Identification of further elongation and branching of dimeric type 1 chain on lactosylceramides from colonic adenocarcinoma by tandem mass spectrometry sequencing</p>

					analyses. <i>J Biol Chem.</i> 283(24):16455-68.
		<p>Dr. Po-Chiao Lin (CBMB-2005)</p>	<p>Dr. Chun-Cheng Lin 林俊成博士 清華化學所</p>	<p>Postdoc. In Dept. of Chemistry, NTHU (till the end of 2008)</p> <p>Postdoc. In Max Planck Institutes (Germany) (from Jan. 2009)</p>	<p>1. P.-H. Chou, S.-H. Chen, H.-K. Liao, P.-C. Lin, G.-R. Her, Alan C.-Y. Lai, J.-H. Chen, C. -C. Lin,*, Y. -J. Chen, (2005) "Nanoprobe-Based Affinity Mass Spectrometry for Selected Protein Profiling in Human Plasma" <i>Anal. Chem.</i> 77, 5990-5997. (IF:5.287)</p> <p>2. P.-C. Lin, P.-H. Chou, S. -H. Chen, H.-K. Liao, K. -Y. Wang, Y.-J. Chen, C.-C. Lin, (2006) Ethylene Glycol-Protected Magnetic Nanoparticles for a Multiplexed Immunoassay in Human Plasma" <i>Small</i>, , 2, 485-489. (IF:6.408)</p> <p>3. P.-C. Lin, S. -H. Ueng, M. -C. Tseng, J.-L. Ko, K.-T. Huang, S.-C. Yu, A. K. Adak, Y.-J. Chen , C.-C. Lin (2006) Site -Specific Protein Modification Through Cui-Catalyzed 1,2,3-Triazole Formation and Its Implementation in protein Microarray Fabrication. <i>Angew. Chem. Int. Ed.</i>,45,4286-4290. (IF:10.031)</p> <p>4. P.-C. Lin, M.-C. Tseng, A.-K. Su, Y.-J. Chen, C.-C. Lin (2007) "Functionalized Magnetic Nanoparticles for Small- Molecule Isolation, Identification, and Quantitation" <i>Anal. Chem.</i> 79, 3401-3408.(IF:5.287)</p> <p>5. P.-C. Lin, S.-H. Ueng, S.-C. Yu, M.-D. Jan, A. K. Adak, C.-C. Yu, C.C.Lin,* "Surface Modification of Magnetic Nanoparticle Via Cu(I)-Catalyzed Alkyne-azide [2+3] Cycloaddition " <i>Org. Lett.</i> 2007, 9,2131-2134. (IF:4.802)</p> <p>6. Y.-J. Chen, P.-C.Lin, C.-C. Lin, S.-H. Chen, P.-H. Chou, H.K. Liao (2007), <i>Mass spectrometric analysis of ligand conjugated magnetic nanoparticles, U.S. Appl. Publ.</i> US20 070054407</p> <p>7. T.-C. Chiu, L.-S. Huang, P.-C.Lin, Y.-C. Chen, Y.-J. Chen, C. -C. Lin, H.-T. Chang (2007),</p>

					<p>„Nanomaterial Based Affinity Matrix-assisted Laser Desorption/ Ionization Mass Spectrometry for Biomolecules and Pathogenic Bacteria.“ <i>Recent patents on Nanotechnology</i>, 1, 99-111.</p> <p>8. L.-S. Huang, Y.-Y. Chien, S.-H. Chen, P.-C.Lin, K.-Y. Wang, P.-H. Chou, C.-C. Lin, and Y.-J. Chen (2007) “<i>Nanoprobe-based Affinity Mass Spectrometry for Cancer Marker Protein Profiling</i>” in <i>Nanomaterials for Cancer Diagnosis</i>; Eds:Challa S. S. R. wiley-VCH,</p> <p>9. P.-C.Lin, A. Kumar Adak, and C.-C.Lin* (2008) “<i>Application of glycol-nanomaterial in the biological system</i>”in <i>The Molecular Immunology of Complex Carbohydrates-3</i>; Eds: Albert M. Wu, Kluwer Academia/ Plenum Publishers,</p> <p>10. P.-C.Lin, C.-C. Yu, C.-C. Lin (2008) “Site-specific immobilization of CMP-sialic acid synthetase on magnetic nanoparticles and its use in the synthesis of CMP-sialic acid.”<i>Chem. Commun. (Camb)</i>, (11):1308-10. (authors equal contribution)</p> <p>11. P.-H. Shih, J.-Y. Shiu, P.-C.Lin, C.-C.Lin, T. Veres, P. Chen (2008) “On chip sorting of bacterial cells using sugar-encapsulated magnetic nanoparticles” <i>J.Appl. Phys.</i> 103.07A316.</p> <p>12. P.-C.Lin, S.-H. Chen, M.-L. Chen, A. Kumar Adak, Y.J. Chen* and C.-C. Lin*(2008) “<i>site-specific Immobilization of Antibody on the Magnetic Nanoparticle via Boronate Formation</i>”ACS Nano (submitted).</p> <p>13. K.-Y. Wang, S.-A. Chuang, P.-C.Lin, S.-H. Chen, L.-S. Huang, C.-C. Lin, and Y.-J. Chen*(2008) Multiplexed immunoassay: quantitation and profiling of serum biomarkers using magnetic nanoprobe and MALDI-TOF MS. <i>Anal. Chem.</i> in press.</p>
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		<p>Dr. Chin-Kai Lin (MST-2004)</p>	<p>Dr. Huan-Cheng Chang 張煥正博士 中研院原分所</p>	<p>Postdoctoral fellow in Research Center for Applied Sciences, Academia Sinica / Taiwan</p>	<ol style="list-style-type: none"> 1. Chih-Che Wu, Chih-Kai Lin, Huan-Cheng Chang, Jyh-Chiang Jiang, Jer-Lai Kuo, and Michael L. Klein (2005) "Protonated clathrate cages enclosing neutral water molecules: $H^+(H_2O)_{21}$ and $H^+(H_2O)_{28}$", <i>J. Chem. Phys.</i> 122, 074315 2. Chih-Kai Lin, Chih-Che Wu, Yi-Sheng Wang, Yuan T. Lee, Huan-Cheng Chang, Jer-Lai Kuo, and Michael L. Klein (2005) "Vibrational predissociation spectra and hydrogen-bond topologies of $H^+(H_2)$", <i>Phys. Chem. Chem. Phys.</i> 7, 938. 3. Kuo Kan Liang, Chih-Kai Lin, Huan-Cheng Chang, Michitoshi Hayashi, and Sheng Hsien Lin (2006) "Theoretical treatments of ultrafast electron transfer from adsorbed dye molecule to semiconductor nanocrystalline surface", <i>J. Chem. Phys.</i> 125, 154706. 4. Kuo Kan Liang, Chih-Kai Lin, Huan-Cheng Chang, Albert A. Villayes, Michitoshi Hayashi, and Sheng Hsien Lin, "Calculation of the vibrationally non-relaxed photo-induced electron transfer rate constant in dye-sensitized solar cells", <i>Phys. Chem. Chem. Phys.</i> 9, 853. 5. Chih-Kai Lin, Huan-Cheng Chang, and S.H. Lin (2007) "Symmetric double-well potential model and its application to vibronic spectra: Studies of inversion modes of ammonia and nitrogen-vacancy defect centers in diamond", <i>J. Phys. Chem. A</i> 111, 9347. 6. Chih-Kai Lin, Yi-Hsieh Wang, Huan-Cheng Chang, M. Hayashi, and S.H. Lin (2008) "One- and two-photon absorption properties of diamond nitrogen-vacancy defect centers: A theoretical study. <i>J. Chem. Phys.</i> (accepted)