胡安仁(Anren Hu)  
慈濟大學 醫學檢驗生物技術學系暨醫學生物技術研究所 副教授  
我們在和敬樓四樓：辦公室B406, 實驗室B402   
 Tel：886-3856-5301 ext.2334 (Off) / 2335 (Lab) Email:[**anren@mail.tcu.edu.tw**](http://mailto:anren@mail.tcu.edu.tw/)

歡迎 研究生 & 專題生 加入

生物質譜研究室 (Biomass Spectrometry Lab.)   
  
1. Research：主要是以生物質譜技術應用於醫學檢驗、微生物蛋白體及毒藥物檢測研究。   
質譜儀為醫藥、生化、環境及有機各領域極為重要的分析儀器，本研究室以開發與質譜儀相關之技術和方法為主要的研究方向，希望藉由這些研究而提昇上述各領域的發展。   
研究室主要從事生物及有機質譜相關的應用研究，包括：結合各式分離技術之質譜應用研究、質譜儀於各式微生物的鑑定及抗菌技術開發、癌症及其他疾病相關蛋白質或其他生物指標的建立，藥毒物的分析、質譜相關的分析方法開發等。   
研究室精密儀器大致上可以分為兩大類，包括微量分離的儀器設備與質譜儀。   
一、質譜儀：「液相層析質譜儀 (LC/MS)」兩台、「氣相層析質譜儀(GC/MS)」四台與「基質輔助雷射脫附游離飛行時間質譜儀 (MALDI-TOF MS)」。   
二、分離儀器：「毛細管電泳儀 (CE)」兩台、「液相層析儀 (HPLC)」兩台、膠體電泳儀、PCR、「吹捕熱脫附(Purge & Trap Thermo-desorption)」及「頂空採樣儀 （Headspace）裝置」各壹台。   
  
目前研究方向：   
a. 應用現有生物質譜技術：如微灑游離質譜法（Nanospray Ionization Mass Spectrometry, nano-ESI/MS）及基質輔助雷射脫附游離質譜法（Matrix-Assisted Laser Desorption Ionization, MALDI/MS)) 結合各式生化及醫學分析技術於微生物物種（包括噬菌體、細菌）的快速鑑定。   
b. 利用蛋白體學快速診斷病源體及其抗藥性（Rapid Diagnosis for Superbug by Shotgun Proteomics）。   
c. 開發新質譜技術快速偵測毒藥物（Rapid Screening of Poisons by Mass Spectrometry）：毒品、河豚毒、藻毒等。   
d. 以生物質譜分析技術 (Biological Mass Spectrometry) 結合層析及電泳技術來搜尋與各式癌症及感染細胞有關的生物指標，計畫主要以質譜結合蛋白質體資料庫，快速搜尋異常細胞內所含的特殊脂質、胜肽或蛋白質，進而建立篩檢疾病的方法。   
  
2. Education：   
• National Dong Hwa University, Ph.D., 2007.01 Analytical Chemistry   
• National Chung Kung University, M.S., 1991.06 Analytical Chemistry   
• Chung Yuan University, B.S., 1987.07 Chemical Engineer   
  
3. Employments：   
�P 經濟部標準檢驗局 國家標準技術委員會 委員 2011.07-2013.06   
�P 國立東華大學 化學系 兼任副教授 2009.08-2010.07   
�P 慈濟大學 濫用藥物檢驗中心 主任 2007.08-2009.07   
�P 慈濟大學 運動員禁藥檢驗中心分析組組長 1996.09-1998.04   
�P 加拿大 Quebec University NDCC (國家藥檢實驗室) 研究 1996 & 1997   
�P 工研院 工業安全衛生技術發展中心 副研究員 1991.07-1992.09   
�P 『勞工衛生管理師』安瑞勞師衛證字第2506號 1992.02   
  
4. Rewards and honors   
�P 慈濟大學100學年度研究論文成績卓越獎   
�P 慈濟大學99學年度優良導師   
�P 慈濟大學99學年度”普通化學”課程教材上網獎   
�P 慈濟大學99學年度研究論文成績卓越獎   
�P 慈濟大學96學年度研究論文成績卓越獎   
�P 慈濟大學95學年度研究論文成績卓越獎   
�P 慈濟大學94學年度研究論文成績卓越獎   
  
5. Members：   
�P 中國化學學會會員（1989年起）   
�P 中國地質學會會員（1993年起）   
�P 美國質譜學會會員（1997年起）   
�P 台灣環境分析學會會員（1997年起）   
�P 台灣質譜學會創始會員（2003年起）   
�P 台灣層析暨分離科技學會（2008年起）   
�P 台灣蛋白體學會（2009年起）   
  
6. Special techniques：   
• 生物及有機質譜分析   
• 分離技術   
• 工業分析服務   
  
7. Research Interests：   
�P Microbial Proteomics (微生物蛋白體學)   
�P Antimicrobial Studies (抗菌研究)   
�P Toxicological Analysis (毒藥物分析)

8. Publications：

1. Chang, Chih-Jui; Lin, Jyun-Han; Chang, Kai-Chih; Lai, Meng-Jiun; Rohini, Rondla; Hu, Anren\* (2013, Feb). Diagnosis of β-Lactam Resistance in Acinetobacter baumannii Using Shotgun Proteomics and LC-Nano-Electrospray Ionization Ion Trap Mass Spectrometry . Analytical Chemistry, 85, 2802–2808. (SCI, IF=5.856, 3/73, ANALYTICAL CHEMISTRY). NSC 98-2113-M-320-002-MY2. 本人為通訊作者.
2. Liang-Yu Chen\*, Anren Hu, Chih-Jui Chang\* (2013, Feb). The Degradation Mechanism of Toxic Atractyloside in Herbal Medicines by Decoction . Molecules, 18, 2018-2028. (SCI, IF=2.386, 26/56, ORGANIC CHEMISTRY). NSC 100-2113-M-130-001-MY2.
3. Chien-Hua Chu, Chi-Ming Chiu, Anren Hu, , Hui-Chung Wu, Shu-Ping Ye, Kuo-Chieh Ho\*, And Liang-Yu Chen\* (2012, Jun). Toxicity Attenuation of Atractyloside in Traditional Chinese Medicinal Herbs after Hydrothermal Processing. Botanical Studies, 53, 459-465 . (SCI, IF=1.103, 108/190, PLANT SCIENCES). NSC 100-2113-M-130-001-MY2.
4. Puchakayala Muralidhar Reddy, Rondla Rohini, Edulla Ravi Krishna, Anren Hu\*, Vadde Ravinder\* (2012, Mar). Synthesis, Spectral and Antibacterial Studies of Copper(II) Tetraaza Macrocyclic Complexes. International Journal of Molecular Sciences, 13, 4982-4992. (SCI, IF 2.598, 45/154, MULTIDISCIPLINARY CHEMISTRY). NSC 100-2113-M-130-001-MY2. 本人為通訊作者.
5. Rondla Rohini, P. Muralidhar Reddy, Kanne Shanker, Kodipelli Kanthaiah, Vadde Ravinder\* and Anren Hu\* (2011, Jul). Synthesis of Mono, Bis-2-(2-Arylideneaminophenyl)Indole Azomethines as Potential Antimicrobial Agents. Archives of Pharmacal Research, 34, 1077-1084. (SCI, IF 1.592, 38/59, MEDICINAL CHEMISTRY). NSC 98-2113-M-320-002-MY2. 本人為通訊作者.
6. Geeta Budige, P. Muralidhar Reddy, K. Shobha Rani, Anren Hu\* And Vadde Ravinder\* (2011, Feb). Synthesis, Characterization and Biological Evaluation of Mononuclear Co(II), Ni(II), Cu(II) and Pd(II) Complexes with New N2O2 Schiff base Ligands. Chemical & Pharmaceutical Bulletin , 59, 166-171.. (SCI, IF 1.592, 64/154, MULTIDISCIPLINARY CHEMISTRY). NSC 98-2113-M-320-002-MY2. 本人為通訊作者.
7. Kai-Chih Chang; Nien-Tsung Lin; Anren Hu; Yu-Shan Lin; Li-Kuang Chen; Meng-Jiun Lai\* (2011, Jan). Genomic Analysis of Bacteriophage <phi>AB1, a <phi>KMV-like Virus Infecting Multidrug-Resistant Acinetobacter baumannii. Genomics, 97,249-255. (SCI, IF=3.019, 48/158, BIOTECHNOLOGY & APPLIED MICROBIOLOGY). NSC 98-2113-M-320-002-MY2.
8. Meng-Jiun Lai, Nien-Tsung Lin, Anren Hu, Po-Chi Soo, Li-Kuang Chen, Long-Hui Chen and Kai-Chih Chang\* (2011, Jan). Antibacterial activity of Acinetobacter baumannii phage ϕAB2 endolysin (LysAB2) against both Gram-positive and Gram-negative bacteria. Applied Microbiology and Biotechnology , 90, 529-539. (SCI, IF 3.425, 39/158, OTECHNOLOGY & APPLIED MICROBIOLOGY). NSC 98-2113-M-320-002-MY2.
9. Rondla Rohini, P. Muralidhar Reddy, Kanne Shanker, Anren Hu\*, Vadde Ravinder\* (2010, Mar). Antimicrobial study of newly synthesized 6-substituted indolo[1,2-c]quinazolines. European Journal of Medicinal Chemistry, 45, 1200-1205.. (SCI, IF 3.346, 13/59, MEDICINAL CHEMISTRY). NSC 98-2113-M-320-002-MY2. 本人為通訊作者.
10. Rondla Rohini, P. Muralidhar Reddy, Kanne Shanker, Anren Hu\*, Vadde Ravinder\* (2010, Feb). Synthesis of Some New Mono, Bis-Indolo[1,2-c]quinazolines-Evaluation of their Antimicrobial Studies. Journal of The Brazilian Chemical Society, 21, 897-904. (SCI, IF 1.434, 73/154, MULTIDISCIPLINARY CHEMISTRY). NSC 98-2113-M-320-002-MY2. 本人為通訊作者.
11. Anren Hu, Pei-Jen Tsai, and Yen-Peng Ho\* (2007, May). Identifying bacterial species using CE-MS and SEQUEST with an empirical scoring function. Electrophoresis, 25,1387-1392. (SCI, IF=3.303, 14/73, ANALYTICAL CHEMISTRY). 本人為第一作者.
12. Alan A.-L. Lo, Anren Hu, Yen-Peng Ho\* (2006, Aug). Identification of microbial mixtures by LC-selective proteotypic-peptide analysis(SPA). Journal of Mass Spectrometry, 41,1049-1060. (SCI, IF=2.368, 7/42, SPECTROSCOPY).
13. Anren Hu, Cheng-Tung Chen, Pei-Jen Tsai, and Yen-Peng Ho\* (2006, Jul). Using Capillary Electrophoresis-Selective Tandem Mass Spectrometry To Identify Pathogens in Clinical Samples. Analytical Chemistry, 78,5124-5133. (SCI, IF=5.856, 3/73, ANALYTICAL CHEMISTRY). 本人為第一作者.
14. Anren Hu, Pei-Jen Tsai, and Yen-Peng Ho\* (2005, Mar). Identification of Microbial Mixtures by Capillary Electrophoresis/Selective Tandem Mass Spectrometry. Analytical Chemistry, 77,1488-1495. (SCI, IF=5.856, 3/73, ANALYTICAL CHEMISTRY). 本人為第一作者.
15. Yeh-Fu Lee, Pi-Shih Lo, Yueh-Jan Wang, Anren Hu, Hwei-Hsien Chen\* (2005, Feb). Neonatal toluene exposure alters N-methyl-D-aspartate receptor subunit expression in the hippocampus and cerebellum in juvenile rats. Neuropharmacology, 48,195-203. (SCI, IF=4.814, 25/261, PHARMACOLOGY & PHARMACY).
16. Lua AC\*, Lin HR, Tseng YT, Hu AR and Yeh PC, (2003), “Profiles of Urine Samples from Partiaipants at Rave Party in Taiwan: Prevalence of Ketaminee and MDMA Abuse”, Forensic. Sci. Int.,136, 47-51.(SCI, IF 2.301, Ranking: Legal Medicine, 5/13)
17. Lua AC\*, Hu AR, Lin BF, Yeh PC, Lin HR and Tseng YT, (2003), “Evaluation of immunoassaye for the Determination of MDMA and Cannabinoids in Urine Samples”, J. Food and Drug Analysis, 11,108-113. (SCI, IF 0.615, Ranking: Food Science & Technology, 83/128)
18. Yu-Chie Chen\*, Anren Hu, (1999) ,”Simultaneous Determination of Trace Benzodiazepines from Drinks by using Direct Electrospray Probe/Mass Spectrometry(DEP/MS)”, Forensci. Sci. Int., 103, 79-88. (SCI, IF 2.301, Ranking: Legal Medicine, 5/13)
19. Jung-Nan Oung\*, Anren Hu, Jentaie Shiea and Ping-Mei Liew, (1998) ,“Biomarkers in The Peat Deposit of The Toushe Basin, Central Taiwan”, J. Geo. Soc. China, 41, 127-142.