

Key Technology Development Division



Jung-Lee Lin 林俊利

Associate Research Specialist

副研究技師

harrylin@gate.sinica.edu.tw

Education and Positions

- Ph.D., Chemistry, National Taiwan University, 2002
- Postdoctoral Fellow, Institute of Atomic and Molecular Sciences, Academia Sinica, 2002-2007
- Assistant Research Specialist, Genomics Research Center, Academia Sinica, 2007-2012
- Mass Spectrometry Facility Manager, 2010-present
- Associate Research Specialist, Genomics Research Center, Academia Sinica, 2012-present

Expertise

Main job is responsible for the development new mass spectrometry technology and management mass spectrometry core facility in Genomics Research Center. New mass spectrometric techniques are mainly aimed at commercial mass spectrometer which mass range is not available and developed unique methods to enhance the efficiency of ionization and detection. Mass spectrometry core facilities mainly provide routine sample analysis service, proteomics and glycomics analysis, structure analysis of glycans and glycoproteins in details, software operation services, new staff training course, and to assist users in operating the mass spectrometer. Management of mass spectrometry core facility maintains facility to operate in normal condition and personnel management.

主要工作是負責開發新的質譜技術及管理基因體中心質譜儀核心設施。質譜技術開發目前主要是針對商業化質譜儀無法量測的質量範圍為主要目標，另外也研發特殊的偵測方法增加游離與偵測的效率。質譜儀核心設施主要提供例行性樣品檢測服務，質譜數據分析服務與特定分子結構分析與比對，分析軟體操作服務，新進人員質譜操作教育訓練，協助使用者操作質譜儀。管理基因體中心質譜儀核心設施主要工作是維護設施正常運作與人員管理。

Selected publications

1. “Rapid Identification of Terminal Sialic Acid Linkage Isomers by Pseudo-MS3 Mass Spectrometry” Chein-Hung Chen, Ya-Ping Lin, *Jung-Lee Lin*, Shiou-Ting Li, Chien-Tai Ren, Chung-Yi Wu, Chung-Hsuan Chen, *Isr. J. Chem.* **55**, 412, 2015
2. “Novel Mass Spectrometry Technology Development for Large Organic Particle Analysis” Huan-Chang Lin, *Jung-Lee Lin*, Chung-Hsuan Chen, *RSC Adv.*, **4**, 4523, 2014.
3. “Novel Atmospheric Biomolecule Ionization Technologies” Nelson G Chen,

Key Technology Development Division

- Jung-Lee Lin*, Chen-Yi Wu, Kent J Gillig, Abdil Ozdemir, Chung-Hsuan Chen, *J Anal Bioanal Tech* 2013, S2: 003.
4. “Kelvin spray ionization” Abdil Ozdemir, *Jung-Lee Lin* , Kent J. Gillig, Chung-Hsuan Chen. *Analyst*, **138**, 6913, 2013.
 5. “Macromolecular ion accelerator mass spectrometer” Yun-Fei Hsu, *Jung-Lee Lin*, Ming-Lee Chu, Chung-Hsuan Chen, *Analyst*, 138, 7384, 2013
 6. “Biomolecular dual-ion-trap mass analyzer” Yun-Fei Hsu, *Jung-Lee Lin*, Ming-Lee Chu, Chung-Hsuan Chen, *Analyst*, **138**, 4823, 2013.
 7. “Triboelectric spray ionization” Abdil Özdemir, *Jung-Lee Lin*, Kent J. Gillig ,Chung-Hsuan Chen, *J. Mass Spectrom.* **48**, 154, 2013
 8. “Sinapinic acid clusters distribution from monomer to mega Dalton’s region in MALDI process” Szu-Hsueh Lai, Kuang-Hua Chang, *Jung-Lee Lin*, Chia-Lin Wu, Chung-Hsuan Chen, *Chem. Phys. Lett.* **561**, 142, 2013
 9. “Macromolecular ion accelerator.”Yun-Fei Hsu, *Jung-Lee Lin*, Szu-Hsueh Lai, Ming-Lee Chu, Yi-Sheng Wang, Chung-Hsuan Chen, *Anal Chem.* **84**, 5765, 2012.
 10. “High-speed Measuring Nanoparticle and Virus by Laser-Induced Acoustic Desorption Mass Spectrometry” Huan-Chang Lin, *Jung-Lee Lin*, Hsin-Hung Lin, Shiue-Wen Tsai, Alice L Yu, Richie L C Chen, Chung-Hsuan Chen. *Anal Chem.* **84**, 4965, 2012
 11. “Frequency-scanning MALDI Linear Ion Trap Mass Spectrometer for Large Biomolecule Detection” I-Chung Lu, *Jung Lee Lin*, Szu-Hsueh Lai, and Chung-Hsuan Chen, *Anal Chem.* **83**, 8273, 2011.
 12. “MALDI ion trap mass spectrometer with charge detector for large biomolecule detection.” C. H. Chen, *J. L. Lin*, M. L. Chu, C. H. Chen, *Anal Chem.* **82**, 10125, 2010.