1. Study of Electrochemical Reactions Using Nanospray Desorption Electrospray Ionization Mass Spectrometry. Presented by **Pengyuan Liu** of Ohio University.

2. Proteomic Analysis of DNA-Protein Complexes Captured on a Solid Support. Presented by **Rachel Knoener** of UW-Madison.

3. Utilizing Coherent Multidimensional Spectroscopy to Investigate Nanomaterials for Solar Energy Generation. Presented by **Blaise Thompson** of UW-Madison.

4. The Transport of ionic Species in Silyl Solvents by NMR Spectroscopy. Presented by **Claire Williams** of Grinnell College.

5. Genomic Analysis via Nanoconfinement: Nanocoding. Presented by **Kristy Kounovsky-Shafer** of UW-Madison.

6. Ultrasensitive Capillary Electrophoresis with Three-color Fluorescence Detection for Metabolic Cytometry Analysis. Presented by **Richard Keithley** of University of Notre Dame.

7. Ion Mobility-Mass Spectrom etry: Improved Isobaric Tag Quantitation Accuracy and Structural Neuropeptide Analysis. Presented by **Chris Lietz** of UW-Madison.

8. Diagonal CE-Microreactor-CE MS: Application to Phosphorylation Analysis. Presented by **Si Mou** of the University of Notre Dame.

9. Rapid Analysis of Human Corneal Tissue Samples by Desorption Electrospray Ionization Mass Spectrometry. Presented by **Daniel Renfus** of Northern Illinois University.

10. Multiple Sclerosis and Zinc: Wild Theory or Missing Link. Presented by **Suzanne Letourneau** of Michigan State.

11. Investigation of Alternating Current Electrospray Ionization for Proteomics. Presented by **Scott Sarver** of the University of Notre Dame.

12. Relative and Absolute Quantification of Vesicular Stomatitis Virus Infection Protein Translation by Mass Spectrometry. Presented by **Greg Potts**, UW-Madison.

13. Solvent-assisted Ionization Inlet-Mass Spectrometry: A New Approach for Surface Analysis and Automated Analysis. Presented by **Beixi Wang** of Wayne State University.

14. Studying Reaction Chemistry at the Droplet-air Interface in Single Aerosol Droplets by Laser Ablation ESI MS. Presented by **Ranran Liu** of UW-Madison.

15. C-peptide: The Missing Link in Diabetes Therapy? Presented by **Yueli Liu** of Michigan State University.

16. Techniques toward Multidimensional Spectroscopic Analysis of the Oxygen Evolving Complex of Photosystem II. Presented by **Erin Boyle** of UW-Madison.

17. Matrix-assisted Ionization Vacuum for Spontaneous Cold Ionization of Small and Large Molecules Directly from Surfaces. Presented by **Ellen Inutan** of Wayne State University.

18. Proteomic Analysis of Decellularized Tissue to Better Understand Scaffolds for Tissue Engineering and Replacement. Presented by **Qiyao Li** of UW-Madison.

19. Multi-pathway Metabolism of Glycosphingolipids by Capillary Electrophoresis-Laser Induced Fluorescence. Presented by **Jennifer Arceo** of the University of Notre Dame.

20. MALDI-MSI of Metabolites during Nitrogen Fixation in the *Medicago truncatula-Sinorhizobium meliloti Symbiosis*. Presented by **Erin Gemperline** of UW-Madison.

21. Coupling C18-SPE Prefractionation and Optimized CZE-ESI-MS/MS for E. Coli Proteome Analysis. Presented by **Xiaojing Yan** of the University of Notre Dame.

22. Discovering Alternatively-spliced proteins using Mass Spectrometry and Customized RNA-Seq. Presented by **Gloria Sheynkman** of UW-Madison.

23. Utilization of Ion-molecule Reactions for the Analysis of Biomolecules. Presented by **Andrii Piatkivsky** of Northern Illinois University.

24. Elucidating Protein-DNA Interactions in E.Coli.rrn Through Sequence-specific Capture of DNA. Presented by **Julia Kennedy-Darling** of UW-Madison.

25. Negative Mode Measurements of Gangliosides Using Matrix-assisted Ionization Vacuum Mass Spectrometry. Presented by **Steven Lingenfelter** of Wayne State University.

26. Mass Spectrometric Evaluation of Neuropeptidomic Profiles upon Heat Stabilization of Crustacean Neuroendocrine Tissues. Presented by **Tyler Greer** of UW-Madison.

27. Effects of Electrochemical Reactions upon the Surface Topography of STO Thin Films. Presented by **Kelly Harmon** of Eastern Illinois University.

28. High-efficiency Chromatin Purification and Sequence-specific Capture of a Single Genomic Locus. Presented by **Yuan Yuan** of UW-Madison.

29. Single-Cell Imaging of Antimicrobial Attack on E.Coli. Presented by **Ranga Rangarajan** of UW-Madison.

30. Ionic Conductivity Studies of LiBOB-based 1ND2/1NM2 Electrolytes for Lithium-ion Battery Applications. Presented by **Willie Barth** of Grinnell College.

31. If You Only Knew What Happened to Your Blood after Donation! Presented by **Yimeng Wang** of Michigan State University.

32. Smaller Particles, Elevated Temperature, Longer Columns and Gradients: Insights from the Laboratory. Presented by **Arne Ulbrich** of UW-Madison.

33. Separation and Characterization of Mixtures by Matrix-assisted Ionization Vacuum (MAIV)-ion Mobility Spectrometry-MS. Presented by **Jing Li** of Wayne State University.

34. Gas-phase Purification for Accurate Quantification of Phosphorylation-Enriched Proteomic Samples. Presented by **Alicia Richards** of UW-Madison.

35. Automated Two-dimensional Capillary Electrophoretic Separations of Complex Mixtures. Presented by **Ryan Flaherty** of the University of Notre Dame.

36. An Applications-grade, Bench-top GC-quadrupole Orbitrap MS for High-resolution and High-mass Accuracy GC/MS. Presented by **Amelia Peterson** of UW-Madison.

37. Studies of Metal/Gallium Nitride Gas Sensors: Sensing Response, Morphology and Sensing Applications. Presented by **Barret Duan** of the University of Notre Dame.

38. Synthesis of DNA Aptamer Arrays with Modified Nucleosides. Presented by **Jiyeon Han** of UW-Madison.

39. Combined Targeted and Data-Dependent Mass Spectrometry Proteomic Analysis. Presented by **Derek Bailey** of UW-Madison.

40. How to maximize Quantitative Accuracy and Precision with Isobaric Tags: Case Studies in Quantitative Proteomics. Presented by **Catie Vincent** of UW-Madison.

41. Maximizing Results in Label-Based Quantitative Proteomics. Presented by **Anna Larson** of UW-Madison.

42. Proteomic Analysis of Human Seminal Fluid. Presented by **Dominic Colosi** of UW-Madison.

43. Analysis of Saccaromyces Cerevisiae Ribosomal Proteins: Quantification and Identification. Presented by **Dan Ladror** of UW-Madison.

MUACC2012

University of Wisconsin - Madison

Poster Session

7 – 9 p.m.

Union South

Varsity Hall III