Tae-Young Kim, PhD

Assistant Professor

School of Environmental Science and Engineering

Gwangju Institute of Science and Technology

Office: +82-62-715-3647

E-mail: kimtaeyoung@gist.ac.kr

Homepage: https://sites.google.com/site/gistbms/



Education

1993.03-1999.02	BS	Seoul National University
1999.03-2001.02	MS	Seoul National University
2002.01-2009.10	PhD	Indiana University at Bloomington

Professional Experience

2009.09-2010.09	Postdoctoral Scholar	California Institute of Technology
2010.09-2013.02	Postdoctoral Fellow	University of California at Los Angeles
2013.03-Present	Assistant Professor	Gwangju Institute of Science and Technology

Academic Society

2002.01-2013.12	Member	American Society for Mass Spectrometry
2013.03-Present	Member	Korean Chemical Society
2013.03-Present	Member	Korean Society for Mass Spectrometry

Publications

- Sohn CH, Gao J, Thomas DA, <u>Kim T-Y</u>, Goddard III WA, Beauchamp JL. Mechanisms and Energetics of Free Radical Initiated Disulfide Bond Cleavage in Model Peptides. Chem Sci. 2015; 6: 4550-4560.
- Lam MPY, Lau E, Scruggs SB, Wang D, <u>Kim T-Y</u>, Liem DA, Zhang J, Ryan CM, Faull KF, Ping P. Site-Specific Quantitative Analysis of Cardiac Mitochondrial Protein Phosphorylation. J Proteomics. 2013; 81: 15-23.
- <u>Kim T-Y</u>, Wang D, Kim AK, Lau E, Lin AJ, Liem DA, Zhang J, Lam MPY, Zong NC, Ping P. Metabolic Labeling Reveals Proteome Dynamics of Mouse Mitochondria. Mol Cell Proteomics. 2012; 11: 1586-1594.
- Lam MPY, Scruggs SB, <u>Kim T-Y</u>, Zong C, Lau E, Wang D, Ryan CM, Faull KF, Ping P. An MRM-Based Workflow for Quantifying Cardiac Mitochondrial Protein Phosphorylation in Murine and Human Tissue. J Proteomics. 2012; 75: 4602-4609.
- Lau E, Wang D, Zhang J, Yu H, Lam MPY, Liang X, Zong C, <u>Kim T-Y</u>, Ping P. Substrate- and Isoform-Specific Proteome Stability in Normal and Stressed Cardiac Mitochondria. Circ Res. 2012; 110: 1174-1178.
- <u>Kim T-Y</u>, Valentine SJ, Clemmer DE, Reilly JP. Gas-Phase Conformation-Specific Photofragmentation of Proline-Containing Peptides Ions. J Am Soc Mass Spectrom. 2010; 21: 1455-1465.
- <u>Kim T-Y</u>, Reilly JP. Time-Resolved Observation of Product Ions Generated by 157 nm Photodissociation of Singly Protonated Phosphopeptides. J Am Soc Mass Spectrom. 2009; 20: 2334-2341.

- <u>Kim T-Y</u>, Schwartz JC, Reilly JP. Development of a Linear Ion Trap/Orthogonal-TOF Mass Spectrometer for Time-Dependent Observation of Product Ions by Ultraviolet Photodissociation of Peptide Ion. Anal Chem. 2009; 81: 8809-8817.
- <u>Kim T-Y</u>, Thompson MS, Reilly JP. Peptide Photodissociation at 157 nm in a Linear Ion Trap Mass Spectrometer. Rapid Commun Mass Spectrom. 2005; 19: 1657-1665.
- <u>Kim T-Y</u>, Brun YV, Reilly JP. Effects of Tryptic Peptide Esterification in MALDI Mass Spectrometry. Anal Chem. 2005; 19: 1657-1665.
- <u>Kim T-Y</u>, Kim H-J. Chiral Separation of 9-Fluorenylmethyl Chloroformate- and Dansyl Chloride-Derivatized D.L-Serine by γ-Cyclodextrin-Bonded High-Performance Liquid Chromatography. J Chromatogr A. 2001; 933: 99-106.