

Zee Hwan Kim

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EDUCATION and PROFESSIONAL EXPERIENCE

<i>Fall 2013 – present</i>	Seoul National University	Seoul, Korea
<i>Associate Professor</i>		
<i>Spring 2005 – 2013</i>	Korea University	Seoul, Korea
<i>Associate and Assistant Professor</i>		
<i>Fall 2002 – Spring 2005</i>	University of California, Berkeley	Berkeley, CA
<i>Postdoctoral Fellow</i>	Professor Stephen R. Leone	
<i>Spring 1998 – fall 2002</i>	Stanford University	Stanford, CA
<i>Ph. D., Physical Chemistry</i>	Professor Richard N. Zare	
<i>Spring 1995 - 1996</i>	Seoul National University	Seoul, Korea
<i>M. S. program</i>	Professor Seong Keun Kim	
<i>Spring 1989 -Fall 1994</i>	Seoul National University	Seoul, Korea
<i>B. S., Chemistry</i>		

PRIMARY RESEARCH AREA

- Nanoparticle plasmonics
- Single-molecule surface-enhanced Raman scattering spectroscopy
- Near-field microscopy

AWARDS

- Research Award, 2017, College of Natural Science, Seoul National University, Seoul, Korea
- Best Teaching Award, 2016, College of Natural Science, Seoul National University, Seoul, Korea
- Best Teaching Award, 2015, College of Natural Science, Seoul National University, Seoul, Korea
- Seok-Tap Teaching Award, 2011, Korea University, Seoul, Korea
- KCS-Wiley Young Chemist Award, 2010, Korean Chemical Society and Wiley
- Annual Reviews Prize in Physical Chemistry, 2002, Annual Reviews Board, Palo Alto, California
- Franklin Veatch Memorial Fellowship, 2000-2001, Stanford University, Stanford, California
- Graduation with Honor, 1995 spring, Seoul National University, Seoul, Korea
- SNU Chemistry Alumni Fellowships 1991, and 1994, Seoul National University, Seoul, Korea

RECENT PROFESSIONAL ACTIVITIES

- Scientific Program Director, the 26th International Conference on Raman Spectroscopy (Jeju, Korea, 2018)
- Program Committee, NFO-12, 12th International conference on near-field optics, nanophotonics and related techniques (San Sebastian, Spain, 2012)
- Program Committee, SPP5, the 5th international conference on surface plasmon photonics (2011, Busan)

RECENT AND UPCOMING INVITED LECTURES

- META-2018, France, 2018 (Scheduled)
- SPIE-2018, San Diego, USA 2018 (Scheduled)
- Frontiers of Plasmonics-5, Nanjing, China 2018 (Scheduled)
- International Conference on Surface-enhanced Raman Scattering 2017, Xiamen, China, 2017
- META-2017, Songdo, Korea, 2017
- 9th Asian Photochemistry Conference, 2017, Singapore
- Beijing Symposium 2016 on Chemical Reactions under External Fields, Xiamen, China, 2016
- Pacifichem 2015, Honolulu, USA 2015
- 2015 E-MRS Spring Meeting, Lille, France, 2015
- KITPC Program on "Plasmonic Nanogaps and Circuits", Beijing, China 2015
- 13th International Conference on Near-Field Optics, Nanophotonics, and Related Techniques (NFO13), Utah, 2014
- ICORS-2014, 24th International Conference on Raman Spectroscopy, Jena, Germany, 2014
- Progress in Electromagnetics Research Symposium, Stockholm, Sweden, 2013
- Photonics of Functional Nanomaterials, Hong Kong, 2013
- ICMAT2013, 7th International Conference on Materials for Advanced Technologies, Singapore, 2013
- JSAP-MRS Joint Symposia, Kyoto, Japan, 2013
- ICORS-2012, International Conference on Raman Spectroscopy, Bangalore, India, 2012
- VAS-14, the 14th International Conference on Vibrations at Surface, Kyoto, Japan, 2012
- SPIE Photonics West, San Francisco, January 2012
- Gordon Research Conference on Plasmonics, Main, USA, 2010
- Frontiers of Plasmonics, Xian, China, Sept. 2010

RECENT PUBLICATIONS

- Hyun-Hang Shin, Gyu Jin Yeon, Han-Kyu Choi, Sang-Min Park, Kang Sup Lee, and Zee Hwan Kim*, "Frequency-Domain Proof of the Existence of Atomic-Scale SERS Hot-Spots", *Nano Lett.* **2018**, 18(1), 262-271.
- Gyouil Jeong, Boogeon Choi, Deok-Soo Kim, Seongjin Ahn, Baekwon Park, Jin Hyoun Kang, Hongki Min, Byung Hee Hong and Zee Hwan Kim*, "Mapping of Bernal and non-Bernal stacking domains in bilayer graphene using infrared nanoscopy", *Nanoscale*, **2017**, 9, 4191.
- Han-Kyu Choi, Kang Sup Lee, Hyun-Hang Shin, and Zee Hwan Kim*, "Identification of the First Elementary Step in the Photocatalytic Reduction of Nitrobenzenethiols on a Metallic Surface", *J. Phys. Chem. Lett.* **2016**, 7(20), 4099-4104.
- Deok-Soo Kim, Sung-Hyun Ahn, Jinwook Kim, Daeha Seo, Hyunjoon Song, and Zee Hwan Kim*, "Far-Field and Near-Field Investigation of Longitudinal Plasmons of AgAuAg Nanorods", *J. Phys. Chem. C.* **2016**, 120(37), 21082-21090.
- Han-Kyu Choi, Won-Hwa Park, Chan-Gyu Park, Hyun-Hang Shin, Kang Sup Lee, and Zee Hwan Kim*, "Metal-Catalyzed Chemical Reaction of Single Molecules Directly Probed by Vibrational Spectroscopy", *J. Am. Chem. Soc.*, **2016**, 138(13), 4673-4684
- Woong Kim, Nara Kim, Eunbyoul Lee, Duckhoe Kim, Zee Hwan Kim*, and Joon Won Park*, "A tunable Au core-Ag shell nanoparticle rip for tip-enhanced spectroscopy", *Analyst*, 2016, 141, 5066-5070.
- Woong Kim, Nara Kim, Joon Won Park*, and Zee Hwan Kim*, "Nanostar probes for tip-enhanced spectroscopy", *Nanoscale*, 2016, 8, 987-994
- Deok-Soo Kim, Hyuksang Kwon, Alexey Yu. Nikitin, Seongjin Ahn, Luis Martin-Moreno, Francisco J. Garcia-Vidal, Sunmin Ryu, Hongki Min, and Zee Hwan Kim*, "Stacking Structures of Few-Layer Graphene Revealed by Phase-Sensitive Infrared Nanoscopy", *ACS Nano*, 2015, 9(7), 6765-6773.
- Han-Kyu Choi, Hyun Kyong Shon, Hyunung Yu, Tae Geol Lee, and Zee Hwan Kim*, "b₂ Peaks in SERS Spectra of 4-Aminobenzenethiol: A Photochemical Artifact or a Real Chemical Enhancement?", *J. Phys. Chem. Lett.*, 4, 1079-1086 (2013).