

**Prof. Hansu Kim**

Email: khansu@hanyang.ac.kr

Tel: + 82.2.2220.2412

<http://khansu.wordpress.com>

**Education**

Ph.D. Mineral and Petroleum Engineering, Seoul National University 2000

M. S. Mineral and Petroleum Engineering, Seoul National University 1996

B. S. Mineral and Petroleum Engineering, Seoul National University 1994

**Research Interests**

High Capacity Anode Materials for Lithium-ion Batteries, Nanostructured Materials for Energy Storage, Inkjet Printing Enabled Energy Storage/Conversion Devices

**Career**

2011 – Present, Associate Professor, Department of Energy Engineering, Hanyang University

2001- 2011 Member of Research Staff, Battery Group, Energy Lab, Samsung Advanced Institute of Technology

**Recent Projects**

Development of Si Based High Capacity Anode Materials for Lithium-Ion Batteries, Green Electrochemical Process of Metal Recovery Using Ionic Liquid, Metal Oxide Anode Materials for Lithium Ion Batteries.

**Author of 73 scientific papers, 96 granted patents, and 3 book chapter**

**Selected Publications**

1. Discovery of abnormal lithium storage sites in molybdenum dioxide electrodes, *Nature Comm.*, 2016, **7**, 11049
2. Discovering Dual-Buffer Effect on Lithium Storage: Durable Nanostructure of Ordered Mesoporous Co–Sn Intermetallic Electrode, *Adv. Func. Mater.*, 2016, **26**, 2800
3. Dual-Size Silicon Nanocrystal-Embedded SiO<sub>x</sub> Nanocomposite as a High-Capacity Lithium Storage Material, *ACS Nano*, 2015, **9**, 7690
4. Highly Cyclable Lithium– Sulfur Batteries with a Dual-Type Sulfur Cathode and a Lithiated Si/SiO<sub>x</sub> Nanosphere Anode, *Nano Letters*, 2015, **15**, 2863
5. Nanotechnology enabled rechargeable Li–SO<sub>2</sub> batteries: another approach towards post-lithium-ion battery systems”, *Energy & Environ. Sci.* 2015, **8**, 3713
6. In Operando Monitoring of the Pore Dynamics in Ordered Mesoporous Electrode Materials by Small Angle X-Ray Scattering, *ACS Nano*, 2015, **9**, 5470