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Jin-Yoo Suh

Education

2003.7-2008.12 **California Institute of Technology**, Pasadena CA, USA

- **Ph.D. in Materials Science**

- Thesis title: Fracture toughness study on bulk metallic glasses and novel joining method using bulk metallic glass solder
- Advisor : William L. Johnson

1995.3-1997.2 **Seoul National University**, Seoul, Korea

- **M.S. in Materials Science and Engineering.**

- Thesis title: Theoretical Calculation of Bending Plastic Dissipation and Finite Element Analysis in Peel Test
- Advisor: Kyu-Hwan Oh

1991.3-1995.2 **Seoul National University**, Seoul, Korea

- **B.S. in Metallurgical Engineering**

Work/Research Experience

2015.03 – present KIST Seoul, Korea
Principal Research Scientist

2009.03 – 2015.02 KIST Seoul, Korea
Senior Research Scientist

1998.03 – 2003.06 KIST Seoul, Korea
Research Scientist

Current Research Areas

Solid-state hydrogen storage

- Metal hydrides for room temperature applications
- MgH₂, Mg₂NiH₄, Mg₂FeH₆ metal hydride

Hydrogen embrittlement in metals

- Hydrogen embrittlement in FCC metals (austenitic stainless steels and high-entropy alloys)

Heat resistant steels and their welding parts

- Premature failure in heat affected zone of high-Cr martensitic heat resistant steel weld joint
- Creep behavior of FCC high entropy alloys

Metallic membranes for hydrogen separation

- Vanadium-based BCC metallic membrane for hydrogen separation