

# Myung Geun Song

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## EDUCATION

- March 1998-  
February 2003      **Korea Advanced Institute of Science and Technology (KAIST), Korea**  
*Doctor of Philosophy in Dept. of Chemical & Biomolecular Engineering*
- Thesis: Synthesis of Mesoporous Materials by Supramolecular Templating Approach and its Application
  - Research Assistant
  - Research Advisor: Prof. Jong-Duk Kim
- March 1996-  
February 1998      **Korea Advanced Institute of Science and Technology (KAIST), Korea**  
*Master of Science in Dept. of Chemical Engineering*
- Thesis: The Dispersion Properties of Precipitated Calcium Carbonate Suspensions with Adsorbed APG Layers
  - Research Advisor: Prof. Jong-Duk Kim
- March 1992-  
February 1996      **Korea Advanced Institute of Science and Technology (KAIST), Korea**  
*Bachelor of Science in Dept. of Chemical Engineering*

## WORK EXPERIENCES

- 2006.12-Present      **Post-Doc Staff in Northwestern University, USA**
- Electroneutral Self-Assembly Approach for the Synthesis of Supracrystals of Au/Ag Nanoparticles

- 2003.5-2006. 11      **R&D Center, Samsung Corning Co., Korea**  
***Senior Researcher in Cu CMP Slurry Project Team & Nanolab.***
- Synthesis & Dispersion of  $\gamma$ -Alumina Nanoparticles via Wet Beads Milling
  - Working in Area of Chemical-Mechanical Polishing (CMP) for Copper Interconnect
  - Synthesis of SnO<sub>2</sub> Particles by Modified Precipitation Route
- 2001.1-2001.2      **Visiting Researcher** of National Institute of Materials and Chemical Research (NIMC), Tsukuba, Japan
- 1998-2001      **KAIST, Research Assistant**
- 1998-2001      **Project Manager and Researcher**
- Project on a study of “Development of Water-in-Diesel Oil Emulsion Fuel”
  - Hanhwa L&C Corp., Korea
- 1997-1998      **Project Researcher**
- Project on a study of “Development of Oil-Spill Dispersant with Environment-Friendly Surfactant”
  - LG Household & Health Care Corp., Korea.
- 1996-1997      **Project Manager and Researcher**
- Project on a study of “Dispersion of Precipitated Calcium Carbonate Suspensions in Aqueous and Non-Aqueous Medium”
  - Dongho Chemical Corp., Korea.

## **PUBLICATIONS**

1. **Myung-Geun Song**, Jin-ho Lee, Yoon-Gyu Lee and Ja-ho Koo, “Stabilization of Nano-Sized Gamma Alumina Slurry for Chemical-Mechanical Polishing of Copper”, *J. Colloid & Interface Sci.*, 300, 603 (2006).

2. Kwang-Suk Jang, **Myung-Geun Song**, Sung-ho Cho, and Jong-Duk Kim, "Using the Effect of pH and Moisture to Synthesize Highly Organized Mesoporous Titania Thin Films", *Chem. Comm.*, 1514 (2004).
3. **Myung-Geun Song**, Jong-Yun Kim, Sung-Ho Cho, and Jong-Duk Kim, "Rapid Synthesis of Mesoporous Silica by an Accelerated Microwave Radiation Method", *Korean J. Chem. Eng.*, 21(6), 1224 (2004).
4. **Myung-Geun Song**, Jong-Yun Kim, and Jong-Duk Kim, "Effect of Sodium Stearate and Calcium Ions on Dispersion Properties of Precipitated Calcium Carbonate Suspensions", *Colloids Surfaces A: Physicochem. Eng. Aspects*, 229, 75 (2003).
5. **Myung-Geun Song**, Jong-Duk Kim, and Hyun-Wuk Kim, "Synthesis of Organized Mesoporous TiO<sub>2</sub> Thin Film and its Application to Photovoltaic Cell", *J. Ind. Eng. Chem. - Appl. Chem.*, 7(1), 1 (2003).
6. **Myung-Geun Song**, Jong-Duk Kim, and Kiyozumi Yoshimichi, "Synthesis of Ordered Lamella Mesophase from Helix Layered Silicate (HLS)", *Studies in Surface Science and Catalysis*, 146, 169 (2003).
7. **Myung-Geun Song**, Jong-Yun Kim, Sung-Ho Cho, and Jong-Duk Kim, "Mixed Cationic-Nonionic Surfactants Templating Approach for the Synthesis of Mesoporous Silica", *Langmuir*, 18(16), 6110 (2002).
8. **Myung-Geun Song**, Sung-Ho Cho, Jong-Yun Kim, and Jong-Duk Kim, "Novel Evaluation Method for the Water-in-Oil (W/O) Emulsion Stability by Turbidity Ratio Measurements", *Korean J. Chem. Eng.*, 19(3), 425 (2002).
9. **Myung-Geun Song**, Jong-Yun Kim and Jong-Duk Kim, "The Dispersion Properties of Precipitated Calcium Carbonate Suspensions Adsorbed with Alkyl Polyglycoside in Aqueous Medium", *J. Colloid & Interface Sci.*, 226, 83 (2000).
10. **Myung-Geun Song**, Sung-Ho Cho, Jong-Yun Kim and Jong-Duk Kim, "Rapid Evaluation of Water-in-Oil (W/O) Emulsion Stability by Turbidity Ratio Measurement", *J. Colloid & Interface Sci.*, 230, 213 (2000).

11. Jong-Yun Kim, **Myung-Geun Song**, Tae-Sung Kim and Jong-Duk Kim, "Effectiveness of New Water-based Oil Spill Dispersant comprised of an Alkyl Polyglycoside", *J. of Surfactant and Detergent*, 2(4), 539 (1999).
12. Jong-Yun Kim, **Myung-Geun Song**, and Jong-Duk Kim, "Zeta Potential of Nano-Bubbles Generated by Ultrasonification in Aqueous Alkyl Polyglycoside Solutions", *J. Colloid & Interface Sci.*, 223, 285 (1999).

## INTERNATIONAL CONFERENCE

1. **Myung-Geun Song**, Jong-Yun Kim and Jong-Duk Kim, "The Electrostatic and Rheological Properties of Precipitated Calcium Carbonate Suspensions Absorbed with Sodium Stearate and Calcium Ions", Proceedings of the 10th Taejon/Chungnam-Kyushu Symposium on Chemical Engineering, pp. 135-136 November 28-30, Taejon, Korea (1997).
2. **Myung-Geun Song**, Jong-Yun Kim and Jong-Duk Kim, "Zeta Potential and Rheological Properties of Calcium Carbonate Suspensions - Effect of Sodium Stearate and Calcium Ion", 12th International Symposium on SIS (Surfactant in Solution) in Stockholm, Sweden, June 6-12 (1998).
3. Jong-Yun Kim, **Myung-Geun Song**, Tae-Sung Kim and Jong-Duk Kim, " Effectiveness of New Water-based Oil Spill Dispersant Comprised of an Alkyl Polyglycoside", 12th International Symposium on SIS (Surfactant in Solution) in Stockholm, Sweden, June 6-12 (1998).
4. **Myung-Geun Song**, Jong-Yun Kim and Jong-Duk Kim, "The Dispersion Stabilities of Calcium Carbonate Suspensions Adsorbed with Alkyl Polyglycoside Layers in Aqueous Solution", the 12th Taejon/Chungnam-Kyushu Symposium on Chemical Engineering, Hukuoka, Kyushu, Japan, October 28-30 (1998).
5. **Myung-Geun Song**, Jong-Yun Kim, Sung-Ho Jho and Jong-Duk Kim, "Evaluation of W/O Emulsion Stability by Turbidity Ratio Measurement", 73th ACS Colloid and Surface Science Symposium, MIT, Boston, U.S.A., June 14-16 (1999).
6. **Myung-Geun Song**, Jong-Duk Kim, and Yoshimichi Kiyozumi, "Synthesis of Ordered Lamella Mesophase from Helix Layered Silicate (HLS)", 3rd International Mesosstructured Materials Symposium, Jeju, Korea, July 8-11 (2002).

## HONORS AND MEMBERSHIPS

- Award for Excellent Research;  
**Myung-Geun Song**, Jong-Yun Kim and Jong-Duk Kim, " The Dispersion stability of Precipitated Calcium Carbonate Suspensions Adsorbed with Alkyl Polyglycoside in Aqueous Medium", The Fall meeting of the Korean Society of Industrial and Engineering Chemistry, Chosun Univ., Kwangju, Korea, May 1-2 (1998).
- Best Poster Award;  
Jong-Yun Kim, **Myung-Geun Song**, Tae-Sung Kim and Jong-Duk Kim, " Effectiveness of New Water-based Oil Spill Dispersant Comprised of an Alkyl Polyglycoside", 12th International Symposium on SIS (Surfactant in Solution) in Stockholm, Sweden, June 6-12 (1998)
- Members of Korean Society of Industrial and Engineering Chemistry
- Members of Korean Institute of Chemical Engineering

## Reference

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