



이 성 준 선임연구원

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Research Interests

- Modification and characterization of Polymers
- Morphology control of polymer

Education

- 2015: Yeungnam Univ. (Ph.D. in Department of Advanced Organic Materials Engineering)
- 2004: Yeungnam Univ. (M.S. in Department in Textile Engineering)
- 2002: Yeungnam Univ. (B.S. in Department in Textile Engineering)

Professional Experience

- 2005-Present: Senior Researcher, DGIST, Korea
- 2004-2005: Researcher, Kolon, Korea

Introduction to Research

1. Transformation of Cellulose for Melt Preprocess
 - Chemical modification of cellulose/cellulose derivatives to give meltability
 - Optimization of melt spinning processes
 - Improvement of performance and development of an industrial application
2. Preparation of Polymeric Micro/Nanospheres and Application
3. Preparation of Organic-Inorganic composite materials

Research Publication (selected)

1. Young Jae Lee, Ga Hyun Lee, Jun Seong Hwang, Sang Won Jeong, Hyun-Chul Kim, Eunjo Kim, Tae Hwan Oh, Sung Jun Lee, and Se Geun Lee, "Preparation of Monodisperse Poly(vinyl alcohol) (PVA) Nanoparticles by Dispersion Polymerization and Heterogeneous Surface Saponification", *Fibers and Polymers*, 17, 502 (2016)
2. Sung Jun Lee, Hae Sung Lee, Sang Won Jeong, Hyun-Chul Kim, Se Geun Lee and Tae Hwan Oh, "Effect of Dimethyl Sulfoxide on Synthesis of Thermoplastic Cellulose-Graft-Poly(l-lactide) Copolymer Using Ionic Liquid as Reaction Media", *J. Appl. Polym. Sci.*, 132, 41331 (2015)
3. Eun-Sook Choi, Se Geun Lee, Sung Jun Lee and Eunjo Kim, "Rapid detection of 6X-histidine-labeled recombinant proteins by immunochromatography using dye-labeled cellulose nanobeads", *Biotechnol. Lett.*, 37, 627 (2015)

Patents (selected)

1. Korea Patent(10-2014-0102215), "Preparation method of colored micro-particle beads of cellulose acetate for diagnosis reagent and colored micro-particle beads of cellulose acetate for diagnosis reagent prepared by the same" with Lee, S. G., Jeong, S. W., Kim, H. C., Seo, S. E.
2. Korea Patent(10-2010-0109773), "Manufacturing method of cellulose ester" with Lee, S. G., Jeong, S. W., Kim, E., Kim, H. C., Lee, H. J., Applied melt spinning
3. Korea Patent(10-2006-0071624), "Nano non-woven containing antioxidant for wound dressing and method for preparing thereof, with Lee, S. G., Kim, H. Y., Kim, J., Lyoo, W. S., Applied wound dressing

Technology Transfer

1. Preparation of Poly(vinyl alcohol) Nanoweb (2019)
2. Preparation of Thermoprocessable Cellulose Ester Composite and Technology (2014)
3. Fabrication Technique of Antibacterial Suture (2009)