

Hyun Suk Kim

Department of Polymer Science & Engineering
Room A322, Conte Research Center
University of Massachusetts
120 Governors Drive
Amherst, MA 01003
E-mail: hkim@mail.pse.umass.edu

362 Northampton Rd. Apt D
Amherst, MA 01002
Tel: +1 347-266-0647

EDUCATION

Ph.D. Candidate in Polymer Science and Engineering *Sep 2007- present*
Department of Polymer Science and Engineering,
University of Massachusetts, Amherst, USA
Advisor: Prof. Alfred J. Crosby

M.S. in Polymer Science and Engineering *Feb 2006*
Department of Polymer Science and Engineering, Inha University, Korea
Advisor: Prof. In-Joo Chin
Thesis: “*Fabrication and Applications of Electrospun Nanofibers*”

B.S. in Chemical Science and Engineering *Feb 2003*
Department of Chemical Science and Engineering, Inha University, Korea

EXPERIENCE

Joint Study Intern *Jun 2006 – May 2007*
Advanced Organic Materials, IBM Almaden Research Center, San Jose, CA
Supervisor: Dr. Robert D. Miller
Mentor: Dr. Ho-Cheol Kim

Research Associate *Mar 2006 – May 2006*
Institute of Polymer Science and Engineering, Inha University, Korea
Supervisor: Prof. Chul-Hee Kim

Visiting Researcher *Sep 2004 – Sep 2005*
Biomedical Engineering, Tufts University, Medford, MA
Co-adviser: Prof. David L. Kaplan
Sponsored by KOSEF (Korea Science and Engineering Foundation)

Teaching Assistant in Polymer Laboratory *Sep 2003 – Aug 2004*
Department of Polymer Science & Engineering, Inha University, Korea

Research Assistant *Mar 2003 – Aug 2003*
Department of Polymer Science & Engineering, Inha University, Korea

Military Service

Nov 1997 – Jan 2000

Military driver, Yang-gu, Korea (Defense Security Command)

PUBLICATIONS

1. **Hyun Suk Kim**, Hun-Sik Kim, Heon Sang Lee, In-Joo Chin, and Hyoung-Joon Jin, "Dispersion of Multiwalled Carbon Nanotubes in Aqueous Silk Fibroin Solutions," *Journal of Nanoscience and Nanotechnology*, 8, 5543-5546, **2008**.
2. Peng Chen, **Hyun Suk Kim**, Chi-Young Park, Hun-Sik Kim, In-Joo Chin, and Hyoung-Joon Jin, "pH-Triggered Transition of Silk Fibroin from Spherical Micelles to Nanofibrils in Water," *Macromolecular Research*, 16, 539-543, **2008**.
3. Hyeon Joo Kim, Ung-Jin Kim, **Hyun Suk Kim**, Chunmei Li, Masahisa Wada, Gary G. Leisk and David L. Kaplan, "Bone tissue engineering with premineralized silk scaffolds," *Bone*, 42(6), 1226-1234, **2008**.
4. **Hyun Suk Kim**, Minsung Kang, Hyoung-Joon Jin, In-Joo Chin and Jinsoo Joo, "Carbon nanotube-organized polymeric fibers and measurement of their electrical conductivity," *Molecular Crystals and Liquid Crystals*, 464, 597-603, **2007**.
5. Oun-Ho Park, Joy Y. Cheng, **Hyun Suk Kim**, Philip M. Rice, Teya Topuria, Robert D. Miller, and Ho-Cheol Kim, "Photo-Patterning of Block Copolymer Templated Nanoporous Titania Thin Films," *Applied Physics Letters*, 90, 233102, **2007**.
6. Yongzhong Wang, Dominick J. Blasioli, Hyeon-Joo Kim, **Hyun Suk Kim** and David L. Kaplan, "Cartilage tissue engineering with silk scaffolds and human articular chondrocytes," *Biomaterials*, 27, 4434-4442, **2006**.
7. **Hyun Suk Kim**, Minsung Kang, Seung Jun Myung, In-Joo Chin and Hyoung-Joon Jin, "Carbon Nanotubes Adsorbed Electrospun Nylon 6 Nanofibrous Membranes," *Macromolecular Rapid Communications*, 27, 146-151, **2006**.
8. Hyeon Joo Kim, **Hyun Suk Kim**, Akira Matsumoto, In-Joo Chin, Hyoung-Joon Jin and David L. Kaplan, "Processing Windows for Silk Fibroin 3D Porous Biomaterial Matrix Formation," *Australian Journal of Chemistry*, 58, 716-720, **2005**.
9. **Hyun Suk Kim**, Kwangsok Kim, Hyoung-Joon Jin and In-Joo Chin, "Morphological Characterization of Electrospun Nano-Fibrous Membranes of Biodegradable Poly(L-lactide) and Poly(lactide-co-glycolide)," *Macromolecular Symposia*, 224, 145-154, **2005**.
10. Jun Hee Sung, **Hyun Suk Kim**, Hyoung-Joon Jin, Hyoung Jin Choi and In-Joo Chin, "Nanofibrous Membranes Prepared by Multi-walled Carbon Nanotube/Poly(methyl methacrylate) Composites," *Macromolecules*, 37, 9899-9902, **2004**.

CONFERENCES

1. *APS March Meeting*

March 2009

Hyun Suk Kim, Mark McDonough, Samuel Pendergraph, Alfred J. Crosby
 “Controlling Pattern Formation in Polymer and Nanoparticle Assemblies via Programmed Flow-coating”

2. *ACS Meeting* *Spring 2007*

Oun-Ho Park, Joy Y. Cheng, **Hyun Suk Kim**, Philip M. Rice, Teya Topuria, Robert D. Miller, Ho-Cheol Kim
 “Photo-patternable Nanoporous Titania Films by Coassembly of Diblock Copolymer and Chemically Modified Titanium Alkoxide”

3. *SPIE - The International Society for Optical Engineering* *2007*

Se-Chul Lee, **Hyun Suk Kim**, In-Joo Chin
 “Preparation of Surfactant-mediated Nanoporous PMMA Film”

4. *MAM-2006* *Fall 2006*

Yeon Wook Jang, **Hyun Suk Kim**, In-Joo Chin
 "Preparation and characteristics of aqueous poly(urethane-urea)-g-MWNT dispersion"

5. *KJF 2005* *Fall 2005*

Hyun Suk Kim, Hyoung-Joon Jin, In-Joo Chin, Hyoung Jin Choi, Jinsoo Joo
 “Carbon Nanotube-Organized Polymeric Fibers and Measurement of their Electrical Conductivity”

6. *ACS Meeting* *Fall 2005*

Hyun Suk Kim, Jun Hee Sung, Hyoung Jin Choi, In-Joo Chin, and Hyoung-Joon Jin
 “Electrospun nanofiber of multi-walled carbon nanotube and poly(methyl methacrylate) composites”

7. *ACS Meeting* *Spring 2005*

Kyu Tae Park, **Hyun Suk Kim**, Kwangsok Kim, In-Joo Chin
 “Electrospinning of crystalline poly(L-lactic acid) and amorphous poly(ether sulfone) in mixed solvents”

8. *ACS Meeting* *Spring 2004*

In-Joo Chin, Jun Hee Sung, Bong Joon Park, **Hyun Suk Kim**, Hyoung Jin Choi
 "Preparation and Characterization of Microcapsules Containing PMMA-coated Titanium Dioxide Suspension"

9. *ACS Meeting* *Fall 2003*

Hyun Suk Kim, Kwan-Young Kim, Hyoung-Joon Jin, In-Joo Chin
 "Electrospinnig using Liquid Reservoir Collector"

10. *MRS Fall Meeting 2003* *Fall 2003*

Hyun Suk Kim, Kwan-Young Kim, Hyoung-Joon Jin, In-Joo Chin
 "Morphology Control of Electrospun Fiber Membrane Using NaCl Crystallization"

11. *The Polymer Society of Korea Fall Meeting* *Fall 2003*

Kwan-Young Kim, **Hyun Suk Kim**, Hyoung-Joon Jin, In-Joo Chin
 “Meso-Patterning using Immiscible Polymer Blend system”

Hyun Suk Kim

The date of birth: 10/25/1976

12. *The Polymer Society of Korea Fall Meeting*

Fall 2003

Hyun Suk Kim, Kwan-Young Kim, Hyoung-Joon Jin, In-Joo Chin

“Electrospinning using the water reservoir collector”

AWARDS/ACTIVITIES

KOSEF Fellowship for international research internship 2004

Honor student scholarship from Inha University (undergraduate) 1996 1st, 2000 1st/2nd, 2001 1st

Honor student scholarship from Inha University (graduate) 2003-2005