# **Seung Min Kim**

PURDUE University School of Materials Engineering <u>E-mail</u>: kim319@purdue.edu

#### **EDUCATION**

Korea Advanced Institute of Science and Technology, Daejeon, Korea

August 2004

Master of Science Degree in Materials Science and Engineering Scholarship: Awarded by Korea Ministry of Science and Technology Major Advisor: Prof. Yoon, Duk Yong (E-mail: dyyoon@kaist.ac.kr)

Seoul National University, Seoul, Korea

Bachelor of Science Degree in Materials Science and Engineering

February 1998

#### **EXPERIENCE**

## Materials Interface Laboratory, KAIST, Daejon, Korea

Research Assistantship September 2002 – August 2004
Performed research on interfacial structures and their effects on grain growth. Analyzed interfacial structures with Scanning Electron Microscopy and Transmission Electron

Microscopy.

#### Hynix Semiconductor, Inc., Flash Memory R&D Division, Icheon, Korea

Product Engineer/Researcher

December 2000 - March 2002

Participated in project that developed NOR-type flash memory for semiconductors. Performed device function-and-reliability testing and analyzed the causes and mechanisms of device failure. Won Top New Employee Award in February 2001.

### **MASTER'S THESIS**

S.M. Kim, "Coarsening of Cubic TiC Grains with Round Edges in Ni-Rich Liquid Matrix," Korea Advanced Institute of Science and Technology, 2004

# **PUBLICATIONS**

M.J. Kim, <u>S.M. Kim</u>, and D.Y. Yoon, "Singular-Grain Boundaries in Alumina Doped with SiO<sub>2</sub>." *Journal of the American Ceramic Society*, 87 [3], 507-509 (2004)

S.M. Kim, J.Y. Ko, and D.Y. Yoon, "Coarsening of Cubic TiC Grains with Round Edges in Ni-Rich Liquid Matrix." (Manuscript in preparation)

#### **PRESENTATIONS**

S.M. Kim, J.Y. Ko, and D.Y. Yoon, "Coarsening of Cubic TiC Grains with Round Edges in Ni-Rich Liquid Matrix." (Presented at the Fall meeting of the Korean Ceramic Society on October 17, 2003.)

S.M. Kim, J.Y. Ko, and D.Y. Yoon, "Coarsening of Cubic TiC Grains with Round Edges in TiC-20wt%Ni." (Presented at the Spring meeting of the Korean Powder Metallurgy Institute on April 11, 2003.)

# **PREVIOUS RESEARCH**

"Microstructure and Mechanical Properties of Ultra-Fine TiC-Based Powder Tool Materials." (Project based on research for master's thesis, supported by a grant from the Korean Ministry of Science and Technology's 21st Century Frontier research and development program.)

"Control of Interface Migration." (Project examining singular-grain boundaries in alumina doped with SiO<sub>2</sub>, supported by a grant from the Korean Ministry of Science and Technology through the National Research Laboratory program.)

## **ADDITIONAL RESEARCH**

"Development of 3V 32Mbit NOR-Type Flash Memory." (Project involving device testing and failure analysis using a memory tester and reliability monitoring, conducted from February 2001 to February 2002 at the Flash Memory R&D Division of Hynix Semiconductor, Inc.)