

# Saeja O. Kim

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**EDUCATION**

1988 Ph.D. University of Illinois, Urbana-Champaign, Urbana, IL  
Thesis: "Projective Resolutions of Generic Order Ideals"

1985 M.S. Math. Brown University, Providence, RI

1975 B.S. Math. *Magna Cum Laude*, Seoul National University, Seoul, Korea

**APPOINTMENTS**

Sep. 1997 Associate Professor  
- Present University of Massachusetts Dartmouth

Jan. 2000 Visiting Scientist  
- June 2000 Brown University, Department of Mathematics

Sep. 1990 Full Time Visiting Lecturer & Assistant Professor  
- May 1997 (Awarded tenure from September, 1996)  
University of Massachusetts Dartmouth

Aug. 1988 Visiting Scholar in Mathematics  
- Aug. 1989 University of Illinois at Urbana-Champaign

Sep. 1988 Consultant  
- Jan. 1989 Wolfram Research Institute

Mar. 1988 Post Doctoral Fellow in Mathematics  
- June 1988 Harvard University

**RECENT PUBLICATIONS**

• S. O. Kim, Y.Y. Earmme, K.-S. Kim, "Useful Conservation Sums in Molecular Dynamics and Atomistics," *Mathematics and Mechanics of Solids*, doi:10.1177/1081286509357338, Feb. 2010.

- J.-H. Jung, S. Gottlieb, S. O. Kim, C. L. Bresten, D. Higgs, “Recovery of high order accuracy in radial basis function approximation of discontinuous problems,” *Journal of Scientific Computing*, doi: 10.1007/s10915-010-9360-7, Feb. 2010.
- S. Gottlieb, J.-H. Jung, S. O. Kim, “A Review of David Gottlieb’s work on the Resolution of the Gibbs phenomenon,” *Submitted to Communications in Computational Physics*, 2009.
- J.-H. Jung, S. Gottlieb, S. O. Kim, “Iterative adaptive RBF methods for detection of edges in two dimensional functions,” *Submitted to Applied Numerical Mathematics*, 2009.
- B. Burke, S. Kim, K.-S. Kim, “Partial Polar decomposition inverse method applied to determination of internal stresses in an elastic complex structure,” *International Journal of Solids and Structures*, **vol. 44** (2007), 2010-2020.

## OTHER PUBLICATIONS

- Saeja O. Kim, “Projective Resolutions of Generic Order Ideals,” *Journal of Algebra*, **vol. 191**, no. 1 (1997), 279-330.
- Saeja O. Kim, “Connectedness of a Variety generated by an Order ideal on the punctured spectrum,” *Communications in Algebra*, **vol. 24**, no. 9 (1996), 2931-2943.
- Saeja O. Kim, “Repairing Non-commutative Diagrams,” *Journal of Algebra*, **vol. 161**, no. 2 (1993), 311-323.

## SYNERGISTIC ACTIVITIES

- Director of Assessment and Student Research of NSF-funded RUI: CSUMS: Research in Scientific Computing in Undergraduate Education (RESCUE) at UMass Dartmouth, since 2008
- Coach and Consultant (since 2008) for Barrington Middle school MATHCOUNTS Team since 1994 and Coach for RI State MATHCOUNTS Team for the National Competition (2007, 2006, 2002, 1996, 1995)
- Mathematics Department Liaison (since 2008) for NSF-funded Noyce Scholarship Program of the Center for University, School & Community Partnerships (CUSP) at UMass Dartmouth

## COLLABORATORS

Thesis Advisor: Daniel R Grayson, University of Illinois at Urbana-Champaign.

S. Gottlieb, UMass Dartmouth. A. Heryudono, UMass Dartmouth.  
 J.-H. Jung, SUNY Buffalo. S. Sarra, Marshall University. C. Wang, UMass Dartmouth.  
 K.-S. Kim, Brown University. Y.Y. Earmme, Korea Advanced Institute of Science and Technology, Korea.