

## Sang-Gu LEE

Full-time Professor  
Department of Mathematics



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**Key Words** Matrix, Linear Preserver Problems, Combinatorics, Math Modeling  
Computational Math, 3D Printing, History of Math, Mobile Mathematics  
**Research Area** Matrix Theory, Combinatorial Matrix Theory, Numerical Linear Algebra, Math Modeling,  
Computational Math, 3D Printing, History of Math, Mobile Mathematics

**Education**

• 1991	PhD	Utah State Univ., USA
• 1987	MSc	Utah State Univ., USA
• 1981	BSc	Sungkyunkwan Univ

**Experience**

• 2006.4.1 - 2013. 2.28.	Director of BK 21 Mathematical Modelling HRD Division of SKKL
• 2001.3.1 - 2003.2.28	Chair of Math Dept., Sungkyunkwan Univ.
• 2005. 9.1 - 2012.2.28.	
• 2007. 9.1 – 2007.8.30	Visiting Professor - Univ. of Nor. Iowa, Iowa, USA
• 1998.9.1 – 1999.8.30	College of William & Mary, USA

**Position**

• 2015/01/01-2016/12/31	Vice President of Korean Mathematical Society
• 2011/01/01-2015/12/31	ICME12 and ICM 2014 LOC Member, ILAS 2014 SOC & LOC Co-Chair
• 2007/01/01 -2016.12.31	Editor-in-Chief for Journal of KSME Series E

**Selected Publication**

- Sign idempotent sign pattern matrices that allow idempotence, Linear Algebra Appl. 487 (2015), 232–241. (with Jin-Woo Park) (SCI)
- SIMULTANEOUS SOLUTIONS OF OPERATOR SYLVESTER EQUATIONS, Studia Mathematica, 222 (2014), 87-96. (with Phong, Vu Quoc) (SCI)
- A comparison of term ranks of symmetric matrices and their preservers. Linear Algebra Appl. 438 (2013), no. 10, 3745–3754. (with L. Beasley, S.-Z. Song, K.-T. Kang)(SCI)
- A HOPF BIFURCATION IN A THREE-COMPONENT REACTION-DIFFUSION SYSTEM WITH A CHEMOATTRACTION IN ONE DIMENSION, Abstract and Applied Analysis (2013), 1-11. (with Y. Ham, Q.P. Vu)(SCI)
- Simultaneous solutions of matrix equations and simultaneous equivalence of matrices. Linear Algebra Appl. 437 (2012), no. 9, 2325–2339. (with Q.P. Vu) (SCI)
- Springer Book: Mobile Linear Algebra with Sage, Selected Regular Lectures from the 12th International Congress on Mathematical Education, Springer, (Editor in Chief: Sung Je Cho), (2015)
- Improving Computational Thinking Abilities Through the Teaching of Mathematics with Sage, J. Korea Soc. Math. Ed. Ser. E: Communications of Mathematical Education, Vol. 29, No. 1, Jan. 2015. 19-33 (with K. Park)(KCI)
- A Mobile, Open-source 2-D and 3-D Printing Graphic Creation C.A.S. Tool for Mathematics Courses, Journal of US-China Education Review A, Vol. 4, No. 8, 565-580, 2014. (with V. Lang, J. Lee)

**Others**

- Patent: Cloud computing and recording Method for Random Problem Generator  
- Submission Number : 10-2014-0139027  
- Registered number : 10-1560802 (Oct. 7 2015)