

# Jin-Goo Park

- 2019 [연구우수교수](#)

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## 목차

- [1 Profile](#)
- [2 Research Topics](#)
- [3 Papers](#)
- [4 Writings](#)
- [5 Industry-Academia Collaboration](#)
- [6 Patents](#)
- [7 Contact Information](#)

## Profile

- 2015 ~ present Member, The National Academy of Engineering of Korea (NAEK)
- 2017 ~ present Director, Environmentally Benign Surface Cleaning ICC
- 2012 ~ 2014 Vice Dean of Graduate School
- 2012 ~ 2019 President, Society of International Planrization/CMP Technology
- 2009 ~ 2012 Visiting Research Professor, Northeastern University, Boston, MA
- 2006 ~ present Managing Director and Board Member of Korea Cleaning UGM
- 2004 ~ 2006 and 2011 ~ 2015 President of Korea CMPUGM
- 2003 ~ present Program Committee Member, SEMI Korea STS
- 2002 ~ 2003 Visiting Scholar, Department of Mechanical Industrial and Manufacturing Engineering, Northeastern University, Boston, USA
- 1992 ~ 1994 Member Technical Staff, TexasInstrument,Dallas,TX

## Research Topics

- Wet Cleaning Processes/Chemicals in Semiconductor and Electronic Materials Fabrication,
- Chemical Mechanical Planrization, Post CMP Cleaning,
- Mask and EUV Cleaning,
- Wettability of Surfaces,
- Particle/Metallic Adhesion and Removal,

## Papers

- “Study on possible root causes of contamination from an incoming PVA brush during post-CMP cleaning”, Polymer Testing, 2019  
<https://www.sciencedirect.com/science/article/pii/S0142941819303563>

- “Post-CMP Cleaning of InGaAs Surface for the Removal of Nanoparticle Contaminants for Sub-10nm Device Applications”, ECS J. Solid State Sci. Technol., 2019  
<https://iopscience.iop.org/article/10.1149/2.0051905jss/meta>
- “Removal of EUV exposed hydrocarbon from Ru capping layer of EUV mask using the mixture of alkaline solutions and organic solvents”, Colloids and Surfaces A, 2018  
<https://www.sciencedirect.com/science/article/pii/S092777571830582X>
- “Investigation of cu-BTA complex formation during Cu chemical mechanical planarization process”, Applied Surface Science, 2016  
<https://www.sciencedirect.com/science/article/pii/S0169433216311254>
- “Fabrication of hydrophobic/hydrophilic switchable aluminum surface using poly(N-isopropylacrylamide)”, Progress in Organic Coatings, 2016  
<https://www.sciencedirect.com/science/article/pii/S0300944016301916>

## Writings

- Developments in surface contamination and cleaning, Volume 9: Methods for Surface Cleaning (2017) ISBN: 978-0-3234-3157-6, Chapter 5. Contamination Removal From UV and EUV Photomasks, 2017  
[https://books.google.co.kr/books?id=emWfDAAAQBAJ&pg=PR2&dq=978-0-3234-3157-6&hl=k\\_o&sa=X&ved=0ahUKEwjx39rH6tfnAhUjlqYKHYuQD1cQ6AEIKDAA#v=onepage&q=978-0-3234-3157-6&f=false](https://books.google.co.kr/books?id=emWfDAAAQBAJ&pg=PR2&dq=978-0-3234-3157-6&hl=k_o&sa=X&ved=0ahUKEwjx39rH6tfnAhUjlqYKHYuQD1cQ6AEIKDAA#v=onepage&q=978-0-3234-3157-6&f=false)
- Handbook of Silicon Wafer Cleaning Technology, 3rd Ed., ISBN: 978-0-323-51084-4, Chapter 3. Particle Deposition and Adhesion and Chapter 10. Metal Surface Chemical Composition and Morphology, 2018  
<https://books.google.co.kr/books?id=3JOZDgAAQBAJ&pg=PR4&dq=978-0-323-51084-4&hl=ko&sa=X&ved=0ahUKEwj69qp6tfnAhWKwZQKHf7AALIQ6AEIKDAA#v=onepage&q=978-0-323-51084-4&f=false>
- Guest Editor, Focus Issue on Chemical Mechanical Planarization for Sub-10 nm Technologies, ECS Journal of Solid State Science and Technology, 2019

## Industry-Academia Collaboration

- Ebara (Japan), Post CMP Cleaning
- Samsung Electronics (Korea), Backside particles contamination
- BASF-Chemetall (USA), Ceria particle removal
- SKhynix (Korea), IPA impurity control

## Patents

- EUV mask cleansing solution and method of fabrication of the same  
<https://patents.google.com/patent/KR101972212B1/en>
- Cleaning method for PVA brush and that apparatus thereof  
<https://patents.google.com/patent/KR20190033339A/en>

## Contact Information

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