

Korean International Semiconductor Conference & Exhibition on Manufacturing Technology 2025

## **KISM 2025 BUSAN**

Re:Innovation of Semiconductor Manufacturing for AI Ecosystem



Dr. Yongsik Moon

(EHWA Diamond, Korea)

Yongsik Moon, Ph.D., is currently the **Director of Technology** in the CMP Disk Business Unit at **EHWA Diamond**, Korea. He has brought over two decades of comprehensive experience in **Chemical Mechanical Polishing (CMP)**, spanning equipment manufacturers, IDMs, logic foundries, and memory semiconductor companies.

Dr. Moon began his CMP career in 2000 as a **CMP Process Development Engineer** at **Applied Materials**, where he developed **Best Known Method (BKM)** recipes for Cu interconnect CMP—practices still used in high-volume manufacturing today. In 2005, he joined **Advanced Micro Devices (AMD)** and advanced to **R&D Manager** of the CMP development team, leading CMP process innovations for next-generation CPUs.

Following AMD's spin-off, Dr. Moon took on leadership roles at **GlobalFoundries** as **CMP/Plating R&D** and **Manufacturing Module Manager**, driving both technology development and production implementation for foundry products.

Upon returning to Korea, he joined **SK C&C**, where he led the development of **AI-enabled automatic defect classification systems** and **big data analytics platforms** for semiconductor manufacturing. He later held strategic roles at **SK hynix**, focusing on **CMP equipment development** and **procurement**. Dr. Moon earned his **Ph.D. in Mechanical Engineering** from **UC Berkeley** in 1999, specializing in **Chemical Mechanical Polishing**. He is also a **co-author of the book** "Advances in Chemical Mechanical Planarization (CMP)", edited by Prof. Suryadevara Babu (Elsevier, 2016). His diverse career offers a unique, end-to-end view of CMP, from R&D to advanced manufacturing and data-driven innovation.