

ALD 2016 Ireland

Sumit Agarwal
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Sumit Agarwal is an Associate Professor of Chemical and Biological Engineering at the Colorado School of Mines, Golden, CO, USA. He received his B.S. in Chemical Engineering from the Indian Institute of Technology – Varanasi in 1996. Following that, he received his M.S. and Ph.D. degrees in Chemical Engineering from the University of New Mexico in 1998 and the University of California – Santa Barbara in 2003, respectively.

Dr. Agarwal's research has spanned a broad range of topics related to plasma processing of materials where he has employed *in situ* plasma and surface diagnostics to understand interfacial dynamical phenomena at gas-solid interfaces during material growth. Over the past decade, his research has been focused on understanding the growth mechanism during thermal and plasma-assisted atomic layer deposition (ALD) of metal oxides, metal nitrides, and metals. In 2011, he received the Paul H. Holloway Young Investigator Award from the Thin Films Division of the AVS for his use of *in situ* surface diagnostics to study surface reactions during film growth, including ALD surface reactions. Dr. Agarwal has also worked on the growth of group IV nanomaterials using plasmas for applications in energy conversion and storage, and more recently, atomic layer etching of dielectrics.