

Jeffrey J. Derby

“Continuum transport of heat, mass, and momentum in crystal growth processes: Fundamentals and computational modeling”



Jeffrey J. Derby is currently the Distinguished McKnight University Professor in the Department of Chemical Engineering and Materials Science at the University of Minnesota. He received a B.S. in Chemical Engineering from Caltech, 1981, an M.S. in Chemical Engineering Practice from MIT, 1982, and a Ph.D. in Chemical Engineering from MIT, 1986. Prior to his appointment to the faculty at Minnesota, he spent two years with the Physics Department at Lawrence Livermore National Laboratory. His research program centers on the theoretical analysis of materials processing systems, especially crystal growth processes, and has resulted in over 150 refereed and invited publications and over 225 invited talks. An acknowledged international expert in crystal growth processes, his work has concentrated on the modeling of bulk crystal growth, with recent emphasis on radiation detector and photovoltaic materials. Derby has received the NSF Presidential Young Investigator Award, the University of Minnesota McKnight-Land Grant Professorship, the ACCG Young Author Award, and the Research Award of the Alexander von Humboldt Foundation. He is a member of the Executive Committees of the National and Western Sections of the American Association of Crystal Growth and of the International Organisation of Crystal Growth. He has served as an Associate Editor of the *Journal of Crystal Growth* since 1997 and served as the Program Co-chair for the *International Conference on Crystal Growth* in 2007. Derby served the President of the American Association of Crystal Growth from 2008-2011.