

## Ion Mobility: An Aerosol Dynamics Approach to Manipulate and Characterize NanoParticles

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Burchard 118, 11am

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This talk will provide an overview of our research, where we use ion-mobility of particles in the aerosol phase to study a variety of nanoparticle based problems. These problems of scientific and technological interest include assembly on surfaces, the characterization of nanoparticle reactivity, transport of nanowires and growth of nanotubes, and the stability of colloids.

**Professor Michael Zachariah** is the founding Director of the University of Maryland/NIST Center for NanoManufacturing and Metrology and was the founding Director of the Army Center for Nanoenergetics Research. He has published over 190 scientific papers, and presented over 80 invited talks, in the area of aerosol and nanoparticle science, combustion, and nanoscale characterization by mass-spectrometry and optical spectroscopy. Prior to his arrival at the University of Maryland, he was on the faculty at the University of Minnesota and group leader of the reacting flows group at NIST. He holds a B.S in Biochemistry and received the PhD in Chemical Engineering from UCLA.



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