"Discovery and Development of High Performance Materials through Collaborative Innovation"

Wednesday
November 15, 2017
3:00 pm
Wu and Chen Auditorium
Levine Hall

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Abstract

Are you curious about an industrial chemist or engineer role? What does it take to move technology towards commercialization where the potential value of a technology is just as important as the technical feasibility of the solution? What are the circumstances that an industrial chemist or engineer can find themselves in and what is required for success in these diverse situations? We will use several examples of Dow research and innovation from conception to commercial reality to highlight what an industrial chemist role is like at Dow. These examples of successful Dow technology will come from two different areas within the company. The first focuses on the discovery and development of chain shuttling olefin polymerization catalysis for the generation of INFUSE™ olefin block copolymers. The second comes from Dow's BETAMATE™ and BETAFORCE™ Structural Adhesives for light weight bonding applications. Clearly, these success stories and the successful careers which resulted from this research start with a solid technical background but an important aspect of these stories is that it takes more than just technical abilities. Creativity, leadership, and communication skills as well as the ability to collaborate with a diverse range of roles are all necessary for success. Please come with your questions about industrial chemistry!

Bio

David Devore is a Fellow in Core R&D at The Dow Chemical Company, where he has worked since 1989. Dave's primary field of research is in the discovery of new catalysts, particularly for Polyolefins, and in the development of new materials for electronic applications. He has been involved with the discovery and development of Dow's INSITE* Technology and Constrained-Geometry Catalysts. Prior to his role as a Fellow, he was the Sr. Director for the Chemical Sciences capability within Core R&D. David's research interests are varied covering a range of homogeneous and heterogeneous catalytic chemistries, transition metal catalyzed polymerizations, the development of high through-put (HTR) research techniques for synthesis and catalysis, and the development of new organic materials for application within OLED displays. David completed his B.A. in Chemistry from Augustana College in 1982 and his Ph.D. from Kansas State University in 1987. Then prior to joining Dow he finished two Post- Doctoral appointments at Bristol University, England, and at Pennsylvania State University. David holds 57 US patents and has 18 technical publications.

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