

CHEMISTRY COLLOQUIUM

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3:15 PM, Room 111, Life Sciences

Nanotechnology Applications in Coatings

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The use of nanotechnology for enhanced coating performance has come to market for a number of applications. Such coatings cover the range from self-assembly of liquid coatings into multilayer coatings or patterned coating films, to use of various additives. The horizon for improved performance include a full range of properties from the range of additive materials: better gloss retention, scratch resistance, reduce crack propagation, better electrical conduction, enhanced color options, higher temperature performance, low dirt pickup, and antifoulant activity. Approaches, enhancements, and drawbacks to use of various nanomaterials will be covered.

Learning Objectives: A. Provide insight into the advancing role of nanomaterials and nanotechnology for coatings. B. Understand the simultaneous global technology developments that are driving these advances. C. Appreciate the limitations and difficulties in such developments. D. Provide a view of the future growth of nanotechnology in coating materials.