

Emerging Technologies

The Emerging Technologies session is the forum for groundbreaking new trends in the thin film coating industry. Such trends may be either the application of established coating technologies in innovative ways to expand into new applications, or creative new developments in coating technologies that overcome long-standing roadblocks in the industry. Technologies that successfully cross over from early-stage feasibility studies into commercially viable industry solutions are a primary focus of this session.

The emergence of Atomic Layer Deposition (ALD) processes for high-volume capability through fast-sequence processing that enables roll-to-roll production promises a dramatic improvement of the commercial viability of ALD for many new applications, and is a specific focus area for 2011. **Steven George, University of Colorado, Boulder**, will present an invited talk on this topic, and we encourage researchers in this field to share their insights and accomplishments.

Other examples for topics of strategic interest for the Emerging Technologies session are:

- *New thin film applications in alternative energy generation and storage, as well as energy conservation*
- *Economically viable alternatives to classic transparent conducting oxides (TCOs) for example using nanotubes and nanowires*
- *New transparent oxide electronics applications: TFTs and newp-type material junction devices*
- *High-performance electronics on flexible transparent substrates and roll-to-roll processing*

We are soliciting contributed talks and posters for these areas, and always welcome new and innovative topics that advance the use of thin film processing in modern technology applications. We are particularly interested in technologies which support the two conference Symposia: *Manufacturing and Technology for Thin Film Photovoltaics* and *Coating Advances and its Impact on the Future of the Vacuum Coating Industry*.

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