

**TRACK 1: STRUCTURES AND MECHANICAL SYSTEMS**

**“IMPROVING EFFICIENCY OF AEROSPACE PAINT SHOPS”**

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**ABSTRACT**

The presentation will focus on developing trends in aerospace paint hangar operations and the ways coating suppliers can help aircraft OEMs and MROs meet the new challenges. In particular, two topics will be presented in detail. First, Accelerated cure paint systems – Curing represents up to 20% of the aerospace paint hangar time and is the major bottleneck in the production process. UV cure is one of the promising technologies for significantly reducing drying time. Various UV curable technologies such as 1K UV cure, 2K dual cure, 2K latent cure, and 2K UV accelerated cure will be reviewed. 2K UV and thermally accelerated cure clearcoat and topcoat prototypes recently developed by PPG will be described. Second, Robotic paint application –Rotary Bell has been the standard painting technique in the automotive industry for a few decades and it’s now being considered for the aerospace field. It allows to achieve a better quality of finish and more consistent appearance, reduce paint usage and waste, and increase the safety of the paint hangar operations. Summary of the application studies for complete aerospace systems (primer, intermediate coat, basecoat, clearcoat) recently performed by PPG will be presented.

**BIOGRAPHY OF SPEAKER**



Dr. Mikhail Khudiakov is the Global Technology Manager at PPG with the focus on Advanced Aerospace Coatings. Mikhail has more than ten years of experience in coatings development including polysiloxane, epoxy, urethane and polyurea chemistries. Mikhail holds a PhD degree in Chemistry and Materials Science from the University of Wisconsin – Madison, USA and BS degree in Chemistry from Moscow State University, Russia. Prior to joining PPG, Mikhail worked at Johnson Matthey Fuel Cells, SDC Technologies (wholly owned subsidiary of Mitsui Chemicals), and Custom Building Products.