



# ADHESION SCIENCE AND TECHNOLOGY

Focus seminar with Dr. Kash Mittal

- Adhesion: introduction, theories and mechanisms
- Surface contamination and cleaning
- Analyzing wetting and adhesion by contact angle measurement and the limits of test inks
- Investigation of interfacial interactions
- Polymer surface modification
- Silanes and other adhesion promoters
- Adhesion of thin films and coatings and its measurement

## Expert knowledge for your application

For our focus seminar, we are very happy to have Dr. Kash Mittal by our side holding his *Course on Adhesion Science and Technology*. He is ranked among the world's top experts in adhesion research and giving courses around the globe. Providing a comprehensive overview of adhesion in this joint seminar, we will also cover contact angle measurement as an effective method for analyzing adhesion and wetting.

## STRENGTHEN YOUR BOND WITH SCIENCE

Apply and further your knowledge about wetting and adhesion with Dr. Kash Mittal and our experienced seminar team. Dr. Mittal will provide a scientific overview of adhesion theories and many aspects of surface pre-treatment as well as adhesion on a broad range of materials. Dr. Thomas Willers, manager of our Applications & Science Center, will set his focus on the application of contact angle measurement as a central technique for analyzing wetting and adhesion.

In a session in our laboratory, our team will pass on practical know-how about adhesion analysis with up-to-date instruments and methods:

- Tensiometric contact angle measurement using the Wilhelmy method
- Optical contact angle measurement
- Contact angles on fibers and powders
- Measurements on inclined or small samples and in depressions
- Measuring the effect of plasma treatment carried out on-site

The seminar is a two-day course held in English and limited to 30 participants. The practical part of the course will be carried out in small groups.

## Main speaker Dr. Kash Mittal

Dr. Kashmiri Lal Mittal is the editor of 119 published books dealing, *inter alia*, with adhesion measurement, adhesion of thin films and coatings, polymer surface modification, contact angle and wettability, adhesion promoters and adhesive joints. He has received many prestigious awards including the title of doctor *honoris causa* from the Maria Curie-Skłodowska University, Lublin, Poland. Also, two books were published in his honor. He was Editor-in-Chief of the *Journal of Adhesion Science and Technology* and currently he is the Editor of the „Reviews of Adhesion and Adhesives” journal, which he founded in 2012.

