# **Surface Treatment of Polymer Films**

### Challenges of the Processes and Products of the Future

Joint Technical Conference of Fraunhofer IVV and the European Metallizers Association EMA on the International Converting Exhibition ICE 2005



Chairmen
Dr. Klaus Noller,
Prof. Dr. Horst-Christian Langowski,
Fraunhofer IVV, Freising, D

12.30 Registration, coffee

13.00 Welcome Prof. Dr. Horst-Christian Langowski, Fraunhofer IVV, Freising, D

#### **Future Application Fields**

13.15
Future applications for flexible materials: Food packaging, pharmaceuticals, decorative and technical applications
Simon King,
PCI Films Consulting, Banbury, UK

13.40
Technical trends in the label industry: Decorative layers by printing and vacuum coating techniques, functional elements
Dr. Martin Bergsmann,
HUECK FOLIEN Ges.m.b.H.,
Baumgartenberg, A

14.05
The future of flexible polymeric devices: Displays, solar modules and low-cost electronic devices Dr. Jens Hauch,
Konarka Technologies GmbH,
Erlangen, D

## Substrate Films, Vacuum Coating and Monitoring

14.30
Polyester (PET, PEN) films for present and future applications: Food packaging, displays, solar modules
Richard L. Davis,
Mitsubishi PET Film, Wiesbaden, D

14.55 Coffee break with snacks

Developments in vacuum coating techniques on flexible web: Barrier coatings, conductive and active layers Gerhard Steiniger, Applied Films, Alzenau, D

15.50
From real-time to in-line optical monitoring of polymeric substrates and the deposition of transparent barrier layers Prof. Stergios Logothetidis, University of Thessaloniki, GR

16.15
Barrier mechanisms of vacuum coated polymers: Where are the limits for downgauging of substrates and for barrier properties of coated films?
Prof. Dr. Horst-Christian Langowski,

16.40 Innovations in transparent barrier systems: A converter's view Wolfgang Lohwasser, Alcan Packaging, Neuhausen, CH

Fraunhofer IVV, Freising, D

### Special Product Developments

17.05
Vacuum coating of polymer
films for display applications
Dr. Nicolas Schiller,
Fraunhofer FEP, Dresden, D

17.30
Coating techniques for active packaging: Oxygen absorbers, indicators, antimicrobial films Thomas Wanner, Fraunhofer IVV, Freising, D

17.55
Outlook and discussion
Summary and discussion,
moderated by the chairmen



For discussion 5 min are planned after each presentation.