# Current Effect Pigment Technology for the Coatings Market



### **Effect Pigments**

Historical Development Production Processes Physical and Chemical Principles Effect Pigments in Coatings

This first part will provide an overview of current existing effect pigments including a short review of historical development and current production processes.

The different physical principles of effect pigments will be explained and discussed in regard to the usage in coatings. Apart from the classical pearlescent and metall effect pigments the session will also cover liquid crystals,holografic, CVD and PVD pigments and pigments on new core substrates like silicon dioxide, aluminium oxide or borosilicate glass.

### **Analytical Session**

Light Microscopy REM TEM AFM

The Analytical part will contribute to the various possibilities to either identify effect pigments in coatings mostly by light microscopy or to investigate paint defects caused by effect pigments via REM or TEM. Atomic Force Microscopy provides a closer understanding of the pigments' shape and surface characteristics.

### **Practical Session**

Demomaterial

Hand Experiments

In the Practical Session emphasize will be placed on the understanding of different color mixing principles of solid and effect colors in regard to additive and subtractive color mixtures. The participants will have the possibility to make own experiments and to view demonaterial of various effect coatings applications.

## **Color Design**

Color Trend Organisations

Influence on Color Trends

Future Color Directions 2007/2008

The last part will give an idea how color trends are identified and settled and who is influencing the future trends of automotive and industrial coatings. An outlook to the consumer colors of 2007/ 2008 in regard to consumer goods, home, transportation, visual communication and fashion will be given.

A review of regional automotive color development during the last 25 years will complete the color design session.