

Simulation in Packaging Development

March 10th 2010

Simulations are used in many areas of technology. They drive innovation, increase end user benefits while reducing time to market and development cost. Simulations are often used in:

- Automotive Industry: development and design of automobiles, optimizing the drive comfort etc.
- Aviation: development of aircrafts, optimizing airport operations
- Environmental Technologies: modelling of processes in nature increase its understanding

How can the packaging industry benefit from simulation possibilities?

Packaging can also be described as a system in which a large number of objects are interacting with each other. Complex situations can be identified and optimized with System Engineering tools. It does not matter whether the goal is to find market relevant innovation, improve quality or reduce cost. Modelling of components and processes, analyzing the behaviour of such models and the transfer of conclusions into applications is also possible and useful in packaging.

In this IPI seminar you will learn about already existing ways to increase added value through simulation techniques.

System Engineering approaches with appropriate process models allow:

- New, unusual and surprising perspectives
- Real time or accelerated system dynamic observations
- To understand complexity and limitations
- Learning on specific systems
- To achieve effective competitive advantages

This IPI Seminar will demonstrate with real examples how packaging processes can be designed value added.

Detailed Program

09:00 – 12:00	Packaging Design, Development and the Integration of Artwork Revolutionizing the Packaging Supply Chain (ESKO artwork / Frank Adegeest) Working in a Virtual Environment (Virtual Dimension Center / Dr. Christoph Runde)
12:00 – 13:30	Lunch
13:30 – 17:30	Simulation of Materials Materials in a Virtual Environment (ETH Zürich / Prof. Dr. Pavel Hora) Computer Aided Development of Formed Packages (Rohrer AG / Hans Peter) Successful through Simulation (Schweiter AG / Pieter Volgers)
	Development of Packing Product Lines Packaging Line Configuration (FH Hannover / Prof. Dr. Matthias Weiss) Simulation Technology for the Design of Packaging Lines (Siemens AG / Ralf Hofmann)
	Shelf Life Design and Barrier Materials Permeation Measurement and Shelf Life Prediction (Mocon/Lippke / Andreas Roos) Back to Reality: Barrier Materials Field Experience (Alcan Packaging Ceramis / Oliver Vetter)
17:30 – 18:00	Discussion and Concluding Remarks