

APT_PACK first SEMINAR (2nd October 2006)
Logoplaste Packaging Technology Development Lda (Cascais, PORTUGAL)

“Modelling in Polymer Stretching and Blowing. Properties and Microstructure Developed”

APT_PACK PROJECT

The main objective of the project is the definition of a **global strategy for optimising stretched plastic packaging** (thermoforming, stretch blow moulding). To compensate for the lack of basic understanding that strongly inhibits durable improvements, scientific objective is promoting attainments and applications of fundamental knowledge.

The strategy is to propose **tools** that are necessary for building straightforward correlation between the structure of polymers, its relevance to packaging and the end-use properties of products. This is achieved thank to **fundamental studies** of the material and of the role of its microstructure.

This project addresses packaging, a highly important aspect of **present-day society**. Packaging allows production to be remote from consumption, especially in the case of food. Most consumer products have to be packaged before transportation. Improvement in packaging can indirectly contribute to health, safety (with respect to food) and comfort. Furthermore, the use of plastic materials in packaging have a tremendous impact in energy savings and consequently in the environment. Therefore, a better use and innovation in polymer applications in packaging will also contribute for a sustainable social development.

This project is made up of **16 organisations from 10 different member states** and is therefore transnational in character. This project consists of both more technologically advanced nations as well as countries with less stable economies, such as Eastern European countries, that will benefit greatly from the support provided by this co-operation and the technological dissemination activities.

SEMINAR PROGRAMME *FREE ACCESS*

9:15-9:30h. *Welcome and Seminar's presentation.*

Speaker: **Paulo Correia (Logoplaste)**

APT-PACK Project Introduction

9:30-9:45h: *Introduction to the APT-PACK project.* Speaker: Noelle Billon (CEMEF)

Influence of the Manufacturing Process in different Polymer Properties

9:45-10:10h: *Mechanical behaviour of amorphous polymers near the alpha transition; Application to processing range.*

Speaker: Noelle Billon (CEMEF-armines)

10:10-10:30h: *Measurement of tool/polymer friction.*

Speaker: David Liebing (University of Stuttgart)

10:30-11:00h Coffee

Polymer Material Modelling

11:00-11:20h: *Modelling of polymer infra-red heating.*

Speaker: Fabrice Schmidt (CROMEP)

11:20-11:40h: *Numerical modelling of thermoforming and injection stretch blow moulding.*

Speakers: Gary Menary/Peter Martin (Queen's University of Belfast)

11:40-12:00h: *Can we model stress-strain relationships for polymers without considering morphology?.*

Speaker: Julio Viana (IPC- Inst. for Polymers and Composites, Portugal)

Applications and New Developments in the Industry

12:00-12:20h: *Trends of the packaging Industry – A view from a Global Supplier.*

Speaker: Paulo Correia (Logoplaste)

12:20-12:40h: *Review of medical/pharmaceutical issues.*

Speaker: Michael Cummins (Medtronic)

12:40-13:00h: *Trends in the development and design of new packages.*

Speaker: waiting for confirmation

13:00-13:30h: *Questions/answers. Summary from the project coordinator:*

For further information, please contact:

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