

Research Institute:

PTS München
Hess-Str. 134
80797 München

Head of the research institute:

Dr. Frank Miletzky

Project leader:

Anatoli Davydov

Tel: 089 / 12146-493

Fax: 089 / 12146-36

E-Mail: anatoli.davydov@ptspaper.de

Internet: www.ptspaper.de

Research area: Product aims

Paper, paperboard and board // technical speciality papers

Key words:

Future, retropolation

TITLE:**"Fibre & Paper 2030" - the foresight project of an industry sector****Background/Problem area**

Current trends demonstrate that in the future, paper will not be limited to well established printing and writing functionalities. Innovative paper based solutions will be available for new applications as construction material for houses or furniture, lightweight actuators for robotic systems and revolutionary components for advanced automotive and aerospace constructions.

The aim of the project "Fibre & Paper 2030" was the development of application areas and the analysis of future requirements for paper based materials. Resource efficiency from production and usage up to recycling will be an important part of future sustainability. The sum of insights created will generate new business opportunities for the whole paper industry to develop novel and attractive markets. According to the team motto "Doing the thinkable instead of thinking the doable", the project started with a time travel to a future vision of 2050. This was a prerequisite for the team discussions in the way to the joint identification of future needs and new requirements.

In a second step the project team works on a retro-perspective view on the period to 2030, to check potential pathways into the future, and to verify how the collected ideas can be transferred into future products, services and business models.

Objectives/Research results

The objective of the future-oriented project entitled "Fibre & Paper 2030: Shaping a sustainable future" was to take a look into the future of materials and the sector of the entire paper value chain. A core team made up of 18 representatives from interbranch organisations and several companies have been working on this groundbreaking project during the 15 months of the project period.

Eight true-to-life fields of action, known as thematic areas, were defined for contemplation: Living & Working, Nutrition, Health & Hygiene, Mobility, Information/Communication/Education/Learning, Logistics, Future towns & Architecture as well as General boundary conditions. This scenario framework was then defined more precisely based on 106 selected premises – assumptions derived from future studies in numerous sectors.

A total of 103 participants from a variety of sectors and subject areas initially developed just under 1500 concrete proposals in six idea workshops. Once these proposals had been consolidated, there was a corpus totalling 640 business ideas, of which 375 were classified as being closely associated with paper. They could theoretically be put into practice in the paper value chain now on the basis of current know-how. Of the remaining proposals, 265 were regarded as being unrelated to paper, although they are attractive based on a clearly justified need, while the contributions of future paper have yet to be clarified or developed by research work.

The result is a wealth of interesting and informative project results which was presented for the first time at ZELLCHEMING 2015. At the same time, broad-based communication on this future project, important for the entire paper value chain, will be disseminated through a comprehensive brochure and a separate website at www.faser-papier-2030.de.

Application/Economic benefits

- Determine future impulses, innovations and new business models for lightweight and composite materials on the road to 2030
- Identify and analyze future customer needs and expected requirements as well as new application areas for paper based materials
- Develop a consistent foresight for the innovation potential of the whole industry and its value chains
- Initiate research projects enabling the development of attractive future markets
- Foster interdisciplinary cooperation between organizations and enterprises to prepare for new profitable business opportunities

Period of time: 01.01.2014 – 15.03.2015

Remarks

Research project "Fibre & Paper 2030" is being funded by the curatorship of research and technique of the pulp and paper industry within VDP e. V.