



Products from biomaterials

In the last few years innovative production technologies and applications, the high oil price and environmental aspects have made products from biomaterials more and more attractive. Biomaterials include natural biomaterials and synthetic biomaterials. In the case of natural biomaterials, the original structure remains intact (e.g., wood and paper), while synthetic biomaterials are composed of biomass-derived smaller components and include many bio-based polymers, lubricants, surfactants, solvents and chemical building blocks. A whole range of new technologies is being developed and applied to make competitive biomaterials, with the most important being biotechnology (fermentation and enzymatic conversions), novel thermochemical processes (among them C_1 chemistry), nanotechnology and sophisticated conventional chemistry. Products from biomaterials compete with conventional products which are, for example, made from glass, metals or petrochemical polymers.

New biomaterials are currently being developed, processes are being designed and investment decisions are being made. At this stage it should be taken into account that the environmental impacts associated with biomaterials are often fundamentally different from more conventional materials and that the feedstocks for these materials may compete with global food production. Life cycle assessment (LCA), economic assessments (production costs, markets) and other analyses (e.g., on public perception) can play a crucial role in supporting the sustainable development of biomaterials and generally advancing the sustainability of the materials sector.

The **Life Cycle Management Conference** will offer a forum for this topic by having an extensive session on biomaterials. The Life Cycle Management Conference will take place at the ETHZ in Zurich, Switzerland, on 27-29 August 2007 (LCM 2007, see www.lcm2007.org). The biomaterials session has the ambition to provide a full overview of the latest activities and current understanding in the field, including cutting-edge activities in R&D and production. Papers on environmental analyses and life cycle assessment (LCA) are solicited

- for natural biomaterials and synthetic biomaterials (also combinations of biomaterials and other materials are included),
- thereby covering all product areas, reaching from bulk products to fine chemicals and pharmaceuticals

As an extension to LCA, also papers covering the following issues are invited:

- Economic analyses and markets (including public perception)
- Policy developments and policy analysis
- Tools & methods and databases.

Analyses presented should be comparative in nature, including the strongest competitors for products from biomaterials. Next to papers reflecting the current state of the art also prospective analyses are very welcome.

Instructions for submission of papers will be made available in July 2006 on www.lcm2007.org. Further information regarding the session is available from:

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