

Call For Papers

Feedstocks for the Future: Renewables for the Production of Chemicals and Materials

Today's petrochemical industry is an amazing model of production efficiency, taking crude oil and supplying thousands of discrete chemicals and materials from just seven primary building blocks. Renewable raw materials offer a new set of primary building blocks including *carbohydrates*, in the form of cellulose, starch, hemicellulose, and monomeric sugars, *aromatics*, in the form of lignin, *hydrocarbons* in the form of fatty acids, and *polyols* in the form of glycerol. Yet chemical production today is overwhelmingly dominated by crude oil, principally because conversion technology for renewables still lags far behind that available for nonrenewables.

The Cellulose and Renewable Materials Division (CELL) of American Chemical Society will offer a forum for this topic by sponsoring ***Feedstocks for the Future: Renewables for the Production of Chemicals and Materials***, at the national ACS meeting in Anaheim, CA, March 28 – April 1, 2004. This symposium will include discussions of emerging conversion technologies for renewable building blocks, new mechanistic understanding of these conversion processes, development of new catalytic processes tailored for renewables, life cycle and process analysis of renewables, and identification of new structures that could serve as platforms for renewables-based product families. The symposium hopes to attract contributions from those individuals performing research that will lead to renewables based chemical processes that rival or exceed the diversity and efficiency of today's chemical industry. The symposium is intended to have a strong emphasis on organic chemistry, mechanism, and structure, and is looking for submissions describing novel synthesis and production of chemicals, polymers and materials. Process and life cycle analysis of renewables-based transformations are of specific interest. Please note that we are planning to publish an ACS symposium series volume, pending ACS approval. Papers are solicited in the following additional areas:

- 1) new transformations of carbohydrates to chemicals and polymers
- 2) novel oleochemical processes; new uses of glycerol and fatty acids
- 3) transition metal catalyzed transformations of carbohydrates, lignin, fatty acids, glycerol, etc.
- 4) selective conversion of lignin to discrete products
- 5) economic, environmental, and life cycle analysis of chemicals derived from renewables
- 6) production of new polymeric materials from renewables
- 7) new biocatalytic transformations of renewable building blocks
- 8) industrial uses of renewables and renewables based building blocks

Discussion of simple physical transformations of renewable feedstocks and fuels technology are of lower priority for this symposium, primarily because such topics are well covered elsewhere. Such papers will be considered if they offer new research pertinent to the development of novel chemical co-products or new technology development.

Instructions for submission of papers can be found at www.acs.org. Further information regarding the symposium is available from the meeting co-chairs:

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