

## ECOFUEL: EU-China Cooperation for Liquid Fuels from Biomass Pyrolysis

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Related website <a href="http://www.ecofuel.soton.ac.uk/">http://www.ecofuel.soton.ac.uk/</a>



Fast pyrolysis is a relatively new biomass thermochemical conversion method in comparison to combustion and gasification. A wide range of routes can be explored for use of bio-oils, upgrading and extraction of chemicals. Further implementation of this technology will need a coherent approach involving academia, industry and policy makers. It is not possible for one nation to be the sole driver of this renewable technology, and international collaboration is the best possible solution to accelerate the research and technology development.

ECOFUEL is building an international partnership for new second generation biofuel processes: the research will set the foundation stones for the technologies being developed, and make further contributions to overcoming barriers to commercialisation. The ECOFUEL project will effectively integrate respective regional programmes for better allocation and utilisation of resources, in particular to achieve the critical mass required to move the second generation of biofuels forward.

## **Objectives**

Draw together very best academic research teams from the EU and China with diverse multidisciplinary skills and expertise and with common interests in the field of bioenergy to confront the challenge of climate change and sustainable development in a global framework.

- Execute an innovative exchange and training programme that allows a detailed comparison of different methodologies on their merits, that encourages cross-fertilisation of the ideas behind the various approaches and that will stimulate the commercialization of new biofuel technologies through a close cooperation among international partners.
- Bring together the very best research groups in this field in order to remove fragmentation of the existing research activities at various universities and research institutes and to achieve a critical mass of research effort unparalleled anywhere in the world.
- Create a platform for research training and transfer of knowledge activities, both within the network domain and towards the public domain, crossing inter-sector boundaries; this is essential to promote new second generation of biofuel technologies, to ensure that there is a sufficient number of people trained in this field to meet the challenges ahead, and to ensure the competitiveness of EU industry.
- Disseminate knowledge to the larger international communities to maximize the impact of this network and ensure the academic and industrial relevance of its research activities.
- Provide researchers, young researchers in particular, intensive training-through-research programmes as well as a complementary skills training in order to become trainers of the future in a multi-disciplinary field of academic, industrial and societal importance; and as such improving the young researcher's career perspectives.
- Establish collaborative mechanisms for long-term partnerships between the EU and China researchers and institutes on important issues such as energy to combat the climate changes and other challenges for 21st century





## **Collaborators:**

Aston University
Aalto University
Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences
Shanghai Jiao Tong University

