

16th ESAB NEWSLETTER

The Scientific Committee of the EFB Section on Applied Biocatalysis (ESAB) had her 54th meeting in Brussels/BE on 19 March 2005. Furthermore, ESAB co-organised a workshop on a Strategic Research Agenda for Industrial Biotechnology, in Brussels, on 17 and 18 March. A report of both meetings is given below; it's a long one this time, sorry.....

1. Brussels affairs

Industrial Biotechnology is one of the sections within the European Technology Platform (ETP) on Sustainable Chemistry (see www.suschem.org). The Vision Paper of this ETP (downloadable at the website) has been adopted during a stakeholder meeting in Barcelona on 4 March last. What has to be done now is to draft a so-called Strategic Research Agenda (SRA), which can then be translated into an Action Plan. The Action Plan describes in detail at what time which type of research has to be stimulated in the forthcoming European Framework Programme. Each of the sections of the ETP makes their own SRA, although there are cross-links. The workshops to make a SRA for Industrial Biotechnology are organised by ESAB and EuropaBio, the association of European bioindustries. On the first workshop on 17 and 18 March, presented the 9 research themes of Industrial Biotechnology were presented by our secretary Wim Soetaert. After amendments by the participants they read:

1. Novel enzymes and micro-organisms
2. Fermentation science & engineering
3. Metabolic engineering and modelling
4. Biobased performance and nano-composite materials
5. Microbial genomics and bio-informatics
6. Biocatalyst function and optimisation
7. Biocatalytic process design
8. Innovative down-stream processing
9. Integrated biorefineries

Of course, there are many cross-links between these themes. During the three following workshops, it has to be defined what the contributions of these 9 themes will be to the three 'pillars' of industrial biotechnology, being biomass, bioprocesses & bioproducts, bioenergy.

There is more good news to tell concerning FP7. The DG Research has admitted that neglecting biotechnology in FP6 was a major mistake which should not happen again in FP7. I quote one of the EC speakers at the workshop: "we don't want another disaster in Life Sciences and Technology". A first version of the general FP7 text is circulating now among the member states and it contains promising paragraphs. There will be 9 research themes and one of them is called 'food, agriculture and biotechnology: to create a European knowledge-based bio-economy.' The third subtheme in this is called 'Life sciences and biotechnology for sustainable non-food products and processes', and the explanation contains (among others) the following text: 'Improved crops, feedstocks and biomass (including marine resources) for energy, environment, materials and chemicals, including bioprocesses and biorefinery concepts; biocatalysis.' The present instruments (IP, NoE) will remain, but the EC officers want to reduce the amount of paperwork involved (which is always welcomed by us and all of you, I guess). Furthermore, there are plans for a European Research Council where individual research groups can apply for grants for fundamental research.

This text will be ratified by the Commission soon and will then be sent to the European Parliament, which will discuss it in November. The first call for proposals for FP7 is expected to appear in November 2006.

2. Upcoming events in 2005, incl. deadlines

Symposia (co-)organised by ESAB:

Biotrans 2005, 3-8 July 2005, Aula of the Technical University of Delft/NL, www.biotrans2005.bt.tudelft.nl. The deadline for all kinds of contributions has passed, but you can still register as a participant.

ECB12, 21-24 August 2005, Danish Technical University, Lyngby (near Copenhagen/DK), www.ecb12.dk. The deadline for posters is **1 May**, for cheap registration **20 July**.

RSC Meeting on **Frontiers of Chemical Biology: Mechanistic Enzymology and Biocatalysis**, 31 August - 2 September, University of Exeter/UK, see <http://www.rsc.org/lap/confs/meb05.htm>. The topics of the symposium are: Understanding the enzymatic mechanisms using biophysical, biochemical and molecular biology techniques; Evolving new enzymes with improved properties and altered substrate specificities; Enzymes in industrial biocatalysis and their use in combination with chemical synthesis. The deadline for poster presentations and cheap registration is **30 June**. ESAB members receive a £ 100 reduction on the registration fee !!!

Our ESAB secretary prof. Wim Soetaert organises a symposium on **Renewable Resources and Biorefineries** in Ghent/BE, 19-21 September, see <http://www.rrbconference.ugent.be>. The topics of the symposium are: European Policy; Biorefineries; Renewable feedstocks for chemical manufacture; Industrial Biotechnology; Carbohydrates and Oleochemicals; New Materials and Products based on Renewable Resources; Biofuels & Bio-energy; Sustainability and Renewable Resources. The deadlines for all kinds of contributions is **15 May**, for registration **1 September**.

Second Conference on **Enzyme Reaction Engineering**, 21 – 24 September, Dubrovnik/Cavtat, Croatia, see <http://www.fkit.hr/erec2005>. Deadlines for abstracts and cheap registration is **31 May**.

Symposia not organised by ESAB:

Glycoproteomics – protein modifications for versatile functions, Dubrovnik, Croatia, 28-30 June 2005, see <http://bmb.pharma.hr/glyco2005/>.

Enzyme Engineering XVIII, Gyeong-ju, Korea, 9-14 October 2005, see www.engconfintl.org/5ae.html.

3. Upcoming ESAB events in 2006 and 2007

After the first successful symposium in Paris in 2002 there are now plans for a second symposium on **Protein Design and Evolution for Biocatalysis**. Organisers will be prof. Uwe Bornscheuer (DE) and dr. Roland Wohlgemuth (Fluka, CH). The location will be Greifswald, north-east Germany; the date will probably be early September 2006. In conjunction with this event there will be a course on Directed Evolution in Vilnius, Lithuania, organised by prof. Juozas Kulys and Roland Wohlgemuth.

The third symposium on **Biocatalysis in the Food and Drinks Industries** will be held in Wageningen/NL, from 24-26 September 2006, organised by Maurice Franssen. Details will be published early 2006 at the website <http://www.wau.nl/vlag/conf.htm>.

The date of the 2007 version of the well-known **Biotrans** series has been fixed at 8-13 July 2007. The location will be Oviedo/ES, the organisator is prof. Vicente Gotor.

4. General Assembly

The General Assembly of ESAB will take place on Tuesday 5 July from 13.15-14.15, during Biotrans 2005, in lecture hall C in the aula of the TU Delft. All ESAB members are cordially invited to discuss past, present and future of ESAB with the Board!

Maurice Franssen (chairman ESAB)