

## MINUTES OF THE WP PROCESS INTENSIFICATION BUSINESS MEETING PRAGUE, 30 AUGUST 2010

Delegates present: Dirk Kirschneck (DK, Industry, Austria), Tord Svedberg (TS, Academia, Sweden), Tommy Norén (TN, Industry, Sweden), Jean Pierre Brunelle (JPB, Industry, France), Jan Harmsen (JH, Industry, the Netherlands), Jiri Klemes (JK, Academia, Czech Republic), Liubov Kiwi-Minsker (LKM, Academia, Switzerland), Bruno De Witte (BDW, Industry, Belgium), Ilkka Turunen (IT, Academia, Finland), Andrzej Stankiewicz (AS, Academia, the Netherlands), Bora Aydin (BA, Industry, Turkey), Tom Van Gerven (TVG, Academia, Belgium).

Invited guests: Jean Jenck (JJ, Industry, France), Adam Harvey (AH, Academia, UK), Andy Furlong (AF, IChemE, UK), Bettina Muster (BM, representing Hans Schnitzer, Academia, Austria).

### Agenda

1. Opening/amendments to the agenda  
The preparation of EPIC2011 will be discussed first as AH has a presentation to give at the CHISA conference during this meeting.
2. Introduction of new Delegates and Guest Members  
**Tord Svedberg** (Swedish Environmental Research Institute) is the academic delegate for Sweden.  
**Bruno De Witte** (Janssen Pharmaceutica – Johnson&Johnson) is the industrial delegate for Belgium.  
**Mark Dickson** (Morgan Sindall) is succeeding John Nichols (who retired) as the industrial delegate for the UK.  
**Bora Aydin** (Delft University of Technology) is the industrial delegate for Turkey.
3. Minutes of the previous Business Meeting in Venice (17-06-2009)  
DK was present at the meeting and his name should have figured in the list of attendees. There are no other amendments.
4. Update on preparations to EPIC2011 in Manchester  
An update is presented by AF and AH; see presentation attached to these minutes. A discussion followed:
  - IT mentions that EFCE WP Education will take the initiative to organise a **satellite conference on the education of PI**. The WP PI welcomes this initiative.
  - **Suggestions for additional Keynote Lectures are welcome.** AS suggests to invite E.N. Lightfoot on “Process Intensification for downstream processing”, a lecture that was cancelled at CHISA.

- The abstract deadline of October 17, 2010, has not yet been clearly advertised. **AF will send around a mail to the WP with the ‘Call for papers’ leaflet attached. WP members are requested to promote the Conference.**
- It is important to have industry present during the Conference. A separate communication with industry is preferable (industrial presenters are not likely to write long papers). **AS will organize the EUROPIE Board Meeting and Expert Meeting during the Conference. AH will also organize the UK PIN Meeting during the Conference.**
- Conference fees remain a point of attention. The organizers are requested to review prices, certainly for students. Also different prices for academics and industry are possible. Budget accommodation should be advertised on the Conference website.
- The WP will be involved in the abstract review process. Quality of papers and posters should be scrutinized carefully. The number of papers from the same research group should be limited. The organizers are considering flash presentations (“Intensified Presentations”) to steer the audience to the poster session.
- Following the contact made by JJ at WCCE in Montréal, the **organizers will also contact AIChE (Section 12F)** to distribute the call for papers. **BA can also assist.**

#### 5. Report on the WP and other European activities

##### ▪ *Delft Skyline Debates*

As a follow up of the European Roadmap for Process Intensification (funded by the Dutch SenterNovem Agency) the Delft Skyline Debates were held from Autumn 2009 to Spring 2010. AS gives a short overview, see presentation attached to these minutes. The goal of these Debates was a science-driven identification of the development path for large societal trends. This identification was performed on three levels: beacons for 2050, PI milestones for 2020, research topics for 2015. The Debates led to three deliverables: the Delft Skyline Times, 14 scientific Position Papers (to be published in CEP:PI) and a research agenda to be communicated to the EU (October 2010). Additional authors are required for the paper on “Low-cost small scale processing technologies for production applications in various environments (e.g. mass produced factories)”. **BM will discuss this with her supervisor Hans Schnitzer.**

##### ▪ *Poster Competition Session at CHISA*

This Competition is a joint initiative of the EFCE WP’s on Process Intensification, Chemical Reaction Engineering and Multiphase Flow. 22 posters were present. The prize of €1000 was awarded to C.S.M. Pereira et al. on the topic of “Perm SMBR – a new hybrid technology: application on the ethyl lactate green solvent production”.

This joint Poster Competition will be repeated next year during the ECCE Conference in Berlin. **Action for the new WP chairman.**

##### ▪ *Industrial implementation of PI*

Recently several examples of industrial implementation of PI have been communicated (by Velocys, Alfa Laval, MicroInnova). Industrial success stories of PI should be emphasized in order to induce quicker PI introduction in the industrial (and academic) community. The WP website can assist here (see further).

##### ▪ *Conference in China*

In the previous Business Meeting of the WP PI, Jian-Feng Chen proposed to organise an international PI Conference in China. Unfortunately, no further news was heard.

6. Chairmanship of WP PI for the term of 2010-2014

IT is the only candidate for the chairmanship. Focus will be on further spreading PI knowledge in the chemical community. Also collaboration should be enhanced between countries experienced in PI and countries that are less experienced. A more elaborate mission statement will be communicated by IT in a later stage.

**IT is voted unanimously as chairman of the WP PI for the term of 2010-2014. AS is thanked for his leadership in the previous years.**

7. WP PI Award 2011

Every two years the WP PI gives an award to an outstanding PhD dissertation or paper within a PhD investigation in the field of PI in the two years between the previous and coming EPIC. As the chairman of the WP cannot be member of the jury, IT withdraws. The jury for 2011 will consist of JK (chairman), JH, JPB and John Woodley.

**The delegates are requested to propose candidates for the next award in 2011.**

8. EFCE WP Website

The WP Website will be upgraded by JK (webmaster). The following actions are decided:

- Each member should send his photograph and affiliation to JK. **JK will send a reminder by mail.**
- The list of PI technologies should be present. **TVG will send the Appendix of the European Roadmap for Process Intensification to JK.**
- The previous presentations and posters should also be uploaded. **TVG will collect the presentation of Carsten Buchaly (Award 2009) and the poster of Carla Pereira (Award 2010) and send it to JK.**
- A discussion page or forum would be very useful to enhance PI interaction. Also a newsletter is possible, announcing industrial implementation examples (see earlier). An automatic mail that is sent when anything new is added to the website would also enhance the visibility of the website. **JK will investigate what can be done. All WP members, and in particular the industrial delegates, are requested to send PI success stories to JK (even when most information cannot be disclosed, the news of the implementation itself is already valuable).**

9. Any other business

With respect to the organisation of WP2013, **interested parties are requested to send their candidacy to IT, chairman of the WP, before EPIC2011.** At EPIC2011, the bids will be discussed and one organizer will be selected. Currently, DECHEMA has announced its candidacy.

ECCE9 will be organized in The Hague, the Netherlands, by JH (WP member) and Harry van den Akker (Delft University of Technology). Dates are 22-24<sup>th</sup> of April, 2013. PI will be an important topic. ESCAPE21 will be organized from May 29 to June 1, 2011, in Greece.

IT asks whether more meetings should be organized. **It is decided to keep one formal meeting per year, but to enhance electronic contact, also through a more active website.**

The non-presence of certain delegates remains an issue. **The new chairman will take it up with Ines Honndorf from EFCE.** Some delegates might be impeded by the costs of travelling. Unfortunately, no travel costs can be reimbursed by EFCE.

10. Date and place of the next business meeting

Next meeting will be organized at EPIC2011: June 20-23, 2011, in Manchester, UK.

Tom Van Gerven, Secretary, 14-09-2010.

Attachments:

1. Update on EPIC 2011 preparation
2. Delft Skyline Debates