

EFCE WP PROCESS INTENSIFICATION REPORT 2009/2010

1. WP Chair and Secretary

Chairman: Prof. Ilkka Turunen
Dept. Chemical Technology
Lappeenranta University of Technology
PO Box 20
53851 Lappeenranta
Finland
E-mail: ilkka.turunen@lut.fi

Date of election: August 30, 2010 (1st term of 4 years)

Secretary Dr. Tom Van Gerven
Department of Chemical Engineering
Katholieke Universiteit Leuven
De Croylaan 46
3001 Leuven
Belgium
E-mail: tom.vangerven@cit.kuleuven.be

Date of election: June 17, 2009 (1st term of 4 years)

2. WP Members

Number of members representing industry: 9
Number of academic members: 15 + 1 to be confirmed
Number of guest members: 1 industrial + 2 academic
Total number of members: 28

Complete list in appendix.

3. Events organized by the WP (2006-2010)

In the period 2006-2010 four events were organized:

- November 9-10, 2006: European Top on Process Intensification (Delft, the Netherlands)
- September 17-18, 2007: 1st European Process Intensification Conference – EPIC (Copenhagen, Denmark)

- June 15-17, 2009: 2nd European Process Intensification Conference – EPIC (Venice, Italy)
- June 21 – July 2, 2010: Summer School of the EFCE WPs on Process Intensification and on Computer Aided Process Engineering (CAPE) and EURECHA (Veszprém, Hungary)

Members of the WP were also active in the Delft Skyline Debates, organized between autumn 2009 and spring 2010. These Debates led to 14 scientific Position Papers (see paragraph 5) and a research agenda to be communicated to the EU.

4. Business meetings (2006-2010)

In the period 2006-2010 six business meetings were held:

- 17 May 2006 in Frankfurt am Main
- 9 November 2006 in Delft
- 18 September 2007 in Copenhagen
- 27 August 2008 in Prague
- 17 June 2009 in Venice
- 30 August 2010 in Prague

5. Publications (2006-2010)

In 2006 the WP Chairman at that time (Andrzej Stankiewicz) presented two times a statement on behalf of the Working Party, entitled “Process Intensification: the Chance Europe Cannot Afford to Miss”. Dates and places of presentations:

- 2nd European Innovation Workshop, European Parliament, Brussels, 4-5 October 2006;
- Ad-hoc group supporting the High Level Group on Competitiveness, Energy and the Environment, Brussels, 8 December 2006.

The WP has endorsed the Chemical Engineering and Processing journal to be renamed as Chemical Engineering and Processing: Process Intensification, which was launched on September 17, 2007. This is the world’s first journal dedicated to Process Intensification.

Members of the WP have assisted in the production of

- the documents pertaining to the European Roadmap and Action Plan for Process Intensification (Dutch initiative, 2008-2009);
- 14 scientific Position Papers (to be published in Chemical Engineering and Processing) as a result of the Delft Skyline Debates (autumn 2009-spring 2010)

6. Other forms of activity

The WP has two types of awards: the Excellence Award in Process Intensification given every two years to outstanding research in the field of Process Intensification, and the Best Poster Award given every two years to the best poster in the competition organized by three EFCE WPs (Process Intensification, Chemical Reaction Engineering and Multiphase Flow):

- EFCE2009 Excellence Award in Process Intensification was given at EPIC2009 to dr. Carsten Buchaly for his work at the Technical University of Dortmund on the combination of reactive distillation and membrane distillation.
- Best Poster Award in the Poster Competition jointly organized by WPs Process Intensification, Chemical Reaction Engineering and Multiphase Flow during CHISA2010. The award was won by C.S.M. Pereira et al. on the topic of “Perm SBR – a new hybrid technology: application on the ethyl lactate green solvent production”.

Members of the WP are also active in the European Process Intensification Center – EUROPIC. This is an initiative by industry for industry. Three Universities (Delft, Dortmund, Toulouse) are involved as administrative nodes. University experts can be requested for consultancy services.

7. Website

The website of the WP is <http://www.efce.info/index.php?id=111684&site=efce>.

8. Other relevant information

The WP has increased substantially its number of members over the last years. The industrial delegation is still underrepresented compared to the academic delegation. Interaction outside of the business meetings (electronic contact, e.g. through website) is modest. It also remains difficult to have all delegates present at the business meetings (costs of travelling might be in some cases the underlying costs).

9. Forthcoming activities

The following activities will be organized in 2011-2013:

- 3rd European Process Intensification Conference (June 20-23, 2011, Manchester, UK)
- Poster Competition jointly organized by WPs Process Intensification, Chemical Reaction Engineering and Multiphase Flow during ECCE2011 (September 25-29, 2011, Berlin, Germany)
- ECCE9 is co-organized by Jan Harmsen (WP delegate) with Process Intensification being an important topic (April 22-24, 2013, The Hague, the Netherlands)
- 4th European Process Intensification Conference (2013, place to be decided)

Prof. Ilkka Turunen
Chairman

Dr. Tom Van Gerven
Secretary