# European Federation of Chemical Engineering Working Party on Crystallization

**Minutes** of the 48<sup>th</sup> Annual Meeting of the Working Party on Crystallization (WPC) held on 11 April, 2013 in Basel, Switzerland.

#### **Delegates present:**

B. Biscans	France
P. Carvin	France
J. Gómes-Morales	Spain
B. Lakatos	Hungary
M.Lee	United Kingdom
M. Louhi-Kultanen	Finland
I. Markovitz	Hungary
Z. Nagy	United Kingdom
M. Parisi	Italy
M. Rauls	Germany
M. Stepanski	Switzerland
J. Ulrich	Germany

#### Permanent Guests present:

E. Verdurand Switzerland

## Delegates absent and apologies:

Z. Bubnik C. Campbell P. Daudey B. Glennon E. Korin P. Koutsoukos H. Kramer M. Mazzotti I. Melikhov S. Myasnikov F. Paroli P. Synowiec Czech Republic Ireland The Netherlands Ireland Israel Greece The Netherlands Switzerland Russia Russia Italy Poland

#### Permanent Guests absent and apologies:

J.P. Andreassen Norway N. Bulutçu Turkey R. Guardani Brazil M. Giulietti Brazil R. Geertman The Netherlands K.-J. Kim Korea L. Lafferrère France Switzerland R. Spruijtenburg

The meeting, kindly organized by Manfred Stepanski, has been hosted by SULZER Company, in its Center of Excellence located in Basel (Switzerland).

The chairman, Beatrice Biscans, opened the meeting and welcomed all present. Manfred Stepanski welcomed the Working Party to Basel .

As Brian Glennon was apologized, Philippe Carvin kindly accepted to write the minutes.

# 1. Minutes of last WPC meeting

The minutes of the last meeting of the Working Party held on May 10, 2012 in Roma, Italy were approved.

# 2. Announcements of the Chairman

### Delegates :

- Dr Mariapaola Parisi form University La Sapienza;, Rome, Italy was nominated by the EFCE as the new Italian delegate (in place of Angelo Chianese). The chairman, on behalf of the working party, welcomes Mariapaola Parisi and thanks Angelo Chianese for his constant and active participation to the WPC during more than 20 years.

- Joachim Ulrich intends to leave his delegate position in 2014 after ISIC19th. Joachim Ulrich announced that Heike Lorentz from Max-Planck-Institut in Magdeburg has been proposed by the German society as prospective delegate.

- As mentioned in previous WPC meeting a number of delegates seems to be no longer active. Russian delegation do not attend meetings since many years. Delegate's positions will be ended. Situation for Israel delegate needs to be clarified.

#### Chairman :

- Béatrice Biscans, arrives to the term of her office as chairperson of the WPC (4 years) and a new chairman must be elected next year. The announcement of the WPC chairman change is scheduled in September 2014 during ISIC19th.

Candidates among the delegates, should be declared to Béatrice Biscans before end of December 2013. Each candidate is asked to send his (or her) CV and a letter developing their vision on the future orientations of the WPC group activities.

### Excellence Award in Crystallization :

After the success of the previous edition, excellence award in crystallization will be repeated in 2014, with the EFCE support.

Principles and rules have been explained and debated. The priority is to guaranty the best level of quality for candidates. It was agreed that evaluation will be only based on scientific point of view. The price will be valid if at least 3 candidates are nominated (new EFCE rule).

A committee was formed to examine the candidate profiles,: Matthias Rauls, Jaime Gomez-Morales, Philippe.Carvin., Mei Lee, Imre Markovits. Béatrice Biscans as chairman will act with the EFCE members.

Deadline for award nomination is foreseen in the end of March 2014.

The call for nomination will be elaborated by the committee and put on the website.

### 3- ISIC19:

Béatrice Biscans presented the state of preparation of ISIC19th

### • General Organization:

ISIC19 will be held in Toulouse (France) on September 16-19, 2014, in the Congress Center, downtown. Béatrice Biscans made a presentation on the main arrangements on going and on the concept for organization.

Web site has been created: www. lsic19.fr.

#### • Scientifics aspects:

Scientific committee appointments were reviewed (3 names were added) and approved.

The five proposed scientific topics of the Symposium were approved

1. **Fundamentals of crystallization science:** thermodynamics, solubility and kinetics of crystallization, solution structure, nucleation, crystal growth, influence of impurities, agglomeration and breakage of crystals;

2. **Characterization techniques of crystals and suspensions** : rheology , crystal aggregation, small-angle X-ray scattering, Raman spectroscopy, image analysis tools, particle size analysis;

3. **Process design, scale up, downstream processing, modelling**, (multi-dimensional) population balances, monitoring techniques ; optimization and control of crystallization and precipitation processes; process analytical technologies, process control tools;

4. **Product engineering** : crystalline nano/micro-particles, polymorphs, co-crystals, solvates, chiral resolution, molecular modelling, macromolecules, laser crystal growth, composites, biominerals;

5. **Industrial challenges**: crystallization in novel solvents, using multicomponent mixtures; spherical crystallization, melt crystallization, intensified crystallization using external fields or hybrid processes; crystallization fouling; crystallization processes for sustainability; novel crystallization equipment.

The deadline for abstracts was fixed to January 30<sup>th</sup>, 2014.

For higher fit with global expectations (attendees, authors, and scientific committee), the abstracts will be extended to 4 to 6 pages.

Depending on the number of accepted abstracts, two or three parallel sessions will be organized, with 5 keynote lectures corresponding to the five topics.

Poster sessions was widely debated. There was an agreement to increase time dedicated for these sessions and to promote more intensive exchanges through ergonomics.

#### \* Proceeding and Publications:

As wished in previous meeting, the book of abstracts will be provided in paper form as well as USB memory stick.

Among the contributions, full length papers will be submitted for edition in a special issue of scientific journals in the field. Only full manuscripts will be considered, and will be required by September 2014. If number of manuscripts is large enough, it was agreed to try to propose special issues in two different journals. Base case is Chem. Eng. Science. On the occurrence of two special issues, the other journal remains to be defined. Current proposals to be investigated are Crystal Research and Technology or Crystal Growth and Design.

#### \* Keynotes lectures:

Delegates were invited to make proposals for keynote lecturers. Five Topics will be involved. For 'Industrial Challenges' topic, it was suggested to choose an industrial lecturer. Further suggestion was to build with industrial delegates of WPC a plenary lecture, to be given by a representative on behalf of the WPC.

### 4 – Next ISIC20th, 2017:

ISIC20th will be organized in 2017. Candidates must be chosen during our next WPC meeting in April 2014. Suggestion and volunteers are welcome. At present, two societies intend to be candidates: Ireland and United Kingdom.

### 5 – Next WPC meeting:

The next meeting of the working party will be held in United Kingdom in April, 2014, kindly organized by Mei Lee, in GSK facilities of Stevenage near London.

The chairman, on the behalf of the working party, thanked Manfred Stepanski and SULZER Company for the excellent organization and hosting of the meeting, and the nice accompanying dinner.

### Next meeting: United Kingdom April, 2014.

Ph. Carvin (reviewed by B.Biscans)