Ossa, September 21-24 2013, within the framework of Nanotechnology, Biomaterials and Alternative Energy Source for ERA integration

The “International Symposium on Mechanochemistry in Synthesis and Nanoscience (ISMech 2013)” was organized within the Work Package WP5 „Green nanotechnology” from September 21 to 24, 2013. This unique, international conference was addressed not only to acknowledged scientists but also to young, dynamic researchers interested in this quickly developing area of chemistry. We organized this conference with a hope that it would provide a great opportunity to share the knowledge and experience among the scientists from all over the world and having witnessed many fruitful discussions during and after the conference we could confirm that our aim has been reached.

The broad area of topics of the conference encompassed the main aspects of nanoscience including: mechanochemically-facilitated chemical transformations, synthesis and processing in solid-state chemistry, solvent-free synthesis of metal complexes and their solid-state transformations, mechanosynthesis of coordination polymers and metal-organic frameworks, mechanochemistry of metal oxides and related compounds, metallopharmaceuticals and pharmaceutical cocrystals, polymer mechanochemistry, mechanochemical control over nanomaterials and nanosystems.

The conference gathered 63 participants, including eight invited speakers, world-famous scientists: Professor Christopher Bielawski from University of Texas, Austin; Professor Tomislav Friščič from McGill University, Montreal; Professor Przemysław Dopieralski from Ruhr-Universität Bochum and University of Wrocław; Professor Bartosz A. Grzybowski from Northwestern University, Evanston; Professor Fabrizia Grepioni from University of Bologna; Professor Frédéric Lamaty from Université Montpellier; Professor Laszlo Takacs from University of Maryland, Baltimore County; and Professor Rint Sijbesma from Technische Universiteit, Eindhoven.

The conference was planned to be located in a historical palace in Łochów. This Conference Centre was selected following an open tender procedure in February 2012 (attachment 1) and the contract with the selected firm ARCHE S.A. was concluded on 2 March 2012 (attachment 2). However, ca. two weeks before the beginning of the Conference we have been informed that the Conference Centre
in Łochów was not able to provide the hotel and restaurant services on 21 and 22 September. After intensive negotiations between the Director of the Institute of Physical Chemistry PAS and the representatives of the company ARCHE S.A. (attachment 3) it was decided to change the localization of the Conference (attachment 4) one week before the beginning of the Symposium. Following the very intensive organizational activity (we asked more than 10 conference centres and hotels for price offers and we have visited the best three personally) the Organizing Committee of ISMech 2013 has decided to choose the Hotel OSSA, Ossa 1, 96-200 Rawa Mazowiecka, as the Conference Centre (http://www.hotelossa.pl/en/). This hotel offered the best price for relatively good accommodation conditions. The contract with “Ossa” S.A. has been concluded on 17 September 2013 (attachment 5). The conference was organized in the seven following steps:

1. The choice of the place of accommodation for the conference (February 2012). After the evaluation of the submitted offers the contract was awarded to ARCHE S.A., ul. Brzeska 134, 08-110 Siedlce (March 2012). The signed localization of the conference was in the Łochów Palace, ul. Marii Konopnickiej 1, 07-130 Łochów, Poland.

2. Establishing the Local Organizing Committee of the ISMech (November 2012). According to the assumptions of the working package WP5 of the “Noblesse” project Professor Janusz Lewiński, Dr. Iwona Justyniak, and Dr. Katarzyna Wójcik were chosen as the Local Organizing Committee members of the ISMech 2013.

3. Establishing the Scientific Committee of the ISMech 2013 consisting of: Professor Janusz Lewiński, Professor Bartosz A. Grzybowski and Professor Tomislav Friščić (December 2012).

4. Preparation of the list of potential invited speakers (February 2013). All of the world-famous scientists listed below were willing to take part in the conference.

- Prof. Christopher Bielawski (University of Texas, Austin, TX)
  “Polymer Mechanochemistry: Using Force To Direct Molecular Reactivity”

- Prof. Tomislav Friščić (McGill University, Montreal)
  “Mechanochemical reactions by milling: an inspiration for studies of solid-state reaction dynamics and development of new low-energy chemistry”

- Prof. Bartosz A. Grzybowski (Northwestern University, Evanston, IL)
  “Mechanical Charging of Polymers – How Mechanoradicals Can Save Computers from Electrostatic Failure”

- Prof. Stuart L. James (Queen’s University, Belfast)

- Prof. Rint Sijbesma (Technische Universiteit Eindhoven)
  “Polymer Mechanoluminescence”
- Prof. Laszlo Takacs (University of Maryland, Baltimore County, MD)
  “Perspectives on Mechanochemistry, its History, Mechanism and Applications”
- Fabrizia Grepioni (University of Bologna, Italy)
  “From molecules to multiple crystal forms: a crystal engineering journey in the ground state”
- Przemyslaw Dopieralski (Ruhr-Universität Bochum, Germany, University of Wrocław)
  “Mechanochemistry: Force as Dr. Jekyll and Mr. Hyde”
- Frédéric Lamaty (Université Montpellier 2, France)
  “Mechanochemistry and its applications: from organic to peptide synthesis”

Unfortunately, Prof. Stuart L. James has cancelled his contribution in the last moment for family reasons.

5. Creation of the conference website (http://mechanochem.org (April 2012)).
6. Distribution of the conference website address to the participants (from May to September 2013).

1. Information about ISMech2013 conference was announced on the following world-wide websites: http://www.conferencealerts.com/; http://ichf.edu.pl/noblesse/conferences.html;

2. A mailing list of the potential participants interested in the subject of the conference was prepared and the information about the conference was sent to them.

3. The conference ISMech 2013 leaflets were prepared and distributed at universities, scientific institutes, as well as during other conferences.

4. More than 100 invitations were sent by email to famous scientists and researchers encouraging them to take part in ISMech2013 conference.

5. Large format posters informing about ISMech2013 conference were prepared and placed at appropriate universities and scientific institutions.
Conference poster

7. Assignment of duties related to the conference services took place twice: for the first time for the Łochów Palace where the conference was initially planned and for the second time for the Ossa Hotel where the conference actually took place (August - September 2013).

1. Organization of the transportation to and from the conference venue.
2. Preparation and printing of the „Book of abstracts”, including the timetable of the conference, the list of members and abstracts of all the presentations. (Attachment No.1)
3. Choice of the Conference Reception Desk staff for the conference.
5. Preparation of the Second Circular.
Certificate of Attendance
Dear Colleague,

It is our great pleasure to invite you to the International Symposium on Mechanochemistry in Synthesis and Nanoscience organised as a part of the European Union 7th Framework Project “NOBLESSE”, which will take place on 21-24 of September 2013 in Lochów, Poland. This unique international conference is addressed not only to acknowledged scientists but also to young, dynamic researchers. We hope that this conference will be a great opportunity to share the knowledge and experience among the scientists from all over the world.

Mechanochemistry is one of the most dynamically developing areas in chemistry. The great potential of mechanochemical approach in synthesis in nanoscience brought us the idea of collecting experts in one place to fill in the lack in mechano-cooperations and know-how exchange. Oral presentations, posters sessions, plenary lectures as well as coffee breaks and lunches will be held in beautiful, historical palace in Lochów, where the unique atmosphere of this place for sure will be encouraging to fruitful discussions.

We are looking forward to welcoming you at the ISMech2013 in Lochów.

On behalf of the organising committee,

Prof. Janusz Lewiński
Institute of Physical Chemistry
Polish Academy of Sciences

Official Letter of Invitation from Prof. Lewiński (2nd Circular)
The conference was divided into seven thematic sessions, each one beginning with a plenary lecture. During poster sessions 23 young researchers presented their posters. The detailed conference schedule with all the lectures and posters subjects as well as the abstracts of presentations is included in the “Book of Abstracts”, Attachment 1. All of the lectures and the extended poster sessions got almost 100% attendance. It should be emphasized that the conference provided a natural and comfortable place for the young participants to discuss with well-known scientists.

The conference was also a very effective way of presentation of advances in Polish science as well as improving the visibility of the Institute of Physical Chemistry PAS. The conference provided an opportunity to discuss and plan future collaboration with scientific partners within the Noblesse project. The fruitful discussions between Professor Lewiński, Professor Grzybowski and Professor Christopher Bielawski resulted in a potential cooperation within a common research. The vivid discussions went far beyond the oral and poster sessions, extending to coffee breaks and the gala dinner.

The organization and active participation of the researchers from the Institute of Physical Chemistry PAS, and other Polish scientific centres at the ISMech2013 conference was extremely useful because of the possibility of presenting the latest progress in mechanochemistry in Poland, indicating that Poland is one of the leaders in this fast developing field of chemistry.

**Attachments:**
1. Report on the selection of a conference centre in February 2012
3. Agreement between the IPC PAS and ARCHE S.A. (16 September 2013)
7. Conference website (http://mechanochem.org/)

Below are presented some photos taken during the conference.
Group photograph of all participants of ISMech2013

Professor Fabrizia Grepioni (University of Bologna, Italy)
NanOtechnology, Biomaterials and aLternative Energy Source for ERA integration
FP7–REGPOT–CT–2011–285949-NOBLESSE

Professor Tomislav Friščić (McGill University, Montreal)

Professor Bartosz A. Grzybowski (Northwestern University, Evanston)
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Posters Session