



M INCOME 2011

First Announcement and Call for Abstracts

VII International Conference on
**MECHANOCHEMISTRY
AND MECHANICAL ALLOYING**

Herceg Novi, Montenegro, August 31 – September 3, 2011

Organised by

MATERIALS RESEARCH SOCIETY OF SERBIA

under the auspices of

INTERNATIONAL MECHANOCHEMISTRY ASSOCIATION

INCOME 2011 immediately precedes YUCOMAT 2011



BACKGROUND

Since the classical papers by M. Carey Lea on mechanical activation of solids over hundred years back (1893–94), mechanochemistry and mechanical activation have moved a long way and evolved as a frontier area of research and applications, during the last two to three decades. Notable developments have taken place in terms of scientific understanding and applications in diverse fields, encompassing all facets of metallurgy including metal extraction, alloying, composites; traditional and advanced ceramics processing; paints, pigments and dyes; catalysis, pharmaceuticals, agriculture, utilization of wastes, energy and environment, and many more. Simultaneous developments have taken place in terms of characterization techniques of activated solids; quantification and control of activation processes; and mechanical activation devices for specific needs, etc. The INCOME series of conferences initiated by International Mechanochemistry Association [an associate member of International Union of Pure and Applied Chemists (IUPAC)] has served as a common platform to bring together all stakeholders from academia, Research and Development organisations, and industry to foster the growth of the discipline. The first international conference on 'Mechanochemistry and Mechanical Alloying' (INCOME 1993) was held in Košice (Slovakia) in 1993. This was followed by INCOME 1997 in Novosibirsk (Russia), INCOME 2000 in Prague (Czech Republic); INCOME 2003, in Braunschweig (Germany), INCOME 2006 again in Novosibirsk, and INCOME 2008 in Jamshedpur (India).

The developments in the field of mechanochemistry are unfolding at a rapid rate in terms of basic science, range of applications, and their impact. While significant advances are taking place in each of the application areas, e.g. smart mechanochemistry, pharmaceuticals, etc., and call for periodic review, the need for cross fertilization of concepts and ideas is increasingly becoming apparent. The next conference of the series, INCOME 2011, will be held in Herceg Novi, Montenegro, from August 31 – September 3, 2011. The conference aims to provide a forum for presentation of new results, identification of current research & development trends and future directions, and promote interactions among various stakeholders dealing with various aspects of the discipline. It is also proposed to organize an exhibition on the sideline of the conference to provide an opportunity to related institutes/companies for the display of their products.

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INCOME 2011

SCOPE

The scientific program will consist of invited lectures, oral, and poster presentations. The conference will touch upon all facets of mechanochemistry, including:

SYNTHESIS AND PROCESSING IN SOLID-STATE SCIENCE AND TECHNOLOGY

Mechanosynthesis, Mechanical alloying, Mechanical activation, High-energy milling, Severe plastic deformation of materials (SPD), Role of environment (e.g. water, gases), Reaction milling, and Mechanochemical processing under less intensive stressing (soft mechanochemistry, smart mechanochemistry, etc.), Mechanochemistry of macromolecules.

STRUCTURAL CHARACTERIZATION

Mechanically induced structural changes in activated solids, Role of defects (point defects, dislocations, clusters, precipitates, grain boundaries), Surfaces and interfaces in activated solids.

THERMODYNAMICS AND MODELING

Fundamentals and models of mechanically stimulated processes, Computer simulations.

KINETICS OF SOLID STATE PROCESSES

Evolution toward equilibrium, Phase transitions, Crystal growth, Transport processes.

PROPERTIES

e.g., chemical, electrochemical, electrical, magnetic, electronic, optical, tribological, thermal, and mechanical.

NEW MATERIALS/PROCESSES

Nanomaterials, nano-composites, quasi-crystalline phases/materials, molecular design, coatings, self propagating high temperature synthesis

APPLICATIONS (INCLUDING NEW COMMERCIAL PROCESSES)

Mechanical alloying, Metal extraction, Leaching of minerals and ores, Ceramics processing, Catalysis, Paints, pigments and dyes, Cement processing, Mechano-organo/organometallic synthesis, Pharmaceutical, Agriculture, Waste utilisation, Ecologically safe technologies, etc.

NEW EQUIPMENT AND PROCEDURES

Milling equipment based on improved milling dynamics, Large size activation devices, Preparation, characterization and handling of active powders

ORGANISING COMMITTEE

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Nenad Ignjatović, Jasna Grbović-Novaković

TECHNICAL COMMITTEE

Smilja Marković, Dragana Jugović, Zoran Stojanović, Miodrag Lukić

CONFERENCE SECRETARY

Aleksandra Stojičić

GENERAL INFORMATION

DATE AND VENUE

The conference will be held on August 31 – September 3, 2011, at the **Hunguest Hotel Sun Resort Herceg Novi****** (http://www.hunguesthotels.hu/en/hotel/herceg_novi/hunguest_hotel_sun_resort/), Herceg Novi, Montenegro (www.hercegnovi.com).

PAPER PRESENTATION AND ABSTRACT PREPARATION AND PUBLICATION

The conference will feature sessions, which will comprise invited keynote lectures (30 min) by the leaders in the field, oral (15 min) and poster presentations. Abstract in English, no longer than 10 lines, and registration form, should be submitted by April 1, 2011. The recommended abstract format is given below.

The Organising Committee, advised by the International IMA Advisory Committee, will evaluate the submitted abstracts and, on the basis of their contents, assign the papers, taking into account author's wishes as much as possible, to the oral or poster presentation. Abstracts will be included in a Book of Abstracts and distributed to each participant at the conference registration.

Conference programme and further information about the Conference will be sent to registered participants, who paid registration fees, and will be available online beginning with July 1, 2011.

CONFERENCE INFORMATION

INCOME 2011 Conference information is available on its official Internet presentation: www.mrs-serbia.org.rs or from: Aleksandra Stojičić, Conference Secretary, Materials Research Society of Serbia, Knez Mihailova 35/IV, P.O. Box 377, 11000 Belgrade, Serbia, Phone: +381 (11) 2185-437; 2636-994, Fax: +381 (11) 2185-263, E-mail: income@mrs-serbia.org.rs.

INSTRUCTIONS FOR PREPARING ABSTRACTS

Abstracts should be prepared using the following instructions for preparing abstracts:

Abstract size: A4, top and bottom margins 6 cm, left and right 4 cm; **Line spacing:** Single; **Font:** Times New Roman (10 pts). **TITLE OF THE PAPER:** CENTER, CAPITALS, BOLD, 10 pts, (1 line spacing), **Name(s) of Author(s):** (underline the author who will present the paper). Institution or Company, City, Country, (1 line spacing), Text should be printed single spaced in one paragraph, only plain text, no figures, no formulae, no references.

ELECTRONIC SUBMISSION

Abstracts should be sent as attached document by e-mail to: income@mrs-serbia.org.rs

Subject of your mail: income 2011

Title of the attached document: name of the first author.

Send one e-mail per abstract.

Only e-mail submissions will be acknowledged.

DEADLINE FOR ABSTRACT SUBMISSION APRIL 1, 2011

<http://www.mrs-serbia.org.rs/income2011/income2011.html>