

THE 8th EDITION OF INTERNATIONAL CONFERENCE ON MATERIALS SCIENCE & ENGINEERING, BRAMAT 2013

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Abstract: *This paper presents the 8th edition of the International Conference on Materials Science & Engineering, BraMat 2013. There are presented the objectives of the conference, the organizers, the scientific and organizing committees and the sections. The papers presented at the conference were published in ISI and BDI journals. The authors of these papers are researchers from 11 countries.*

Key words: *materials science, conference, publications.*

The 8th edition of the International Conference on Materials Science and Engineering took place between 28th of February and 2nd of March 2013.

The 2013 BraMat International Conference was organised by:

- *Transilvania* University of Braşov - Material Science and Engineering Faculty;
- Romanian Academy of Technical Sciences - ASTR;
- Association for Heat Treatment and Surface Engineering - ATTIS;
- Romanian Foundry Technical Association - ATTR;
- Romanian Welding Association - ASR.

The Conference partners were companies from Romania and abroad, who presented throughout the event stands with the latest equipment in the field: CSM Instruments, Standard Service, Melt, Nitech, Namicon, Olympus, Zeiss, Sartorom, Cobotech and Braşov County Council.

The scientific committee of the Conference included academicians, correspondent members of The Romanian Academy of

Technical Sciences, presidents of specialized associations, as well as home and foreign scientists: Portugal (3), Spain (2), Israel (2), France (1), Italy (1), The Netherlands (1), Germany (1), USA (1), Turkey (1) and Liechtenstein (1).

The organizing committee consisted of teaching staff and PhD. students from Material Science and Engineering Faculty.

The purpose of this scientific meeting was to ensure the best conditions for a European evaluation of achievements in the field of advanced materials, acknowledging that Romanian research is a viable partner to European research.

The top fields regarded or with an impact upon the development of national economy were the following:

- advanced technologies for materials;
- organic and inorganic hybrid materials;
- thin layers with controlled properties processing;
- new processing with laser, electric field applications;
- nanocrystals material development;

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- biomaterials and implants;
- glasses for photonics;
- advanced characterisation methods.

The goals of the conference were the following:

- a change of information concerning fields and subjects of interest for national and international research groups both as concerns and scientific knowledge;
- developing of technologic transfer through the presence of research results beneficiaries;
- development of research activities and drawing in young researchers to the field subject of the conference;
- development of new research directions by establishing the opportunities in the field of materials and environmental protection;
- identifying the demand for research, development, innovation.

BraMat Conference 2013 was focused on materials science field valued in all industrialized countries and the papers presented were a good exchange for the development of national and international programs. Constant contact between Romanian and foreign specialists maintain academic research in Braşov at a competitive world, paving the way for further fruitful cooperation.

Sections of the conference included:

- Equipment and technologies in materials engineering;
- Materials science;
- Heat treatment and surface engineering;
- Advanced welding eco-technologies;
- Safety, modelling and simulation in materials engineering.

The conference consisted of the following kinds of activities:

- plenary session (8 papers) hold by specialists who define their field. They established the directions of interest for the years to come, the philosophy for a

sustainable development and key achievements so far;

- 4 keynotes, large papers in the field of sections;

- oral presentations (57 papers) for the interest subjects, selected by the scientific committee, each followed by discussions;

- poster presentations (124 papers) for applicative or development on a known field.

The conference program also included the awarding of the title "Professor Emeritus" of *Transilvania* University to Professor Dr. Eng. Cornel SAMOILĂ, granted by the university senate.

On the first day of the conference, the "Education and Research in Materials Engineering - Present and Perspectives" workshop was held, which brought together representatives of education and research in the field and founded the professional association of Materials Science and Engineering, ASIMAT.

All information regarding the conference and the schedule were posted at <http://www2.unitbv.ro/bramat/Bramat2013/tabid/8328/language/en-US/Default.aspx>, the place where participants also registered.

For dissemination of conference's results within the academic and business world and for making this conference popular in the European and international academic environment, a CD-ROM with the Book of Abstracts was edited and were delivered along with the conference program on registration.

According to the option of the authors, the papers accepted for publications were published in special issues of the journals: Applied Surface Science (ISI); Journal of Optoelectronics and Advanced Materials (ISI); Metalurgia International (ISI); Bulletin of the *Transilvania* University of Braşov (BDI); Metalurgia (BDI); Recent (BDI).