# **MATERIALS AND METALLURGY** 8<sup>th</sup> International Symposium of Croatian Metallurgical Society (CMS)

## S H M D '2008.

Šibenik 2008, June 22 - 26, Solaris Holiday Resort, Croatia

## http://public.carnet.hr/metalurg

# 8th International Symposium of Croatian Metallurgical Society "Materials and Metallurgy" will be held as part of:

 55<sup>th</sup> anniversary of the foundation of Croatian Metallurgical Society (from Society of Engineers and Technician Steel Works Sisak)

The Croatian Metallurgical Society has the responsibility for the development and future of Croatia. Its purpose is contributing to Croatia's advancement, based on the promotion of metallurgy. This is chief goal and we shall realize it by linking all the various sciences and points of view, aware that the advancement and development of Croatia can only by achieved through the united efforts of all.

Unlike other transitional states, Croatia still undergoes a stage of restructuring both ferrous and non-ferrous metallurgy. For metallurgy, this means a difficult economic situation, and in comparison to the level until the war in 1991 the production is at the level below 30%.

Naturally, this situation has an impact to the activity of the Croatian Metallurgical Society as well. Practically without any starting point and foundation in industry, CMS was financed by a modest money support from the Ministry of Science, Education and Sports of the Republic of Croatia.

However, thanks to voluntary work of CMS heads and members (not one fee has ever been paid in the last 17 years), the Society's activities are various, successful and recognizable in the world.

In addition to the mutual useful cooperation with many related societies, professional and scientific institutions in Croatia and abroad, the following needs to be stressed in particular:

1. CMS is a publisher of the Journal Metallurgy the articles of which are being referred to in an array of international periodicals and databases), among other in ISI-SCI as well. Articles are being

published by authors from over 30 states, and over 100 articles are being received per year.

2. Every two years CMS organizes and holds symposiums called "Materials and Metallurgy". All of these symposiums are agreed on a global level – in the meetings of representatives of metallurgical associations. They are organized in early November in Düsseldorf, by Verein Deutscher Eisenhütten-leute (VDEh), the current name of VDEh's Stahlinstitut.

Seven international symposiums have been held so far:

- 1<sup>st</sup>: Zagreb 1994 February, 16-18 (88 lectu-res
- 2<sup>nd</sup>: Split 1996 June, 20-22 (150 lectures)
- 3<sup>rd</sup>: Šibenik 1998 June, 25-27 (192 lectures)
- 4<sup>th</sup>: Opatija 2000 June, 25-29 (333 lectures)
- 5<sup>th</sup>: Šibenik 2002 June, 23-27 (375 lectures)
- 6<sup>th</sup>: Šibenik 2004 June, 20-24 (368 lectures)
- 7<sup>th</sup>: Šibenik 2006 June, 18-22 (475 lectures)

The workshops of symposiums were held in plenary sessions (lecturers were invited and firms presented) and poster sections.

For the plenary lectures research topics were selected relating partly to the new materials and partly to the increase of efficiency of metallurgi-cal procedures, decrease of required energy as well as improving of products.

Generally the reports were prepared for these symposiums by the authors and coauthors from various world universities, institutes, academies and companies (in 7<sup>th</sup> Symposium 799 authors and coauthors from 34 countries). It is to be emphasized that the scientists from

four Croatian universities (Zagreb, Rijeka, Osijek and Split) participated in these symposiums.

In the discussions it was confirmed that the symposiums organized by Croatian Metallurgical Society have become traditional assembly of experts and scientists of various profiles: metallurgists, geologists, physicists, chemists, mechanical engineers etc.

With a demonstration of their best achieve-ments they all assist the metallurgy in Croatia to call the same attention as it does otherwise in the world.

Detailed reviews of all the symposiums held so far were published and made public [1-35].

Based on the agreement of Meeting of World Metallurgical Societies, Düsseldorf, November 2005 y. and the November 2006 y., the next 8<sup>th</sup> International Symposium of Croatian Metallur-gical Society "Materials and Metallurgy" will be held 2008 - June 22 - 26, Solaris Holiday Resort, Šibenik, Croatia.

## THE AIM OF SYMPOSIUM '2008

The aim of this Symposium is to point out all the possibilities of the materials and achieve-ments in metallurgy.

## TOPICS OF THE SYMPOSIUM ARE:

#### Materials

- New Materials
- Refractories Materials
- The Development
- Applications
- Physical Metallurgy

## Metallurgy

- Process Metallurgy and Foundry
- Plastic Processing of Metals and Alloys
- Technologies
- Energetics
- Ecology in Metallurgy
- Quality Assurance and Quality Management

Here are the most important details on the 8<sup>th</sup> Symposium of Croatian Metallurgical Society:

## ORGANIZER

CROATIAN METALLURGICAL SOCIETY (CMS)

## PATRONS

- European Steel Institute Confederation (ESIC)
- European Steel Federation (ESF)
- International Iron and Steel Institute (IISI)

- Ministry of Science, Education and Sport Republic of Croatia,
- Croatian Chamber of Economy

## **CO-ORGANIZERS**

- Academy of Engineering Science of Ukraine
- University of Mining and Metallurgy, Faculty of Foundry Engineering, Krakow
- University of Ljubljana, Faculty of Natural Science and Engineering
- Baikov Institute of Metallurgy and Materials Science, Russian Academy of Sciences, Moscow, Russia
- University of Sarajevo, Faculty for Metallurgy and Materials Science, Zenica
- National Metallurgical Academy of Ukraine
- Technical University of Košice, Faculty of Metallurgy
- Technical University of Košice, Faculty of Mechanical Engineering
- Technical University of Košice, Berg Faculty
- University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture
- University of Osijek, Faculty of Mechanical Engineering, Slavonski Brod
- University of Rijeka, Technical Faculty
- VŠB Technical University of Ostrava
- University of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture
- Institute of Metals and Technology, Ljubljana
- Institute of Materials Research of the Slovak Academy of Sciences in Košice
- Steel Works Split
- Moscow State Steel and Alloys Institute
- Physico-Technical Institute National Academie of Science Minsk
- Politehnica University of Bucharest
- Institute of Metallurgy "Kemal Kapetanović", Zenica
- Pisarenko Institute of Problems of Strength NASU, Kiev
- Dnepropetrovsk National University
- Hutnictvi zeleza, a.s., Prague
- Slovak University of Technology in Bratislava, Faculty of Materials Science and Technology
- Vatrostalna Sisak d.d.
- Tvornica lakih metala "Šibenik"
- Polytehnic of Slavonski Brod

## **CO-OPERATION WITH ORGANIZATIONS**

- Stahlinstitut VDEh, Germany
- ATS Association Technique de la Siderurgie Francaise

- CENIM Centro National de Investigaciones Metalurgicas Spain
- ChSM The Chinese Society for Metals China
- CRM Centre de Recherches Metallurgiques Belgium
- ASMET The Austrian Society for Metallurgy and Materials
- American Iron and Steel Institute, USA
- $-\,$  ISIJ The Iron and Steel Institute of Japan
- JERN Jernkontoret, Sweden
- SRM Romanian Society for Metallurgy
- SITPH Association of Polish Metallurgical Engineers
- HOOGOVENS, The Netherlands
- SHS Slovak Metallurgical Society
- Sociedade Portuguesa de Materiais
- MVAE Association of Hungarian Steel Industry
- Steel Federation of the Czech Republic
- Union of Bulgarian Metallurgists
- IBS Instituto Brasileiro de Siderurgia
- AIM Associazione Italiana di Metallurgia
- The Japan Institute of Metals
- Egyptian Association for Industrial Development
- Institute Argentino de Siderurgia
- Associacao Brasileira de Metalurgia e Materiais
- ILAFA Instituto Latinoamericano del fierroy el Acero, Chile
- Société Francaise de Métallurgie et de Materiaux
- The Institut of Materials, Minerals and Mining, England
- P. T. Krakatau Steel, Indonesia
- ISIJ The Iron and Steel Institute of Japan
- KOSA Korea Iron and Steel Association
- Amsteel Mills Sdn Bhd, Malaysia
- Philippine Iron & Steel Institute
- NatSteel Asia (S) Pte Ltd, Singapur
- The South African Institute of Mining and Metallurgy
- Iron and Steel Institute of Thailand
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#### **GENERAL INFORMATION**

#### Languages

Croatian, English (no simultaneous translation)

#### Summarye (Abstract)

All participants who intend to present a lecture are required about a summary of paper lecture in the following form:

Initial of Name, Surname, Institution, Title of Abstract, Content – max 120 words, key words (please see on Web site: Metalurgija, Summaries of Lectures, 45(2006), 3, 189-269).

The workshop of symposium will be held in plenary session (invited lectures, presentation of firms) and posters sections.

Summaries of all accepted lectures will be published in Summaries of Lectures in the Journal Metalurgija 47 (2008), 3. Invited (plenary) papers will be also published in the Journal Metalurgija 47 (2008) 3, in order of acception after regular procedure. The selected papers will be also published in the Journal Metallurgy after Symposium with paid the Participation Fee, and accepted from the Reviewers.

#### All correspondence and Papers send to:

Croatian Metallurgical Society Berislavićeva 6, 10 000 Zagreb, Croatia Phone / Fax: + 385 1 619 86 89 (service) Mob: + 385 98 317 173

E-mail Summaries only to: denona@denona.hr or send them on CD to CMS.

DEADLINES (please see WEB site for all information – http://public.carnet.hr/metalurg) Registration and Summary: 31<sup>st</sup> January 2008 Second Circular: 31<sup>st</sup> March 2008 Programme: 31<sup>st</sup> May 2008 Papers: at latest 31<sup>st</sup> December 2008.

#### PARTICIPATION FEE (for each the paper)

 a) Participation, publication of Summaries in Metallurgy issue 47 (2008) 3, presentation in the poster section, Summaries of Lectures ... 150 €

- b) a) and publication of a whole paper in Journal Metallurgy (The papers not consistently prepared according to the "Instructions to Authors", for Journal of Metalurgija will not be considered see WEB site): 450 € (150 € + 300 €)
- c) Other participants and co-authors, including the Summaries of Lectures: 100 €

All this prices generally included symposium attendance, welcome cocktail and symposium materials.

Please pay participation fee by May 15<sup>th</sup>, 2008 to: Croatian Metallurgical Society, Zagreb, Berislavićeva 6, Croatia, the bank account No: Privredna Banka Zagreb, Croatia **IBAN: HR 76 2340 0091 1100 4804 3 SWIFT CODE (BIC): PBZGHR2X** 

For the participants from Croatia (in Croatian Kuna):

#### 2340009-1110048043

The fee can also be paid at the symposium: price +10%.

#### **Paper presentation**

- Plenary lectures of invited scientists will be held.
- All other papers will be grouped by topics and will be given on posters.
- Review of each group of papers will be orally presented by invited scientists.
- Authors are required to prepare posters (title, abstract, results, conclusion) on a 100×100 cm paper, to be paste on a board.

#### **Eventually let us point out:**

The reception of the 8<sup>th</sup> Symposium of Croatian Metallurgists by international associations has shown that the Symposium has become a traditional place for the gathering of the world's experts and scientists of various profiles: metallurgists, physicists, chemists, mechanical engineers, and technicians who can and want to contribute so that metallurgy in Croatia receives the same attention as it does in the world.

#### REFERENCES

- [1] Metalurgija 32 (1993) 4, 122-124.
- [2] Metalurgija 32 (1993) 4, 185-194.
- [3] Stahl und Eisen 114 (1994) 6, 80.
- [4] Metalurgija 34 (1995) 3, 57-59.
- [5] Stahl und Eisen 116 (1996) 9, 41-42.
- [6] Metalurgija 35 (1996) 2, 105-126.
- [7] Metalurgija 36 (1997) 3, 135-140.
- [8] Metalurgija 37 (1998) 2, 57-59.
- [9] Metalurgija 37 (1998) 2, 103-132.

- [10] Metalurgija 37 (1998) 4, 195-198.
  [11] Stahl und Eisen 118 (1998) 11, 45-96.
  [12] Metalurgija 38 (1999) 4, 199-204.
  [13] Metalurgija 39 (2000) 3, 131-189.
  [14] Metalurgija 39 (2000) 3, 191-224.
  [15] Metalurgija 40 (2001) 1, 61-63.
  [16] Metalurgija 40 (2001) 3, 127-133.
  [17] Metalurgija 41 (2002) 3, 131-268.
  [18] Metalurgija 41 (2002) 3, 217-238.
  [20] Metalurgija 41 (2002) 3, 254-255.
  [21] Metalurgija 41 (2002) 4, 279-283.
- [23] Metalurgija 42 (2003) 2, 79-84.

[24] Metalurgija 43 (2004) 3, 143-198.
[25] Metalurgija 43 (2004) 3, 201-265.
[26] Metalurgija 43 (2004) 3, 203-205.
[27] Metalurgija 43 (2004) 3, 223-225.
[28] Metalurgija 43 (2004) 3, 241-243.
[29] Metalurgija 43 (2004) 3, 255-256.
[30] Metalurgija 44 (2005) 1, 3-8.
[31] Metalurgija 45 (2006) 4, 271-276.
[32] Metalurgija 45 (2006) 3, 147-184.
[33] Metalurgija 45 (2006) 4, 313-340.
[34] Metalurgija 45 (2007) 1, 3-8.

Note: Please see p. 8.