



7th International Symposium of Croatian Metallurgical Society

S H M D '2006.

“Materials and Metallurgy”

<http://pubwww.srce.hr/metalurg>

Šibenik 2006, June 18 - 22, Solaris Holiday Resort, Croatia

The Croatian Metallurgical Society have 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 be achieved through the united efforts of all.

In order to contribute to the metallurgical restructuring and development program the Croatian Metallurgical Society held, the first Symposium “Materials and Metallurgy” in Zagreb, February 16 - 18, 1994. The intention to hold that Symposium was announced in *Metalurgija* 32 (1993) 4, 122 [1] in agreement with Verein Deutscher Eisenhüttenleute (VDEh). Over 88 lectures, a half of which was attended by more than 250 scientists and experts from several European metallurgical associations. Summaries of lectures were published in the *Journal Metalurgija* 32 (1993) 4, 185-194 [2].

The Symposium received due attention in the public, a detailed report about the Symposium was published in *Stahl und Eisen* 114 (1994) 6, 80 [3].

Croatian Metallurgical Society held second Symposium “State and Development of Plastic Metal Processing”. Along with the announcement of this Symposium to the Croatian and foreign public in *Metalurgija* 34 (1995) 3, 57-59 a short historical survey of metallurgical evolution in Croatia was given [4].

The Symposium was inserted in the “Calendar of International Conferences” (through Verein Deutscher Eisenhüttenleute - Düsseldorf and Institute of Materials London) and held in the town of Split on June 20-22, 1996.

150 lectures (105 by participants from abroad and 45 by Croatian participants) were read at the Symposium, and

more than 300 people from twelve countries were attending. A detailed report from this Symposium was again provided by *Stahl und Eisen* 116 (1996) 9, 41-42 [5]. Summaries of all lectures were published in the journal *Metalurgija* 35 (1996) 2, 105-126 [6].

Even before the II Symposium was held, the worldwide public had received of the professional approach of the Croatian Metallurgists to its organization so that the 3rd Symposium of Croatian Metallurgists “State and Development of Plastic Metal Processing” had already been inserted in the “Calendar of International Conferences” for 1998.

Along with the announcement of this Symposium to the Croatian and foreign public in *Metalurgija* 36 (1997) 3, 135-140 [7], the aim and topics of the Symposium and location, Hotels Solaris Šibenik was given. (from June 25 - 27, 1998.)

At the 3rd International Symposium 300 participants from 15 countries were present. There were read 192 reports. Symposium activities proceeded through plenary sections (plenary lectures and Round table sessions “Metallurgy today, tomorrow - State in Croatia”) and four sections (posters):

- Section A - Plastic Processing,
- Section B - Physical Metallurgy and Materials,
- Section C - Process Metallurgy,
- Section D - Metallurgical Thermotechniques and Protection of Environment.

For plenary lectures research-developing topics were chosen, on one hand relating to aluminium materials, on the other to increasing efficiency of procedure and decreasing of necessary energy and environmental pollution.

All the plenary lectures also were published in the journal *Metalurgija* 37 (1998) 2, 57-99 [8], and the Summaries of all lectures in the same Volume, 103-132 [9].

A wide area was occupied, of course, by the reviews and professional discussions on economic situation in Croatia in the framework of Round table "Metallurgy today, tomorrow - State in Croatia".

The symposium proved that the readiness of scientists and engineers was very high. For the revival of the economy, however, some new resources have to be opened as well.

During the Symposium an exhibition of equipment and devices used in metallurgy was organized.

A detailed report from 3rd Symposium Croatian metallurgical was provided in the journal *Metalurgija* 37 (1998) 4, 195-198 [10] and again in *Stahl und Eisen* 118 (1998) 11, 95-96 [11].

The intention to hold 4th Symposium of Croatian Metallurgical Society "Materials and Metallurgy" was announced in *Metalurgija* 38 (1999) 4, 199-204 [12]. 4th Symposium also had already been inserted in the "Calendar of International Conferences" for 2000 (Meeting of World metallurgical Societies, Düsseldorf 11-13 November 1998).

There were 333 reports from 29 countries, 700 authors and coauthors registered for the fourth International Symposium of the Croatian Metallurgical Society.

380 participants from 19 countries were present at the symposium. Symposium activity took place through plenary lectures and three sections (poster):

Materials Section "A" (134 reports)
 Process Metallurgy Section "B" (114 reports)
 Plastic Processing Section "C" (74 reports)

For the plenary lectures (8 reports) research topics were selected relating partly to the materials and partly to the increase of efficiency of metallurgical procedures, decrease of required energy as well as improving of products quality.

Comprehensive outline of plenary reports also were published in the journal *Metalurgija* 39 (2000), 3, 131-189 [13] and the Summaries of all lectures in the same volume, 191-224 [14].

For this symposium the reports were prepared by the authors and coauthors from various world universities, institutes, academies and companies. It is to be emphasised that the scientists from all four Croatian universities (Zagreb, Rijeka, Osijek, Split) participated in the symposium. However, a less number of company experts engaged directly in the domestic and foreign manufacturing practice was noticed. During the plenary session a presentation was held and some special company exhibitions were organized.

Before more than 200 participants a round table session on the achievements, conclusions and closing of the 4th International symposium "Materials and Metallurgy" was held.

A detailed report from 4th Symposium of Croatian Metallurgical Society "Materials and Metallurgy" Opatija 2000. June, 25 - 29 was provided in the Journal *Metalurgija* 40 (2001) 1, 61-63 [15].

Based on the conclusion of the round table the fifth International Symposium of Croatian Metallurgical Society was announced in *Metalurgija* 40 (2001) 3, 127-133, and was held in Šibenik, Solaris Hotels, 23 - 27.06.2002. [16].

The 5th Symposium had already been inserted in the "Calendar of International Conferences for 2002.", (Meeting of World Metallurgical Societies, Düsseldorf, November 1999 and November 2000).

There were 375 reports from 30 countries, 700 authors and coauthors registered for this Symposium. 300 participants from 20 countries were present at the Symposium. Symposium activity took place through plenary lectures and four sections (posters):

Plenary lectures.....	15
Materials - Section "A".....	135
Process Metallurgy - Section "B".....	121
Plastic Processing - Section "C".....	76
Metallurgy and Related Topics - Section "D".....	28

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

Comprehensive outline of plenary reports (the first 11 reports) were published in the journal *Metalurgija* 41 (2002) 3, 131-214 as the article and the summaries of all lectures in the same volume, 215-268 [17].

Review of the papers of Poster section were also published in the journal *Metalurgija* 41 (2002) 3:

- review of the papers of materials - section "A" *Metalurgija* 41 (2002) 3, 219 [18];
- review of the papers in process metallurgy - section "B" *Metalurgija* 41 (2002) 3, 237-238 [19];
- review of the papers of plastic processing - section "C" *Metalurgija* 41 (2002) 3, 254-255 [20];
- review of the papers of metallurgy and related topics - section "D" *Metalurgija* 41 (2002) 3, 265 [21].

For this symposium the reports were prepared by the authors and coauthors from various world universities, institutes, academies and companies. It is to be emphasised that the scientists from all four Croatian universities (Zagreb, Rijeka, Osijek, Split) participated in the symposium. However, a less number of company experts engaged directly in the domestic and foreign manufacturing practice was noticed. During the plenary session a presentation was held and some special company exhibitions.

- In the time of 5th Symposium was also held:
- meeting of International Editorial Board of the journal *Metalurgija* with Promotion of Bibliography 1962-2001 (2002-06-25);
 - assembly of Croatian Metallurgical Society (2002-06-24). President of Society is Prof. D. Sc. Ilija Mamuzić.

More than 100 participants were included in a round table session on the achievements, conclusions and closing of the 5th International symposium “Materials and Metallurgy” was held.

A detailed report from 5th Symposium of Croatian Metallurgical Society “Materials and Metallurgy”, Šibenik, 23-27.06.2002 was provided in the Journal *Metalurgija* 41 (2002) 4, 279-283 [22].

Based on the conclusion of the round table the 6th International symposium of Croatian Metallurgical Society “Materials and Metallurgy” was held 2004 - June 20 - 24.

The 6th Symposium is also in the “Calendar of International Conferences for 2004”, (Meeting of World Metallurgical Societys, Düsseldorf, November 2002).

A rapport for the 6th Symposium was provided in the Journal *Metalurgija* 42 (2003) 2, 79 - 84. [23]. Here are some data on the 6th Symposium of Croatian Metallurgical Society.

At the 6th International Symposium of Croatian Metallurgical Society “Materials and Metallurgy” the following countries had participad:

1. Austria	18. Italy
2. Australia	19. Japan
3. Belgium	20. Korea
4. Beloruss	21. Netherlands
5. Bosnia and Herzegovina	22. Norway
6. Brasil	23. Poland
7. Bulgaria	24. Portugal
8. Canada	25. Romania
9. China	26. Russia
10. Croatia	27. Serbia and Montenegro
11. Czech Republic	28. Slovakia
12. England	29. Slovenia
13. Egypt	30. South Africa
14. France	31. Spain
15. Germany	32. Sweden
16. Greece	33. Turkey
17. Hungary	34. Ukraine
	35. USA

There were 368 reports from 28 countries, 660 authors and coauthors registered for the sixth International Symposium of the Croatian Metallurgical Society.

250 participants from 23 countries were present at the symposium. Symposium activity took place through plenary lectures and four sections (poster):

Plenary lectures.....	12
Materials - Section “A”.....	111
Process Metallurgy - Section “B”.....	104
Plastic Processing - Section “C”.....	78
Metallurgy and Related Topics - Section “D”.....	63

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

Comprehensive outline of plenary reports (the first 8 reports) were published in the journal *Metalurgija* 43 (2004) 3, 143-198 [24] as the article and the summaries of all lectures in the same volume, 201-263 [25].

Review of the lectures of Poster section were also published in the Journal *Metalurgija* 43 (2004) 3:

- Review of the lectures of materials - section “A”, *Metalurgija* 43 (2004) 3, 203-205 [26];
- Review of the lectures in process metallurgy - section “B”, *Metalurgija* 43 (2004) 3, 223-225 [27];
- Review of the lectures of plastic processing - section “C”, *Metalurgija* 43 (2004) 3, 241-243 [28];
- Review of the lectures of metallurgy and related topics - section “D”, *Metalurgija* 43 (2004) 3, 255-256 [29].

For this symposium the reports were prepared by the authors and coauthors from various world universities, institutes, academies and companies. It is to be emphasised that the scientists from all four Croatian universities (Zagreb, Rijeka, Osijek, Split) participated in the symposium. However, a less number of company experts engaged directly in the domestic and foreign manufacturing practice was noticed.

- In the time of 6th Symposium was also held:
- meeting of International Editorial Board of the journal *Metalurgija*;
 - for the Editor - in - chief is elected Acad. D. Sc. I. Mamuzić in the period 2004-2008 [30].

More than 100 participants were included in a round table session on the achievements, conclusions and closing of the 6th International symposium “Materials and Metallurgy” was held.

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 achievements they all assist the metallurgy in Croatia to call the same attention as it does otherwise in the world.

Based on the analysis and evaluation of the subject matter of the symposium, the symposium has been appraised positively and it has been acknowledged that it has its place in the international exchange of knowledge.

It is reasonable to conclude that the demonstrated results of scientific and professional investigation accompanied by the complete and quality manifestations, especially discussions at the round table prove that the organizing of the sixth International symposium of Croatian Metallurgi-

cal Society "Materials and Metallurgy" in Šibenik 2004, June 20 - 24 was justified. Especially has to be emphasized that the participants will keep wonderful memories of Šibenik and Solaris Hotels.

Detailed report from 6th symposium also was provided in The Journal *Metalurgija* 44 (2005) 1, 3 - 8 [21].

Based on the conclusion of the round table the 7th International symposium of Croatian Metallurgical Society "Materials and Metallurgy" will be held 2006 - June 18 - 22. Solaris Holiday Resort, Šibenik, Croatia.

THE AIM OF SYMPOSIUM '2006

The aim of this Symposium is to point out all the possibilities of the materials and achievements 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 7th Symposium of Croatian Metallurgical Society:

The 7th International Symposium will be held as a part of 55th anniversary of the foundation of Croatian Metallurgical Society (from Society of Engineers and Technician Steel Works Sisak 1952 y.), 45th anniversary of the print of Journal *Metalurgija* (1962 y.).

ORGANIZER

CROATIAN METALLURGICAL SOCIETY (CMS)

PATRONS

- European Steel Federation
- International Iron and Steel Institute
- 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

- 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
- Steel Federation, Inc., Prague
- Slovak University of Technology in Bratislava, Faculty of Materials Science and Technology
- Vatrostalna Sisak d. d.

CO-OPERATION WITH ORGANIZATIONS

- German Iron and Steel Institute (VDEh)
- ATS - Association Technique de la Siderurgie Francaise
- CENIM - Centro Nacional de Investigaciones Metalurgicas Spain
- ChSM - The Chinese Society for Metals China
- CRM - Centre de Recherches Metallurgiques Belgium
- Eisenhütte Österreich - The Austrian Society for Metallurgy
- Iron and Steel Society, 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

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GENERAL INFORMATION

LANGUAGES

Croatian, English, German (no simultaneous translation)

All participants who intend to present a paper are required about a summary of paper (max. 120 words).

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

Summaries of all accepted papers will be published in Summaries of Lectures in the Journal *Metalurgija* 45 (2006),

3. Invited (plenary) papers will be also published in the Journal Metallurgy 45 (2006), 3 in order of acceptance after regular procedure. The selected papers also will be published in the Journal Metallurgy after Symposium with paid the Participation Fee, and accepted from the Reviewers.

DEADLINES (see WEB site)

Registration and Summary: 31th December 2005.

Second Circular: 15th March 2006 (see web site).

Programme: 15th May 2006 (see web site).

Papers: at latest 31th December 2006.

The Accompanying Exhibition will present instruments and equipments used in metallurgy and materials.

PARTICIPATION FEE (for each the paper)

- Participation, publication of abstracts in Metallurgy issue 45 (2006) 3, presentation in the poster section: **100 €**
- Participation, publication of abstracts in Metallurgy issue 45 (2006) 3, presentation in the poster section, publication of a whole paper in journal Metallurgy (**The papers not constistenly prepared according to the "Instructions to Authors", for Journal of Metalurgija will not be considered - see WEB site: 250 € (100 € for Summary; and 150 € for the Reviewers)**)
- Other participants and co-authors, including the Summaries of Lectures: **70 €**

Please pay participation fee by May 15, 2006. to: Croatian Metallurgical Society, Zagreb, Berislavićeva 6, Croatia, the bank account No:

Privredna Banka Zagreb, Croatia
703000-304713-7
(SWIFT PBZ GHR 2 X)

For the participants from Croatia (in Croatian Kuna):
2340009-1110048043

(Privredna Banka Zagreb)

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.
- Rewiew 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.**

REGISTRATION FOR SHMD 2006

June 18 - 22, 2006

Registration Form should be sent not later than 31th December 2005 to:

Croatian Metallurgical Society,
Berislavićeva 6, 10000 Zagreb, Croatia,
or fax: + 385 1 619 86 89

Name:

Title and Profession:

University or Company:

Mailing Address:

Zip Code:

City:

Country:

Phone:

Fax:

E-mail:

Attendance: - with a paper [] - without a paper [],

Title of the paper:

.....

.....

.....

.....

Author(s):

Date:

Signature:

ACCOMODATION

Solaris Holiday Resort, Šibenik, Croatia

The more details about the town Šibenik and Solaris Holiday Resort, please see: www.solaris.hr

HOTEL ACCOMODATION FORM SHMD 2006

Deadline of reservation: 31th May 2006 to:

Phone: + 385 22 361 011, fax: + 385 22 361 800
Solaris Holiday Resort, 22 000 Šibenik, Croatia

Name:

Phone:

Address:

Arrival Date: 06. 2006; Time:

Departure date: 06. 2006; Time:

Please indicate type of room required:
(price are per person/day)

	double 1/2	single 1/1
room + breakfast	30 € []	37,7 € []
half board	33 € []	40,7 € []
full board	42 € []	49,7 € []

visitor's tax - person/day 0.8 €

Date:

Signature:

Information: Solaris Holiday Resort

Phone + 385 22 361 011
361 007
361 707

Fax: + 385 22 361 800
361 801

Eventually let us point out:

The reception of the 7th 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.

All correspondence and sent Papers to:

Croatian Metallurgical Society
Berislavićeva 6, 10 000 Zagreb, Croatia

Phone / Fax: + 385 1 619 86 89 (service)
Mob: + 385 98 317 173

Sent Summaries to: delta-computers@pu.htnet.hr



The Congress Hall in Hotel Ivan

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.
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- [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, 219.
- [19] Metalurgija 41 (2002) 3, 237-238.
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- [22] Metalurgija 41 (2002) 4, 279-283.
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- [24] Metalurgija 43 (2004) 3, 143-198.
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- [26] Metalurgija 43 (2004) 3, 203-205.
- [27] Metalurgija 43 (2004) 3, 223-225.
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- [29] Metalurgija 43 (2004) 3, 255-256.
- [30] Metalurgija 43 (2004) 4, 278 and 286.
- [31] Metalurgija 44 (2005) 1, 3-8.



The Hotel -
Tourist Colony "Solaris"