

Survey of 13<sup>th</sup> International Symposium of Croatian Metallurgical Society (CMS)

# SHMD `2018

»Materials and Metallurgy«

<http://pubweb.carnet.hr/metalurg>

Šibenik 2018, June, 24 – 29  
Solaris Holiday Resort, Croatia

Based on the Agreement of Meetings of World Metallurgical Societies, Dusseldorf  
2010 – 2016 y

13<sup>th</sup> International Symposium of Croatian Metallurgical Society  
“Materials and Metallurgy“ was held as part of:

100<sup>th</sup> Anniversary of the Foundation of the Technical Faculty University of Zagreb  
(1919-2019) Croatia

100<sup>th</sup> Anniversary of the Foundation of Dnepropetrovsk National University  
(1919–2019) Ukraine

80<sup>th</sup> Anniversary of Studies of Metallurgy University of Ljubljana (1939-2019) Slovenia

70<sup>th</sup> Anniversary of the Establishment of Institute of Materials Research,  
Slovak Academie of Sciences (1950-2019)

65<sup>th</sup> Anniversary of the Establishment of Technical University of Košice  
(1952-2017), Slovakia

65<sup>th</sup> Anniversary of the Foundation of Croatian Metallurgical Society (from Society of  
Engineering and Technician Steel Works Sisak), (1952-2017), Croatia

55<sup>th</sup> Anniversary of the Establishment of Mechanical Engineering Study,  
Programms University Osijek, (1962-2017), Croatia

55<sup>th</sup> Anniversary of the Foundation and Publication of the Journal Metalurgija,  
(1962-2017), Croatia

Countries Participating at the 13<sup>th</sup> International Symposium of Croatian Metallurgical Society “Materials and Metallurgy“

- |                           |                |                  |                  |
|---------------------------|----------------|------------------|------------------|
| 1. Argentina              | 14. Egypt      | 27. Lithuania    | 40. Singapore    |
| 2. Austria                | 15. Finland    | 28. Macedonia    | 41. Slovakia     |
| 3. Belgium                | 16. France     | 29. Malaysia     | 42. Slovenia     |
| 4. Belarus                | 17. Germany    | 30. Mexico       | 43. South Africa |
| 5. Benelux                | 18. Greece     | 31. Montenegro   | 44. Spain        |
| 6. Bosnia and Herzegovina | 19. Hungary    | 32. Netherlands  | 45. Sweden       |
| 7. Brazil                 | 20. India      | 33. Philippine   | 46. Thailand     |
| 8. Bulgaria               | 21. Indonesia  | 34. Poland       | 47. Turkey       |
| 9. Chile                  | 22. Iran       | 35. Portugal     | 48. Ukraine      |
| 10. China                 | 23. Italy      | 36. Romania      | 49. USA          |
| 11. Croatia               | 24. Japan      | 37. Russia       | 50. Vietnam      |
| 12. Czech Republic        | 25. Kazakhstan | 38. Saudi Arabia |                  |
| 13. England               | 26. Korea      | 39. Serbia       |                  |

**TOPICS OF THE SYMPOSIUM WERE:****Materials**

- New Materials
- Refractory 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

There were 426 + Rejected 135; Total 561 reports; over: 1100 Authors and Coauthors registered for the 13 th International Symposium of the Croatian Metallurgical Society.

249 Participants were present at the Symposium.

Symposium activity took place through Plenary Lectures and four Sections (Posters):

Plenary lectures	6
Materials – Section “A”	138
Process Metallurgy – Section “B”	118
Plastic Processing – Section “C”	66
Metallurgy and Related Topics – Section “D”	98

For the Plenary Lectures research topics were selected relating partly to the new materials and partly to the increase of efficiency of metallurgical procedures, as well as improving of research of ferrous and non ferrous metals, selected new technologies and simulation in material forming, several plastic deformation etc.

**PLENARY LECTURE WERE**

**I. Samardžić, M. Dunder, T. Marsenić, Croatia**

**Welding of contemporary materials in thermal power plants.**

**A. Panda, J. Dobransky, M. Jančík, I. Pandov, M.**

**Kačalova, Slovak Republic**

**Advantages and effectiveness of the powder metallurgy in manufacturing technologies.**

**R. Kawalla, M. Ullmann, M. Oswald, U. Prah, Germany**

**Developments in the field of semi-finished Mg products**

**T. Vuherer, I. Samardžić, A. Stoić, D. Bajić, Slovenia, Croatia, Montenegro**

**Challenges of application of high-strength steel in welded constructions.**

**I. E. Uskova, N. I. Chekunova-Tomacheva, Russia**

**Determination of performance criteria for mergers and acquisitions in the metals industry.**

**I. Alfirević, Croatia**

**Advanced in mechanical and its influence on science, technology and society.**

The Summaries of all Lectures of 13 th Symposium were published also in *Metalurgija* “Book of Abstracts” 57 (2018) 3,175-216. Total held 269 Lectures at the 13 th Symposium.

For this Symposium the reports were prepared by the authors and coauthors from various world Universities, Institutes, Academies and Companies. It is to be emphasized that the Scientists from Croatian Universities (Zagreb, Rijeka, Split, Varaždin, Osijek) participated in the symposium.

In the time 13 th Symposium was also held:

- **Meeting of Editorial Board of Journal *Metalurgija***; June 26, 2018 4 PM, Šibenik, Hall Žirje with election of Acad. Ilija Mamuzić for Editor – in – chief of *Journal Metalurgija* 2018 – 2022; Minutes of this Meeting, *Metalurgija* 58 (2019) 1

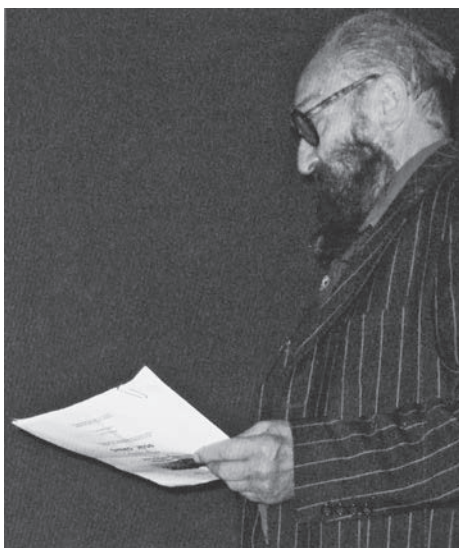
More than 150 Participants were included in a Round Table Session on the Achievements, conclusions and closing of the 13 th International Symposium “Materials and Metallurgy” (June 27, 6,00 PM Hall Lavsa).

In the Discussions it was confirmed that the Symposium organized by Croatian Metallurgical Society have become traditional assembly of experts and Scientists of various profiles: Metallurgists, Geologists, Physicists, Chemists, Mechanical Engineers et.

Based on the analysis and evolution 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 13 th International Symposium of Croatian Metallurgical Society “Materials and Metallurgy” in Šibenik, 2018 June 24 – 29 was justified. Especially has to be emphasized that the participants will keep wonderful memories of Šibenik and Solaris Hotels.


Based on the Agreement of Meeting of World Metallurgical Societies, Dusseldorf, November 2012 y – 2016 y; and the conclusion of the Round Table, the next 14 th International Symposium of Croatian Metallurgical Society “Materials and Metallurgy” will be held 2020 – Šibenik, June 21 – 26.




President of Scientific and Organizing  
Committee Acad. I. Mamuzić



Chairman of Plenaries Lectures Prof. D. Sci. I. Samardžić, Prof. Em. I. Alfrević,  
Prof. Dr. Sci. R. Kawalla



TU Bergakademie  
Freiberg



**TECHNISCHE UNIVERSITÄT  
BERGAKADEMIE FREIBERG**  
Die Ressourcenuniversität. Seit 1765.

Institut für Metallformung · B.-v.-Cotta-Str. 4 · 09599 Freiberg

**Prof. Mamuzic**

Institut für Metallformung  
Prof. Dr.-Ing. Prof. E.h. mult.  
Rudolf Kawalla (Institutsdirektor)  
Prof. Dr.-Ing. Ulrich Prahl

Bearbeiter: Patricia Krause  
Gebäude/Raum: FOR-1.121  
Telefon: +49 3731 39-3698  
Fax: +49 3731 39-3656  
E-Mail: [office@imf.tu-freiberg.de](mailto:office@imf.tu-freiberg.de)  
Homepage: [www.imf.tu-freiberg.de](http://www.imf.tu-freiberg.de)  
Datum: 29.06.2018  
Tgb. Nr.:

Sehr geehrter Herr Professor Mamuzic,

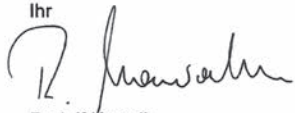
die Tagung in Sibenik war für mich ein voller Erfolg. Ich habe sehr interessante Personen kennen gelernt. Dazu haben mir die Personen einige Hinweise für einige Forschungsarbeiten gegeben. Darüber hinaus hoffe ich auf den zukünftigen intensiven Kontakt mit den Kollegen aus Ljubljana, Zagreb und Kosice. Vielleicht können Sie Ihre Kollegen aus Zagreb dazu auch motivieren.

Die Tagung war sehr gut von Ihnen organisiert und Ihre Herzlichkeit ist nicht zu übertreffen. Ich möchte mich auf diesem Wege für die Einladung bedanken und sofern mir das die Gesundheit erlaubt, werde ich auch bei der nächsten Tagung in zwei Jahren dabei sein. Der Ort und die Hotels sind exzellent. Ich habe die Hotels und die gesamte Anlage nicht wiedererkannt. Sie sind super modernisiert und auf einem sehr hohen Niveau. Ich bedauere, dass ich meine Frau nicht mitgenommen und anschließend paar Tage Urlaub gemacht habe. Ich danke Ihnen nochmals für alles und insbesondere für die Arbeit, die Sie für die Organisation geleistet haben.

In der Zeit bis zur nächsten Tagung in Sibenik werde ich einige Kollegen ansprechen und motivieren zu Ihnen zu kommen.

Ich wünsche Ihnen weiterhin Gesundheit und Schaffenskraft und hoffe auf baldiges Wiedersehen.

Mit herzlichen Grüßen aus Freiberg

Ihr  
  
 Rudolf Kawalla

TU Bergakademie Freiberg · Institut für Metallformung · Bernhard-von-Cotta-Str. 4 · 09599 Freiberg  
Telefon: +49 3731 39-3698 · Fax: +49 3731 39-3656 · [www.imf.tu-freiberg.de](http://www.imf.tu-freiberg.de)