

# The 9th International Conference on Physical and Numerical Simulation of Materials Processing

---



**Call for papers**

**October 10-14  
Moscow, Russia**

---

The 9th International Conference on Physical and Numerical Simulation of Materials Processing (ICPNS'2019) follows the tradition of its eight predecessors in USA (Seattle-2016), Finland (Oulu-2013) and China (Guilin 2010, Zhengzhou-2007, Shanghai-2004, Beijing-1999, Hainan-1997, Harbin-1990) and provides a forum for researchers around the world to present papers on recent advances in the overall field of physical & numerical methods and their applications in materials processing and testing.

## **ORGANIZED BY**

Tikhonov Moscow Institute of  
Electronics and Mathematics of  
National Research University  
Higher School of Economics

International Federation on  
Physical and Numerical Simulation  
of Materials Processing (IFPNS)

<https://icpns2019.hse.ru>

---

## SCOPE AND TOPICS

The conference will cover all aspects of Physical and Numerical Simulation of Materials Processing. The focus will be on (but not limited to) the following topics:

1. Physical simulation of forming operations and thermo-mechanical processing of materials
2. Design and optimization of materials processing technologies
3. Mathematical and numerical modeling of materials constitutive behavior
4. Atomistic and multiscale computer simulation
5. Materials characterization
6. Radiation, microwave and laser processing of materials
7. Nondestructive testing
8. Intelligent manufacturing
9. Modelling and simulation in metallurgical processing
10. Software engineering and software development for materials processing, computation and design
11. Additive manufacturing, processes and materials
12. Simulation of phase transformations and microstructural evolution
13. Material design approaches and experiences, computation material science and molecular dynamics simulation
14. Sustainability through materials processing and waste valorization

## IMPORTANT DATES

- |  |                            |
|--|----------------------------|
| - Abstract submissions due:                | <b>April 15, 2019</b>      |
| - Deadline for full manuscript submission: | <b>May 10, 2019</b>        |
| - Final program on the website:            | <b>September 30, 2019</b>  |
| - Dates of the conference:                 | <b>October 10-14, 2019</b> |

## PUBLICATION

All accepted abstracts will be printed in the proceedings of ICPNS'2019.

Full manuscripts after peer review will be published in [Procedia Manufacturing](#), an open access Elsevier journal available in [ScienceDirect.com](#) and indexed in world leading scientific databases including **Scopus** and **Web of Science**.

## SOCIAL PROGRAM

During the conference, the organization committee will arrange a tour program for participants and companions to visit most popular attractions in Moscow.

A one day trip to St. Petersburg will be organized as an optional activity (for additional payment), including visiting Peter the Great St. Petersburg Polytechnic University (SPbPU).

## CONFERENCE FEES

|   | <b>Early bird</b><br><i>Before May 31, 2019</i> | <b>Standard</b><br><i>Before July 15, 2019</i> |
|---|---|--|
| <b>Regular participant<sup>1</sup></b><br><i>Accommodation in double room</i> | 700 USD   | 800 USD  |
| <b>Regular participant<sup>2</sup></b><br><i>Accommodation in single room</i> | 900 USD   | 1000 USD                                       |
| <b>Regular participant</b><br><i>without accommodation</i>                    | 500 USD   | 600 USD  |
| <b>Student</b><br><i>without accommodation</i>                                | 350 USD   | 600 USD  |
| <b>Accompanying person</b>  | 350 USD   | 450 USD  |

Participant fee includes:

- Accommodation in the conference (double<sup>1</sup> or single<sup>2</sup> room),
- Access to Plenary Session, Parallel Sessions, Poster Session and Exhibition
- Participant bag, book of abstracts and conference program
- Lunch & coffee breaks during the conference
- Social program, welcome reception, conference diner
- Certificate of participation

Accompanying person fee includes:

- Accommodation in the conference hotel (double room)
- Social program, welcome reception, conference diner

## COMMITTEES

### Chairman

- Prof. Jitai Niu  
*Chairman of International Federation on Physical and Numerical Simulation of Materials Processing (IFPNS)*  
*Harbin Institute of Technology, China*  
*Henan Polytechnic University, China*  
*Southwest University of Science and Technology, China*

### Co-Chairman

- Dr. Sergey Aksenov  
*Deputy Director for research of Tikhonov Moscow Institute of Electronics and Mathematics, National Research University "Higher School of Economics" (MIEM HSE), Russia*

### Co-Chairman

- Dr. Jim Papa  
*Vice chair of IFPNS, Chief Executive Officer of Dynamic Science Systems Inc., USA*

## International Scientific Committee

### Chairman

Prof. Josip Brnic,  
*Professor Emeritus of Department of Engineering Mechanics, Faculty of Engineering,  
Former Rector of the University of Rijeka, Croatia*

### Vice Chairman

- Prof. Igor Mazur,  
*Vice Chair of IFPNS, Head of the Department of Metal Forming, Professor, Lipetsk State  
Technical University, Russia*

### Vice Chairman

- Prof. Yuansheng Yang  
*Professor, Leader of Advanced Materials Solidification & Preparation Group, Institute of Metal  
Research, Chinese Academy of Sciences, China*

### Members

- Prof. Nathan Blaunshtein, *Professor of Ben Gurion University, Israel*
- Prof. Gennady Bondarenko, *Professor of MIEM HSE, Russia*
- Prof. Qingyou Han, *Professor and Director for the Purdue Center for Materials Processing Research,  
Purdue University, USA*
- Dr. Hitoshi Iino, *Fuji Electronic Industrial Co. Ltd, Japan*
- Prof. John J. Jonas, *Emeritus Professor of McGill University, Canada*
- Prof. Pentti Karjalainen, *Emeritus Professor of Oulu University, Finland*
- Prof. Marcin Knapiński, *Czestochowa University of Technology, Poland*
- Prof. Donato Sorgente, *University of Basilicata, Italy*
- Prof. Hyoung Seop Kim, *Pohang University of Science and Technology, Korea*
- Prof. Nikolay Kolbasnikov, *Professor of Peter the Great St.Petersburg Polytechnic University, Russia*
- Prof. Fadey Komarov, *Professor of Belarusian State University, Minsk, Belarus*
- Prof. Pavel Korzhavyi, *Royal Institute of Technology, Stockholm, Sweden*
- Prof. Evgenii Krouk, *Director of MIEM HSE, Russia*
- Prof. Yongping Lei, *Professor of Beijing University of Technology, China*
- Prof. Sergey Lezhnev, *Professor of Rudny Industrial Institute, Kazakhstan*
- Prof. Dequn Li, *Academician of the Chinese Academy of Engineering, Professor of Huazhong  
University of Science and Technology, China*
- Prof. Abdrakhman Naizabekov, *Rector of Rudny Industrial Institute, Kazakhstan*
- Prof. Alfonso Ngan, *Professor of Materials Science at the University of Hong Kong, China*
- Prof. Ronald Lesley Plaut, *Professor of University of Sao Paulo, Brazil*
- Prof. Muhammad Ejaz Qureshi, *Professor of National University of Sciences & Technology, Pakistan*
- Prof. Juergen Schneider, *Freiberg University of Mining and Technology, Germany*
- Prof. Pavel Selyshchev, *Professor of University of Pretoria, South Africa*
- Prof. Fulvio Siciliano, *Senior Application Consultant of Dynamic Systems Inc., USA*
- Prof. Christof Sommitsch, *Head of Institute of Materials Science, Joining and Forming, Graz  
University of Technology, Austria*
- Prof. Mahesh P. Srivastava, *Professor of University of Delhi, India*
- Prof. Vladimir Stegailov, *Professor of MIEM HSE, Russia*
- Prof. Aleksey Yanilkin, *Dukhov Research Institute of Automatics (VNIIA), Russia*
- Prof. Pawel Zukowski, *Professor of Lublin University of Technology, Lublin, Poland*

## International Organizing Committee

### Chairman

- Dr. Sergey Aksenov  
*Deputy Director for Research of Tikhonov Moscow Institute of Electronics and Mathematics,  
National Research University Higher School of Economics (MIEM HSE), Russia*

### Vice Chairman

- Prof. Jianmin Zeng  
*Guangxi University, China*

### Vice Chairman

- Dr. Wayne C. Chen,  
*Dynamic Science Systems Inc., USA*

### Members

- Prof. Aleksandr Belov, *MIEM HSE, Russia*
- Tatiana Sedova, *MIEM HSE, Russia*
- Dr. Irina Logashina, *MIEM HSE, Russia*
- Nadezhda Litvinova, *MIEM HSE, Russia*
- Prof. Jun Hu, *Secretary, Materials institute of CMES, China*
- Dr. Daoyuan Wang, *FDC Co., Japan*
- Prof. Yunlong Chang, *Shenyang University of Technology, China*
- Prof. Yun-Hae Kim, *Korea Maritime University, South Korea*
- Dr. Baohui Tian, *BÖHLER Edelstahl GmbH & Co KG, Austria*
- Prof. Mei ZHANG, *Shanghai University, China*
- Prof. Jianxin ZHOU, *Huazhong University of Science and Technology, China*

## PARTNERS AND SPONSORS

