

IPM 2019
5th International Conference on
Inverse Problems Methods
Rzeszów – Kombornia, Poland
22–24.05.2019

<https://ipm.prz.edu.pl/>

5th International Conference on Inverse Problems Methods IPM 2019 will be one of the ECCOMAS Thematic Conferences. For further information please visit

www.eccomas.org

Inverse Problems Methods (IPM)

The Conference on Inverse Problems Methods (IPM) is organized to foster cross-disciplinary interaction. Papers may address various aspects of inverse problems, such as:

- mathematical theory and numerical algorithms,
- mechanics of structures and materials,
- heat transfer,
- other engineering disciplines,
- biology, biochemistry,
- genetics and medicine,
- tomography and inverse scattering,
- bioengineering,
- nondestructive evaluation,
- multiscale- and nano- engineering,
- geology and geophysics,
- environmental phenomena,
- economics.

Unlisted but related to the above items are also acceptable.

Topics

- Advanced mathematical methods for modelling and analysis of Inverse Problems in Mechanics (IPM).
- Intelligent computing (machine learning and especially neural networks, fuzzy sets, evolutionary methods and strategies, immunological systems).
- Damage detection and health monitoring in structures and materials of civil and mechanical engineering.
- Advanced methods for material and structure parameter identification and calibration.
- Probabilistic identification and Bayesian inference in IPM, Kalman filter methodology.
- Sensitivity analysis in IPM of biomechanical systems.
- Topology and shape parameter identification, computational tomography, relation to optimal design for unspecified topology and boundary shape.
- Hybrid systems in updating of computational models.
- Reverse engineering as taking apart an object to see how it works to duplicate or enhance the object – relations to source codes, 3-D images, hardware and software problems.

A number of presented papers will be selected by the members of the Scientific Advisory Board and chairmen of Conference sessions for publishing in special issues of two international scientific journals: Computer Assisted Mechanics and Engineering Science (CAMES), Inverse Problems in Science and Engineering (IPSE).

IPM 2019 is organised under the auspices of the **Committee on Mechanics of the Polish Academy of Sciences**





6th CONFERENCE ON NANO- AND MICROMECHANICS 3-5 JULY 2019 – RZESZÓW, POLAND

<http://cnm2019.ippt.pan.pl/index.html>

Objectives

The aim of the conference is to address the state-of-the-art knowledge in the multi-disciplinary area of nano and micro technologies in mechanics, fluidics, physics, chemistry, and biomedicine. The meeting is the sixth in the series to provide a forum for the presentation and discussion of new concepts, properties and developments of new science and novel materials in the nano regime, new functional nanomaterials, photonics, nanobiotechnology, devices, and sensors.

It is based on the successful formula of previous meetings to provide a broad forum for scientists from academia and engineers to present and discuss recent advances in their research on the phenomena on scale levels where size is an important factor. There will be ample time to discuss the opportunities arising from recent developments, allowing for synergy and unique cross-over opportunities between various branches of science.

The conference topics include

- Nanomechanics and micromechanics theory, computational methods and modelling.
- Thermodynamics, microfluidics and nanofluidics.
- Microsystem technology and nanotechnology.
- NEMS, MEMS, and MEOMS technology.
- Nanoelectronics, nanophotonics, nanomagnetism.
- Biomicromechanics and bionanomechanics.
- Biotechnology and bioengineering.
- Nanofibres, nanowires and nanoparticles.
- Experimental methods.
- Optomechanics.

Abstract

Abstracts should be up to 2 pages. The file size is limited to 10 MB. The abstract should be submitted electronically via the conference registration system.

Abstracts will be reviewed by Members of CNM2019 International Scientific Committee and the authors will then be notified of acceptance. Accepted abstracts will be distributed Turing Conference as a Book of Abstracts in printed and electronic form.

Papers

Abstract authors are invited to publish the full presented papers (after a standard review process) after the conference in the following journals:

Bulletin of the Polish Academy of Sciences (IF = 1.277)
https://www.editorialsystem.com/bpasts/journal/call_for_papers/
(additional payment rules on the website of Bulletin)

Archives of Mechanics (IF = 0.923)
<http://am.ippt.gov.pl/index.php/am>

The deadline for the submission is: September 30th, 2019.
All the submitted papers will undergo the usual reviewing procedure.



Ministry of Science
and Higher Education
Republic of Poland



<https://pcm-cmm2019.com/en>

Scope and objectives

The 4th Polish Congress of Mechanics (PCM) continues the tradition of scientific meetings on Mechanics, initiated around 12 years ago during the 1st PCM in Warsaw. The Congress presents the current state of the art research in all disciplines of Classical and Quantum Mechanics, Solid and Fluid Mechanics, Computational Mechanics, Applied Mathematics and Physics, as well as Structural Mechanics and Engineering. The 23rd International Conference on Computer Methods in Mechanics (CMM) continues the 46-years old series of conferences dedicated to the numerical methods and their applications in mechanics-based problems. The scientific meetings, organized biannually since 1973, provide a forum for the presentation and discussion of new ideas surrounding the theoretical background and practical applications of Computational Mechanics.

Congress format

During the Congress, plenary and keynote lectures, joint sessions, mini-symposia and parallel sessions, as well as oral and poster presentations, will be delivered in the auditoria and lecture rooms of the Jagiellonian University and the University of Science and Technology AGH in Kraków. The language of the Congress will be English. The social program of the Congress includes a get-together party, banquet, Cracovia walking tour, and other events. More information on all the events will be available on the Congress website.

Congress proceedings

Accepted abstracts will be published in the Congress Book of Abstracts (electronic version). Full-length articles contributed by plenary and keynote speakers will appear in the Journal of Theoretical and Applied Mechanics. In addition, a list of recommended journals, to which the Congress articles may be submitted, will be announced. Details of the article format and the list of journals will be available on the Congress website.

Full-length papers

Authors of the accepted abstracts are encouraged to submit full-length papers to the following journals:

- Journal of Theoretical and Applied Mechanics,
- Archives of Mechanics,
- Computer Assisted Methods in Engineering and Science,
- Engineering Transactions.

Papers should be submitted via the selected journal website – please obey the guidelines given there. The deadline for submission of articles is November 30, 2019. All the papers will undergo the usual reviewing procedure.

If the number of submissions is sufficient, JTAM, Eng Trans and CAMES will publish special issues with papers from PCM-CMM-2019.

Post-conference proceedings

Optionally, full-length papers presented at the Congress and submitted to the organizers by October 15, 2019, will be reviewed, edited in electronic format and published as the Congress and Conference Proceedings by the AIP Publishing. Each paper in the proceedings will be permanently worldwide available, without any fee to access or download. The articles will be sent to indexing by Web of Science and Scopus.

The templates for the proceedings full-length papers, in both MS Word and LaTeX formats, can be found at the link: <http://aip.scitation.org/apc/authors/prepapers>.



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