

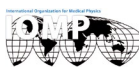


# World Congress on Medical Physics & Biomedical Engineering

June 3–8, 2018  
Prague, Czech Republic  
[www.iupesm2018.org](http://www.iupesm2018.org)



## First Announcement



# Welcome

Dear colleagues,

it is a great pleasure and honour for The Czech Society for Biomedical Engineering and Medical Informatics and for the Czech Association of Medical Physicists to be the host societies and organizers of the 2018 World Congress on Medical Physics and Biomedical Engineering.

The Congress will be held in Prague, the capital of the Czech Republic, in the beginning of June 2018. The Congress is represented by the Congress Organizing Committee (COC) and is organized in a close collaboration with the international societies IUPESM, IFMBE and IOMP represented by the Congress Coordinating Committee (CCC).

This triennially organized joint meeting of medical physicists, biomedical engineers and adjoining health care professionals is a unique opportunity to liaise with your professional colleagues from all over the world, learn and share your knowledge, and discuss the latest research outcomes and technological advancements as well as new ideas in both medical physics and biomedical engineering field. Besides the purely scientific and technological topics, the 2018 Congress will also focus on other aspects of our professional involvement in health care, such as the education and training, the accreditation and certification, the health technology assessment or the patient safety.

Scientific sessions, plenary lectures, poster sessions, keynote lectures, continuing education sessions and special sessions will be the forms of the Congress events. These scientific meetings will be supplemented with exhibitions and presentations of the manufacturers, innovators and vendors, both local and global.

Dear colleagues, we do hope that the 2018 World Congress on Medical Physics and Biomedical Engineering in Prague will become a memorable event both professionally and socially to all participants and we are very much looking forward to meet you in person.

On behalf of the COC



Jaromír Cmíral, Ing., PhD., DSc.  
COC Co-chair (Biomedical Engineering)



Libor Judas, RNDr., PhD.  
COC Co-chair (Medical Physics)

## Organizers

**Czech Society for Biomedical Engineering and Medical Informatics**  
Member of Czech Medical Association JEP  
Prague, Czech Republic

**Czech Association of Medical Physicists**  
Prague, Czech Republic

## Important Dates

September 1, 2017  
Call for Abstracts opens  
September 1, 2017  
Registration opens  
November 15, 2017

Abstract Submission Deadline  
December 31, 2017  
Authors Notification of Abstract Acceptance  
January 31, 2018  
Full Papers Submission Deadline



**DEADLINE  
EXTENDED**  
November 30, 2017

## Main Topics

- 1 Diagnostic Imaging
  - 2 Image Processing
  - 3 Information Technology in Healthcare
  - 4 Modelling and Simulation
  - 5 BME and MP Education, Training and Professional Development
  - 6 Patient Safety
  - 7 Accreditation and Certification
  - 8 Health Technology Assessment
  - 9 Biosignals Processing
  - 10 Biomechanics, Rehabilitation and Prosthetics
  - 11 Minimum Invasive Surgery, Robotics, Image Guided Therapies, Endoscopy
  - 12 Diagnostic and Therapeutic Instrumentation
  - 13 Micro- and Nanosystems, Active Implants, Biosensors
  - 14 Neuroengineering, Neural Systems
  - 15 Biomaterials, Cellular and Tissue Engineering, Artificial Organs
  - 16 Assistive Technologies
  - 17 Biological Effects of Electromagnetic Fields
  - 18 Clinical Engineering
  - 19 Radiation Oncology Physics and Systems
  - 20 Dosimetry and Radiation Protection
  - 21 Advanced Technologies in Cancer Research and Treatment
  - 22 Biological Effects of Ionizing Radiation
  - 23 Nuclear Medicine and Molecular Imaging
- 

## Invited Speakers for Plenary Session

Professor Uwe Oelfke (United Kingdom)  
Professor Russell Ritenour (USA)

---

## Key-Note Speakers

Anthony Atala (USA)	Penelope Jeggo (United Kingdom)
Charles Bloch (USA)	Christian Kollmann (Austria)
Edward Boyden (USA)	Patty Kostkova (United Kingdom)
José Bravo (Spain)	Michal Kozubek (Czech Republic)
Carmel Caruana (Malta)	José Millet Roig (Spain)
Paul Chang (Singapore)	Donald Peck (USA)
Andre Dekker (Netherlands)	Miroslav Pinak (Austria)
Jay Flanz (USA)	E. Russell Ritenour (USA)
Christian Gasser (Sweden)	Milan Santrucek (Czech Republic)
Jens Haueisen (Germany)	Jack A. Tuszynski (Canada)
Radovan Hudak (Slovakia)	Jozsef Varga (Hungary)
Leonidas D. Iassemidis (USA)	Kevin Warwick (United Kingdom)
Sebastien Incerti (France)	Habib Zaidi (Switzerland)

## Scientific Committee

### Co-Chairs

Geoffrey Ibbott (IOMP)  
Lenka Lhotska (Czech Republic, BME)  
Ratko Magjarevic (IFMBE)  
Lucie Sukupova (Czech Republic, MedPhys)

### Members

Magdalena Bazalova-Carter (Canada)  
Carmel Caruana (Malta)  
Tomas Cechak (Czech Republic)  
Paul Chang (Singapore)  
Jiri Chvojka (Czech Republic)  
Matej Daniel (Czech Republic)  
Marie Davidkova (Czech Republic)  
Pavel Dvorak (Czech Republic)  
Susanna Guatelli (Australia)  
Martin Falk (Czech Republic)  
Alberto Folletti (Italy)  
Christian Gasser (Sweden)  
Csilla Gergely (France)  
Jens Hauelsen (Germany)  
Jan Havlik (Czech Republic)  
Jiří Hozman (Czech Republic)  
Leonidas D. Iassemidis (USA)  
Julian R. Jones (United Kingdom)  
Frank Jülicher (Germany)  
Peter Knoll (Austria)  
Radim Kolar (Czech Republic)  
Jana Kolarova (Czech Republic)  
Christian Kollmann (Austria)

Irena Koniarova (Czech Republic)  
David Korpas (Czech Republic)  
Vladimir Krajca (Czech Republic)  
Jan Kremlacek (Czech Republic)  
Petr Marsalek (Czech Republic)  
Karel Nechvil (Czech Republic)  
Milos Nesladek (Belgium)  
Chris Nuggent (United Kingdom)  
Pirkko Nykänen (Finland)  
Hakan Nystrom (Sweden)  
Pawel Olko (Poland)  
Leandro Pecchia (United Kingdom)  
Vaclav Porod (Czech Republic)  
Kevin Prise (United Kingdom)  
Ivo Provaznik (Czech Republic)  
Vladimir Rogalewicz (Czech Republic)  
Simo Saarakkala (Finland)  
Ioannis Sechopoulos (Netherlands)  
Milan Sonka (USA)  
Lucie Sukupova (Czech Republic)  
Olga Stepankova (Czech Republic)  
Krystina Tack (USA)  
Rosanna Tarricone (Italy)  
Annalisa Trianni (Italy)  
Jiri Trnka (Czech Republic)  
Frantisek Vlcek (Czech Republic)  
Vladimir Vondracek (Czech Republic)  
Jan Vrba (Czech Republic)  
Kevin Warwick (United Kingdom)  
Martha Zequera Diaz (Columbia)

## Congress Coordinating Committee

### Chair

Kin Yin Cheung (Chair, IOMP, Hong Kong)

### Members

Howell Round (IOMP, New Zealand)  
Slavik Tabakov (IOMP, UK)  
Virginia Tsapaki (IOMP, Greece)  
James Goh (IFMBE, Singapore)  
Kang Ping Lin (IFMBE, Taiwan)  
Herb Voigt (co-opted, IFMBE, USA)  
Monique Frize (co-opted, IFMBE, Canada)

## Program Committee

### Co-Chairs

Jaromir Cmiral (Czech Republic, BME)  
Libor Judas (Czech Republic, MedPhys)

## Contacts

### Congress Organizing Committee

E-mail: coc@iupesm2018.org

### Supporting Agency

**GUARANT International spol. s r.o.**

Na Pankráci 17, 140 21 Prague 4, Czech Republic

Tel: +420 284 001 444

Fax: +420 284 001 448

E-mail: agency@iupesm2018.org