6th international Conference on plasma medicine

FINAL ANNOUNCEMENT

Bratislava, Slovakia September 4–9, 2016

associated with **Summer School on Plasma Medicine** September 1–3, 2016, Bratislava, Slovakia

Table of Contents

WELCOME	3
HISTORY	. 3
ORGANIZERS Organizing Institutions and Societies ISPM Board (International Committee) Local Organizing Committee Sponsors and Exhibitors	4 5
PROGRAM Topics Conference Program Plenary and Invited Lectures Oral Presentations Poster Presentations Poster Session 1 Poster Session 2 Poster Session 3	5 8 9 12 15
FEES	23
CONFERENCE TRIP TRIP 1: Knights at Devín Castle TRIP 2: Driny Cave and Červený Kameň Castle TRIP 3: Beckov Castle and Trenčín Castle and town TRIP 4: Action Park Čunovo TRIP 5: Bratislava Old Town	23 25 26
COMPANION TRIPS TRIP 1: Čičmany, Rajecká Lesná and Rajecké Teplice TRIP 2: Pannonhalma and Esztergom TRIP 3: Laxenburg and Seegrotte	31
AWARDS Plasma Medicine Award Early Career Award in Plasma Medicine Young Researcher Presentation Award Student Grant	33 33
VENUE Conference Venue Welcome Reception Venue Conference Dinner Venue Bratislava Travel and Visa Accommodation	38 39 40 42
CONTACT	47

Welcome

On behalf of the International Society for Plasma Medicine (ISPM), we are delighted to welcome you at the full-week 6th International Conference on Plasma Medicine (ICPM-6), which will be held in Bratislava, Slovakia, from **September 4 to 9, 2016**.

Plasma Medicine is a new, rapidly growing field that faces many technological challenges and brings to the forefront fundamental questions on the mechanisms of interaction between living organisms and gas plasmas. The conference creates a multidisciplinary forum bringing together professionals from the fields of plasma physics, medicine, biology, biochemistry, pharmacy, agriculture, and food science and industry, in order to develop a common language, to better define key challenges and open questions, to further development of international collaborations, and to move toward effective solutions.

This time, the ICPM-6 will be preceded by the Summer School on Plasma Medicine, held in Bratislava on September 1-3, 2016.

We hope to see you all in Bratislava, one of the pearls on the Danube river and quickly developing metropoles in the Central Europe.

Zdenko MACHALA and Karol HENSEL Organizers of ICPM-6 Faculty of Mathematics, Physics and Informatics Comenius University Mlynská dolina 84248 Bratislava Slovakia tel: +421-2-60295618 info@icpm6.com www.icpm6.com dt for international Conference on plasma medicine



History

The field of the biomedical applications of gas plasmas was first introduced to the scientific community at the IEEE International Conference on Plasma Science (ICOPS) in the 1990s. Soon after other international plasma conferences including the Gaseous Electronics Conference (GEC), the International Conference on Phenomena in Ionized Gases (ICPIG), and the International Symposium on Plasma Chemistry (ISPC) followed. Along with these conferences, several special issues dedicated to the biomedical plasma applications were published by prominent journals such as IEEE Transactions on Plasma Science, Plasma Processes and Polymers, and Journal of Physics D: Applied Physics. Based on the initial successes of this emerging field, later known as 'plasma medicine', several scientists came together and founded a new conference focused specifically on biomedical applications of plasmas - **The International Conference on Plasma Medicine (ICPM)**.

The first two conferences were organized by A. Fridman and G. Friedman and were held in **Corpus Christi**, **USA**, in 2007 and **San Antonio**, **USA** in 2009, respectively. In 2009, a new scientific society 'The International Society for Plasma Medicine (ISPM)' has been formed to support the activities and interests of the growing plasma medicine scientific community. The following two conferences were organized on the European continent - ICPM-3 in 2010 in **Greifswald**, **DE**, and ICPM-4 in 2012 in **Orleans**, **FR**. After conferences in America and Europe, the ISPM voted for the next conference to be held in Asia: ICPM-5 was then organized in 2014 in **Nara**, **JP**.

The upcoming sixth conference (ICPM-6) will be held in Europe again, this time not in its western, but rather the very central part - in **Bratislava, Slovakia**.

ICPM F	Place	Dates	Organizer
1 (Corpus Christi, Texas	October 15-18, 2007	A. Fridman and G. Friedman
2 8	San Antonio, Texas	March 16-20, 2009	A. Fridman and G. Friedman
3 (Greifswald, Germany	September 19-24, 2010	KD. Weltmann and M. Juenger
4 (Orleans, France	June 17-21, 2012	JM. Pouvesle and E. Robert
5 N	Nara, Japan	May 18-23, 2014	S. Hamaguchi
6 E	Bratislava, Slovakia	September 4-9, 2016	Z. Machala and Hensel

Table: General information on ICPM conferences

Organizing Institutions and Societies

International Society for Plasma Medicine (ISPM) Comenius University Division of Environmental Physics, Comenius University, Bratislava Society for Plasma Research and Applications (SPVAP)



ISPM Board (International Committee)

Farzaneh AREFI-KHONSARI (University of Pierre and Marie Curie, Paris, IFRANCE) Eun Ha CHOI (Kwangwoon University, Seoul, SOUTH KOREA) Vittorio COLOMBO (University of Bologna, Bologna, IITALY) Svetlana ERMOLAEVA (Gamaleya Research Institute, Moscow, RUSSIA) Theresa FREEMAN (Thomas Jefferson University, Philadelphia, USA) Alexander FRIDMAN (Drexel University, Philadelphia, USA) David GRAVES (University of California, Berkeley, USA) Satoshi HAMAGUCHI (Osaka University, Osaka, JAPAN) Masaru HORI (Nagoya University, Nagoya, JAPAN) Gerrit KROESEN (University of Technology, Eindhoven, NETHERLANDS) Zdenko MACHALA (Comenius University, Bratislava, SLOVAKIA) Jean-Michel POUVESLE (University of Orléans, Orléans, IFRANCE) Eric ROBERT (University of Orléans, Orléans, IFRANCE) Klaus Dieter WELTMANN (INP Greifswald, Greifswald, GERMANY) Thomas von WOEDTKE (INP Greifswald, Greifswald, GERMANY)

icpm

Local Organizing Committee

Zdenko MACHALA, chairman Karol HENSEL, vice-chairman Mário JANDA, secretary Zuzana KOVAĽOVÁ, scientific manager Barbora TARABOVÁ, scientific manager Katarína KUČEROVÁ, scientific manager Viera KRIŠTÚFKOVÁ, project manager

Sponsors and Exhibitors

Hiden Analytical (www.hidenanalytical.com) Springer (www.springer.com) Clininical Plasma Medicine (www.journals.elsevier.com/clinical-plasma-medicine) Biointerphases (www.biointerphases.org) Journal of Physics D: Applied Physics (www.iopscience.org/jphysd) Trek Inc. (http://www.trekinc.com) AlmaPlasma Srl. (wwww.almaplasma.com)



Topics

- 1. Medical treatment with plasmas
- 2. Plasma-cell and plasma-tissue interactions, biological reactions
- 3. Plasma-based sterilization/decontamination
- 4. Agricultural and food applications of plasmas
- 5. Pharmaceutical applications and biochemical/biomolecular engineering with plasmas
- 6. Plasma-surface interactions and surface functionalizations for biomedical applications
- 7. Fundamentals of atmospheric plasmas
- 8. Plasma sources for biomedical applications
- 9. Plasma and liquid diagnostics and sensors
- 10. Modeling and numerical simulations

Conference Program

The conference program is composed of plenary and invited lectures, oral presentations and of three poster sessions. The date and time of the plenary and invited lectures, oral presentations and poster sessions are listed in the table below.

All plenary and invited lectures, and oral presentations should be prepared and presented in MS PowerPoint (ppt) or Adobe Acrobat (pdf) format. The presentations should prefereably be uploaded on the computers in the corresponding lecture rooms in the morning of the same day the presentation is given, and at the latest during the coffee or lunch break before the sessions starts.

The length of the plenary and invited lectures, and oral presentations are as follows:

Plenary lecture: 45 min (including 10 minutes for questions)

Invited lecture: 30 min (including 5 minutes for questions)

Oral presentation: 15 min (including 3 minutes for questions)

Posters will be organized in three poster sessions and will be displayed in the lobby in front of the lecture rooms. The poster numbers are listed on the ICPM-6 website, and will also be listed in the conference booklet and the Book of abstracts. The authors are requested to be present at their posters during the poster sessions. Materials for poster mounting will be available on the poster board. The preferable size for preparing the poster is A0 (portrait format: 84.1 cm (w) x 118.4 cm (h)). Posters are requested to be removed by the presenters after each poster session.

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TIME	SUN (Sep 4)	MON (Sep 5)	TUE (Sep 6)	WED (Sep 7) evious page	THU (Sep 8)	FRI (Sep 9)
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14 00		S. Bekes chus	M. Larou	Y. Ikehara	P. Lukeš		L. Mir	A. Cochis	
		J. Chauvin	ssi	M. Jacofsky				U.K. Ercan	
30 45		H. Tanaka	G. Busco T.	P. Brun	T. von Woedtke F.		N. Shimizu I.	K. Kitano	
15 00			Shimizu		Girard H.		Topala		
15		K. Ishikawa R.	D. O'Con nell	M.G. Kong	Jablo nowski B.		C. Canal S.	E. Sysolya tina	
30		Furuta P.M.	т.	K. Shimizu	Tarabová D.		Mirpour		
45		Girard E.H. Choi	Sato I. Kossyi	S. Kalghatgi	Boehm E. Szili		coffee	break	
16 00									
20		coffee	break	coffee	break				
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18 00	welcome				BoD mtg				
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Plenary Lectures

- P-1 Shinya TOYOKUNI (Nagoya University Graduate School of Medicine, Nagoya,
 JAPAN) Insight into chemical mechanism in plasma medicine from viewpoints of oxidant stress
- **P-2** Jürgen KOLB (INP Greifswald, Greifswald, Market GERMANY) Cell to cell communication affected by electric pulses and plasmas
- P-3 Robert SHORT (University of South Australia, Adelaide, AUSTRALIA) Opportunities for plasma technologies in cell therapy and wound healing
- **P-4** Matteo GHERARDI (University of Bologna, Bologna, III ITALY) Plasma treatment in dentistry
- **P-5 Vandana MILLER** (Drexel University, Camden, NJ, **USA**) Plasma onco-immunotherapy: The future of cancer treatment?

Invited Lectures

- I-1 Peter CELEC (Comenius University, Bratislava, Marcial SLOVAKIA)
 Oxidative stress sources, consequences and its role in the pathogenesis of diseases
- I-2 Natalie CHERNETS (Thomas Jefferson University Hospitals, Philadelphia, PA, USA) Deciphering plasma/tissue interactions to develop appropriate medical treatments
- Hiromasa TANAKA (Nagoya University, Nagoya,
 JAPAN) Plasma-activated medium and cancer
- I-4 Ali MESBAH (University of California, Berkeley, CA 🔤 USA) Model predictive control of atmospheric pressure plasmas
- I-5 Sylvain ISÉNI (University of Orléans, Orléans, III FRANCE) Electric field characterization of plasma gun and multi-jet plasma arrays
- I-6 Mounir LAROUSSI (Old Dominion University, Norfolk, VA, 🔤 USA) Low temperature plasma jets and their interactions with biological cells and media
- I-7 Deborah O'CONNELL (University of York, York, Standard UNITED KINGDOM) Characterising a COST reference microplasma jet for biomedical applications
- **I-8** Mark J. JAROSZESKI (University of South Florida, Tampa, FL, USA) Plasmid DNA delivery using a nonthermal He plasma in a murine model
- **I-9** Christian OPLÄNDER (Heinrich Heine University, Düsseldorf, EGERMANY) Effects of cold plasma on human skin and skin cells
- I-10 Kai MASUR (INP Greifswald, Greifswald, Marcine GERMANY) Cold plasma mediated influence on cellular redox balance to support wound healing
- I-11 Paola BRUN (University of Padova, Padova, III ITALY) Mechanisms of wound healing and disinfection in a plasma source for the treatment of corneal infections
- I-12 Kazuo SHIMIZU (University of Shizuoka, Hamamatsu, JAPAN) Transdermal drug delivery by low discharge voltage atmospheric microplasma
- **I-13 Paula BOURKE** (Dublin Institute of Technology, Dublin, **II** IRELAND) Potential of atmospheric cold plasma for food preservation and processing
- I-14 Nevena PUAČ (University of Belgrade, Belgrade, Market SERBIA) Plasma treatment in seed germination
- I-15 Brendan NIEMIRA (USDA-ARS Eastern Regional Research Center, Wyndmoor, PA, 🔤 USA) Plasmas against food-borne pathogens
- I-16 Petr LUKEŠ (Czech Academy of Sciences, Prague, CZECHIA) Plasma/liquid interactions, liquid phase plasma chemistry
- I-17 Shoko NISHIHARA (Soka University, Tokyo,
 JAPAN) Effect of atmospheric pressure plasma on embryonic stem cells
- I-18 Kostya OSTRIKOV (CSIRO, West Lindfield, AUSTRALIA) Plasma, cell and cancer
- I-19 Pietro FAVIA (University of Bari, Bari, ITALY) Elaboration of polymer films by plasma processes as biomaterials
- **I-20** Hynek BIEDERMAN (Charles University, Prague, CZECHIA) Plasma surface modification for biomedical applications

- I-21 Gregor SERŠA (University of Ljubljana, Ljubljana, SLOVENIA) Anti-vascular effects of electroporation - implications for electrochemotherapy and gene therapy
- I-22 Lluis MIR, Institute Gustave-Roussy, Villejuif, I FRANCE Pulsed electric field effects on cells and associated cancer treatments
- I-23 Brendan GILMORE (Queen's University, Belfast, 🚟 UNITED KINGDOM) Controlling bacterial biofilm and virulence using non-thermal plasmas
- I-24 Jean-Yves MAILLARD (Cardiff University, Cardiff, 🚟 UNITED KINGDOM) Bacterial spore structures and their protective role in biocide resistance
- I-25 Katsuhisa KITANO (Osaka University, Osaka, JAPAN) Identification of chemical species for bactericidal effects of cryo-preserved plasma treated water
- **I-26** Elena SYSOLYATINA (Gamaleya Research Institute, Moscow, RUSSIA) Plasma against mycoplasma, a cell-wall-deficient membrane parasite.
- **I-27** Nagendra KAUSHIK (Kwangwoon University, Seoul, SOUTH KOREA) Immuno-modulatory effect of bio-plasma and its application in cancer treatment
- I-28 Jan BENEDIKT (Ruhr University, Bochum, GERMANY) Molecular beam mass spectrometry and vacuum UV-spectroscopy of atmospheric pressure plasmas
 I-29 George NAIDIS (Russian Academy of Sciences, Moscow, RUSSIA)
- Production of reactive species in cold atmospheric-pressure plasma jets

Oral Presentations

- **O-1 David GRAVES** (University of California, Berkeley, CA, **E** USA) Biological effects of cold atmospheric plasma: Current status
- O-2 Pietro RANIERI (Drexel University, Camden, NJ, WUSA) Propagation of plasma effects into tissue: Cell-to-cell signaling or direct ROS effects?
- **O-3 Ryugo TERO** (Toyohashi University of Technology, Toyohashi, **I** JAPAN) Degeneration of artificial cell membranes induced by plasma-generated reactive oxygen species
- **O-4 Kristian WENDE** (INP Greifswald, Greifswald, **Method** GERMANY) On the chemistry of remote effects of non-thermal plasmas
- **O-5** Ilaria TRIZIO (University of Bari, Bari, III ITALY) DBD-generated RONS in biological liquids for 2D and 3D *in vitro* studies on eukaryotic cells
- **O-6** Sander BEKESCHUS (INP Greifswald, Greifswald, GERMANY) Cold physical plasma-treated medium demonstrates antitumor activity against pancreatic cancer cells *in vitro* and *in vivo*
- **O-7** Julie CHAUVIN (Paul Sabatier University, Toulouse, FRANCE) Investigation of cell death mechanisms of 3D multicellular tumor spheroids (MCTS) after contact with a plasma activated medium
- O-8 Kenji ISHIKAWA (Nagoya University, Nagoya, JAPAN) Metabolic profiles on glioblastoma (U251SP) modified in plasma-activated medium (PAM) cultivation
- **O-9 Ryo FURUTA** (Nagoya University, Nagoya, JAPAN) Dynamic Behavior of HeLa Cells in Plasma-Activated Medium
- 0-10 Pierre-Marie GIRARD (Paris-Sud University, Orsay, 🛄 FRANCE)

Synergistic effect of H2O2 and NO2 in cell death induced by cold atmospheric He plasma

- **O-11 Eun Ha CHOI** (Kwangwoon University, Seoul, SOUTH KOREA) Plasma activated water Induced the activation of FOXO3 signaling caused cell death of squamous (A349) carcinoma
- **O-12 Jörn WINTER** (INP Greifswald, Greifswald, **Mathematical Germany**) Challenges and solutions on the way to a deployable plasma endoscope
- **O-13 Kerstin HORN** (INNOVENT e.V., Jena, GERMANY) Screening test of a new pulsed mini-plasma-jet for medical application
- **O-14 Toshihiro TAKAMATSU** (Kobe University, Kobe, I JAPAN) Development of atmospheric non-thermal plasma sources created by 3D printer for medical application
- **O-15 Mário JANDA** (Comenius University, Bratislava, SLOVAKIA) Antimicrobial NOx generated by transient spark in atmospheric dry air and air with water electrospray
- **O-16 Eric ROBERT** (University of Orleans, Orleans, III FRANCE) Conductive target influence on helium metastable production in a µs plasma gun discharge

O-17	Giovanni BUSCO (University of Orleans, Orleans, 🛄 FRANCE)
	Study of chemico-physical properties of a He plasma gun in the context of skin physioxia for
	cosmetical applications
O-18	Tetsuji SHIMIZU (Terraplasma GmbH, Garching, 三 GERMANY)
	Surface micro-discharge plasma for disinfection
O-19	Takehiko SATO (Tohoku University, Sendai, 💽 JAPAN)
	Development of small sterilization device using LT plasma flow at atmospheric pressure
O-20	Igor KOSSYI (Russian Academy of Sciences, Moscow, 🔤 RUSSIA)
	Microwave multifunctional sterilizing system 'OVOD-1'
O-21	Masafumi JINNO (Ehime University, Matsuyama, 💿 JAPAN)
	Synergistic effect between electrical and chemical factors in plasma gene transfection
O-22	Yoko YAMANISHI (Kyushu University, Fukuoka, 💽 JAPAN)
	Gene transfer by circulating plasma-bubble flow
O-23	Uroš CVELBAR (Jožef Stefan Institute, Ljubljana, 🔤 SLOVENIA)
	Safety level of atmospheric pressure jet skin treatment
O-24	Emilio MARTINES (Consorzio RFX, Padova, 🚺 ITALY)
	Plasma treatment of sheep skin wounds in veterinary medicine
O-25	Yuzuru IKEHARA (AIST, Tsukuba, 💌 JAPAN)
	Mechanism of blood coagulation induced by plasma treatment in addition to the acceleration of the
	natural blood coagulation process
O-26	Mark JACOFSKY (Plasmology4, Scottsdale, AZ, WUSA)
0.07	Hemostasis with tissue preservation using the Plaz4 [™] atmospheric pressure plasma jet <i>in vivo</i>
0-27	Michael Gangyu KONG (Xi'an Jiaotong University, Xi'an, E CHINA) An evaluation of a CAP-based treatment of psoriasis
0-28	Sameer KALGHATGI (EP Technologies LLC, Akron, OH, 🧮 USA)
0-20	Non-thermal DBD plasma for enhancing intracellular DNA delivery
0-29	Gregory FRIDMAN (Drexel University, Camden, NJ 🚟 USA)
0 20	Non-equilibrium gliding arc discharge plasma-activated water in plasma agriculture: Pathogen control
O-30	Dongping LIU (Dalian Nationalities University, Dalian, E CHINA)
	AtmospheriO-pressure air microplasmas for agricultural applications
O-31	Kyoung Suk OH (National Fusion Research Institute, Gunsan, 述 SOUTH KOREA)
	Effect for the GABA accumulation of brown rice using the plasma and the plasma discharged water
O-32	Stanislav KYZEK (Comenius University, Bratislava, 🔤 SLOVAKIA)
	Monitoring of the potential genotoxic effect of low temperature plasma in pea seeds
O-33	Thomas von WOEDTKE (INP Greifswald, Greifswald, 🥅 GERMANY)
	The redox potential in liquids as possible parameter to estimate and compare biological plasma effects
O-34	Fanny GIRARD (University of Pau, Pau, 🛄 FRANCE)
	Combining spectro-electrochemical methods to characterize the RONS generated in physiological
	buffer exposed to diffuse cold atmospheric plasmas
O-35	Helena JABLONOWSKI (INP Greifswald, Greifswald, 🧮 GERMANY)
	Plasma induced reactive oxygen species in biorelevant liquids: different species have various origins
O-36	Barbora TARABOVÁ (Comenius University, Bratislava, 🔤 SLOVAKIA)
	Challenges of RONS detection in air plasma activated solutions by colorimetric and fluorescent based
	assays
O-3 7	Daniela BOEHM (Dublin Institute of Technology, Dublin, I IRELAND)
	Plasma activated liquids show distinct biocidal effects between microbial and mammalian cells
O-38	Endre SZILI (University of South Australia, Adelaide, 🔤 AUSTRALIA)
	Effect of sparging in plasma medicine
O-39	Theresa FREEMAN (Thomas Jefferson University, Philadelphia, PA, 🧮 USA)
	Tissue growth, repair and regeneration due to ASK1 inhibition is further enhanced by cold atmospheric
• • •	dielectric barrier discharge treatment
U-40	Shota SASAKI (Tohoku University, Sendai, • JAPAN)
0 44	Interaction between plasma-activated calcium ion channel and uptake of drug-simulated molecule
0-41	Oleg LUNOV (Czech Academy of Sciences, Prague, CZECHIA) Towards the understanding of non-thermal plasma effects on bacteria and mammalian cells
0.42	Augusto STANCAMPIANO (University of Bologna, Bologna, III) ITALY)
0-42	Effect of cold atmospheric plasma on human papillomavirus type 16 infected keratinocytes
	Encor of cold atmospheric plasma of framan papillomavirus type to infected keratinocytes

- **O-43** Alibi BAITUKHA (University of Pierre and Marie Curie, Paris, FRANCE) Carboplatin drug delivery systems prepared by catalyst free PECVD reactor for biomedical application
- O-44 Michael R. WERTHEIMER (Polytechnique Montreal, Montreal, IM CANADA) Chemical aspects of endothelial cell adhesion and growth for vascular grafts
 O-45 Anna LIGUORI (University of Bologna, Bologna, III ITALY)
- Non-equilibrium atmospheric pressure plasma technology for anti-CD 10 antibody immobilization on PLLA nanofibres
- **O-46 Navaneetha Pandiyaraj KRISHNASAMY** (Sri Shakthi Institute, Coimbatore, INDIA) Study of cold atmospheric pressure (CAP) plasma assisted polymerization and immobilization of biomolecules on the surface of PET films for enrichment of vascular compatibility
- **O-47 Lukasz JABLONOWSKI** (University of Greifswald, Greifswald, **E** GERMANY) PP application in the oral cavity experiments in mice
- **O-48 Bruno HONNORAT** (University of Pierre and Marie Curie, Paris, III FRANCE) Therapeutic effect of cold atmospheric plasma on oral cavity squamous cell carcinomas
- **O-49 Hans-Robert METELMANN** (University of Greifswald, Greifswald, **Meterson** GERMANY) Cancer treatment and physical plasma: A clinical phase-I-study concept and first results
- **O-50 Kazue MIZUNO** (Stanford University, Stanford, CA, **WE** USA) Nanosecond pulsed streamer discharge delayed the tumor growth at unirradiated sites *in vivo*
- **O-51 Michael KEIDAR** (George Washington University, Washington, DC, Markov USA) Toward understanding the selective anti-cancer capacity of cold atmospheric plasma - an aquaporinsbased model
- **O-52 Nobuyuki SHIMIZU** (International University of Health and Welfare, Tokyo, I JAPAN) Systematization of the mechanism by which plasma irradiation causes cell growth and tumor cell death
- **O-53 Ionuţ TOPALĂ** (Alexandru Ioan Cuza University, Iaşi, **I ROMANIA**) Viability and cell biology for HeLa and VERO cells after exposure to low temperature air DBD plasma
- **O-54 Cristina CANAL** (Polytechnic University of Catalonia, Barcelona, SPAIN) Atmospheric pressure plasma jet selectivity towards bone cancer
- **O-55 Shahriar MIRPOUR** (Shahid Beheshti University, Teheran, **See IRAN**) Atmospheric plasma induces 'bystander effect' in the treatment of the breast cancer tumor in in-vivo
- **O-56 Anne MAI-PROCHNOW** (CSIRO, Lindfield, AUSTRALIA) Cold plasma treatment of single- and mixed-species biofilms
- **O-57 Zuzana KOVAĽOVÁ** (Comenius University, Bratislava, SLOVAKIA) Biofilm thickness and biomass reduction after treatment with DC air corona discharges
- **O-58 Joanna PAWŁAT** (Lublin University of Technology, Lublin, POLAND) Comparison of RONS generation and biodecontamination by atmospheric pressure plasma sources: Transient spark, mini glide-arc and dielectric barrier discharge jet
- **O-59 Andrea COCHIS** (University of Eastern Piedmont, Novara, **II** ITALY) Effective decontamination of soft reline-based oral cancer shutters by means of non-thermal atmospheric plasma
- **O-60 Utku Kürşat ERCAN** (İzmir Kâtip Çelebi University, İzmir, Markey) Evaluation of antimicrobial activity of nebulized plasma-treated liquids for control of ventilator associated pneumonia
- O-61 Katrin RÖDDER (INP Greifswald, Greifswald, Image: GERMANY)
 Cold plasma treatment of murine cancer cells triggers immunogenic responses in splenocytes ex vivo
 O-62 Yosky KATAOKA (RIKEN, Kobe, Image: JAPAN)
- C-62 Fosky Refrection (Rinkely, Robe, Constraint) Effect of atmospheriO-pressure plasma irradiation on the central nervous system of adult rats O-63 Julia BANDOW (Ruhr University, Bochum, CERMANY)
- Plasma-based inactivation of proteins
- **O-64 Jan-Wilm LACKMANN** (Ruhr University, Bochum, Section Bernder GERMANY) Cysteine as a model for comparing the impact of plasmas on biological samples
- **O-65 Ji Hoon PARK** (Kwangwoon University, Seoul, SOUTH KOREA) Effect of cold atmospheric plasma and nanosecond pulsed plasma on protein folding and deactivation of drug resistance bacteria: Experimental and computational outlook
- **O-66 Liam O'NEILL** (TheraDep, Palo Alto, CA, **WE** USA) Deposition of biomolecules via non-thermal plasma devices
- **O-67 Simon MAHEUX** (Luxembourg Institute of Science and Technology, Belvaux, LUXEMBOURG) Effect of small unilamellar liposome composition on their degradation mechanism in physiological liquids by nanosecond pulsed cold atmospheric plasma under nitrogen atmosphere

- O-68 Amanda LIETZ (University of Michigan, Ann Arbor, MI, 🚟 USA) Impact of electrode placement on RONS production in atmospheric pressure plasma jets
- **O-69 Maksudbek YUSUPOV** (University of Antwerp, Antwerp, **III** BELGIUM) Effect of electric field on pore formation in model systems for lipid membrane and skin barrier: A molecular dynamics study
- **O-70 Tomoyuki MURAKAMI** (Seikei University, Musashino, JAPAN) Modelling of plasma interaction with gas-liquid interface

Poster Presentations

POSTER SESSION 1: Monday (Sept 5th) - Topics 1, 2, 4, 6, 7, 8, 9 **POSTER SESSION 2:** Tuesday (Sept 6th) - Topics 1, 2, 3, 4, 8, 9 **POSTER SESSION 3:** Thursday (Sept 8th) - Topics 1, 2, 3, 4, 5, 8, 10

POSTER SESSION 1 - Monday (Sept 5th) - Topics 1, 2, 4, 6, 7, 8, 9

TOPIC: 1. Medical treatment with plasmas

Takamichi HIRATA (Tokyo City University, Tokyo, . JAPAN) Emergency & critical care medicine by irradiation / inhalation of atmospheric pressure plasma Ihn HAN (Kwangwoon University, Seoul, SOUTH KOREA) Role of non-thermal atmospheric pressure bio-compatible plasma in bone tissue engineering and regeneration Uroš CVELBAR (Jožef Stefan Institute, Ljubljana, 🔤 SLOVENIA) Localized plasma treatment for targeted intra-operative immobilization and demise of lens epithelial cells Sander BEKESCHUS (INP Greifswald, Greifswald, March GERMANY) A flow cytometry genotoxicity assay to evaluate the safety of cold physical plasma sources Laura BARILLAS (Costa Rica Institute of Technology, Cartago, ECOSTA RICA) Plasma medicine research in Costa Rica: Overview of first steps Naoaki TOKOYAMA (Obihiro University, Obihiro, . JAPAN) Effect of plasma-treatment on the in vitro growth of Trypanosoma brucei Natalya SMIRNOVA (Saint Petersburg State Polytechnic University, Saint Petersburg, MUSSIA) Cell therapy of articular pathologies using adipose derived stem cells activated by cold atmospheric plasma Alexandr DEJNEKA (Czech Academy of Sciences, Prague, La CZECHIA) Preclinical testing of non-thermal air plasma in veterinary medicine

TOPIC: 2. Plasma-cell and plasma-tissue interactions, biological reactions SUBTOPIC: RONS + oxidative stress

Sung Ha HONG (University of South Australia, Adelaide, AUSTRALIA)
The hormesis effect of plasma
Juliana ŠIMONČIČOVÁ (Slovak University of Technology, Bratislava, SLOVAKIA)
Oxidative response to low temperature plasma exposure in *Aspergillus flavus*Toshihiko EKI (Toyohashi University of Technology, Toyohashi, I JAPAN)
Development and characterization of the reporter gene assays in yeast for detecting oxidative stress and DNA damage

TOPIC: 2. Plasma-cell and plasma-tissue interactions, biological reactions SUBTOPIC: PAW/PAM and cells

Hachiro YASUDA (Toyohashi University of Technology, Toyohashi,
 JAPAN)
 Characterization of chemical species in plasma treated water essential for inactivation of cells and proteins
 Hirokazu HARA (Gifu Pharmaceutical University, Gifu,
 JAPAN)
 Intracellular free zinc plays an important role in plasma-activated medium-induced cell death
 Zhitong CHEN (George Washington University, Washington, DC,
 USA)
 Induction of apoptosis in human gastric carcinoma cancer cells by cold atmospheric plasma generated in water
 Washington University
 Structure
 Structu

Yang PENG (Nagoya University Graduate School of Medicine, Nagoya, SAPAN) Plasma-activated medium inhibits metastatic tendency of ovarian cancer cells *in vitro* **Hiroshi HASHIZUME** (Nagoya University, Nagoya, SAPAN) Selective killing of human breast cancer cells by plasma-activated medium

Yutaka KAMIMURA (Nagoya University Graduate School of Medicine, Nagoya, I JAPAN)

Plasma activated medium change ASCs cytokine profile

Chae Bok LEE (Kwangwoon University, Seoul, 😻 SOUTH KOREA)

Macrophage M1/M2 regulation by plasma activated NO-water

Anna MISEROCCHI (University of Bologna, Bologna, III Italy)

Study of potential cytotoxicity on eukaryotic cells associated with the use of plasma activated liquids in dental applications

TOPIC: 2. Plasma-cell and plasma-tissue interactions, biological reactions **SUBTOPIC:** Biomolecules

Ionut TOPALĂ (Alexandru Ioan Cuza University, Iaşi, 🚺 ROMANIA)

Direct exposure of amino acids and proteins powders to atmospheric pressure helium plasmas with impurities

Masaharu SHIRATANI (Kyushu University, Fukuoka, 💌 JAPAN)

A comparative study for action of gamma and plasma irradiation dose on thermodynamics of protein **Caitlin HESLIN** (Dublin Institute of Technology, Dublin, **III** IRELAND)

Safety considerations for the application of cold plasma in medicine - cytotoxic/mutagenic potential **Andreas HELMKE** (Fraunhofer IST, Göttingen, E GERMANY)

XPS study on the modification of amino acids by cold atmospheric plasma

Hirofumi KURITA (Toyohashi University of Technology, Toyohashi, . JAPAN)

Evaluation methods of DNA strand breaks induced by exposure to an atmospheric pressure plasma

Marie BRETON (Paris-Sud University, Orsay, III FRANCE)

Chemical modification of unsaturated lipids treated by atmospheric plasma jet

Shunsuke YOSHIZAWA (University of Tsukuba, Tsukuba, I JAPAN)

Biochemical mechanism of protein inactivation in aqueous solution by low temperature atmospheric plasma jet

Iulia-Elena VLAD (Babes-Bolyai University, Cluj-Napoca, **II** ROMANIA) Protein modification at plasma - liquid interaction

TOPIC: 4. Agricultural and food applications of plasmas SUBTOPIC: Seeds

Yeunsoo PARK (National Fusion Research Institute, Gunsan, SOUTH KOREA) The biological effects of surface dielectric barrier discharge on seed germination and plant growth with barley **Olga STEPANOVA** (Saint Petersburg State University, Saint Petersburg, RUSSIA)

Introduction to plasma agriculture: controlled parameters and some experimental procedures

Veronika MEDVECKÁ (Comenius University, Bratislava, 🔤 SLOVAKIA)

The effect of atmospheric pressure plasma on soya beans

Anna ZAHORANOVÁ (Comenius University, Bratislava, 🔛 SLOVAKIA)

The effect of low-temperature plasma on the maize seeds: Germination improvement and microorganisms inactivation

Jean-Michel POUVESLE (University of Orléans, Orléans, III FRANCE)

Evaluation of plasma component effects in LTNTP seed treatments

Katarína KUČEROVÁ (Comenius University, Bratislava, 🔤 SLOVAKIA)

The effect of cold air plasma activated water on germination and growth of wheat seeds

Mansour KHORAM (Islamic Azad University, Teheran, 🔤 IRAN)

Effect of low pressure radio frequency plasma on ajwain seed germination

TOPIC: 4. Agricultural and food applications of plasmas SUBTOPIC: PAW application

Junghyun LIM (National Fusion Research Institute, Gunsan, SOUTH KOREA) Determination of activation time of PAW and its application to fresh-cut potato **Romolo LAURITA** (University of Bologna, Bologna, **III** ITALY) Plasma activated water (PAW) for grapevine yellows disease management Romolo LAURITA (University of Bologna, Bologna, III ITALY)

Plasma activated water as sustainable tool to control bacterial disease severity on tomato plants

TOPIC: 6. Plasma-surface interactions and surface functionalizations for biomedical applications

Alenka VESEL (Jožef Stefan Institute, Ljubljana, 🔤 SLOVENIA) Surface modification of PET polymer in SO2/O2 plasma for improved cell adhesion **Tomy ABUZAIRI** (Shizuoka University, Hamamatsu, **I** JAPAN) Patterning of biomolecules onto carbon nanotube array via atmospheric pressure plasma jet Hidehiko YASHIRO (AIST, Tsukuba, • JAPAN) Enhanced bone-bonding of zirconia ceramics by femtosecond laser processing Cristina CANAL (Polytechnic University of Catalonia, Barcelona, SPAIN) Plasma polymerization on β -TCP for the design of antibiotic delivery systems in bone repair surgery Judit BUXADERA-PALOMERO (Technical University of Catalonia, Barcelona, **Zee** SPAIN) Modulation of doxycycline release from titanium implants by a plasma polymerized polyethylene glycol coating Subroto MUKHERJEE (Institute for Plasma Research, Gandhinagar, ZINDIA) Development of atmospheric pressure plasma jet (APPJ) with possible application in increase of dye-uptake properties of human hair Kanupriya KHURANA (Technical University of Catalonia, Barcelona, **5** SPAIN) Fundamental studies of plasma PEG coatings on bone bioceramics for drug release Jaroslav KOUSAL (Charles University, Prague, Marcelle CZECHIA) Etching of model thin films of biological contamination using low-temperature atmospheric plasma jet **Riccardo TONINI** (University of Brescia, Brescia, **III** ITALY) Cold atmospheric plasma (CAP) treatment to improve the bonding strength of adhesive-dentin interface in dental composite restoration Azadeh Valinataj OMRAN (University of Sorbonne, Paris, II FRANCE) Deposition of thin films using a transporting discharge at atmospheric pressure Anna LIGUORI (University of Bologna, Bologna, III ITALY) Single step process for the co-deposition of nanocomposite antibacterial coatings using a non-equilibrium atmospheric pressure plasma jet Kamel SILMY (University of Tuebingen, Reutlingen, Market GERMANY) Dual DLC-polymer drug-eluting coating for coronary stent Jang-Hsing HSIEH (Ming Chi University of Technology, New Taipei City, Market TAIWAN) Antibacterial properties and biocompatibility of Ta-(NCF) thin films Ita JUNKAR (Jožef Stefan Institute, Liubliana, 🔤 SLOVENIA) Improving biocompatible properties of titanium implants by highly reactive oxygen plasma Pietro FAVIA (University of Bari, Bari, ITALY) Bio-composite coatings for biomedical applications Gurusharan Singh GOGNA (Dublin City University, Dublin, III IRELAND) Investigation of biomaterial surface treatment using air plasma jet for medical applications **TOPIC: 7. Fundamentals of atmospheric plasmas Tomonori HOTTA** (University of Tsukuba, Tsukuba, I JAPAN) Time evolutions of the metastable helium atoms in a low energy atmospheric pressure plasma using a laser absorption spectroscopic measurement Hiromasa YAMADA (University of Tsukuba, Tsukuba, ISUKUba, Study on propagation mode (bullet or striation) of a low energy atmospheric pressure plasma Florent SAINCT (INU Champollion, Albi, III FRANCE) Experimental study of an asymmetric DBD APPJ Paolo SERI (University of Bologna, Bologna, III ITALY) Geometry optimization of linear and annular plasma synthetic jet actuators for enhanced transport of reactive species **Svivain ISÉNI** (University of Orléans, Orléans, **III** FRANCE) Electric field and ionization waves in pulsed atmospheric plasma streams (PAPS): complementary in situ diagnostics

Ryo KUMAGAI (Tohoku University, Sendai, I JAPAN)

Observation of propagation process of negative streamer in water

Chen CHEN (Xi'an Jiaotong University, Xi'an, MarcHINA)

Space- and time-resolved LIF measurement of absolute concentration of nitric oxide produced by atmospheric air surface plasma

Igor KOSSYI (Russian Academy of Sciences, Moscow, 🔤 RUSSIA)

Gas discharge excited by subthreshold microwave beam in a high pressure large gas volume

TOPIC: 8. Plasma sources for biomedical applications

Sang-You KIM (Hanyang University, Seoul, 📧 SOUTH KOREA)

Measurement of molecular species generated in atmospheric surface dielectric barrier discharges with dielectric polyimide

Ahmed ZAKI (Zagazig University, Zagazig, 🔤 EGYPT)

Low-cost DBD plasma hand sanitizer using air and tap water enriched by hydrogen peroxide **Björn OFFERHAUS** (Ruhr University, Bochum, **Markov**)

Characterisation of a dielectric barrier surface discharge - space resolution and homogeneity **Antoine ROUSEAU** (École Polytechnique, Palaiseau, **III** FRANCE)

Dielectric losses in DBDs: correlation between *in vitro* and *in vivo* experiments with modeling **Frederike KOGELHEIDE** (Ruhr University, Bochum, **Markov**)

Tailoring a dielectric barrier discharge regarding wound healing by adjusting power density and gas composition

Yutaka FUJIWARA (University of Tsukuba, Tsukuba, ... JAPAN)

Study on the moving striation phenomena of a low energy atmospheric pressure neon plasma flare using a high speed camera

Hiromasa YAMADA (Nagoya University, Nagoya, 💌 JAPAN)

Review of plasma characteristic measurements of a low energy atmospheric pressure plasma for blood coagulation

Paulien SMITS (Eindhoven University of Technology, Eindhoven, **Section** the NETHERLANDS)

Considerations in designing and testing plasma devices for medical applications

Bouke BOEKEMA (Association of Dutch Burn Centres, Beverwijk, **The NETHERLANDS**)

In vitro efficacy and safety of a new flexible volume DBD device for the treatment of diabetic foot ulcers **Chanchai CHUTSIRIMONGKOL** (PhotoBioCare, Nonthaburi, **THAILAND**)

Non thermal atmospheric DBD plasma: Medical application studies in Thailand

Sang-You KIM (Hanyang University, Seoul, 📧 SOUTH KOREA)

A large area drug powder treatment and transport system with linear ICP sources and particle control devices

Ayman ABDELAZIZ (Swansea University, Swansea, 🚟 UNITED KINGDOM)

Physicochemical characterization of water treated by bubbling plasma discharge and its effect on the degradation of organic substances

Alfred MOSSE (National Academy of Sciences of Belarus, Minsk, **BELARUS**)

Plasmachemical processing of medico-biological wastes

TOPIC: 9. Plasma and liquid diagnostics and sensors

Amel ZERROUKI (Paul Sabatier University, Toulouse, FRANCE)

OES spectroscopic measurements of temperatures and densities of charged particles in micro-air plasma for gene transfection

Branislav PONGRÁC (Czech Academy of Sciences, Prague, Marceller CZECHIA)

Time-resolved optical diagnostics of ns-pulsed underwater discharge

Arthur SALMON (Centrale Supelec, Chatenay-Malabry, III FRANCE)

Characterization of RONS produced by pulsed atmospheric pressure plasma sources in air and nitrogen

POSTER SESSION 2: Tuesday (Sept 6th) - Topics 1, 2, 3, 4, 8, 9

TOPIC: 1. Medical treatment with plasmas SUBTOPIC: Skin and wounds

Sebastian von PODEWILS (University Medicine, Greifswald, GERMANY) Case report: Cold plasma effectively eradicates actinic keratosis of the scalp after one treatment course Vítězslav KŘÍHA (Czech Technical University, Prague, CZECHIA) Inactivation of dermatophyte infection by non-thermal plasma on animal model Victor N. VASILETS (Russian Academy of Sciences, Chernogolovka, RUSSIA) Application of air plasma generated nitric oxide for healing of cornea wounds Yoshihiro AKIMOTO (Kyorin University School of Medicine, Tokyo, JAPAN) Expression of galectins and alpha smooth muscle actin in low-temperature plasma-treated healing skin Janik BRÜGGEMEIER (University of Greifswald, Greifswald, Image: GERMANY) Cold atmospheric plasma for mild blood coagulation in visceral surgery Yudai NOMURA (Kobe University, Kobe, Image: JAPAN) Investigation of blood coagulation effect of non-thermal multi-gas plasma jet on *in vitro* and *in vivo* for endoscopic use

TOPIC: 2. Plasma-cell and plasma-tissue interactions, biological reactions SUBTOPIC: Transdermal drug delivery

Jaroslav KRIŠTOF (Shizuoka University, Hamamatsu, **I**JAPAN) Study of interaction between plasma and stratum corneum for transdermal drug delivery

TOPIC: 2. Plasma-cell and plasma-tissue interactions, biological reactions SUBTOPIC: Skin and wounds

Satoshi KITAZAKI (Fukuoka Institute of Technology, Fukuoka, 💌 JAPAN) Effects of non-thermal atmospheric-pressure plasma irradiation on skin in hairless mice Julia van der LINDE (University of Greifswald, Greifswald, MANY) Repeated cold atmospheric plasma application to intact skin causes no sensitization in vivo - an OECD protocol Enrico TRALDI (University of Bologna, Bologna, III ITALY) Treatment of infected ex-vivo human skin tissue with a low power atmospheric inductively coupled plasma source optimized through design oriented simulations Vandana MILLER (Drexel University, Camden, NJ, **USA**) Immunomodulatory effects of nsDBD plasma in a polarized model of human skin Monika GELKER (Hawk University of Applied Sciences and Arts, Göttingen, Market GERMANY) Plasma-induced modification of the dermal permeability Šárka KUBINOVÁ (Czech Academy of Sciences, Prague, 🛏 CZECHIA) Non-thermal air plasma in skin wound healing Masashi UEDA (Okayama University, Okayama, 💌 JAPAN) Comparison of inflammation after hemostasis with non-thermal plasma or thermal coagulation: a histological and nuclear medical evaluation

TOPIC: 2. Plasma-cell and plasma-tissue interactions, biological reactions SUBTOPIC: Bacteria, cells and tissues

Barbora TARABOVÁ (Comenius University, Bratislava, 🔤 SLOVAKIA) Effects induced on the cell membrane of Escherichia coli by the cold air plasma and the PAW Peter POLČIC (Comenius University, Bratislava, SLOVAKIA) Effects of reactive plasma particles to yeast cells using genetic mutants Akira YONESU (Ryukyu University, Nishihara, . JAPAN) Influence of plasma irradiation on silkwarm **Cristina MUJA** (INU Champollion, Albi, **III** FRANCE) Sublethal injury and cell membrane damage in bacterial cells generated by APPJ exposure Svetlana ERMOLAEVA (Gamaleya Research Institute, Moscow, **EXAMPLA** Effects of cold microwave argon plasma on human fibroblasts are dependent on frequency of cell treatments Karol HENSEL (Comenius University, Bratislava, 🔤 SLOVAKIA) Air transient spark discharge vs. helium plasma jet: Their effects on water, bacteria, cells and biomolecules **Deborah O'CONNELL** (University of York, York, **31** UNITED KINGDOM) Low temperature plasma induces a rapid oxidative stress response in primary prostate epithelial cells Jean-Michel POUVESLE (University of Orléans, Orléans, III FRANCE) Cell response to He, He-O2 plasma and plasma electric field alone treatments Matej KLAS (Comenius University, Bratislava, SLOVAKIA) Influence of NOx on selective apoptosis of cells Kobra HAJIZADEH (Kharazmi University, Teheran, **Z** IRAN) Comparison of charged particles and electric field effect of cold atmospheric plasma on DNA damage Stanislav KYZEK (Comenius University, Bratislava, SLOVAKIA) Monitoring of low temperature plasma effect in combination with hypericin on human lymphocytes Masaru HORI (Nagoya University, Nagoya, 👤 JAPAN) Comprehensive model on interactions among plasmas, liquids, intracellular molecules and animals towards a plasma medical innovation

Yoshimichi NAKATSU (Kyushu University, Fukuoka, ● JAPAN) Mutagenesis in human and mouse cells irradiated by non-thermal atmospheric air plasma Keita SODA (University of Tokyo, Tokyo, ● JAPAN) Plasma irradiation effects on tissues in the abdominal adhesion mouse model Youbin SEOL (KAIST, Daejeon, SOUTH KOREA) On the toxicity of the atmospheric pressure pulsed plasma on photosynthetic organs

TOPIC: 2. Plasma-cell and plasma-tissue interactions, biological reactions SUBTOPIC: Gene transfection

Yoshihisa IKEDA (Ehime University, Matsuyama,
 JAPAN)
 Membrane permeabilization induced by microplasma irradiation
 Yoshihisa IKEDA (Ehime University, Matsuyama,
 JAPAN)
 Cytotoxicity of plasma gene transfection

 Masafumi JINNO (Ehime University, Matsuyama,
 JAPAN)
 Clathrin-mediated endocytosis contribution to plasma gene transfection

TOPIC: 3. Plasma-based sterilization/decontamination

Olga STEPANOVA (Saint Petersburg State University, Saint Petersburg, E RUSSIA) Bactericidal action of DBD plasma jet in helium at varying average discharge power Hiroaki KAWANO (Tokyo Institute of Technology, Yokohama,

JAPAN) Investigation of bactericidal factors in CO2 plasma bubbling Hiroto MATSUURA (Osaka Prefecture University, Sakai, . JAPAN) Experimental confirmation of reactive radical roll in inactivation of Escherichia coli with remote plasma treatment Elena SYSOLYATINA (Gamaleya Research Institute, Moscow, RUSSIA) Bacterial eradication by synergy of argon non-thermal plasma jet and silicon nanoparticles Masafumi ITO (Meijo University, Nagoya, 💌 JAPAN) Inactivation factors of microorganisms in solutions treated with neutral oxygen radical source Meike MÜLLER (German Aerospace Center, Wessling, 🔳 GERMANY) Cold atmospheric plasma technology for decontamination of space equipment Shuma SUGAWARA (Tokyo Institute of Technology, Yokohama, . JAPAN) Plasma bubbling inactivation effect on floating and adhesive bacteria Ekaterina FILIPPOVA (Tomsk Polytechnic University, Tomsk, E RUSSIA) Low temperature atmospheric plasma sterilization of PET track-etched membranes Takashi YOKOYAMA (Osaka University, Suita, . JAPAN) Disinfection of infection models using human extracted tooth and porcine skin by plasma-treated water with the reduced-pH method Zlata TUČEKOVÁ (Comenius University, Bratislava, SLOVAKIA) Inactivation of Escherichia coli using atmospheric pressure non-thermal plasma of diffuse coplanar surface barrier discharge Vladyslava FANTOVA (Czech Academy of Sciences, Prague, Marco CZECHIA) Effect of electrode material on bactericidal properties of water treated with DC-operated plasma jet Sandra MORITZ (Justus Liebig University, Giessen, 🔜 GERMANY) Inactivation of Enterococcus mundtii by indirect plasma treatment using surface micro-discharge electrode Mansour KHORAM (Islamic Azad University, Teheran, Z IRAN) Decontamination of herbal distillates using spark discharge Anna MISEROCCHI (University of Bologna, Bologna, III ITALY) Cold atmospheric plasma treatment of infected skin tissue: evaluation of sterility, viability and integrity **TOPIC: 4. Agricultural and food applications of plasmas**

SUBTOPIC: Degradation of toxic compounds

Georg AVRAMIDIS (Hawk University of Applied Sciences and Arts, Göttingen, GERMANY) Decay of fungal metabolites by atmospheric pressure plasma George PASKALOV (Plasma Microsystem LLC, Torrance, CA, WUSA) Plasma activation and sterilization of bio-materials Natasa HOJNIK (Jožef Stefan Institute, Ljubljana, SLOVENIA) Plasma degradation of toxic fungal metabolites Hamid GHOMI (Shahid Beheshti University, Teheran, 🔤 IRAN)

Elimination of diazinon insecticide from cucumber surface with low temperature plasma treatment **Hamid GHOMI** (Shahid Beheshti University, Teheran, IRAN)

Reduction of chemical and microbial contamination of landfill leachate using plasma discharge

TOPIC: 4. Agricultural and food applications of plasmas SUBTOPIC: Plant growth

Sang Hye JI (Kwangwoon University, Seoul, SOUTH KOREA) Study on the activation of plant growth-promoting bacteria (PGPB) within rice plant by non-thermal atmospheric pressure plasma treatment

Vandana MILLER (Drexel University, Camden, NJ, **EVAN**

Gliding arc plasma reduces water consumption while accelerating *Arabidopsis thaliana* growth and fecundity **Riku NAKANO** (Kyushu University, Fukuoka, • JAPAN)

Mechanism of growth enhancement of plants irradiated by active oxygen species in oxygen plasma

TOPIC: 8. Plasma sources for biomedical applications

Thomas MAHO (University of Orléans, Orléans, III FRANCE)

New plasma sterilization process for packaged medical devices: plasma diagnosis and medical pouch characterization.

Lars ten BOSCH (Hawk University of Applied Sciences and Arts, Göttingen, Market GERMANY)

Cold atmospheric pressure plasma - a novel pediculosis treatment approach

Zuzana KOVAĽOVÁ (Comenius University, Bratislava, 🐸 SLOVAKIA)

Bactericidal effects of argon surface discharge in long tube on planktonic bacteria

Ines BÜRGER (Ruhr University, Bochum, **E** GERMANY)

Characterization of plasma used for electrosurgical cutting by means of optical emission spectroscopy and a high speed camera

Stefan HORN (INP Greifswald, Greifswald, **E** GERMANY)

On the development of an endoscopic atmospheric plasma source for pulmonary tuberculosis

Yoshihisa IKEDA (Ehime University, Matsuyama, 💌 JAPAN)

High-efficient and high-survivability plasma gene transfection by minimizing plasma and optimizing electrodes configuration

Olena SOLOMENKO (Taras Shevchenko National University, Kyiv, 💳 UKRAINE)

Microplasma atmospheric pressure DC system with vortex gas flow

František KRČMA (Brno University of Technology, Brno, 🔤 CZECHIA)

New plasma sources for biomedical applications

Matthew BURNETTE (Texas A&M University, College Station, TX, **Section**, TX, **Section**, TX, **Section**, TX, **Section**, TX, **Section**, TX, Section, Se

A novel pulsed corona system for electroporation

Gurusharan Singh GOGNA (Dublin City University, Dublin, **II** IRELAND)

Development of hand-held plasma based clinical and medical decontamination device to prevent hospital infection

Kostiantyn ACHKASOV (Sairem SAS, Neyron, III FRANCE)

Compact plasma sources based on microwave solid-state technology for industrial and laboratory applications in medicine

TOPIC: 9. Plasma and liquid diagnostics and sensors SUBTOPIC: PAW and RONS diagnostics

Thapanut SARINONT (Kyushu University, Fukuoka,

JAPAN)

A comparative study of reactive oxygen species dose provided by atmospheric plasma and gamma ray irradiation using iodine-starch reaction
Giichiro UCHIDA (Osaka University, Osaka,

JAPAN)

Effects of plasma-irradiation distance on ROS and RNS productions in liquid
Florian JUDÉE (Paul Sabatier University, Toulouse,

FRANCE)
Detection of free radical species generated by low temperature plasma jet in culture liquid media
Yukihiro KUROKAWA (Nagoya University, Nagoya,

JAPAN)

Generation of active species in laser-induced-plasma activated medium
Lucel SIRGHI (Alexandru Ioan Cuza University, Iaşi,

ROMANIA)

Surface dielectric barrier discharge in closed volume air

Thierry DUFOUR (University of Pierre and Marie Curie, Paris, **III** FRANCE) Understanding RO(N)S diffusion and chemical reactivity at the interface, sublayer and in-depth of plasma activated media Keigo TAKEDA (Nagoya University, Nagoya, I JAPAN) Diagnostics of gas- and liquid-phase reactive species generated by AC excited atmospheric pressure Ar plasma Katarína KUČEROVÁ (Comenius University, Bratislava, SLOVAKIA) The reactive species produced by transient spark discharge in gas and liquid phase and its effect on Escherichia coli Chen CHEN (Xi'an Jiaotong University, Xi'an, Marchina CHINA) Influence of plasma-forming gas on aqueous reaction chemistry activated by atmospheric plasma jet in argon containing gas **Chen CHEN** (Xi'an Jiaotong University, Xi'an, **E** CHINA) Quantitative measurement and chemical relations of aqueous reactive species induced by a helium plasma iet Augusto STANCAMPIANO (University of Bologna, Bologna, III ITALY) Advanced investigation on the plasma-liquid interaction in a plasma jet impinging on a water surface **Toshiro KANEKO** (Tohoku University, Sendai, **•** JAPAN) Spatial mapping of gas and aqueous phase OH radicals and plasma-induced effect on cell membrane permeabilization Zdenko MACHALA (Comenius University, Bratislava, 🔤 SLOVAKIA) Metallic nanoparticles in air plasma activated water Athanasios MERMIGKAS (University of Strathclyde, Glasgow, 🚟 UNITED KINGDOM) Transient plasma discharges across water/air interfaces Mohamed Mokhtar HEFNY (Ruhr University, Bochum, Mercenter GERMANY) Treatment of liquids with plasma and its applications in medicine Yury GORBANEV (University of York, York, Structure KINGDOM) Limitations of spin trapping of the plasma induced species

POSTER SESSION 3: Thursday (Sept 8th) - Topics 1, 2, 3, 4, 5, 8, 10

TOPIC: 1. Medical treatment with plasmas SUBTOPIC: Dentistry

Young Min KIM (Pusan National University, Yangsan, South Korea) Effective fluoride gel application on deciduous tooth enamel by low temperature atmospheric plasma

TOPIC: 1. Medical treatment with plasmas SUBTOPIC: Cancer *in vivo*

Sung Un KANG (Ajou University School of Medicine, Suwon, South Korea) Combination of NTP with cetuximab inhibited invasion/migration of cetuximab-resistant OSCC cells: Involvement of NF-κB signaling

Shahriar MIRPOUR (Shahid Beheshti University, Teheran, Iran)

Effect of the micron size non-thermal atmospheric pressure plasma jet on the breast tumor treatment Sybille HASSE (INP Greifswald, Greifswald, Image)

Cold argon plasma as an adjuvant therapy option in progressive head and neck cancer - results of a preclinical study

Abraham LIN (Drexel University, Camden, NJ, 🔤 USA)

Non-thermal plasma induction of immunogenic cell death in an in vivo tumor mouse model

TOPIC: 1. Medical treatment with plasmas SUBTOPIC: PAM and cancer

Akiyo TANAKA (Kyushu University, Fukuoka, 🖲 Japan)

Health effects of repeated intraperitoneal injections of plasma-activated medium in mice **Hiroaki KAJIYAMA** (Nagoya University Graduate School of Medicine, Nagoya,
Japan) Plasma-irradiated liquid therapy suppresses intraperitoneal metastasis of chemoresistant ovarian cancer **Junichiro IKEDA** (Osaka University, Suita,
Japan) Effect of plasma-activated medium (PAM) on cancer-initiating cells for cancer therapy

Joseph-Marie PLEWA (Paul Sabatier University, Toulouse, **III** France) Effects of low temperature plasma activated liquid media on multi-cellular tumor spheroids Hayao NAKANISHI (Aichi Cancer Center, Okazaki, 💌 Japan) Efficacy of intraperitoneal therapy with plasma-activated medium targeting peritoneal micrometastasis as revealed by human gastric cancer cell lines in nude mice Kae NAKAMURA (Nagoya University Graduate School of Medicine, Nagoya, 🥑 Japan) Plasma-activated medium (PAM) inhibits peritoneal metastasis in ovarian cancer mouse model **TOPIC: 2. Plasma-cell and plasma-tissue interactions, biological reactions SUBTOPIC: Cancer cells and tissues** Machiko IIDA (Nagoya University Graduate School of Medicine, Nagoya, ... Japan) Effect of non-equilibrium atmospheric pressure plasmas irradiation on spontaneously developed melanoma in RET-mice Xiaoqian CHENG (George Washington University, Washington, DC, **USA**) Enhancing cold atmospheric plasma treatment of cancer cells by static magnetic field Eda GJIKA (George Washington University, Washington, DC, WUSA) Plasma-tissue and plasma-cell interactions: the effects of power and treatment duration in cancer therapy Steven VANUYTSEL (University of Antwerp, Antwerp, II Belgium) Cold atmospheric-pressure plasma treatment of glioblastoma cells: Influence of working gas and involvement of mitochondria in apoptosis Sun Ja KIM (Dong-A University, Pusan, 📧 South Korea) Selective effects of cold atmospheric pressure plasma on normal and tumor cells Emilio MARTINES (Consorzio RFX, Padova, III Italy) Effect of indirect plasma treatment on laryngeal cancer cells **Eleonora TURRINI** (University of Bologna, Rimini, **III** Italy) Atmospheric non-equilibrium plasma induces apoptosis and oxidative stress pathway regulation in Tlymphoblastoid leukemia cells **Reoto ONO** (Kyushu University, Fukuoka, **I** Japan)

Inactivation effect of DBD on oral cancer cells inside culture medium film

Andrey MUKHACHEV (Gamaleya Research Center, Moscow, Russia)

Effect of nonthermal electrolytic plasma (NTEP) on malignant cells

Anthony CORDERO-RAMIREZ (Hospital Mexico, San Jose, E Costa Rica)

In vitro evaluation of survival curves for tissues exposed to atmospheric pressure plasmas combined with ionizing radiation

Kazunori KOGA (Kyushu University, Fukuoka, 💌 Japan)

Time development of response of cells irradiated by non-thermal atmospheric air plasma

TOPIC: 2. Plasma-cell and plasma-tissue interactions, biological reactions **SUBTOPIC:** Immune cells

Anna LIGUORI (University of Bologna, Bologna, III Italy)

Cold atmospheric plasma treatment affects membrane markers expression in human monocytes and macrophages

Muna BARAKAT (Queen's University, Belfast, 🚟 United Kingdom)

Effect of atmospheric pressure non-thermal plasma exposure on *Pseudomonas aeruginosa*-induced cytotoxicity in murine macrophages

Ku YOUN BAIK (Kwangwoon University, Seoul, 📧 South Korea)

The response of myeloid cells to non-thermal plasma

TOPIC: 3. Plasma-based sterilization/decontamination SUBTOPIC: Biofilms

Fatma IBIS (İzmir Kâtip Çelebi University, İzmir, Markey) Comparative assessment of antimicrobial efficacy of non-thermal plasma and Er:YAG laser on titanium discs for nonsurgical treatment of peri-implantitis

Anelise DORIA (Universidade do Vale do Paraiba, Sao Jose dos Campos, Sa Brazil)

Action of argon/water vapor plasma jet on *Candida albicans* biofilm growth on silicone substrate **Anelise DORIA** (Universidade do Vale do Paraiba, Sao Jose dos Campos, Sa Brazil)

Inactivation of biofilms of *Candida albicans* by atmospheric plasma jet operated in continuous and pulsed mode

Emanuele SIMONCELLI (University of Bologna, Bologna, III Italy)

Qualitative live/dead confocal laser analysis on the decontamination efficacy of CAP treatment on *ex-vivo* tooth root canals

Juliana DELBEN (Uninga, Maringa, 🔯 Brazil)

Tissue tolerable cold plasma against oral biofilms

Martina MODIC (Jožef Stefan Institute, Ljubljana, 🔤 Slovenia)

Cold atmospheric pressure plasma inactivation of clinically important single and multi-species biofilms **Martina MODIC** (Jožef Stefan Institute, Ljubljana, **S**lovenia)

A comparison of direct and in-direct atmospheric pressure air plasma treatments for the decontamination of Staphylococcus epidermidis biofilm contamination grown on titanium substrates

Aliaksandra KAZAK (B.I. Stepanov Institute of Physics, Minsk, **E**BELARUS)

Inactivation of consortiums of microorganisms by an air plasma jet at atmospheric pressure

TOPIC: 3. Plasma-based sterilization/decontamination SUBTOPIC: Spores

Marina RAGUSE (German Aerospace Center, Cologne, E Germany) Low pressure plasma inactivation of *Bacillus subtilis* spores: insights into the mechanisms of spore resistance

Anna KUZMINOVA (Czech Academy of Sciences, Prague, Czechia) Atmospheric pressure plasma treatment for inactivation of bacterial spores Padrig FLYNN (Queen's University, Belfast, Cuited Kingdom) Decontamination of *Clostridium difficile* spores using atmospheric pressure non-thermal plasma Akira YONESU (Ryukyu University, Nishihara,) Sterilization using LF-microwave hybrid plasma at atmospheric pressure

TOPIC: 4. Agricultural and food applications of plasmas SUBTOPIC: Decontamination

Eunjeong HONG (National Fusion Research Institute, Gunsan, M South Korea) The effect of plasma treated water (PTW) for reducing pathogenic microorganism on fruits Juslan LO (INU Champollion, Albi, III France) Microwave coaxial plasma source for spices decontamination Anelise DORIA (Universidade do Vale do Paraiba, Sao Jose dos Campos, 🖾 Brazil) Antifungal action of atmospheric plasma on strains of *Penicillium spp* isolated from onion seeds **Toshifumi YUJI** (University of Miyazaki, Miyazaki, **•** Japan) Atmospheric-pressure non-equilibrium DC pulse discharge plasma jet for plasma sterilization treatment techniques in dry powder foods Lucia HOPPANOVÁ (Slovak University of Technology, Bratislava, 🔤 Slovakia) Low temperature plasma as an alternative means of reducing the amount of used xenobiotics Katerina VLKOVÁ (Czech Technical University, Prague, Korkie) Synergistic effects of essential oregano oil and positive streamer on bacteria and yeasts Zifan WAN (Iowa State University, Ames, IA, 🚾 USA) High voltage atmospheric cold plasma treatment of yeast for spoilage prevention Zifan WAN (Iowa State University, Ames, IA, Web USA) High voltage atmospheric cold plasma treatment of queso fresco cheese for inactivation of Listeria innocua Zifan WAN (Iowa State University, Ames, IA, **USA**) High voltage atmospheric cold plasma treatment of refrigerated chicken eggs for control of Salmonella enteritidis contamination on the egg shell

Andrea ŽILKOVÁ (Comenius University, Bratislava, 🔤 Slovakia)

Cold air plasma pasteurization of a fresh apple juice

TOPIC: 5. Pharmaceutical applications and biochemical/biomolecular engineering with plasmas

Murat TANISLI (Anadolu University, Eskisehir, I Turkey) A comparison for electrical discharge effects onto liquid-molecule Marco KREWING (Ruhr University, Bochum, I Germany) Genome-wide screening for plasma-sensitive mutants reveals genetic basis for bacterial plasma tolerance Yoshihito YAGYU (Sasebo College, Sasebo, I Japan) Gene expression analysis of *Saccharomyces cerevisiae* exposed to FE-DBD plasma Naoyuki KURAKE (Nagoya University, Nagoya,
 Japan)
 Particulates generation in the plasma activated medium (PAM)
 Yoshihisa IKEDA (Ehime University, Matsuyama,
 Japan)
 Evaluation of importance of H2O2 in gene transfection
 Toshiro KANEKO (Tohoku University, Sendai,
 Japan)
 Effects of multi-stimuli on cell membrane permeability in micro solution plasma

TOPIC: 8. Plasma sources for biomedical applications

Eric ROBERT (University of Orléans, Orléans, III France) Rare gas flow channeling in kHz plasma jet operation Vittorio COLOMBO (University of Bologna, Bologna, III Italy) A novel cold atmospheric plasma device for dental applications Vitalii ZABLOTSKII (Czech Academy of Sciences, Prague, Marchia) Micro-plasma device for biomedical applications Yuichi SETSUHARA (Osaka University, Osaka, 💌 Japan) Effects of surrounding gas flow on ROS and RNS productions in non-thermal plasma-iet system **Nofel MERBAHI** (Paul Sabatier University, Toulouse, III France) Optimization of ring-rod argon plasma jets at atmospheric pressure for biomedical applications Aboubakar KONE (INU Champollion, Albi, III France) Investigation of the interaction between a helium plasma jet and conductive / non-conductive targets Magali XAUBET (Institute of Plasma Physics, Buenos Aires, **Section**) Optimization process of an atmospheric pressure plasma jet for medical applications Eduard SOSNIN (Russian Academy of Sciences, Tomsk, Russia) A new atmospheric pressure plasma jet sources first application for inactivation of microorganisms Mohamed Tahar BENABBAS (Freres Mentouri University, Constantine, 💽 Algeria) Low frequency atmospheric pressure plasma jets for bacteria inactivation on solid surfaces and in aqueous solutions Hoang TUNG DO (Vietnam Academy of Science and Technology, Hanoi, 🛄 Vietnam) Cold gliding arc plasma jet for biomedical applications Zhen LIU (Zhejiang University, Hangzhou, Mana) A pulsed cold plasma jet and its medical application Aleksey DAVYDOV (Russian Academy of Sciences, Moscow, **E** Russia) Microwave pulse capillary discharge as a medical tool Adam POLAKOVIČ (Comenius University, Bratislava, 📴 Slovakia) Cold air plasma source for biomedical applications based on DC corona discharge Biswajit BORA (Chilean Nuclear Energy Commission, Santiago, L Chile) Electrical and optical characterization of plasma needle to be used for biomedical applications Jan-Simon BAUDLER (INP Greifswald, Greifswald, Mermany) Progress towards a target-oriented development and benchmarking process for comparable results in biomedical applications

TOPIC: 10. Modeling and numerical simulations

Satoshi UCHIDA (Tokyo Metropolitan University, Tokyo, 🖲 Japan)

Numerical analysis of permeation properties of oxygen active species in cell membrane by classical molecular dynamics

Jonas van der PAAL (University of Antwerp, Antwerp, II Belgium)

Effect of cholesterol and lipid peroxidation on the permeability of ROS through a phospholipid bilayer **Amel ZERROUKI** (Paul Sabatier University, Toulouse, France)

Stochastic simulations with experimental validation of plasma-induced poration of cell membranes for gene transfection

Christof VERLACKT (University of Antwerp, Antwerp, **III** Belgium)

Insight in the plasma induced oxidation of peptides at the molecular scale

Jamoliddin RAZZOKOV (University of Antwerp, Antwerp, III Belgium)

Modeling phosphatidylserine flip-flop in the plasma membrane of cells: a better insight in apoptosis **Dogan GIDON** (University of California, Berkeley, CA, **Mathematical USA**)

Lumped-parameter modeling of atmospheric pressure plasma jets for real-time control applications **Constantinos LAZAROU** (University of Cyprus, Nicosia, Cyprus)

Numerical investigation of the electric field produced by the interaction of helium plasma jet with normal and cancer cells

Kazumasa IKUSE (Osaka University, Suita, 💌 Japan)

Numerical simulations of plasma-induced metabolic responses of Escherichia coli

Hajime SAKAKITA (AIST, Tsukuba, 💌 Japan)

Power distributions of each impedance in the electrical circuit of ionized gas coagulation equipment **Pedro VIEGAS** (École Polytechnique, Palaiseau, **III** France)

Numerical and experimental study on the dynamics of a micro-second helium plasma gun with various amounts of O2 or N2 admixtures

Ali Reza NIKNAM (Shahid Beheshti University, Teheran, **Z** Iran)

Simulation of plasma characteristics of a low pressure inductively coupled plasma source using PIC-MCC

Fees

The registration fee covers the major costs of the conference organization. It covers access to all conference sessions, exhibitions, welcome reception, coffee breaks and lunches. During the registration each participants will receive a conference bag containing conference program, book of abstracts, notepad, pen, city guide, and various information materials. The fee also includes the ISPM membership for the next 2-year period and basic conference trips (some trips will require an additional fee). The registration fee is also used to support participation of invited speakers and students, as well as participants from developing countries and economies in transition.

Regular registration fees:

regular participant (academia and research institutions)	550 €
regular participant (industry and private)	650 €
students (student ID required)	300 €
Special fees	
partners and exhibitors	determined individually
accompanying person*	50 €
conference dinner	50€

*Fee includes welcome coctail and basic conference trips. The fees for optional companion program will be specified later.

Conference Trip

Conference Trip is scheduled for Wednesday, September 7, 2016, afternoon.

TRIP 1: Knights at Devín Castle

Panorama sightseeing two-way boat trip from Bratislava Old Town to the Devín Castle, associated with the visit of the castle ruins and the stunning program performed by Journeymanship of Ancient Warrior Arts and Crafts in Bratislava that will bring you to the beautiful renaissance age.

Trip cancelled due to low number of attendees, which did not meet the minimum attendance

TRIP 2: Driny Cave and Červený Kameň Castle

Visit of the Driny Cave and Červený Kameň Castle associated with wine tasting.

TRIP SUMMARY

program: Driny cave (guided tour) - Červený Kameň Castle (guided tour) - Small Carpatian mountains winery (wine tasting tour)

transport: bus duration: 5-6 hours (expected return to Bratislava 19:00-20:00) meal: refreshments and wine tasting attendance: minimum 50 people, maximum 100 people additional fee: 15 euro

The trip begins with a 35 minute guided tour in the famous Slovak cave Driny. Driny is a natural limestone cave located in the West Slovakia in the Little Carpathians Mountains. It is located about 2 km southwest of the village Smolenice. The cave's entrance altitude is 399 m and there is a 15-minute uphill walk from the parking lot. The first attempt to enter the cave was made by Prussian soldiers, who camped nearby during the Austro-Prussian War. It was finally explored in 1929, and the first 175-meter route was opened in 1934. The cave was declared a nature monument in 1968 and became a part of the newly designated Little Carpathians Protected Landscape Area in 1976. Today, of the total explored length of 636 m, 550 m are open to the public. During 35 minute tour you will have a chance to explore beauties of this natural sight.



The trip continues to the famous Červený Kameň (The Red Stone) Castle, which is just 25 minutes away from the cave Driny. The Red Stone Castle was specialized in the development of housing culture of the nobility and bourgeoisie in Slovakia. The 60 minute guided tour through the castle is focused on the contemporary furnished castle interiors. The visitors walk through parlors, bedrooms, dining room and a knight's hall, where they can see the expositions of contemporary interior furnishings of nobility since the Renaissance period until the Secession period.

The last stop on the way back to Bratislava will be one of the wineries of the well known Small Carpathian wine region. You will have an opportunity to taste some of the finest wines from the region along with some refreshments.





TRIP 3: Beckov Castle and Trenčín Castle and town

Visit famous castles on the Váh river and beautiful town Trenčín in the Western Slovakia.

TRIP SUMMARY

program: Beckov Castle (guided tour, falconry show and archery school) - Trenčín historical city center (short guided walking tour) - dinner at Hotel Elisabeth **transport:** bus, walking **duration:** 7 hours (expected return to Bratislava 21:00) **meal:** dinner **attendance:** minimum 50 people, maximum 120 people **additional fee:** 10 euro

The trip will first take you to village of Beckov located in the Western Slovakia. The village is famous for its castle built on a steep high cliff above the Váh river (the longest river of Slovakia) and is a dominant feature on the horizon. The dominance of the rock and impression of invincibility it gives challenged our ancestors to make use of these assets. The result is a remarkable harmony between the natural setting and architecture. Beckov Castle is one of the oldest castles of the former Austro-Hungarian Empire. The first written records of the castle date back to 1208. In 1996 the ruins were reinforced and castle was open to the public. In the castle, you will have a chance to see the remains of rich Gothic and Renaissance decorations, stone water tanks, water well, Gothic staircase in the castle chapel and other interesting historical architectural elements. The castle also features a magnificent view of the slopes of the White and the Small Carpathians.



If you would you like to try archery, you will have a chance at Beckov castle. The trip also includes the falconry show that will give you a remarkable experience and an immediate contact with the birds of prey and a show of their flying skills.



After leaving Beckov Castle our next stop will be the beautiful town Trenčín. The Trenčín castle is a built on the top of a steep rock which dominates the town Trenčín and the region of Považie. The history of the town goes back to the age of the Roman Empire, testified by the inscription on the rock about the victory of the 2nd Roman legion at Laugaricio (the Latin name of Trenčín) in 179 AD. The oldest building is a stone rotunda, plausibly founded in the Great Moravian period, when the castle served as a community center. In the next centuries it became the domicile of borderland commitat, royal and later aristocratic county. In the 13-14th century, the castle became the residence of Matthew III Csak, the legendary 'Lord of the river Váh and the Tatra Mountains'. The water well in the castle is associated with the legend of the Turkish prince Omar and his great love for beautiful Fatima, whom he had to redeem by digging a well in the rock. Today there are exhibition rooms and many museum expositions inside the castle.

On a short guided tour you will explore the downtown of Trenčín. This walk in the historical center will take you to the Executor's House, City Hall, Jesuit Church, and the Synagogue. You will have an option to individually visit the Trenčín Castle up on the hill or try some shopping in the downtown. After the short tour and some free time we will gather for dinner at the Restro Restaurant directly below the medieval castle with the view to the Roman inscription.



TRIP 4: Action Park Čunovo

Plasma Medicine community teambuilding activity in Action Park in Čunovo.

TRIP SUMMARY

program: paintball, rope center, giant swing, long rope lift - refreshments transport: bus duration: 5 hours (expected return to Bratislava 19:00) meal: refreshments and drinks attendance: minimum 30 people additional fee: 20 euro

The Action Park is a unique place ready to host the 1st plasma medicine community teambuilding event. The goal of the action is to challenge teamwork, strengthen relationships, and improve communication to increase efficiency and productivity.



The Action Park is situated in southern part of Bratislava, in town district called Čunovo. On the area of 28 000 m^2 and the capacity for 1000 visitors it provides 26 fun and adrenaline attractions, and sports grounds. There are more than 110 of team activities. The facility includes various attractions, including rope center,

paintball field, and a playground for extreme golf, bungee trampoline, zorbing hill, off-road track and many other activities. Party tents and shelters, buffet, changing rooms, swimming pool and others. This event is especially designed for people who are not afraid to try something bold. You will experience a half-day full of adrenaline and fun.

You will experience a modern action sport called **paintball**, which not only requires speed and fitness but also tactical thinking. Action Park area offers the perfect space for sufficient antics when playing paintball in the form of SWAT military field with an area of 70x55m. Many trenches, shelters and obstacles will make you feel like being on a real battlefield. You can choose from a variety of games such as 'Central flag' (the team must try to carve out a flag from the middle of the field and transfer it to their own base) or 'Convoy' (teams must shoot their way through the whole course and use their bike to transfer to the destination point), or a little easier fight games that last until the last shooting player in a particular team.



After paintball you will be challenged in the **rope park** with 15 obstacles at 8 meters above ground. The ropes are a combination of horizontal and vertical obstacles created by cables, pillars and devices with different difficulty levels.



The brave souls who still look for a dose of adrenaline can experience a free fall on the **giant swing**. This attraction starts jumping from the 12 meter height and continues with 7-meter free fall and swinging for a few minutes. The best course finally comes in the form of an adrenaline 120 meters **long rope lift**. You will enjoy the feeling of freedom and experience a speed up to 40 km/h.

All you need is courage and a relatively good physical shape. Complimentary drinks and light refreshments on site.

TRIP 5: Bratislava Old Town

Remarkable trip on the tour vehicle through the oldest streets of the city centre.

TRIP SUMMARY

program: sightseeing on a tour vehicle (guided tour, the must-sees of the capital) - walking tour (guided tour, the must-sees of the city centre + Primate's Palace) - dinner at Bratislava Restaurant Flagship **transport:** tour vehicle, walking **duration:** 4 hours (expected dinner time at Bratislava 18:00) **meal:** dinner **attendance:** minimum 30 people **additional fee:** 0 euro

This tour on the *Presporacik-Oldtimer* tour vehicle will take you to all the must-sees of the capital. Unique tour vehicle is the only tour vehicle that takes you directly through the oldest streets of the city centre, called the Old Town, to the courtyard of the medieval Castle with a beautiful view of the entire city and its surroundings. From your comfortable seat in the tour vehicle, you will see the legends and most fascinating sites, such as the Grassalkovich/Presidential Palace, Old Town Hall, the Executioner's house; Venturska Street - center of the rich musical life of the city; the beautiful Slovak National Theatre or Slovak Philharmonic.



After the 60 minutes of tour vehicle tour, with a professional commentary in English language, you will take a 2-hour walk in the pedestrian zone of the Old Town. You can follow your guide and take photos of the tourist's most popular sites: Roland Fountain - the oldest fountain in the city; St. Martin's Cathedral, the coronation Cathedral of Hungarian Kings; ancient St. Clare's Church; St. Michael's Gate - the last remaining well-preserved town gate; palaces from the time of Empress Maria Theresa; the Plague Pillar, galleries, museums, churches, etc.



During your walking tour you will have a chance to have a look inside of a Primate's Palace - a neoclassical palace in the Old Town of the capital. In 1805, the Palace's Hall of Mirrors saw the signing of the fourth Peace of Pressburg (Bratislava), ending the War of the Third Coalition. Today, it serves as the seat of Mayor of Bratislava and it is very special to see it from inside. That is why you cannot miss this trip.

It is said that who has never been in Flagship restaurant - does not know Bratislava! You have a great opportunity to finish this amazing afternoon with having a meal in Bratislava Restaurant Flagship. There is a wide choice of Slovak national specialties and a great atmosphere.



Companion Trips

We prepared three exquisite thematic one-day trips for the accompanying persons, visiting three neighboring countries (Slovakia, Hungary, and Austria) and the region's cultural and historical heritage. These trips are scheduled for Monday Sep 5, Tuesday Sep 6, and Thursday Sep 8, 2016 (during the scientific program of the conference).

TRIP 1: Čičmany, Rajecká Lesná and Rajecké Teplice

Folk and spa heritage

TRIP SUMMARY

date: Sept 5th, 2016 program: Čičmany (sightseeing of old traditional houses) - Slovak style lunch - Rajecká Lesná (Slovak Betlehem) - Rajecké Teplice (spa) transport: bus duration: 11-12 hours (expected departure from Bratislava 9:00, expected return to Bratislava 20:00-21:00) price: 65 euro/person (price valid for minimum 15 attendees includes bus transport, English speaking guide, lunch, entrance fee to Čičmany attendance: minimum 6 people additional costs: 17 euro/person/2 hours (spa water world), 22 euro/person/ 2 hours (sauna and water world)

Čičmany is one of Slovakia's most unique village known by its folk architecture and dark-painted wood houses covered with white-painted decorative patterns. They look exactly like gingerbread houses. In the late 18th century, residents put lime paint on the outside of the houses to protect the wood where it was damaged. But the paint evolved from practical to ornamental in shape of crosses, hearts, stars, spirals, pinwheels, reflecting the motived commonly seen in local needlework. Wooden houses of the folk culture will take you back in time and the museum 'Radenov dom' will show you the original life in this folk houses village.



Leaving Čičmany our next stop will be in Rajecká Lesná, the village famous for its wooden Slovak Bethlehem. The Slovak Bethlehem is a masterpiece of Jozef Pekara, a carver from Rajecké Teplice. The masterpiece is 8.5 meters wide, 2.5 meters deep and 3 meters high. It shows not only the birth of Christ in Bethlehem and his life, but also the history of the Slovak Nation. Altogether it shows 170 moving and static figures in folk costumes working, playing, some as pilgrims all together symbolizing the devoutness of Slovaks, and over 150 animal figures.



The tour will end in an exclusive spa centre Aphrodite in Rajecké Teplice. The spa is a luxury facility designed for the most demanding clients who seek quality medical treatment and leisure spa services. The spa offers both relaxing and artistic experience.



TRIP 2: Pannonhalma and Esztergom

UNESCO Heritage Tour

TRIP SUMMARY date: Sept 6th, 2016 program: Pannonhalma (Benedictine Archabbey) - lunch - Esztergom (Basilica) transport: bus duration: 11 hours (expected departure from Bratislava 8:30, expected return to Bratislava 19:30) attendance: minimum 6 people price: 90 euro/person (price valid for minimum 15 attendees includes bus transport, English speaking guide, entrance fees to Pannonhalma and Esztergom, lunch)

Pannonhalma is one of the oldest historical monuments in Hungary - the Benedictine Archabbey of Pannonhalma, which is located on the top of the St. Martin hill. The abbey was founded in 996 by Prince Geza who designated this as a place for the monks to settle and then it soon became the center of the Benedictine order. Later, Hungarian king Stephen I. completed the construction and donated estates and privilege to the monastery.



Esztergom, former capital city, is one of the oldest Hungarian towns. Is well known under a nickname 'Hungarian Rome' or 'City of St. Stephen'. The Basilica of Esztergom, a masterpiece of Classicism, is the third largest church in Europe. This jewel was established around 972 AD. Esztergom has always played an important role in Hungary's history. It was the birth and coronation place of the first Hungarian king, St. Stephen, as well as the capital of Hungary until the 13th century. After the Mongolian invasion, King Béla IV moved the Royal Seat to Visegrad and later to Buda, giving his palace to the archbishop and making Esztergom a religious center.



TRIP 3: Laxenburg and Seegrotte

Imperial Heritage

TRIP SUMMARY date: Sept 8th, 2016 program: Laxenburg (sightseeing castle and gardens) - lunch near Seegrotte - Seegrotte (cruise through underground lake) transport: bus duration: 8-9 hours (expected departure from Bratislava 8:30, expected return to Bratislava 17:00-17:30) attendance: minimum 6 people price: 68 euro/person (price valid for minimum 15 attendees includes bus transport, English speaking guide, lunch, entrance fee to Seegrotte, castle and gardens of Laxenburg)

Laxenburg castle is an imperial palace and castle situated about 15 km south of Vienna, the capital city of Austria. The castle has its roots in the 13th century and is one of the most impressing castles in Europe. It formerly served as a summer retreat, along with Schönbrunn palace, for the imperial Habsburg dynasty. The Emperor Franz Joseph and his wife Sisi spent their honeymoon here. An important part of the castle is a park with its gardens - considered a prime example of horticulture of the 18th and 19th centuries. You can have a nice walk to the neighbouring Franzensburg castle from there.



The trip continues with visiting the Europe's biggest underground lake Seegrotte in Hinterbrühl. The Seegroote is a former gypsum mine formed in 1912 by an underground blasting operation in the mine that went away and caused 20 million liters of water to gush forth from behind the rock. The lower level galleries of the mine were flooded, creating the largest subterranean lake in Europe. You will have an opportunity to see the lake from a motor boat with the professional guiding.



Plasma Medicine Award

The Plasma Medicine Award (PMA) is the highest recognition awarded by the International Society for Plasma Medicine (ISPM) for lifetime achievements in the field of the Plasma Medicine. Normally, the PMA is awarded by the ISPM Board typically to one individual every two years during the International Conference on Plasma Medicine. However, it is at the discretion of the ISPM Board to award the PMA to multiple individuals or to no individual. The following procedure will be used to implement this rule:

1. The ISPM president will request nominations for candidates for the PMA no later than three months before the ISPM Board meeting at the International Conference on Plasma Medicine (ICPM).

2. Nominations will be requested from the entire membership of the ISPM. Nominations need to contain a nomination letter, describing the lifetime achievements of the candidate and a complete curriculum vitae.

Award: Plasma Medicine Awards (PMA)
Purpose: To recognize lifetime achievements in the field of the Plasma Medicine.
Eligibility: Anyone.
Nomination: By ISPM members (nominations by at least 2 ISPM members are required for each candidate).
No self-nomination is accepted.
Announcement: During the ICPM-6 conference dinner.

Early Career Award in Plasma Medicine

The Early Career Award in Plasma Medicine (ECAPM) will be awarded to early-career researchers who achieved outstanding work and made a significant contribution to the advancement in the field of Plasma Medicine (independently from their mentors or advisors if any).

Award Name: Early Career Award in Plasma Medicine (ECAPM)

Purpose: To recognize and encourage early-career researchers for their outstanding work in Plasma Medicine.

Eligibility: The nominee must have received his/her first Ph.D. degree (or a degree equivalent to Ph.D.) after Jan. 1, 2004. (i.e. less than 12 years post Ph.D. as of Jan. 1, 2016).

One year will be added to each child of the nominee.

Nomination: By ISPM members (nominations by at least 2 ISPM members are required for each candidate). No self-nomination is accepted.

Announcement: During the ICPM-6 conference dinner.

Young Researcher Presentation Award

The Young Researcher Presentation Awards (YRPA) will be awarded to young researchers for the most outstanding oral or poster presentation at ICPM-6. The total number of YRPA awards will depend on the conference sponsors.



Award: Young Researcher Presentation Award (YRPA) Purpose: To recognize most outstanding poster and/or oral presenters at ICPM. Eligibility: A graduate student or early-career professional up to 36 years of age as of Jan. 1, 2016. **Nomination:** By student or early-career professional himself/herself. The self-nomination can be done through the ICPM-6 user account. In the user account, go to 'Abstract' section and select 'Yes' for the option 'Young researcher presentation award'.

Evaluation: By special committee appointed by the ISPM members.

Announcement: During the ICPM-6 closing ceremony.

Prize: The awardees will receive books from Springer.



Figure: The laureates of the Young Researcher Presentation Award of the ICPM-5 (Nara, Japan): Kim Rouven Liedtke (University of Greifswald, Greifswald, Germann, Mattee Gherardi (University of Bologna, Bologna, BITALY), Malte U. Hammer (INP Greifswald, Greifswald, Germann, GERMANY), Kentaro Tomita (Kyushu University, Fukuoka, JAPAN) Sarah Higginbotham (Queen's University, Belfast, Germann, Australia, Australia).

Student Grant

The student grants allocated by the organizers will provide a complimentary student registration to the ICPM-6 conference (valued $250 \in$) to the students from low income countries. The total number of student grants will depend on the conference sponsors.



Eligibility: Students (student ID required!) with accepted abstracts from the countries with gross domestic product (GDP) per capita below US\$ 10,000 according to the List of International Monetary Fund.

Student Grant Holders

Mohamed Tahar BENABBAS (Freres Mentouri University, Constantine, MALGERIA) Anthony CORDERO-RAMIREZ (Hospital Mexico, San Jose, COSTA RICA) Anelise DORIA (Universidade do Vale do Paraiba, Sao Jose dos Campos, BRAZIL) Kobra HAJIZADEH (Kharazmi University, Teheran, IRAN) Aliaksandra KAZAK (National Academy of Sciences, Minsk, BELARUS) Shahriar MIRPOUR (Shahid Beheshti University, Teheran, IRAN) Olena SOLOMENKO (Taras Shevchenko National University, Kyiv, UKRAINE)

Venue



The map of Bratislava with important points of interest

Useful Waypoints

ICPM-6 conference venue (FIIT, Slovak Technical University) N 48° 09.220 E 17° 04.308 ICPM-6 welcome reception (Moyzesova sieň) N 48° 08.446 E 17° 06.951 ICPM-6 conference dinner (Stará tržnica) N 48° 08.685 E 17° 06.682

City center (Staré Mesto) N 48° 08.612 E 17° 06.507 Central railway station (Hlavná stanica) N 48° 09.508 E 17° 06.363 Main bus station (Autobusová stanica) N 48° 08.828 E 17° 07.636 Airport Bratislava (Letisko M. R. Štefánika, BTS) N 48° 10.191 E 17° 12.008

Conference Venue

The conference will be organized in the joint campus of Comenius University (CU) and Slovak University of Technology (STU) in Mlynská dolina. The conference lectures and poster sessions will take place at the

Faculty of Informatics and Information Technologies (FIIT STU), while technical and personal assistance will be provided exclusively by the Faculty of Mathematics, Physics and Informatics (FMFI).



The building of FIIT STU, where ICPM-6 conference will be held.



The layout of the building.



The map of ICPM-6 conference venue.

Welcome Reception

The welcome reception will be held in Moyzesova sieñ (Moyzes Hall), a large representative building on the Danube bank that belongs to Comenius University in Bratislava. Designed by Vienna architect Josef Rittner in the early 20th century, the representative hall is nowadays used for classical music concerts, various academic purposes and other public events. The richly decorated Art Nouveau Moyzes Hall is named after the Slovak composer Alexander Moyzes (1906-1984).





The map of ICPM-6 welcome reception venue.

Conference Dinner

The conference dinner will be held in Stará tržnica (Old Market Hall), a large technical builing in the very city center. The building was designed by the city engineer Gyula Laubner and its construction was completed in 1910. It served as the City Market for more than 50 years. Between 1960-1982 it served as a television studio building and later the building belonged to the Ministry of Culture. In 1990 the hall was reconstructed to its original architectural form. It currently serves as a meeting point, offering food markets every Saturday and cultural events on other days. Apart from being a market place, the Old Market Hall also hosts various cultural and social events. Concerts, performances, exhibitions, festivals, fashion walks and many more.





The map of ICPM-6 conference dinner venue.

Bratislava

Bratislava is the capital of Slovakia and, with a population of about 500,000, the country's largest city. It is located in southwestern Slovakia, occupying both banks of the River Danube and the left bank of the River Morava. Bordering Austria and Hungary, it is the only national capital that borders two independent countries. Bratislava is the political, cultural and economic centre of Slovakia.







The history of the city has been strongly influenced by people of different nations and religions, namely by Austrians, Czechs, Hungarians, Jews, Serbs and Slovaks. The city was the capital of the Kingdom of Hungary, a part of the larger Habsburg Monarchy territories, from 1536 to 1783 and has been home to many Slovak, Hungarian and German historical figures.

Travel

BY AIRPLANE via VIENNA AIRPORT (VIE)

The Vienna airport (VIE) is situated approximately 50 km westwards from the center of Bratislava. The transport from the airport to Bratislava city is very simple, comfortable and lasts approximately 1 hour. Direct and regular bus connection is provided by three bus operators:







The three operators run regular daily service between Vienna city, Vienna Airport, Bratislava city and Bratislava Airport. All operators offer fully air-conditioned buses with free wifi connection on-board, and allow to buy tickets both online or directly at the bus driver. Little differences are in frequency, pricing, comfort and bus stops. **Slovak Lines** offers more regularity and flexibility (one-way ticket 7.80 \in + luggage 1 \in). **Blaguss/Flixbus** is faster and a bit cheaper (one-way ticket 7.50 \in including luggage). **RegioJet** operator started its services only recently and at the moment offers the cheapest price on the market (one-way ticket 4 \in , including coffee/tea on board).

Buses depart daily from 6 a.m. on a frequent basis approximately every 30-60 minutes (even more frequently during the day and peak hours). The last bus departs after midnight. In generals there are more than 50 departures from Vienna airport toward Bratislava in a day. The bus stop at the Vienna airport is located right outside the arrival hall (bus stop #4 and #3). In Bratislava, the bus stops at several bus stops depending on the operator:

- Einsteinova (Einstein st., the south bank of Danube) all three operators. Please do NOT get off here!
- **Most SNP** (SNP bridge, the closest stop to city center) only Blaguss/Flixbus and RegioJet. The most convenient stop for ICPM-6 venue and for welcome reception.
- Autobusová stanica (main bus station) ... only Slovak Lines and RegioJet
- Letisko Bratslava (BTS airport) ... only Slovak Lines and Blaguss/Flixbus



The map of Bratislava with important points of interest

Consult the map prior to your trip to choose the optimal bus stop to get off in Bratislava in order to easily approach your accommodation, conference venue or to change for a connecting tram or a bus. *For information about public transport in Bratislava, please scroll down.*

BY AIRPLANE to BRATISLAVA AIRPORT (BTS).

The Bratislava airport (BTS) is situated at the eastern edge of Bratislava city, approximately 6 km from the centre of Bratislava. There is a regular bus transport (bus #61) from the airport (Letisko) toward the city center with the terminal bus stop at the central railway station (Hlavná stanica). For information about public transport in Bratislava, please scroll down.

BY TRAIN to BRATISLAVA, HLAVNA STANICA.

The central railway station (**Hlavná stanica**) is located in the northern part of the city, close to the city center. It is the main station for trains, but also the terminal station for many city buses, trams and trolleybuses. The station has a direct international connection with Prague, Vienna, Budapest, Berlin and even other cities and countries around the Europe. If you plan to come to Bratislava by a train, you may plan your trip at **http://cp.atlas.sk/vlak/spojenie.** For information about public transport in Bratislava, please scroll down.

PUBLIC TRANSPORT in BRATISLAVA CITY.

Bratislava has public transport line system of buses, trams and trolleybuses, which convey at regular intervals according to pre-defined timetables. Most of the line stops of the public transport are comprehensively marked including the name of the stop, and the timetable with a list of all its destinations. If you want to plan your journey in Bratislava city, we recommend you to do it via **imdh.sk** website. You can find schedules of all city buses, trams and trolleybuses here as well as transport map and many other valuable information.

In case you want to travel to the conference venue select **Botanická záhrada** as the destination of your journey (trams 4,5,6,9; buses 28,29; bus 32 directly from the Central Railway station). The search result will indicate you what bus/tram number(s) to take, the duration of the journey and the price of the travel ticket. Basic travel ticket valid for 15 minutes costs $0.70 \in$, while the ticket valid for 30 minutes costs $0.90 \in$. You can buy a travel ticket in yellow coin-operated machines that are usually located at each bus/tram stop. You cannot buy the ticket from the bus driver. You must mark the ticket immediately after getting on the tram/bus in the nearest ticket marker devices located inside the vehicle by every door.

Visa

Slovakia is the member country of the European Union and the part of the Schengen Area. EU/EEA/Swiss Confederation citizens do not require the visa to enter the Schengen Area. Non-EU citizens generally need the Schengen visa. The countries whose citizens are required to obtain a Schengen visa in order to enter one of its member countries are listed on *www.schengenvisainfo.com/who-needs-schengen-visa*.

Visa is not required for semi-annual visits of up to 90 days for nationals of those countries for which the European Community has abolished the visa requirement. More detailed information about how to obtain the Schengen visa can be found on the web page of the Ministry of Foreign and European Affairs of the Slovak Republic (*www.mzv.sk/web/en/consular_info/visa*) or Migration Information Centre (*mic.iom.sk/en/residence/visa/228-schengenske-viza-na-vstup-do-sr-2.html*).

As part of the visa application process, participants may be requested to submit a Letter of Invitation from the conference organizers endorsed by Comenius University in Bratislava. The letter can also be requested by your university for administrative purposes. The Letter of Invitation is an official document that confirms a registration payment and extends an official invitation to the paid registrant to attend and participate in the ICPM-6 conference. It provides the participant with an official reason to come to Slovakia. The organizers are not competent to provide invitation letters approved by the Border and Immigration Police of the Slovak Republic.

In order to qualify for a Letter of Invitation, a person must meet two criteria:

- 1. Must be a registered participant or the author of an accepted abstract.
- 2. Must pay the conference registration fee.

Under no circumstances the organizers will issue a Letter of Invitation to any interested party who has not met the two criteria listed above.

The Letters of invitation will be sent by email as a PDF attachment or physically via air mail to the place of residence or place of work, if requested by the participant.

All questions/concerns regarding the status of your visa should be directed to the Embassy of Slovakia or nearest Consulate of Slovakia in your home country. The organizers are neither obliged nor authorized to assist the visa application process beyond providing a Letter of Invitation.

Under the applicable law, the visa application procedure should not take longer than 15 days, in exceptional cases the decision may take up to 60 days. In some cases, however, the procedure may be lengthy. Therefore, we do recommend the participants to submit the visa application well in advance and even contact the embassy or consulate for further details and time deadlines.

Accommodation

Bratislava offers a wide variety of an accommodation. Hotels and hostels are located both in the city center as well in suburban areas. There are not many of them in close vicinity of the conference venue, however, the conference venue is only 2 km away from the city center (Staré Mesto) and can be easily and comfortably reached within 10 minutes by a public transport (tram, bus).

To find a suitable accommodation we recommend the participants to use hotels offering special deals for ICPM-6 participants (see list below) or to try various online booking websites, e.g. booking.com, hotels.com, tripadvisor.com, etc. Bratislava is visited by many tourists through the year, especially in the summer period. In addition, Slovakia will preside the European Union starting July 2016, which may negatively affect the availability of hotel rooms. Therefore we encourage the participants to book their accommodation well in advance.

The organizers do not provide accommodation for participants and do not reimburse any travel expenses. The participants are expected to make their own arrangements.



Special Deals for ICPM-6 Participants

1) Loft Hotel (4*) Štefánikova 4 www.lofthotel.sk location: N 48° 09.113 E 17° 06.416 e-mail: reservation@lofthotel.sk phone: + 421 2 5751-1000 fax: + 421 2 5751-1001 reservation procedure: fill the booking form and send it by fax or e-mail single-bed room + breakfast ... 95 euro/night (10 rooms available) double-bed room + breakfast ... 105 euro/night (10 rooms available) premium single-bed room + breakfast ... 130 euro/night (10 rooms available) premium double-bed room + breakfast ... 140 euro/night (10 rooms available) local tax ... 1.65 euro/day reservation available until July 15 or until fully booked

2) Botel Pressburg (3*)

Dvořákovo nábrežie www.botelpressburg.sk location: N 48° 08.416 E 17° 05.563 e-mail: reception@botelpressburg.sk phone: +421 2 4319-1277 reservation procedure: send your reservation by e-mail with 'ICPM-6' subject single-bed room ... 40 euro/night (29 rooms available) double-bed room ... 80 euro/night (29 rooms available) breakfast ... 6.50 euro/day local tax ... 1.65 euro/day *reservation available until July 15 or until fully booked*

3) Ibis Hotel (3*)

Zámocká 38 www.ibis.com location: N 48° 08.668 E 17° 06.159 e-mail: h3566-sl@accor.com phone: + 421 2 5929-2000 fax: + 421 2 5929-2111 reservation procedure: fill the booking form and send it by fax or e-mail single-bed room + breakfast ... 65 euro/night (50 rooms available) double-bed room + breakfast ... 70 euro/night (50 rooms available) local tax ... 1.65 euro/day reservation available until August 8 or until fully booked

4) Mercure Hotel (4*)

Žabotova 2 www.mercure.com location: N 48° 09.376 E 17° 06.473 e-mail: h6840-re1@accor.com phone: +421 2 5727-7700 phone: +421 2 5727-7777 reservation procedure: fill the booking form and send it by fax or e-mail single-bed room + breakfast ... 89 euro/night (50 rooms available) double-bed room + breakfast ... 112 euro/night (50 rooms available) local tax ... 1.65 euro/day reservation available until fully booked

5) Hotel Antares (4*)

Šulekova 15a www.hotelantares.sk location: N 48° 09.007 E 17° 05.776 e-mail: reservation@hotelantares.sk phone: +421 2 5464-8971 reservation procedure: send your reservation by e-mail with 'ICPM-6' subject single-bed room + breakfast ... 82 euro/night (26 rooms available) double-bed room + breakfast ... 94 euro/night (26 rooms available) local tax ... 1.65 euro/day *reservation available until fully booked*

6) Pension Virgo

Panenská 14 location: N 48° 08.862 E 17° 06.207 www.penzionvirgo.sk e-mail: objednavky@penzionvirgo.sk phone: +421 2 2092-1400 reservation procedure: send your reservation by e-mail with 'ICPM-6' subject single-bed room ... 55 euro/night (4 rooms available) double-bed room ... 58 euro/night (4 rooms available) breakfast ... 5.00 euro/day local tax ... 1.65 euro/day reservation available until August 3 or until fully booked

7) Botel Marina

icpm°

Nábrežie Ludvika Svobodu 2 location: N 48° 08.375 E 17° 05.807 www.botelmarina.sk e-mail: sales@botelmarina.sk phone: +421 2 5464-1805 reservation procedure: send your reservation by e-mail with 'ICPM-6' subject double-bed room + breakfast ... 49 euro/night (6 rooms available) local tax ... 1.65 euro/day reservation available until June 30 or until fully booked



The map of hotels

Warning!

Please be warned that none of our contracted hotels available from ICPM-6 website would directly call participants. Please be very alert! Some fraudulent activities of accommodation services pretending to represent ICPM-6 organizers have been reported. One of them is EHS - Exhibitors Housing Services.

This is not at all our activity and it is out of our control. The only accommodation we are directly providing is our University hotel Druzba that was offered to the participants of the Summer School on Plasma Medicine and to the students registered at ICPM-6.

We also guarantee that we did not provide any personal information on our registered participants to any third party. All they can get is the publicly available information at www.icpm6.com.

We are strongly hoping that you did not become the victim of this fraud.

Contact

ICPM-6

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