

Society of Physical Chemists of Serbia Third Circular

PHYSICAL CHEMISTRY 2016

13th International Conference on Fundamental and Applied Aspects of Physical Chemistry





13th International Conference on Fundamental and Applied Aspects of Physical Chemistry

Organized by

The Society of Physical Chemists of Serbia

in co-operation with

Institute of Catalysis Bulgarian Academy of Sciences

and

Boreskov Institute of Catalysis Siberian Branch of Russian Academy of Sciences

and

University of Belgrade, Serbia:

Faculty of Physical Chemistry
Institute of Chemistry, Technology and Metallurgy
Vinča Institute of Nuclear Sciences
Faculty of Pharmacy

and

Institute of General and Physical Chemistry, Belgrade, Serbia



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Local Executive Committee

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A. Stoiljković

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Ranković, M. Ristić, A. Stanojević, B. Stanković, M. Žunić



Program

Conference Venue

The conference will be held at the Rectorate of the University of Belgrade, situated in the Captain Miša's Mansion (Kapetan Mišino Zdanje). Address: Studenski trg 1, Belgrade.



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Registration

Registration desk will be located in the Entrance Hall of the Rectorate of the University of Belgrade, and it will be opened all time during the Conference.

Opening – MAIN HALL

26 September	Opening and Plenary lectures
	Start at (09:30)
27 September	Section Lectures, Oral and poster Presentations
28 September	Excursion
29 September	Section Lectures, Oral and poster Presentations
30 September	Section Lectures, Oral and poster Presentations
	Closing Session (at about 17:00)

Topics

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Chemical Thermodynamics
Spectroscopy, Molecular Structure, Physical Chemistry of Plasma
Kinetics, Catalysis
Nonlinear Dynamics, Oscillatory Reactions, Chaos
Electrochemistry
Biophysical Chemistry, EPR Investigations of bio-systems, Photochemistry,
Radiation Chemistry
Radiochemistry, Nuclear Chemistry
Material Science
Solid State Physical Chemistry
Macromolecular Physical Chemistry
Environmental Protection, Forensic Sciences, Geophysical Chemistry
Phase Boundaries, Colloids, Liquid Crystals, Surface-Active Substances
Complex Compounds
General Physical Chemistry

Pharmaceutical Physical Chemistry

Education, History

Free Topic

Food Physical Chemistry Physico-Chemical Analysis



Oral presentations

The Power Point presentation must be available on CD-Rom or flash memory. Optionally, laptop can be used. Overhead projector will be available.

Poster presentation

The posters should be mounted on the board 0.80m wide and 1.20m high.

Tentative List of Invited Lecturers:

Plenary Lectures

Antonio Cricenti (Italy)

Biomedical and Material Science Applications by Scanning Near-field Optical Infrared Microscopy

Monika Fleischer (Germany)

Nanofabrication and spectroscopy of plasmonic nanocones

Vilmos Gáspár (Hungary)

Dynamical Instabilities in Electrochemical Systems

Katica Hedrih (Serbia)

Universal method across different area of sciences and transient of knowledge flows Ulrich Kortz (Germany)

Polyoxometalate Chemistry: From Synthesis and Structure to Catalysis and Biomedicine Tatjana Parac Voqt (Belgium)

Polyoxometalate complexes as artificial metalloenzymes

David Parker (UK)

PARASHIFT MRI: a challenge to shift and relaxation theory

Igor Pašti (Serbia)

First principles insights in graphene functionalization for energy conversion applications Vladana Vukojević (Sweden)

FCS: The development of methods and applications in biomedical research

Sectuion Lectures

Gordana Ćirić-Marjanović (Serbia)

Nanostructured polyanilines and their carbonized forms: synthesis, characterization and application

Nenad Filipović (Serbia)

Mathematical modeling of plaque formation and progression

Lente Gábor (Hungary)

Fallacies in reaction kinetics

Elmar Fuchs (Netherlands)

Protons in an aqueous electrohydroynamic liquid bridge

Beata Kalska-Szostko (Poland)

Magnetic nanostructures

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Teresa Kowalska (Poland)

Possibilities and limitations of selected analytical tools to trace non-linear chemical processes

Stevan Maćešić (Serbia)

Advances in the modeling of the oscillating chemical reactions

Katarina Novaković (UK)

From small to large molecule substrates in oscillatory carbonylation

Bogdan Novakovski (Poland)

Reaction-diffusion model for embryo morphogenesis

Robert Sandulescu (Romania)

Natural and biomimetic receptors for biosensor design

Guy Schmitz (Belgium)

I₂O preparation and reactions in aqueous solutions

Igor Schreiber (Czech Republic)

Network motifs and mechanisms for oscillatory dynamics of biochemical reactions

Jelena Savović (Serbia)

Laser-Induced Breakdown Spectroscopy

Nikolaj Stepanov (Russia)

Van Vleck perturbation theory in vibrational problems

Erik Szabo (Hungary)

Oxygen Production in Bray-Liebhafsky Reaction: Genetic Algorithm Search for Improved Agreement of a Model with Experiment

Zoran Šaponjić (Serbia)

Ferromagnetic behavior of Mn²⁺ doped titania nanotubes

Radmila Tomovska(Spain)

Water-borne polymer and composite nanostructured particles

Ágota Tóth (Hungary)

Spatiotemporal instabilities induced by electric field

Aleksey Vedyagin (Russia)

Study of MgO transformation into MgF₂ in the presence of CF₂Cl₂

Slobodan Zdravković (Serbia)

Microtubules: dynamics, soliton waves, some roles in the cell

(List is not exhaustive)

Contributed papers

The papers will be divided into oral and poster presentations. The Scientific Committee retains the option of deciding on the presentation form, based on the number/type of contribution, but will try to take into account the author's expressed preference.



Paper preparation

The papers should be submitted electronically by e-mail (paper13@socphyschemserb.org) before May 31, 2016. For the papers received after that deadline the publication in the Conference Proceedings cannot be guaranteed. The authors are limited to no more than three contributions and one invited lecture (Plenary and Section lectures). Invited lectures will be printed in full-length (eight pages) and the papers of other participants in strict four-pages.

For complete information please see the attachment **Instructions for paper**.

Duration of presentation

Plenary lectures: 45 minutes

Section lectures: 30 minutes (25-minute presentation followed by 5 minutes of

discussion)

Oral presentation: 15 minutes (10- minute presentation followed by 5 minutes of

discussion)

Posters: 60 minutes. Poster dimension should be 80 cm wide, 100 cm high

Language

The official language of the conference will be English.

Publication

All contributed papers accepted for the Conference, will be published in the Conference Proceedings.

The Scientific Committee will invite the Authors of selected papers to prepare original manuscripts for the publication in the *Russian Journal of Physical Chemistry*.

Deadline for Submission of papers

May 31. 2016.



Financial support and Registration fee of the Conference

Financial Support to Conference organization would ensure free registration for a limited number of participants. For Institutional or other kinds of donor support, please consult the Organizing Committee: information@socphyschemserb.org

Registration fee

After deadline

Domestic participants should use the following payment instructions:

The amount of local currency payments is calculated according to the daily exchange rate of EUR on the day of payment. For the pro-forma invoice please send request to the Organizing Committee: information@socphyschemserb.org

Purpose of payment: Registration fee of the Conference

DRUŠTVO FIZIKOHEMIČARA SRBIJE, Studenski trg 12-16, 11000 **Beneficiary Customer:**

Beograd, Serbia

Account of the Society: 200-2712770101033-69

Foreign participants should use the following payment instructions:

Intermediary Bank:

DEUTSCHE BANK AG Name: Address: Frankfurt am MAIN

SWIFT code: **DEUTDEFF**

Beneficiary Bank:

EUR

BANKA POŠTANSKA ŠTEDIONICA AD Name:

Address: 11000 Beograd, Serbia

SWIFT code: **SBPORSBG**

Beneficiary Customer:

IBAN number. RS35200271277010100362

DRUŠTVO FIZIKOHEMIČARA SRBIJE Name: Address: Studenski trg 12-16, 11000 Beograd, Serbia

Correspondence

For Registration: registration13@socphyschemserb.org For Paper. paper13@socphyschemserb.org For Information: information@socphyschemserb.org

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Where We Are

Here are some instructions how to reach the Belgrade Center, the Royal Hotel and Conference Venue, coming from the Belgrade Airport.

- You can take the bus from the airport (see more <u>here</u>).
- Line **72** will take you to the Zeleni Venac, and if you take line **A1**, it goes to the Slavija Square. Zeleni Venac is close to both Royal Hotel and Rectorate, but only if you are not afraid from uphill walking.

Directions on Google Maps

Slavija is further away, but you can use any bus or trolleybus going in right direction — towards the Kalemegdan (lines 19, 22, 29, 31).

Directions on Google Maps

- ➤ It is much easier if you take a taxi from the airport, but it costs about 15-20 EUR. Please read the instruction for this option, too! (see more here)
- You will need about 5 min walking from the Royal Hotel to the Conference Venue at the Studentski trg 1 Rectorate of the University of Belgrade (Captain Miša's Mansion).
 Directions on Google Maps



Dear colleagues, welcome to Belgrade