

9th International Conference of the Chemical Societies of the South-East European Countries

BOOK OF ABSTRACTS

**9th International Conference of the
Chemical Societies of the South-East
European Countries**

Valahia University Press

May 8th – 11th, 2019, Targoviste, Romania

Valahia University Press

Editors: Cristiana RADULESCU, Ioana – Daniela DULAMA
Technical editors: Sofia TEODORESCU, Raluca Maria STIRBESCU
Cover design: Ioan Alin BUCURICA

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Printed by Valahia University Press, 13 Sinaia Alley, 130004 Targoviste, Romania, e-mail: universitypress@valahia.ro, phone: +40374473722.

Descrierea CIP a Bibliotecii Naționale a României

Chemistry a nature challenger : book of abstracts : 9th International Conference of the Chemical Societies of the South-Eastern European Countries : 08th-11th May 2019, Târgoviște, Romania. - Târgoviște :
Valahia University Press, 2019
ISBN 978-606-603-209-4

I. International Conference of the Chemical Societies of the South-Eastern European Countries (9 ; 2019 ; Târgoviște)

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9th International Conference of the Chemical Societies of the South-East European Countries

**9th International Conference of the Chemical Societies
of the South-East European Countries**
«Chemistry a Nature Challenger»



The Conference is jointly organized by:



**Valahia University of
Targoviste**



**Romanian Chemical
Society**



**University Politehnica of
Bucharest**

<http://www.icstm.ro/icossecs9>

May 8th – 11th, 2019, Targoviste, Romania

Under the aegis of
Chemical Societies of the South-Eastern European Countries



Union of Chemists in Bulgaria



Pancyprian Union of Chemists



Association of Greek Chemists



**Society of Chemists and
Technologists of North Macedonia**



Chemical Society of Montenegro



Romanian Chemical Society



Serbian Chemical Society

May 8th – 11th, 2019, Targoviste, Romania

GENTAMICIN-LOADED BIOCERAMIC COMPOSITE COATING AIMED FOR BIOMEDICAL USE

MILENA STEVANOVIĆ¹, MARIJA ĐOŠIĆ², ANA JANKOVIĆ¹, VESNA KOJIĆ³, MAJA
VUKAŠINOVIĆ-SEKULIĆ¹, VESNA MIŠKOVIĆ-STANKOVIĆ¹,

Abstract. Electrophoretic deposition (EPD) process was successfully used for obtaining composite antibacterial coating of antibiotic gentamicin (Gent), natural polymer chitosan (CS), and hydroxyapatite (HAP). EPD was carried out on pure titanium (Ti) plates in a single step from three-component aqueous suspension. The gentamicin influence was examined through detailed physico-chemical and biological characterization. The formation of composite HAP/CS and HAP/CS/Gent coatings on the titanium surface was confirmed by X-ray diffraction (XRD), field emission scanning electron microscopy (FE-SEM), Fourier transform infrared spectroscopy (FTIR) and X-ray photoelectron analysis (XPS). Composite HAP/CS and HAP/CS/Gent coatings exhibited homogeneous, porous fracture-free surface, suggesting strong interfacial interactions between HAP and CS. Biological assays pointed to high potential of HAP/CS/Gent coating for medical applications. Test in suspension and agar diffusion method indicated that the gentamicin addition strongly influenced the antibacterial activity of HAP/CS/Gent against *Staphylococcus aureus* and *Escherichia coli*. Biocompatibility assays were performed through MTT and DET tests, indicating low cytotoxicity against MRC-5 and L929 tested cell lines. The coating ability to induce and promote osteoconduction was proved by ALP assay suggesting that HAP/CS/Gent coating is an excellent material for bone tissue engineering.

¹ University of Belgrade, Faculty of Technology and Metallurgy, 11000, Belgrade, Serbia.

E-mail: mstevanovic@tmf.bg.ac.rs.

² Institute for Technology of Nuclear and Other Mineral Raw Materials, 11000, Belgrade, Serbia.

³ University of Novi Sad, Faculty of Medicine, Oncology Institute of Vojvodina, 21204, Sremska Kamenica, Serbia.

REGISTRATION

All participants are kindly requested to register on-line at the conference website. Participation fees are found inside the leaflet.

www.icstm.ro/icosecs9

TRAVEL & ACCOMODATION

Information regarding travel & accommodation can be found accessing the conference website at:
www.icstm.ro/icosecs9

OFFICIAL LANGUAGE

The official language of the conference is English.
No translation facilities are provided.

Correspondence

The correspondences regarding the scientific program should be addressed to:

9th International Conference of the Chemical Societies of the South-Eastern European Countries on «Chemistry a Nature Challenger»

Contact: Prof. Michaela Dina Stanescu
e-mail: secretargenschr@gmail.com

Prof. Corneliu Radu
e-mail: v_radu@chim.upb.ro

Prof. Cristiana Radulescu
e-mail: radulescucristiana@yahoo.com

AIM OF THE CONFERENCE

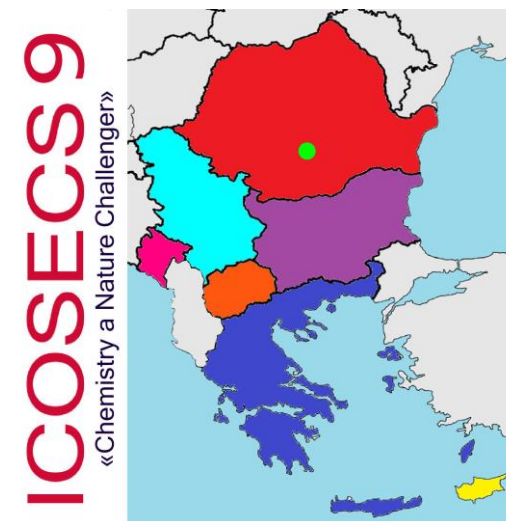
The aim of the 9th International Conference of the Chemical Societies of the South-Eastern European Countries on «Chemistry a Nature Challenger» is to bring scientists from the South-Eastern European Countries together for an improvement of mutual relations as well as an enhancement of scientific co-operation in the field of basic and applied chemical research. The quality of the conference is enhanced particularly by the participation of a large number of distinguished chemists and scientists from all the South-Eastern European countries and the international scientific community.

SCIENTIFIC PROGRAM

The Scientific Committee has selected the following tentative topics to be covered during the conference:

- Inorganic chemistry and technology, inorganic materials and metallurgy
- Organic chemistry, biochemistry and pharmaceutical chemistry
- Analytical and environmental chemistry
- Physical, structural chemistry, spectroscopy and electrochemistry
- Polymers and polymer materials
- Biotechnology and food technology
- Chemical engineering
- Applied electrochemistry
- Textile engineering
- Education

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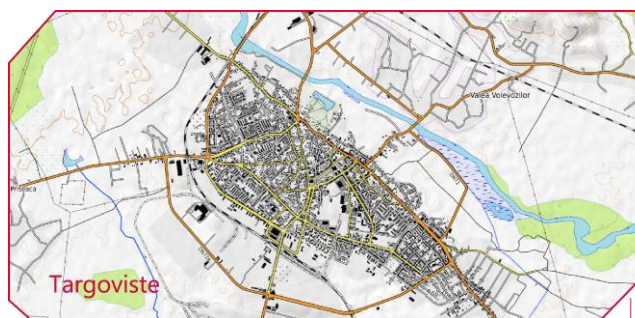


organized by

Union of Chemists in Bulgaria
Pancyprian Union of Chemists
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Chemical Society of Montenegro
Romanian Chemical Society
Serbian Chemical Society

FIRST CIRCULAR

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May 8-11, 2019, Târgoviște
Valahia University of Târgoviște
ROMANIA



ICOSSECS 9
Chemistry a Nature Challenger

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NATIONAL ORGANIZERS

Romanian Chemical Society (SChR)
VALAHIA University of Targoviste (UVT)
University POLITEHNICA of Bucharest (UPB)

NATIONAL ORGANIZING COMMITTEE

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INSTRUCTIONS FOR ABSTRACTS

Contributions in all branches of chemical sciences are welcome. All accepted contributions will be published in the book of abstracts. A **strictly one A4 page abstract will be submitted**. Abstracts exceeding one page will not be considered for publication in the book of abstracts.

Abstract form

On the A4 file a margin of 2 cm should be left on the top and bottom and 2.5 cm on both right and left sides of the text.

The title should be written in font 14 point (Times) and in bold capital letters. The rest of the abstract should be in 12 point font (Times), 1½ lines. The name of the presenting author should be underlined. Then the authors' affiliation and full address should be given in italics. The next line will contain Topic:...; Keywords:... of the contribution.

Figures should be numbered consecutively and located as close as possible to the relevant text. The caption of the figure should be written in bold letters and centered below it. Equations should be numbered in round brackets (1), (2),... and aligned to the right. The citations within the text should be placed in square brackets [1], [2],...and the references cited at the bottom of the abstract.

Only abstracts in the correct format will be considered for reviewing.

Please send your abstract before 1st of April 2019 at email: icoses9@icstm.ro

Presentation time:

Plenary lectures: 40 minutes
Invited lectures: 30 minutes
Oral presentation: 15 minutes

Posters: The organizers provide 1m x 1m poster boards.

The Scientific Committee reserves the right to accept or reject papers and to assign them to oral or poster presentation. All abstracts must be in English. Abstracts received by fax are unacceptable.

DEADLINE FOR RECEIPT OF ABSTRACT AND REGISTRATION FORM: 1st April 2019

REGISTRATION

For registration and more information, please visit:

www.icstm.ro/icossecs9

Registration fees (in €):

	Early payment before the 15 th of April	Payment before the 1 st of May	Over-desk payment 8 th -11 th May
Members of the 7 organizing Chemical Societies	100	120	130
Non-members	120	150	170
Accompanying Person	50	60	70

This includes welcome reception drink, conference materials, book of abstracts, coffee, and refreshments. **The registration fee is for each individual contribution accepted.**

Payment: the registration fee should be transferred (in €) to the Romanian Chemical Society (SChR), Romanian Commercial Bank, Unirea Branch (BCR-Unirea), account no.

RO78 RNCB 0082 0441 8260 0003
SWIFT code: RNCB ROBU

with the comment:

‘‘Payment for ICOSECS-9 Conference for <ID of participant>’’

Please send us a copy of your deposit receipt with your name and bring the original with you.

We kindly request the participants to support all the bank transfer fees.