## **International Conference**

# Progress in Organic and Macromolecular Compounds

28<sup>th</sup> Edition

# **Program**

ICMPP – Petru Poni Institute of Macromolecular Chemistry Iasi | Romania | October 7 - 9, 2021 https://icmpp.ro/macroiasi2021/index.php



#### **Edited by**

Marcela MIHAI

Radu-Dan RUSU

#### Cover by

Catalin-Paul CONSTANTIN

Copyright © 2021







#### Dear colleagues from Romania and abroad

It is our pleasure to welcome you to the 28<sup>th</sup> edition of the Progress in Organic and Macromolecular Compounds Conference, MACRO Iasi 2021, a traditional event organized by the Petru Poni Institute of Macromolecular Chemistry, Iasi (Institutul de Chimie Macromoleculara Petru Poni – ICMPP).

The Conference gives a broad overview of the hottest topics in organic and polymer synthesis, polymer physics, multifunctional polymeric architectures, engineering of polymeric materials, nanocomposites, hybrid materials, polymer networks, smart polymeric materials, polymeric membranes, polymer-based electronics, biologically-inspired nanostructures, drug carriers and biopolymers.

MACRO Iasi 2021 addresses professionals from academia, research institutes and industry, being intended as a dynamic platform for the presentation and sharing of their research and ideas. It brings together more than 60 participants from 25 top research institutions from 11 countries. The attendance of excellent researchers from the Polymer Science and Organic Chemistry fields provides the best environment to connect and share knowledge and professional experiences with the Romanian and European polymer research community and to assemble, network, collaborate, and further develop polymer science research

This meeting could not have been organized without the generous and tireless support and contribution of many individuals and groups within and outside the ICMPP. Therefore, we would like to acknowledge to all the invited lecturers, speakers, board and committee members, chairpersons, sponsors and all the people that have been involved in the organization and presentation of relevant results and perspectives.

Best wishes for a professionally rewarding conference!

Valeria HARABAGIU and Bogdan C. SIMIONESCU

Chairpersons of MACRO Iasi 2021







#### **Chairpersons of MACRO Iasi 2021**

Valeria HARABAGIU and Bogdan C. SIMIONESCU

#### **Program Chair**

Marcela MIHAI

#### **International Scientific Board**

- Anton AIRINEI (ICMPP, Iasi, Romania)
- Svetlana BRATSKAYA (ICB FEBRAS, Vladivostok, Russia)
- Tania BUDTOVA (CNRS, Sophia Antipolis, France)
- Maria CAZACU (ICMPP, Iasi, Romania)
- Sergiu COSERI (ICMPP, Iasi, Romania)
- Mariana CRISTEA (ICMPP, Iasi, Romania)
- Mariana Dana DAMACEANU (ICMPP, Iasi, Romania)
- Calin DELEANU (CCO, Bucharest, Romania)
- Andreas FERY (IPF, Dresden, Germany)
- Gheorghe FUNDUEANU-CONSTANTIN (ICMPP, Iasi, Romania)
- Eric GUIBAL (CME, Ales, France)

- David HADDLETON (U Warwick, UK)
- Florica MANEA (UPT, Timisoara, Romania)
- Luminita MARIN (ICMPP, Iasi, Romania)
- Patrick NAVARD (CEMEF, Sophia Antipolis, France)
- Mariana PINTEALA (ICMPP, Iasi, Romania)
- Stergios PISPAS (NHRF, Athens, Greece)
- Dieter SCHLUTER (ETH Zurich, Switzerland)
- Raluca-Ioana STEFAN-VAN STADEN (INCEMC, Bucharest, Romania)
- Olya STOILOVA (IP-BAS, Sofia, Bulgaria)
- Carmen TEODOSIU (TU, Iasi, Romania)
- Aleksandra WOLINSKA-GRABCZYK (CPCM-PAS, Zabrze, Poland)

#### **Organizing Board**

- Melinda Maria BAZARGHIDEANU
- Catalin BUZDUGAN
- Catalin Paul CONSTANTIN
- Florica DOROFTEI
- Narcisa Laura MARANGOCI
- Larisa Maria PETRILA

- Radu Dan RUSU
- Marin TROFIN
- Marius ZAHARIA
- Mirela ZALTARIOV
- Ana-Lavinia VASILIU





CO16 Bratskaya CO15 Spasova

CO17 Ionita

L7 Cristea

CO14 Iftime

9.00 - 9.15

# SATURDAY, 09.10.2021

# FRIDAY, 08.10.2021

THURSDAY, 07.10.2021

Registration

09.00 - 10.00

09.00 - 09.30 09.30 - 09.45 09.45 - 10.0010.00 - 10.15

I 2 Demogeeur	51.6 - 00.6
L3 Damaceanu	9.15 - 9.30
CO6 Damoc	9.30 - 09.45
CO7 Stiubianu	9.45 - 10.00
CO8 Nocon	10.00
CO9 Rossner	10.00 - 10.30
Coffee break	10.30 - 11.00
PL4 Fery	11.00 - 11.30
	1130 1200
	0.51 - 00.11
PL5 Supuran	12.00 - 12.15
	12.15 - 12.30

L1 Stefan van Staden

**ACS** award

11.00 - 11.30

PL1 Schluter

10.15 - 11.00

Opening

10.00 - 10.15

coffee break

L8 Stoilova

											BioNanoTec Session				
CO9 Rossner	Coffee break	PL4 Fery	PL5 Supuran	L4 Stanescu	S3 Laboratorium	Lunch break	PL6 Haddleton	S4 Apel Laser	L5 Jerca	Coffee break	L6 Chisca	CO10 Nitsche	CO11 Butnaru	CO12 Duduianu	CO13 Balan
10.15 - 10.30	10.30 - 11.00	11.00 - 11.45	11.45 - 12.30	12.30 - 13.00	13.00 - 13.15	13.15 - 15.00	15.00 - 15.45	15.45 - 16.00	16.00 - 16.30	16.30 - 17.00	17.00 - 17.30	17.30 - 17.45	17.45 - 18.00	18.00 - 18.15	18.15 - 18.30

awards + closing

CO22 Bejan

Lunch break

CO21 Bendrea CO20 Vasiliu

12.45 - 13.00 12.30 - 12.45

13.00 - 13.15 13.15 - 13.30 13.30 - 15.00

CO18 Rosca CO19 Ursu

L9 Isac

on line on site

# all sessions will be transmited on-line via Zoom platform

lightning presentations

Posters -

18.00 - 19.00

CO4 Stavarache

CO5 Ailincai

CO3 Verestiuc

S2 Shimadzu

Coffee break

L2 Mangalagiu

2.45 - 13.15

Froup photo +

13.15 - 15.00

unch break

PL2 Tiginyanu

2.00 - 12.45

Coffee break

11.30 - 12.00

S1 Ronexprim

15.45 - 16.00 16.00 - 16.1616.15 - 16.306.30 - 17.00 17.00 - 17.15 |7.15 - 17.30|17.30 - 17.45 7.45 - 18.00

PL3 Pispas

5.00 - 15.45

CO1 Quaretesi

CO<sub>2</sub> Radu





- Best Oral Presentation 500 € (offered by Polymers-MDPI, IF<sub>2020</sub> = 4.329)
- Best Poster Presentation 300 € (offered by Macromol-MDPI, new DOAJ indexed journal)
- 2 Best Young Scientist Oral Presentations free participation to the next RO'ICAC conference (offered by the Romanian International Chapter of ACS)
- 2 Best Young Scientist Poster Presentations—free participation to the next RO'ICAC conference (offered by the Romanian International Chapter of ACS)
- Best Young Scientist Oral Presentation free registration to the next MACRO Iasi edition
- Best Young Scientist Poster Presentation free registration to the next MACRO Iasi edition
- $\bullet$  Selected papers will be published in Cellulose Chemistry and Technology Journal (IF  $_{2020}=1.467)$



The presented papers are published in the volume

Progress in Organic and Macromolecular Compounds - Proceedings

ISSN 2810 - 2126 | ISSN-L 2810 - 2126

ISSN 2810 – 2347 (Online version)

https://icmpp.ro/macroiasi2021/proceedings.php







#### **INVITED LECTURES**

**A. Dieter SCHLUTER** is currently Professor Emeritus for polymer chemistry at the Materials



Department of the ETH Zürich where he was active from 2004 to 2018. He studied chemistry and geophysics at the University of Munich (LMU) and received in 1984 his Ph.D. After post-doctoral stays with Prof. K. P. C. Vollhardt (UC Berkeley, USA) and Prof. W. J. Feast (University of Durham, UK) he was head of the polymer synthesis research group in Prof. G. Wegner's department at the MPI for Polymer Research (Mainz, Germany). 1991 he finished his habilitation, received a scholarship award of the Fonds der Chemischen Industrie (Dozentenstipendium) and started as Associate

Professor for polymer chemistry at the Karlsruhe Institute of Technology. From 1992 to 2004 he was Full Professor at the Free University of Berlin. Since 2012 he is an elected member of the Swiss Academy of Engineering Sciences. In 2017 he was awarded the Society of Polymer Science, Japan, International Award for the discovery of 2D polymers. His research interests are in the area of synthetic polymer chemistry. Schlüter believes that organic chemistry is the fundament of innovative polymer synthesis. He has over 360 peer-reviewed publications with >14'000 citations and gave over 350 invited talks worldwide.

**Ion TIGINYANU** has completed his PhD in 1982 from Lebedev Institute of Physics, Moscow.



He realized research projects at the Technical University Darmstadt (1995/96 and 1998/99) and at the University of Michigan in Ann Arbor (2000/2001). He serves as founding Director of the National Center for Materials Study and Testing, Technical University of Moldova. In 2019 he was elected president of the Academy of Sciences of Moldova. Professor Tiginyanu's research interests are related to nanotechnologies, multifunctional nanomaterials and fabrication of novel device structures. Among recent developments one can mention self-organized hybrid nanoarchitectures with dual

hydrophilic/hydrophobic properties, light-driven nano- and micro-engines, self-propelled liquid marbles. He has more than 400 journal publications and 52 technological patents, his personal Hirsch index equals 43 (Scopus). He is member of the Academia Europaea, honorary member of the Romanian Academy, honorary doctor of the Joint Institute for Nuclear Research (Dubna, Russian Federation), Fellow of SPIE, member of AAAS, IEEE, OSA, MRS, the Electrochemical Society

Stergios PISPAS is Director of Research at the Theoretical and Physical Chemistry Institute of



the National Hellenic Research Foundation in Athens, Greece. He studied Chemistry at the University of Athens, Greece and he obtained his PhD in Polymer Chemistry in 1994 from the same university. He joined TPCI-NHRF in 2004 as Associate Researcher where he initiated research in polymer science for the first time. His research interests include the tailored synthesis of amphiphilic block copolymers and polyelectrolytes utilizing living/controlled polymerizations, physicochemical studies on block copolymer supramolecular assemblies and biomacromolecular systems, as

well as the development of hybrid polymer based synthetic-biological and organic-inorganic nanosystems for applications in nanomedicine, (bio)sensing, bioimaging, agriculture and water remediation technologies. He has published more than 360 peer-reviewed articles, 15 invited review articles, more than 20 invited chapters in books and encyclopaedias, and 3 books. He is currently acting as Deputy Director of TPCI-NHRF, Editor for Polymers and Member of the Editorial Advisory Board of European Polymer Journal.



David HADDLETON has been working in the area of controlled polymer synthesis for over



25 years since being employed at ICI. His PhD "Photochemistry of some organometallic ethene compounds" was under the supervision of Robin Perutz at the University of York in 1986. He spent one year at the University of Toronto as a PDRA. He joined ICI in 1988 and spent one year at the University of Southern Mississippi working with polymer liquid crystals. Moving back to the UK in 1988 he spent 5 years working on GTP and anionic polymerisation prior to moving to Warwick in 1993 and was promoted to full Professor in 1998. He has published over 500 papers and has a google h-

index >85 with over 25000 citations. He has graduated over 75 PhD students from Warwick. Current work in the group is in different aspects of developing new polymerisation methodology and using this for novel polymers for industrial applications, polymers for personal care applications, (hair and skin care) and for biomedical and nano medicinal applications (new and targeted peptide and protein conjugation). Recent work includes new conjugation strategy, glycopolymers, monomer sequence control and polymerisation in biological media. He has formed two companies. currently CSO of a transdermal drug delivery company Medherant Ltd.

Andreas FERY is head of the institute for Physical Chemistry/Polymer Physics at the Leibniz



Institut für Polymerforschung Dresden since 2015. He studied Physics at Konstanz University, where he received his Diplom in 1996. He did his PhD at the Max-Planck Institute for Colloids and Interfaces (MPIKG)/Potsdam University in 2000. After a post-doc at Institute Curie Paris in 2001, he became group leader at MPIKG and received his habilitation in 2006. In 2007 he joined Bayreuth University as associate professor and was promoted to full professor in 2008. He received the Richard Zsigmondy award of the German colloid society and an ERC starting grant. He has published more than 250

papers in peer-reviewed journals in the area of Polymer science and Colloid and interface science which have been cited more than 10000 times. His research interests are in development of novel approaches for Responsive/Bio-interactive Coatings and Nanophotonic/Plasmonic Surface Assemblies. Both research directions benefit from expertise in Characterizing Mechanics and Interactions of Colloidal Particles on the single particle level, using atomic force microscopy techniques. Deputy spokesperson of German Colloid Society, treasurer of European Colloid and Interface Society.

Claudiu T. SUPURAN is professor of medicinal and pharmaceutical chemistry at the



University of Florence, Italy, since 1995. He was a visiting scholar at University of Florida, Gainesville, USA, at Grifitth University, Brisbane, Australia, and visiting professor at University of La Plata, Argentina, at Federal University of Rio de Janeiro, Brazil, and at UNSW, Sydney, Australia. His research is in the medicinal chemistry/biochemistry of metalloenzymes, mainly carbonic anhydrases, field in which he has made contributions to the design of many novel classes of enzyme inhibitors and activators, deciphering their mechanism of action at molecular level, discovery of new isoforms and

their role in disease (cancer, obesity, epilepsy, neuropathic pain and cognition), discovery and characterization of carbonic anhydrases from various organisms (bacteria, fungi, protozoans, sponges, corals, plants, diatoms, vertebrates, etc). Other research interests include X-ray crystallography of metallo-enzymes, heterocyclic chemistry, chemistry of sulfonamides, sulfamates and sulfamides, biologically active organo-element derivatives, metal-based drugs, cyclooxygenases, serine proteases, matrix metalloproteinases, bacterial proteases, and computational chemistry. Published more than 1700 papers in these fields and his Hirsch index is 149, with > 98000 citations. One of the compounds discovered in his laboratory (SLC-0111) is in Phase II clinical trials for the treatment of advanced metastatic solid tumors in Canada/USA.

8





#### **Oral presentations**

IL invited lectures (45 min, Q & A included)

L lectures (30 min, Q & A included)

 $\mathbf{OC}$ oral contributions (15 min, Q & A included)



#### **Poster presentations**

posters lightning presentations (2 min) Posters (A1 size, portrait orientation) will be posted at registration and will remain displayed during the entire conference



#### Language

The conference language is English



## **PROGRAM**

	$9^{00} - 10^{00}$	Registration of Participants
	$10^{00} - 10^{15}$	Conference Opening
		$10^{15} - 11^{30}$
		Session 1
	Ca	onference Hall / Zoom: https://us06web.zoom.us/j/82631577653
		Chair: Bogdan C. SIMIONESCU
	$10^{15} - 11^{00}$	IL1. EXPANSION OF THE STAUDINGER 'MAKROMOLEKÜL'-
		CONCEPT TO TWO DIMENSIONS
		A. Dieter SCHLUTER
		ETH Zurich, Department of Materials, Zürich, Switzerland
	$11^{00} - 11^{25}$	L1. ENANTIOANALYSIS – A TOOL IN DIAGNOSTIC OF
		CANCER
4		Raluca-Ioana STEFAN-VAN STADEN
H		National Institute of Research for Electrochemistry and Condensed
Pe		Matter, Laboratory of Electrochemistry and PATLAB, Bucharest,
; <b>t</b> o		Romania
Ŏ	$11^{25} - 11^{30}$	ACS Awards
HURSDAY, October 7	$11^{30} - 12^{00}$	Coffee Break – Conference Hall
A		$12^{00} - 13^{15}$
A		Session 2
	Ca	onference Hall / Zoom: https://us06web.zoom.us/j/82631577653
5	00 45	Chair: Valeria HARABAGIU
Ħ	$12^{00} - 12^{45}$	IL2. TUBULAR NANOMATERIALS FOR MULTIFUNCTIONAL
L		APPLICATIONS
		Ion TIGINYANU, 1 Tudor BRANISTE <sup>2</sup>
		<sup>1</sup> Academy of Sciences of Moldova, Chisinau, Republic of Moldova
		<sup>2</sup> Technical University of Moldova, National Center for Materials Study
	$12^{45} - 13^{15}$	and Testing, Chisinau, Republic of Moldova
	$12^{13} - 13^{13}$	L2. HYBRID FIVE- AND SIX-MEMBER RING
		AZAHETEROCYCLES: SYNTHESIS AND APPLICATIONS
		<u>Ionel I. MANGALAGIU</u> , <sup>1,2</sup> Dorina AMARIUCAI-MANTU, <sup>1</sup> Vasilichia ANTOCI, <sup>1</sup> Ramona DANAC, <sup>1</sup> Violeta MANGALAGIU, <sup>2</sup>
		Costel MOLDOVEANU, Gheorghita ZBANCIOC <sup>1</sup>
		<sup>1</sup> Alexandru Ioan Cuza University of Iasi, Faculty of Chemistry, Iasi,
		Romania
		<sup>1</sup> Alexandru Ioan Cuza University of Iasi, Institute of Interdisciplinary Research - CERNESIM Centre, Iasi, Romania
	$13^{15} - 13^{30}$	
		Group photo
	$13^{30} - 15^{00}$	Lunch Break

		$15^{00} - 16^{30}$					
		Session 3					
	Conference Hall / Zoom: https://us06web.zoom.us/j/84675946837						
	Chair: Marcela MIHAI						
	$15^{00} - 15^{45}$	IL3. RESPONSIVE COPOLYMERS BY RAFT					
		POLYMERIZATION AS BUILDING BLOCKS FOR					
		CONSTRUCTING SELF-ASSEMBLED BIO-HYBRID					
		NANOSTRUCTURES					
		Stergios PISPAS					
		Theoretical and Physical Chemistry Institute, National Hellenic Research					
		Foundation, Athens, Greece					
	$15^{45} - 16^{00}$	S1. RONEXPRIM – Your reliable partner for integrated solutions in					
		R&D for 30 years					
		Rodica STOIAN					
7		SC RONEXPRIM SRL					
THURSDAY, October 7	$16^{00} - 16^{15}$	OC1. β-Cyclodextrin host for the selective molecular recognition of					
qo		isomers of bisphenols in water					
Ç		<u>Ilaria QUARATESI</u> , <sup>1,2</sup> Paolo Della SALA, <sup>1</sup> Clotilde CAPACCHIONE, <sup>1,2</sup>					
0		Carmen TALOTTA, Silvano GEREMIA, Neal HICKEY, Rocco					
Υ,		GLIUBIZZI, <sup>2</sup> Immacolata BRUNO, <sup>2</sup> Carmelo SGARLATA, <sup>4</sup> Rossella					
A		MIGLIORE, <sup>4</sup> Carmine GAETA, <sup>1</sup> Placido NERI, <sup>1</sup> Elena BADEA <sup>5,6</sup>					
<u>A</u>		<sup>1</sup> Dipartimento di Chimica e Biologia A. Zambelli, Università di Salerno,					
		Salerno, Italy					
5		<sup>2</sup> BI-QEM SPECIALTIES SPA, Buccino, Italy					
		<sup>3</sup> Centro di Eccellenza in Biocristallografia, Dipartimento di Scienze					
		Chimiche e Farmaceutiche, Universita di Trieste, Trieste, Italy					
		<sup>4</sup> Dipartimento di Scienze Chimiche, Universita Degli Studi di Catania, Catania, Italy					
		<sup>5</sup> National Research & Development Institute for Textiles and Leather, ICPI Research Division, Bucharest, Romania					
		<sup>6</sup> Department of Chemistry, Faculty of Sciences, University of Craiova,					
		Craiova, Romania					
	$16^{15} - 16^{30}$	OC2. Novel studies on silk sericin biofunctionalization by atom					
	10 10	transfer radical polymerization					
		Ionut-Cristian RADU, Mircea TEODORESCU, Madalina NECOLAU,					
		Catalin ZAHARIA, Horia IOVU					
		University Politehnica of Bucharest, Faculty of Applied Chemistry and					
		Materials Science, Advanced Polymer Materials Group, Bucharest,					
		Romania					
	$16^{30} - 17^{00}$	Coffee Break – Conference Hall					



		$17^{00} - 19^{00}$						
		Session 4						
	Conference Hall / Zoom: https://us06web.zoom.us/j/84675946837							
	Chair: George STIUBIANU							
	$17^{00} - 17^{15}$	S2. SHIMADZU						
		Adrian ARSINTESCU						
	4.715 4.730	Shimadzu Handelsgesellschaft m.b.H Korneuburg- Bucharest Branch						
	$17^{15} - 17^{30}$	OC3. 3D BIOPRINTED SCAFFOLDS BASED ON						
		FUNCTIONALISED GELATIN AND PEGDA FOR SOFT TISSUE						
		ENGINEERING						
		Isabella COBZARIU, <sup>1</sup> Maria BERCEA, <sup>2</sup> Catalina Anisoara PEPTU, <sup>3</sup> Maria BUTNARU, <sup>1</sup> Liliana VERESTIUC <sup>1</sup>						
THURSDAY, October 7		<sup>1</sup> Faculty of Medical Bioengineering, Grigore T. Popa University of Medicine and Pharmacy, Iasi, Romania						
2		<sup>2</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania						
		<sup>3</sup> Cristofor Simionescu Faculty of Chemical Engineering and						
. •		Environmental Protection, Gheorghe Asachi Technical University of Iasi,						
	1730 1745	Romania						
Q	$17^{30} - 17^{45}$	OC4. HIFU EFFECT ON MAGNETIC POLYELECTROLYTE MICROCAPSULES						
S		Carmen STAVARACHE, <sup>1</sup> Timothy MASON, <sup>2</sup> Feng WU <sup>3</sup>						
É		<sup>1</sup> Costin D. Nenitescu Centre of Organic Chemistry, Romanian Academy,						
		Bucharest, Romania						
		<sup>2</sup> Coventry University, Faculty of Health and Life Sciences, Coventry, UK						
		<sup>3</sup> Churchill Hospital, Oncology Department, Oxford, UK						
	$17^{45} - 18^{00}$	OC5. BIOCOMPATIBLE HYDROGELS WITH						
		BROAD-SPECTRUM ANTIMICROBIAL ACTIVITY						
		Daniela AILINCAI, 1 Irina ROSCA, 1 Simona MORARIU, 1						
		Liliana MITITELU-TARTAU, <sup>2</sup> Marian ANGHELOIU, <sup>3</sup>						
		Luminita MARIN <sup>1</sup>						
		<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania <sup>2</sup> Grigore T. Popa University of Medicine and Pharmacy, Iasi, Romania						
		<sup>3</sup> Sanimed Int IMPEX SRL, Bucharest, Romania						
	$18^{00} - 19^{00}$	Posters lightning presentations						



		$09^{00} - 10^{30}$						
	Session 5							
	Conference Hall / Zoom: https://us06web.zoom.us/j/82264597551							
	Chair: Radu Dan RUSU							
	$09^{00} - 09^{30}$	L3. RECENT CONCEPTS IN ELECTROCHROMIC POLYMERS						
		CONTAINING TRIARYLAMINE AS ELECTROACTIVE UNIT						
		Mariana-Dana DAMACEANU, 1 Catalin-Paul CONSTANTIN, 1						
		Andra-Elena BEJAN, <sup>1</sup> Cristian LOGIGAN <sup>2</sup>						
		<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania						
	0.020 0.045	<sup>2</sup> S.C. Chemical Company S.A., Iasi, Romania						
	$09^{30} - 09^{45}$	OC6. SILOXANE/SILANE DERIVATES BASED ON 5-AMINO-						
		1,3,4-THIDIAZOLE-2-THIOL AND THEIR GOLD COMPLEXES:						
		INTERFACIAL PHENOMENA BASED ON						
		PHOTOLUMINESCENCE						
		Madalin DAMOC, <sup>1</sup> Alexandru Constantin STOICA, <sup>1</sup>						
		Mihaela DASCALU, Ana-Maria MACSIM, Radu Ionut TIGOIANU,						
<b>∞</b>		Diana BLAJ, <sup>1</sup> Alina Gabriela RUSU, <sup>1</sup> Mihail IACOB, <sup>2</sup> Maria CAZACU <sup>1</sup> <sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania						
<b>Se</b>		<sup>2</sup> CT systems AG, Dübendorf, Switzerland						
2	$09^{45} - 10^{00}$	OC7. ENERGY-EFFICIENT DYNAMIC POLYMER-BASED						
FRIDAY, October 8		NANOCOMPOSITES FOR THERMAL COMFORT						
,		George STIUBIANU, <sup>1</sup> Cristian URSU, <sup>1</sup> Codrin TUGUI, <sup>1</sup> Adrian BELE, <sup>1</sup>						
		Alexandra BARGAN, Mihaela DASCALU, Carmen RACLES, Maria						
Q		CAZACU, <sup>1</sup> Aurelian CIOBOTARU <sup>2</sup>						
N.		<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania						
	1000 1015	<sup>2</sup> SC All Cio Invest SRL, Iasi, Romania						
	$10^{00} - 10^{15}$	OC8. THERMALLY REARRANGED MIXED MATRIX						
		MEMBRANES FILLED WITH FUMED SILICA FOR CO <sub>2</sub>						
		SEPARATION						
		Klaudia NOCON-SZMAJDA, Andrzej JANKOWSKI,						
		Aleksandra WOLINSKA-GRABCZYK  Centre of Polymer and Carbon Materials Polish Academy of Sciences,						
		Zabrze, Poland						
	$10^{15} - 10^{30}$	OC9. CONTROLLING THE SURFACE PATTERNING AND						
		SELF-ASSEMBLY OF INORGANIC NANOPARTICLES BY						
		MACROMOLECULAR DESIGN OF POLYMERIC BRUSH						
		COATINGS						
		Christian ROSSNER						
		Leibniz-Institut für Polymerforschung Dresden e.V.,						
		Institut für Physikalische Chemie und Physik der Polymere, Dresden,						
	20	Germany.						
	$10^{30} - 11^{00}$	Coffee Break – Conference Hall						





		$11^{00} - 13^{15}$
		Session 6
	$\mathcal{C}$	Conference Hall / Zoom: https://us06web.zoom.us/j/82264597551
		Chair: Mariana PINTEALA
	$11^{00} - 11^{45}$	IL4. FROM RESPONSIVE SURFACE COATINGS TO SELF-
		REPORTING MATERIALS
		Quinn A. BESFORD, Simon SCHUBOTZ, Jens-Uwe SOMMER,
		Günter K. AUERNHAMMER, Petra UHLMANN, Andreas FERY
	$11^{45} - 12^{30}$	Leibniz-Institut für Polymerforschung, Dresden, Germany L5. EMERGING ROLE OF CARBONIC ANHYDRASE
	11 -12	INHIBITORS
		Claudiu T. SUPURAN
		University of Florence, Florence, Italy
	$12^{30} - 12^{45}$	S3. BYPASSING LC SYSTEM PASSIVATION REQUIREMENTS
		USING ACQUITY PREMIER WITH MAXPEAK HPS
		TECHNOLOGY
20		Ionut MELINTE
	$12^{45} - 13^{15}$	SC LABORATORIUM SRL
r.	$12^{13} - 13^{13}$	L4. THERMAL ANALYSIS - VALUABLE TOOL FOR STUDYING
pe		POLYMER COMPOSITES  Michaela Dina STANESCH
eto		Michaela Dina STANESCU  Aurel Vlaicu University, Arad, Romania
Ŏ		Politehnica University, Bucharest, Romania
AY,	$13^{15} - 15^{00}$	Lunch Break
	13 - 13	Lunch break
DA.	13 – 13	$15^{00} - 16^{30}$
RIDA		$15^{00} - 16^{30}$ <b>Session 7</b>
FRIDAY, October 8		15 <sup>00</sup> – 16 <sup>30</sup> <b>Session 7</b> Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444
FRIDA	C	15 <sup>00</sup> – 16 <sup>30</sup> Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444 Chair: Maria CAZACU
FRIDA		15 <sup>00</sup> – 16 <sup>30</sup> Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444 Chair: Maria CAZACU  IL6. CATALYTIC CHAIN TRANSFER (CCT) IN RADICAL
FRIDA	C	15 <sup>00</sup> – 16 <sup>30</sup> Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444 Chair: Maria CAZACU
FRIDA	C	15 <sup>00</sup> – 16 <sup>30</sup> Session 7 Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444 Chair: Maria CAZACU IL6. CATALYTIC CHAIN TRANSFER (CCT) IN RADICAL POLYMERISATION TO GIVE CONTROLLED POLYMER
FRIDA	C	15 <sup>00</sup> – 16 <sup>30</sup> Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444 Chair: Maria CAZACU  IL6. CATALYTIC CHAIN TRANSFER (CCT) IN RADICAL POLYMERISATION TO GIVE CONTROLLED POLYMER STRUCTURES IN AN INDUSTRIAL USEFUL AND PRACTICAL
FRIDA	$\frac{6}{15^{00} - 15^{45}}$	Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444
FRIDA	C	Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444  Chair: Maria CAZACU  IL6. CATALYTIC CHAIN TRANSFER (CCT) IN RADICAL  POLYMERISATION TO GIVE CONTROLLED POLYMER  STRUCTURES IN AN INDUSTRIAL USEFUL AND PRACTICAL  WAY  David M. HADDLETON  University of Warwick, Coventry, UK  S4. APEL LASER – lighting the future
FRIDA	$\frac{6}{15^{00} - 15^{45}}$	Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444
FRIDA	$15^{00} - 15^{45}$ $15^{45} - 16^{00}$	Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444
FRIDA	$\frac{6}{15^{00} - 15^{45}}$	Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444
FRIDA	$15^{00} - 15^{45}$ $15^{45} - 16^{00}$	Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444
FRIDA	$15^{00} - 15^{45}$ $15^{45} - 16^{00}$	Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444 Chair: Maria CAZACU  IL6. CATALYTIC CHAIN TRANSFER (CCT) IN RADICAL POLYMERISATION TO GIVE CONTROLLED POLYMER STRUCTURES IN AN INDUSTRIAL USEFUL AND PRACTICAL WAY David M. HADDLETON University of Warwick, Coventry, UK S4. APEL LASER – lighting the future Alin ENACHE SC Apel Laser SRL L5. POLY(2-ISOPROPENYL-2-OXAZOLINE)-A VERSATILE PLATFORM FOR ADVANCED MULTIFUNCTIONAL MATERIALS
FRIDA	$15^{00} - 15^{45}$ $15^{45} - 16^{00}$	Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444 Chair: Maria CAZACU  IL6. CATALYTIC CHAIN TRANSFER (CCT) IN RADICAL POLYMERISATION TO GIVE CONTROLLED POLYMER STRUCTURES IN AN INDUSTRIAL USEFUL AND PRACTICAL WAY David M. HADDLETON University of Warwick, Coventry, UK S4. APEL LASER – lighting the future Alin ENACHE SC Apel Laser SRL L5. POLY(2-ISOPROPENYL-2-OXAZOLINE)-A VERSATILE PLATFORM FOR ADVANCED MULTIFUNCTIONAL MATERIALS Florica Adriana JERCA, Valentin Victor JERCA
FRIDA	$15^{00} - 15^{45}$ $15^{45} - 16^{00}$	Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444
FRIDA	$15^{00} - 15^{45}$ $15^{45} - 16^{00}$	Session 7  Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444 Chair: Maria CAZACU  IL6. CATALYTIC CHAIN TRANSFER (CCT) IN RADICAL POLYMERISATION TO GIVE CONTROLLED POLYMER STRUCTURES IN AN INDUSTRIAL USEFUL AND PRACTICAL WAY David M. HADDLETON University of Warwick, Coventry, UK S4. APEL LASER – lighting the future Alin ENACHE SC Apel Laser SRL L5. POLY(2-ISOPROPENYL-2-OXAZOLINE)-A VERSATILE PLATFORM FOR ADVANCED MULTIFUNCTIONAL MATERIALS Florica Adriana JERCA, Valentin Victor JERCA





		$17^{00} - 18^{30}$
		Session 8
	(	Conference Hall / Zoom: https://us06web.zoom.us/j/84635195444
	1-00 1-20	Chair: Mariana-Dana DAMACEANU
	$17^{00} - 17^{30}$	L6. POLYTRIAZOLE A NEW POLYMERIC PLATFORM FOR A
		WIDE RANGE OF MEMBRANE SEPARATIONS
		Stefan CHISCA, Gheorghe FALCA, Valentina Elena MUSTEATA,
		Suzana P. NUNES
		King Abdullah University of Science and Technology (KAUST),
		Biological and Environmental Science and Engineering Division,
		Advanced Membrane & Porous Materials Center, Thuwal, Saudi Arabia
	$17^{30} - 17^{45}$	OC10. LOWERED BAND GAP OF CONJUGATED
		POLYAZOMETHINES VIA SUPRAMOLECULAR
		ORGANISATION INDUCED BY MODIFICATION OF ALKYL
		SUBSTITUENTS
		Paweł NITSCHKE, Marharyta VASYLIEVA, Marcin GODZIERZ,
		Henryk JANECZEK, Marta MUSIOŁ, Adrian DOMIŃSKI,
		Bożena JARZĄBEK
00		Centre of Polymer and Carbon Materials, Polish Academy of Sciences,
J.		Zabrze, Poland
FRIDAY, October 8	$17^{45} - 18^{00}$	OC11. STUDY OF NEW IMINES CONTAINING A
		PHENANTHROLINE CHROMOPHORE
		Irina BUTNARU, <sup>1</sup> Cristian LOGIGAN, <sup>2</sup> Mariana-Dana DAMACEANU <sup>1</sup>
7		<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania
		<sup>2</sup> S.C. Chemical Company S.A., Iasi, Romania
$\mathbf{Q}$	$18^{00} - 18^{15}$	OC12. INTERLABORATORY ASSESSMENT FOR
	10 10	REPRODUCIBILITY IN NMR METABOLOMICS
豆		Catalin DUDUIANU, 1,2 Gabriela AILIESEI, 3 Mihaela BALAN, 3
		Mihaela CRISTEA, <sup>3</sup> Ana-Maria MACSIM, <sup>3</sup> Cristina STAVARACHE, <sup>1,2</sup>
		Carmen STAVARACHE, <sup>1</sup> Oana POPA, <sup>1,2</sup> Anca HIRTOPEANU, <sup>1</sup>
		Alina NICOLESCU, <sup>3</sup> Calin DELEANU <sup>1,3</sup>
		Costin D. Nenitescu Centre of Organic Chemistry, Romanian Academy,
		Bucharest, Romania
		<sup>2</sup> University Politehnica of Bucharest, Faculty of Applied Chemistry and
		Material Science, Bucharest, Romania
	$18^{15} - 18^{30}$	<sup>3</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania OC13. COMPLEXATION OF ACETOPHENONE SUBSTITUTED
	18 - 18	
		BENZIMIDAZOLIUM SALT WITH NATIVE AND MODIFIED
		CYCLODEXTRINS – AN NMR STUDY
		Mihaela BALAN-PORCARASU, 1 Alina NICOLESCU, 1
		Florentina GEORGESCU, <sup>2</sup> Calin DELEANU, <sup>1,3</sup>
		Bogdan C. SIMIONESCU <sup>1</sup>
		Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania
		<sup>2</sup> Enpro Soctech Com, Bucharest, Romania
		<sup>3</sup> Costin D. Nenitescu Centre of Organic Chemistry, Romanian Academy,
		Bucharest, Romania





		$16^{00} - 18^{30}$					
		Special session on Horizon Europe open calls					
		organized by					
		BioNanoTech Project Support Centre					
	Library Hall / Zoom:						
	https://zo	om.us/j/97048982445?pwd=blNNS0ZLTVpYb0VtNlNNdDFFTXd0QT09 Chair: Teodora RUSU					
	$16^{00} - 16^{05}$	Welcome message					
		Bogdan C. SIMIONESCU					
		Romanian Academy					
		Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania					
	$16^{05} - 16^{35}$	WP 11 WIDENING PARTICIPATION AND STRENGTHENING					
		THE EUROPEAN RESEARCH AREA					
		Weiers STEFAN					
		Head of Sector EC DGl for Research and Innovation 'Widening,					
00	25 50	ERA and Research Infrastructure Programming' - tbc					
ı	$16^{35} - 16^{50}$	HORIZON EUROPE AND OPEN CALLS - GENERAL					
FRIDAY, October 8		PRESENTATION					
		Teodora RUSU					
Õ		BioNanoTech Project Support Centre					
	1 < 50 1 7 2 0	Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania					
	$16^{50} - 17^{20}$	MISSIONS IN HORIZON EUROPE					
Q		Iulia MIHAIL  Council on Ministry of Passarah Innovation and Digitalization					
		Counsellor, Ministry of Research, Innovation and Digitalisation Director ROST - Romanian Office for Science & Technology to the EU					
	$17^{20} - 17^{35}$	ROST IN THE BRUSSELS MAZE					
	17 - 17	Iulia MIHAIL					
		Counsellor, Ministry of Research, Innovation and Digitalisation					
		Director ROST - Romanian Office for Science & Technology to the EU					
	$17^{35} - 17^{50}$	PARTNER SEARCH FACILITIES IN HORIZONT EUROPE					
		Claudia TOMULESCU, Anca IFTENE					
		BioNanoTech Project Suport Centre					
		Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania					
	$17^{50} - 18^{05}$	STRUCTURAL FUNDS AND SMART SPECIALIZATION					
		SINERGES WITH HORIZON PROJECTS					
		Magdalena AFLORI, POINGBIO Project Manager					
		Marcela MIHAI, InfraSupraChem Lab Project					
		Teodora RUSU, BioNanoTech Project Manager					
		Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania					
	$18^{05} - 18^{30}$	Conclusion and general discussions					



		0000 1100					
		$09^{00} - 11^{00}$					
		Session 9					
	Conference Hall/ Zoom: https://us06web.zoom.us/j/84638700246						
	$09^{00} - 09^{15}$	Chair: Luminita MARIN					
	0900 – 0913	OC14. SALICYL-IMINE-CHITOSAN HYDROGELS FOR					
		PROLONGED DRUG RELEASE					
		Manuela-Maria IFTIME, Liliana Mititelu TARTAU, Luminita MARIN					
		<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania					
	$09^{15} - 09^{30}$	<sup>2</sup> Gr. T. Popa University of Medicine and Pharmacy, Iasi, Romania OC15. ELECTROPSUN COMPOSITE FIBROUS MATERIALS					
	0915 – 0955						
		FROM BIODEGRADABLE POLYMER AND CHEMICAL FUNGICIDE FOR GRAPEVINE PROTECTION					
		Mariya SPASOVA, 1 Nasko NACHEV, 1 Nevena MANOLOVA, 1 Iliya					
		RASHKOV, <sup>1</sup> Mladen NAYDENOV <sup>2</sup>					
		<sup>1</sup> Laboratory of Bioactive Polymers, Institute of Polymers,					
		Bulgarian Academy of Sciences, Sofia, Bulgaria					
6		<sup>2</sup> Department of Microbiology, Agricultural University, Plovdiv, Bulgaria					
er	$09^{30} - 09^{45}$	OC16. CRYOGELS OF CARBOXYMETHYLCHITOSAN FOR					
qo	0)	3D-CELL CULTURE					
SATURDAY, October 9		Yuliya PRIVAR, Andrey BORODA, Mariya MAIOROVA, Svetlana					
		BRATSKAYA <sup>1</sup>					
Y,		<sup>1</sup> Institute of Chemistry, Far Eastern Branch of Russian Academy of					
$\blacksquare$		Sciences, Vladivostok, Russia					
		<sup>2</sup> A.V. Zhirmunsky National Scientific Center of Marine Biology,					
		Far Eastern Branch of Russian Academy of Sciences, Vladivostok, Russia					
	$09^{45} - 10^{00}$	OC17. SAMPLE CONTROLLED THERMAL ANALYSIS -A					
A		PROMISING APPROACH FOR COMPLEX SYSTEMS					
<b>S</b>		Daniela IONITA, <sup>1</sup> Mariana CRISTEA, <sup>1</sup> Paul LAZAR, <sup>2</sup>					
		Bogdan C. SIMIONESCU <sup>1</sup>					
		<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania					
	00 20	<sup>2</sup> S.C. Laboratorium S.R.L., Targu Bujor, Galati, Romania					
	$10^{00} - 10^{30}$	L7. DYNAMIC MECHANICAL ANALYSIS: WHERE WE ARE IN					
		PPIMC AND WHAT CAN BE AHEAD					
		Mariana CRISTEA, <sup>1</sup> Daniela IONITA, <sup>1</sup> Paul LAZAR, <sup>2</sup>					
		Bogdan C. SIMIONESCU <sup>1</sup>					
		<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania					
	$10^{30}$ – $11^{00}$	<sup>2</sup> S.C. Laboratorium S.R.L., Targu Bujor, Romania					
	1050-1100	L8. ELECTROSPUN POLY(METHYL METHACRYLATE)/TiO <sub>2</sub>					
		COMPOSITES FOR PHOTOCATALYTIC WATER TREATMENT					
		Olya STOILOVA, Nevena MANOLOVA, Iliya RASHKOV					
		Laboratory of Bioactive Polymers, Institute of Polymers,					
	1100 1120	Bulgarian Academy of Sciences, Sofia, Bulgaria					
	$11^{00} - 11^{30}$	Coffee Break – Conference Hall					



		$11^{30} - 13^{15}$
		Session 10
	C	onference Hall / Zoom: https://us06web.zoom.us/j/84638700246
		Chair: Florin BUCATARIU
	$11^{30} - 12^{00}$	L9. ELECTRONIC STRUCTURE AND ISOMERIZATION
		MECHANISM OF AZOBENZENE DERIVATIVES DURING THE
		REACTION PATHWAYS FOLLOWING THE GROUND AND
		EXCITED-STATE LEVELS
		<u>Dragos-Lucian ISAC</u> , Anton AIRINEI
		Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania
	$12^{00} - 12^{15}$	OC18. ANTIFUNGAL PROPERTIES OF NEW
		MULTICOMPONENT POLYMER SYSTEMS AS FLAME
		RETARDANT COATINGS
		Irina ROSCA, Cristian-Dragos VARGANICI, Liliana ROSU,
		Corneliu HAMCIUC, Dan ROSU, Fanica MUSTATA
	15 20	Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania
6	$12^{15} - 12^{30}$	OC19. CARBON BASED NANOMATERIALS-DNA-GOLD
er		NANOPARTICLES HYBRID ASSEMBLIES FOR SERS
q		BIOIMAGING
ctc		Elena-Laura URSU, <sup>1</sup> Alexandru Florentin TRANDABAT, <sup>2</sup>
SATURDAY, October 9		Alexandru ROTARU <sup>1</sup>
5		<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania <sup>2</sup> SC Intelectro Iasi SRL, Iasi, Romania
A	$12^{30} - 12^{45}$	OC20. HYDROPHOBIC BIOCOMPATIBLE CaCO <sub>3</sub> /CELLULOSE
Q	12 - 12	MATERIAL WITH POTENTIAL APPLICATION IN WOUND
		DRESSING
		Ana-Lavinia VASILIU, <sup>1</sup> Marius-Mihai ZAHARIA, <sup>1</sup>
A		Melinda-Maria BAZARGHIDEANU, Irina ROSCA, 1
S		Dragos PEPTANARIU, <sup>1</sup> Maria-Andreea LUNGAN, <sup>2</sup> Marcela MIHAI <sup>1</sup>
		<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania
		<sup>2</sup> Sara Pharm Solutions, Bucharest, Romania
	$12^{45} - 13^{00}$	OC21.THIOPHENE END-GROUP-FUNCTIONALIZED OLIGO(2-
		METHYL-2-OXAZOLINE) AS AN AMPHIPIHILIC REACTIVE
		MACROMONOMER AND AS A NON-CONVENTIONAL
		INTRINSIC LUMINESCENT MATERIAL
		Anca-Dana BENDREA, Luminita CIANGA, Ioan CIANGA
	00 15	Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania
	$13^{00} - 13^{15}$	OC22. DESIGNING PHENOTHIAZINE-BASED MATERIALS
		WITH HIGH LUMINESCENCE IN SOLID STATE
		Andrei BEJAN, Luminita MARIN, Bogdan CHIRICUTA <sup>2</sup>
		<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania
	1215 1230	<sup>2</sup> Apel Laser, Bucharest, Romania
	$13^{15} - 13^{30}$	AWARDS
	1230 1500	Conference Closing
	$13^{30} - 15^{00}$	Lunch



18



#### **POSTER LIST**

# PP1. PMMA-BIOGLASS SCAFFOLDS OBTAINED BY PHASE SEPARATION METHOD: ANALYSIS OF ITS STRUCTURE, MORPHOLOGY, MECHANICAL AND BIOLOGICAL PROPERTIES

<u>Irina ATKINSON</u>,<sup>1</sup> Ana Maria SECIU,<sup>2</sup> Simona PETRESCU,<sup>1</sup> Oana C. MOCIOIU,<sup>1</sup> Luminita PREDOANA,<sup>1</sup> Rodica M. ION,<sup>3</sup> Mariana VOICESCU,<sup>1</sup> Daniela CULITA,<sup>1</sup> Elena M. ANGHEL,<sup>1</sup> Oana CRACIUNESCU<sup>2</sup>

<sup>1</sup>Ilie Murgulescu Institute of Physical Chemistry, Romanian Academy, Bucharest, Romania

<sup>2</sup> National Institute of Research and Development for Biological Sciences, Bucharest, Romania

<sup>3</sup> NCDCP-ICECHIM Bucharest, Romania

# PP2 CHITOSAN BIOCOMPATIBLE HYDROGELS AS DRUG DELIVERY MATRICES FOR ANTICANCER APPLICATIONS

<u>Anda-Mihaela CRACIUN</u>, <sup>1</sup> Gabriela GAVRIL, <sup>1</sup> Ioana Cristina MARINAS, <sup>2</sup> Liliana MITITELU TARTAU, <sup>3</sup> Luminita MARIN<sup>1</sup>

<sup>1</sup>Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania

<sup>2</sup> Sanimed Int Impex Srl, Ctr Serv & Res Adv Biotechnol, Bucharest, Romania

<sup>3</sup> Gr. T. Popa University of Medicine and Pharmacy, Iasi, Romania

# PP3 REACTIVITY ANALYSIS FOR 4-(AZULEN-1-YL)-2,6-BIS((E)-2-(THIOPHEN-2-YL)VINYL)PYRIDINE USING CALCULATED QUANTUM PARAMETERS

Ovidiu-Teodor MATICA, <sup>1</sup> Cristian OMOCEA, <sup>1,2</sup> Roxana Luisa POPESCU, <sup>3</sup> Eleonora-Mihaela UNGUREANU, <sup>1</sup> Amalia STEFANIU<sup>4</sup>

<sup>1</sup>University Politehnica of Bucharest, Department of Inorganic Chemistry, Physical Chemistry and Electrochemistry, Bucharest, Romania

<sup>2</sup>Water Basin Administration Dobrogea - Litoral, Constanta, Romania

<sup>3</sup>National Research and Development Institute for Industrial Ecology – Ramnicu Valcea Subsidiary

<sup>4</sup>National Institute of Chemical-Pharmaceutical Research and Development (ICCF), Bucharest, Romania

# PP4 GREEN INTERPENETRATED SILICONE-BASED ELASTOMERIC WEBS ENGINEERED AS WAVE ENERGY HARVESTERS

<u>Natalia IONESCU</u>, <sup>1</sup> Adrian BELE, <sup>2</sup> Mihaela DASCALU, <sup>2</sup> George STIUBIANU, <sup>2</sup> Maria CAZACU<sup>2</sup>

<sup>1</sup> Mihai Viteazul National College, Bucharest, Romania

<sup>2</sup>Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania

#### PP5 HIGH-DRUG-LOADING MAGNETIC NANOPLATFORMS

Anca Emanuela MINUTI, Camelia-Mihaela DANCEANU, Cristina STAVILA, Horia CHIRIAC, Nicoleta LUPU, <u>Daniel GHERCA</u>, Adrian-Iulian BORHAN, Dumitru-Daniel HEREA, Luminita LABUSCA

National Institute of Research and Development for Technical Physics, Iasi, Romania

# PP6 EFFECT OF THE WASHING ON THE RESISTIVITY OF THE POLYAMIDE TEXTILES COATED WITH DOPED POLYANILINE

Ana -Maria MOCIOIU, 1 Oana Catalina MOCIOIU<sup>2</sup>

<sup>1</sup>National R&D Institute for Non-ferrous and Rare Metals, Ilfov, Romania

<sup>2</sup>Ilie Murgulescu Institute of Physical Chemistry of the Romanian Academy, Bucharest, Romania





# PP7 ALGINATE-DERIVED TANNING AGENTS FOR BIODEGRADABLE LEATHER

Ilaria QUARATESI<sup>1,2</sup>, Maria-Cristina MICU<sup>1</sup>, Claudiu SENDREA<sup>1</sup>, Cristina CARSOTE<sup>3</sup>, Ioan CALINESCU<sup>4</sup>, Petru CHIPURICI, Elena BADEA<sup>1,5</sup>

<sup>1</sup>Advanced Research for Cultural Heritage Laboratory (ARCH Lab), National Research & Development Institute for Textiles and Leather, ICPI Research Division, Bucharest, Romania

<sup>2</sup> A. Zambelli Dipartimento di Chimica e Biologia, Università di Salerno, Salerno, Italy

<sup>3</sup>Laboratory for Scientific Investigation, National Museum of Romanian History, Bucharest, Romania

<sup>4</sup> Department of Bioresources and Polymer Science, Faculty of Applied Chemistry and Materials Science, University Politehnica of Bucharest, Romania

<sup>5</sup>Department of Chemistry, Faculty of Sciences, University of Craiova, Romania

# PP8 B-CYCLODEXTRIN/CURCUMIN INCLUSION COMPLEX-LOADED HYDROGELS FILMS BASED ON BIOPOLYMERS. CHARACTERIZATION AND CURCUMIN RELEASE KINETIC STUDY

<u>Camelia Elena IURCIUC (TINCU)</u>, <sup>1,2</sup> Alexandra BUJOR, <sup>1</sup> Mousa SHA'AT, <sup>1</sup> Marcel POPA, <sup>2,3,4</sup> Lacramioara OCHIUZ<sup>1</sup>

<sup>1</sup>Grigore T. Popa University of Medicine and Pharmacy, Faculty of Pharmacy, Department of Pharmaceutical Technology, Iasi, Romania

<sup>2</sup> Gheorghe Asachi Technical University, Faculty of Chemical Engineering and Protection of the Environment, Department of Natural and Synthetic Polymers, Iasi, Romania

<sup>3</sup>Faculty of Dental Medicine, Apollonia University, Iasi, Romania <sup>4</sup>Academy of Romanian Scientists, Bucharest, Romania

# PP9 POLYHYDROXYBUTYRATE ACCUMULATION IN RALSTONIA EUTROPHA IN LIPID CONTAINING MEDIA

<u>Dana Maria MIU</u>, <sup>1,2</sup> Mihaela Carmen EREMIA, <sup>1</sup> Gabriela SAVOIU<sup>1</sup>

<sup>1</sup>National Institute for Research & Development in Pharmaceutical Chemistry, Bucharest, Romania

<sup>2</sup>University Politehnica of Bucharest, Faculty of Applied Chemistry and Materials Science, Bucharest, Romania

# PP10 DOUBLE-FUNCTIONALIZED CHITOSAN NANOFIBERS FOR WOUND HEALING

Ramona LUNGU, Alexandru ANISIEI, Irina ROSCA, Andreea-Isabela SANDU, Daniela AILINCAI, Luminita MARIN

Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania

#### PP11 NEW HYBRID QUATERNARY SALTS WITH

SULFANYLAMIDE/BENZIMIDAZOLE SKELETON

Roxana CIORTEANU, Vasilichia ANTOCI, Dorina AMARIUCAI-MANTU, Catalina CIOBANU, Violeta MANGALAGIU, Ionel I. MANGALAGIU Alexandru Ioan Cuza University of Iasi, Iasi, Romania

#### PP12 SQUALENE FUNCTIONALIZED WITH COUMARINES OR BENZENESULFONAMIDES AS HYBRID INHIBITORS FOR CARBONIC ANHYDRASE

Bogdan Florin CRACIUN, <sup>1</sup> Lilia CLIMA, <sup>1</sup> Andrea ANGELI, <sup>1,2</sup> Andrea PETRENI, <sup>1,2</sup> Sorin Alexandru IBANESCU, <sup>3</sup> Mariana PINTEALA, <sup>1</sup> Claudiu T. SUPURAN<sup>2</sup>

<sup>1</sup>Petru Poni Institute of Macromolecular Chemistry, Centre of Advanced Research in Bionanoconjugates and Biopolymers, Iasi, Romania

<sup>2</sup>University of Florence, Sezione di Scienze Farmaceutiche, Sesto Fiorentino, Italy <sup>3</sup>S.C. Antibiotice S.A., Iasi, Romania





# PP13 TOWARDS ROBUST METAL-ORGANIC FRAMEWORKS BASED ON FLUORINATED LINKERS FOR GAS STORAGE

<u>Ioan-Andrei DASCALU</u>, <sup>1</sup> Sergiu SHOVA, <sup>1</sup> Rodinel ARDELEANU, <sup>1</sup> Narcisa MARANGOCI, <sup>1</sup> Mariana PINTEALA, <sup>1</sup> Christoph JANIAK<sup>2</sup>

<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania

<sup>2</sup> Institute for Inorganic and Structural Chemistry, Dusseldorf, Germany

# PP14 IDENTIFICATION OF BIO-CHEMICAL CONTAMINANTS IN COMPOSITE MATERIALS BASED ON RECYCLED PET USING TERAHERTZ SPECTROSCOPY

Diana POPESCU,<sup>1, 2</sup> <u>Florina-Daniela COJOCARU</u>,<sup>3</sup> Gianina DODI,<sup>3</sup> Cosmin Teodor MIHAI,<sup>3</sup> Mihaela ARADOAEI,<sup>4,5</sup> Cristian Romeo CIOBANU<sup>4,5</sup> <sup>1</sup> Grigore T. Popa University of Medicine and Pharmacy of Iasi, Department of Internal Medicine, Iasi, Romania

<sup>2</sup> St. Spiridon County Clinical Emergency Hospital, Internal Medicine Clinic, Iasi, Romania

<sup>3</sup>Advanced Research and Development Center for Experimental Medicine (CEMEX), Grigore T. Popa University of Medicine and Pharmacy of Iasi, Romania <sup>4</sup> Electrical Engineering Faculty, Gheorghe Asachi Technical University of Iasi,

<sup>5</sup> ALL GREEN SRL, Iasi, Romania

Romania

#### PP15 LIGNIN AS SOURCE OF NEW HYBRID MATERIALS

<u>Irina APOSTOL</u>, Ioan-Andrei DASCALU, Adina COROABA, Iuliana SPIRIDON *Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania* 

#### PP16 MODIFICATION OF THE POLYURETHANE FILM SURFACE

PROPERTIES AFTER AIR-PLASMA TREATMENT

Mihaela BARBALATA-MANDRU, <sup>1</sup> Luiza Madalina GRADINARU, <sup>1</sup> Magdalena AFLORI, <sup>1</sup> Stefan URSACHE<sup>2</sup>

<sup>1</sup>Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania <sup>2</sup>S.C. Innovative Green Power S.R.L., Iasi, Romania

# PP17 HYOSCINE EXTRACTION FROM DATURA INNOXIA BIOMASS AND ANALYSIS BY SPECTROPHOTOMETRIC AND FLUORESCENCE METHODS

<u>Georgiana MARDARE (BALUSESCU)</u>, Liliana LAZAR, Irina VOLF, Teodor MALUTAN

Gheorghe Asachi Technical University of Iasi-Romania,

Cristofor Simionescu Faculty of Chemical Engineering and Environmental Protection

# PP18 MORPHOLOGICAL STUDY OF SOME EPOXY RESIN WITH DOPO – BASED OLIGOPHOSPHONATE S-IPNs

Ana-Lavinia VASILIU, <sup>1</sup> Cristian-Dragos VARGANICI, <sup>1</sup> Dan ROSU, <sup>1</sup> Fanica MUSTATA, <sup>1</sup> Oana Maria MUNTEANU, <sup>2</sup> Liliana ROSU <sup>1</sup> <sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania <sup>2</sup>S.C. Azomures S.A., Mures, Romania

# PP19 SYNTHESIS AND CHARACTERIZATION OF ACRYLIC ION EXCHANGE RESINS AND THEIR ENVIRONMENTAL APPLICATIONS AS SORBENTS

Marius-Mihai ZAHARIA,<sup>1</sup> Ana-Lavinia VASILIU,<sup>1</sup> Marin-Aurel TROFIN,<sup>1</sup> Melinda-Maria BAZARGHIDEANU,<sup>1</sup> Catalin BLEGESCU,<sup>2</sup> Marcela MIHAI<sup>1</sup>

<sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania

<sup>2</sup>S.C. Azomures S.A., Gheorghe Doja Str. 300, Tirgu Mures, Romania





# PP20 POLYSACCHARIDES-BASED MATERIALS AS DRUG DELIVERY SYSTEMS

<u>Alexandra DIMOFTE</u>, <sup>1</sup> Narcis ANGHEL, <sup>1</sup> Maria Valentina DINU, <sup>1</sup> Tudor BOITA, <sup>2</sup> Iuliana SPIRIDON<sup>1</sup>

<sup>1</sup>Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania <sup>2</sup>SC Antibiotice SA, Iasi, Romania

#### PP21 CHITOSAN-PVA COMPOSITE HYDROGELS: SYNTHESIS, CHARACTERIZATION AND THEIR ANTIBACTERIAL PROPERTIES Bogdan COSMAN, Delia Mihaela RATA, Dana Mihaela SUFLET, Gheorghe FUNDUEANU

<sup>1</sup>Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania <sup>2</sup>Apollonia University, Iasi, Romania

# PP22 ANTIBACTERIAL CELLULOSE HYDROGELS WITH NOBLE METALS NANOPARTICLES: SYNTHESIS, MECHANISM, AND PROPERTIES Aleksandra MIKHAILIDI, 1 Nina KOTELNIKOVA<sup>2</sup>

<sup>1</sup>Saint Petersburg State University of Industrial Technologies and Design, St. Petersburg, Russia

<sup>2</sup>Institute of Macromolecular Compounds, Russian Academy of Sciences, St. Petersburg, Russia

# PP23 NEW ZWITTERIONIC COPOLYMER WITH CARBOXYBETAINE MOIETIES AS POSSIBLE DRUG DELIVERY SYSTEM

<u>Marin-Aurel TROFIN</u>, <sup>1</sup> Stefania RACOVITA, <sup>1</sup> Silvia VASILIU, <sup>1</sup> Ana-Lavinia VASILIU, <sup>1</sup> Diana Felicia LOGHIN, <sup>1</sup> Ondina BOITA, <sup>2</sup> Marcela MIHAI <sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania <sup>2</sup> SC Antibiotice SA, Iasi, Romania

# PP24 SYNTHESIS OF SILICA PARTICLES LOADED WITH CURCUMIN AND COATED WITH PEG<sub>750</sub>

<u>Catalin Ionut MIHAESCU</u>, <sup>1</sup> Ludmila Otilia CINTEZA, <sup>2</sup> Cristina Lavinia NISTOR, <sup>1</sup> Cristian PETCU, <sup>1</sup> Sabina Georgiana BURLACU, <sup>1</sup> Bogdan TRICA, <sup>1</sup> Cristina SCOMOROSCENCO, <sup>1</sup> Raluca IANCHIS, <sup>1</sup> Claudia NINCIULEANU, <sup>1</sup> Catalina GIFU, <sup>1</sup> Elvira ALEXANDRESCU<sup>1</sup>

<sup>1</sup>National Institute for Research & Development in Chemistry and Petrochemistry-ICECHIM Bucharest, Bucharest, Romania.

<sup>2</sup>University of Bucharest, Bucharest, Romania



































