



MINISTRY of RESEARCH,  
INNOVATION and  
DIGITIZATION



ACADEMY of  
MEDICAL SCIENCES



ROMANIAN  
MEDICAL  
ASSOCIATION for  
PLASMAPHERESIS



NATIONAL INSTITUTE  
for R&D in  
ELECTRICAL  
ENGINEERING ICPE-CA  
Bucharest, ROMANIA

# PROGRAMME

## INGIMED XXIII<sup>th</sup> 2022 Conference "Interdisciplinary Connections of Bioengineering" 10<sup>th</sup> November, 2022



National conference with international participation

Hybrid scientific event (onsite and online)

Onsite: Conference Hall of INCDIE ICPE-CA Bucharest, 3<sup>rd</sup> floor  
313 Splaiul Unirii, District 3, Bucharest

Online: <https://us02web.zoom.us/j/83570127513?pwd=bHMwMWxHTDZmdTZUU3RNQU53dEdJZz09>

Thursday, 10 <sup>th</sup> November, 2022	
09:30 – 10:00	Online appeal of all speakers; technical set-up
10:00 – 10:30	<p><b>Opening remarks</b></p> <ul style="list-style-type: none"> <li>• <b>Dr. Sergiu Nicolaie</b>, <i>General Director of INCDIE ICPE-CA, Bucharest</i></li> <li>• <b>Prof. Dr. Gheorghe Mihalaş</b>, <i>Romanian Academy of Medical Sciences, Commission of Medical Informatics, Biostatistics and Data Protection, Romania</i></li> <li>• <b>Prof. Wilhelm Kappel</b>, <i>Counsellor of INCDIE ICPE-CA, Bucharest</i></li> <li>• <b>Dr. Mircea Ignat</b>, <i>Coordinator of "Alexandru Proca" Centre for the Youngsters Initiation in Scientific Research (CICST) within INCDIE ICPE-CA, Bucharest</i></li> </ul> <p>Please notice: 15 minute presentation and discussions for each subject</p>
10:30 – 11:45	<p><b>Session I</b> <b>Chair: Dr. Mircea Ignat</b></p>
	<p><b>10:30 – 10:45 (online)</b></p> <ol style="list-style-type: none"> <li>1. <b>Anti-counterfeiting, a challenge for EEE industries (Anti-contrafacerea, o provocare pentru industriile EEE)</b>, <i>MSc Steli Loznen – IEEE-PSES Vice President for Technical Activities, Tel Aviv, Israel</i></li> </ol>

<http://www.icpe-ca.ro/ingimed-xxiii-2022/>

Participation in the scientific event represents your consent for the processing of personal data

10:45 – 11:00

2. **Bioengineering of rhythms. Is there a relation between biological and musical rhythms? (Bioingineria ritmurilor. Există vreo relație între ritmurile biologice și cele muzicale?)**, Prof. Gheorghe I. Mihalaș, MPhys, MMath  
"Victor Babeș" University of Medicine and Pharmacy, Timișoara, Romania, Center for Biological Systems Modeling and Data Analysis;  
Romanian Academy of Medical Sciences, Commission of Medical Informatics, Biostatistics and Data Protection, Romania

11:00 – 11:15

3. **Is the bioengineered food the solution against world starvation? (Hrana modificată genetic este soluția împotriva foametei mondiale?)**, Prof. Cristina Mocanu<sup>1,2</sup>, MD; Assoc. Prof. Manole Cojocaru<sup>3</sup>, MD; Prof. Simona Soare<sup>3</sup>, MD, PhD  
<sup>1</sup>Carpatia Group, Bucharest, Romania  
<sup>2</sup>University of Maryland, Rockville Faculty of Medicine, Baltimore, USA  
<sup>3</sup>Faculty of Medicine, "Titu Maiorescu" University, Bucharest, Romania

11:15 – 11:30 (online)

4. **Long term impact of the use of stents in patients with STEMI (Impactul pe termen lung al utilizării stenturilor la pacienții cu STEMI)**, Dr. Alice Munteanu<sup>1</sup>, Dr. Irina Ispas<sup>2</sup>  
<sup>1</sup>Central Military Emergency University Hospital "Dr. Carol Davila" Bucharest, Romania  
<sup>2</sup>Emergency County Hospital "Dr. Pompei Samarian" Călărași, county Călărași, Romania

11:30 – 11:45

5. **Smart wound-dressing based on SWCNT and Collagen (Pansament inteligent bazat pe SWCNT și Colagen)**, Bianca-Mihaela Nemeș<sup>1,2</sup>, high school student;  
Coordinators: Dr.Chem. Albu Kaya Mădălina Georgiana<sup>3</sup> and Dr.Eng. Mircea Ignat<sup>2</sup>  
<sup>1</sup>International Theoretical High School of Informatics, Bucharest  
<sup>2</sup>"Alexandru Proca" Center for Youngsters Initiation in Scientific Research (CICST) within INCDIE ICPE-CA Bucharest, Romania  
<sup>3</sup>National Research and Development Institute for Textiles and Leather, Bucharest, Romania

<i>Continuing Thursday, 10<sup>th</sup> November, 2022</i>	
<b>11:45 – 12:00</b>	<b>Short break</b>
<b>12:00 – 13:30</b>	<b>Session II</b> <b>Chair: Dr. Mircea Ignat</b>
	<p><b>12:00 – 12:15 (online)</b></p> <p><b>6. Assistive device to improve hand function recovery during motor rehabilitation (Dispozitiv de asistență pentru îmbunătățirea recuperării funcțiilor mâinii în timpul reabilitării motorii),</b> <i>Assoc. Prof. Călin-Petru Corciovă<sup>1</sup>, MBioeng, PhD; Andra Cristiana Băeșu<sup>1</sup>, student; Assist. Prof. Cătălina Luca<sup>1</sup>, MBioeng, PhD; Robert Fuior<sup>1,2</sup>, MBioeng, PhDs</i>  <sup>1</sup><i>University of Medicine and Pharmacy “Grigore T. Popa”, Medical Bioengineering Faculty, Iasi, Romania</i>  <sup>2</sup><i>”Gheorghe Asachi” Technical University, Faculty of Electrical Engineering, Iasi, Romania</i></p>
	<p><b>12:15 – 12:30</b></p> <p><b>7. Methods of predicting the functions of intrinsically disorder proteins. Exploring the functions of Tau protein (Metode de predicție ale funcțiilor proteinelor intrinsec dezordonate. Studiul funcțiilor proteinei Tau),</b> <i>Ioana Mădălina Cărăuș<sup>1,2</sup>, high school student; Coordinator: Prof. Dr. Ștefan Eugen Szedlacsek<sup>3</sup></i>  <sup>1</sup><i>International Theoretical High School of Informatics, Bucharest</i>  <sup>2</sup><i>“Alexandru Proca” Center for Youngsters Initiation in Scientific Research (CICST) within INCDIE ICPE-CA Bucharest, Romania</i>  <sup>3</sup><i>Institute of Biochemistry of the Romanian Academy, Bucharest, Romania</i></p>
	<p><b>12:30 – 12:45 (online)</b></p> <p><b>8. Portable device for remote recovery of pediatric neuromotor deficiencies using interactive application (Dispozitiv portabil de recuperare la distanță a deficiențelor neuromotorii pediatrice cu ajutorul aplicației interactive),</b> <i>Andra Cristiana Băeșu<sup>1</sup>, student; Robert Fuior<sup>1,2</sup>, MBioeng, PhDs; Assoc. Prof. Călin-Petru Corciovă<sup>1</sup>, MBioeng, PhD</i>  <sup>1</sup><i>University of Medicine and Pharmacy “Grigore T. Popa”, Medical Bioengineering Faculty, Iasi, Romania</i>  <sup>2</sup><i>”Gheorghe Asachi” Technical University of Iasi, Faculty of Electrical Engineering, Iasi, Romania</i></p>

12:45 – 13:00

9. **Proposal of an analog multipurpose diagnostic interface standard for embedded systems (Propunere a unui standard de interfață analogică multifuncțională de diagnosticare a sistemelor integrate)**, Victor-Eduard Albei<sup>1,2</sup>, student

<sup>1</sup>“Alexandru Proca” Centre for the Youngsters Initiation in Scientific Research (CICST) within INCDIE ICPE-CA Bucharest, Romania

<sup>2</sup>University of Politehnica Bucharest, Faculty of Electronics, Telecommunications and Information Technology, Romania

13:00 – 13:15

10. **Interference of electric field in tissues and organs (Implicațiile câmpului electric în țesuturi și organe)**, Dr. Eng. Mircea Ignat<sup>1</sup>; Eric-Gabriel Druțu<sup>1,2</sup> and Robin Bucur-Portase<sup>1,2</sup>, students

<sup>1</sup>“Alexandru Proca” Centre for the Youngsters Initiation in Scientific Research (CICST) within INCDIE ICPE-CA Bucharest, Romania

<sup>2</sup>“Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania

13:15 – 13:30

11. **Neoplastic effects of endogenous alcohol in carcinogenesis process of hepatocarcinoma (Efectele neoplazice ale alcoolului endogen în procesul de carcinogeneză al hepatocarcinomului)**, Dr. Aurelian Udriștioiu<sup>1</sup>, Prof. Assist.; Pharm. Adina Martin<sup>1</sup>, Univ. Assist.; Dr. Liviu Martin<sup>1</sup>, University Lecturer; Dr. Iulia Farmazon<sup>2</sup>, resident doctor; As. Daniela Udriștioiu<sup>3</sup>; Dr. Chem. Delia Nica-Badea<sup>4</sup>, Lecturer

<sup>1</sup>“Titu Maiorescu” University of Bucharest, Faculty of General Nursing (AMG), Târgu Jiu Branch, county Gorj, Romania

<sup>2</sup>Bucharest Emergency Clinical Hospital, Laboratory Medicine, Romania

<sup>3</sup>Târgu-Jiu County Emergency Hospital, county Gorj, Romania

<sup>4</sup>“Constantin Brancuși” University of Târgu-Jiu, Faculty of Medical and Behavioral Sciences, county Gorj, Romania

13:30

Conference closure