

**TUIASI**  
*doctoral*



“GHEORGHE ASACHI”  
TECHNICAL UNIVERSITY OF IASI, ROMANIA

**7TH**

# **INTERNATIONAL CONFERENCE OF THE DOCTORAL SCHOOL**

## **CONFERENCE PROGRAM**

**MAY 15-17, 2024**

IASI, ROMANIA

**Excellence in Doctoral Studies  
through Innovation, Convergence  
and Interdisciplinarity**

[WWW.CONFERINTA-CSD.TUIASI.RO](http://WWW.CONFERINTA-CSD.TUIASI.RO)

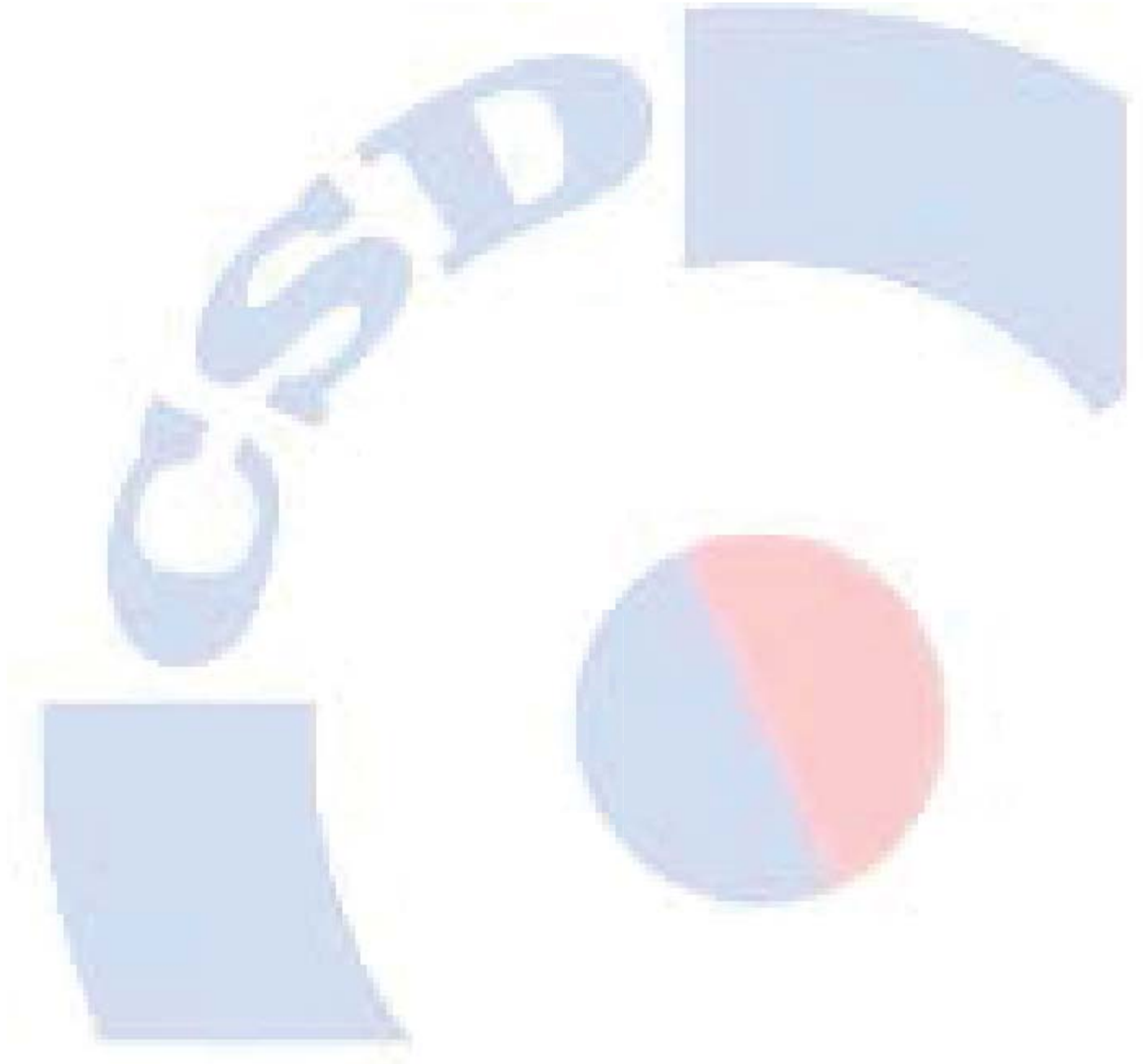




**Welcome to CSD2024,  
wishing you a successful  
conference!**



**"Gheorghe Asachi" Technical University of Iasi, Romania**  
**7<sup>th</sup> International Conference of the Doctoral School**  
**May 15 - 17, 2024, Iași, România**





**"Gheorghe Asachi" Technical University of Iasi, Romania**  
**7<sup>th</sup> International Conference of the Doctoral School**  
**May 15 - 17, 2024, Iași, România**



# **7<sup>th</sup> International Conference of the Doctoral School**

**"Gheorghe Asachi" Technical University of Iasi**

***Excellence in Doctoral Studies through Innovation,  
Convergence and Interdisciplinarity***

## **CONFERENCE PROGRAMME**

**May 15 – 17, 2024**

**IAȘI, ROMÂNIA**



## Organizers

- "Gheorghe Asachi" Technical University of Iasi, Romania
- Council for Doctoral University Studies, CSUD
- Council of Doctoral School, CSD

## Partner:

- "Gheorghe Asachi" University Foundation, Iasi, Romania

## Conference Sections

- **Section 1.** Interdisciplinary studies (**held onsite and includes papers from all doctoral fields**)
- **Section 2.** Computers and information technology; Systems engineering Electrical engineering; Energy engineering; Electronic engineering, telecommunications and information technology (**held online**)
- **Section 3.** Chemistry; Chemical engineering; Environmental engineering (**held online**)
- **Section 4.** Civil engineering and installations (**held online**)
- **Section 5.** Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management (**held online**)
- **Workshop:** Applications of artificial intelligence in the industrial domains (**held onsite**)



## Organizer's Message

**Dear PhD Students,**  
**Dear Colleagues and Guests,**  
**Dear Participants,**

The seventh edition of the International Conference of the Doctoral School at the "Gheorghe Asachi" Technical University of Iasi (TUIASI) aims to create a beneficial environment for PhD students from Technical Universities in Romania and abroad to share their research findings, exchange ideas, and establish new collaborations. It also seeks to refine their theoretical and methodological approaches, promote interdisciplinary research, and foster continuous development. Scheduled for three days from May 15th to May 17th, 2024, the conference will feature five panel sessions where PhD students can present and discuss their research papers. Additionally, the conference program will include plenary presentations by esteemed professors from universities closely linked with TUIASI.

The conference endeavors to bring together oral presentations covering various pertinent topics related to the university's thirteen doctoral fields: *Chemistry; Computers and Information Technology; Chemical Engineering; Civil Engineering and Installations; Electrical Engineering; Electronic Engineering, Telecommunications, and Information Technologies; Energy Engineering; Industrial Engineering; Materials Engineering; Mechanical Engineering; Environmental Engineering; Systems Engineering; and Engineering and Management.*

By bridging different scientific doctoral fields, promoting innovation through interdisciplinary collaboration, and focusing on internationalization, this event aims to create an intellectual crossroads where new ideas and scientific progress can emerge. This approach is intended to shape doctoral programs by emphasizing the training of PhD students in research and equipping them with core competencies for immediate application in societal institutions, contributing to the pursuit of a sustainable economy. For PhD students in the early stages of their doctoral studies, the conference provides an opportunity to prepare for the initial contributions to their chosen scientific field. Meanwhile, for those in the later stages, the conference serves as an essential step towards entering the job market.

*Please visit the conference website at: <https://conferinta-csd.tuiasi.ro/>*

**Welcome to CSD2024, wishing you a successful conference!**

Honorary President,  
Professor **Dan CAȘCAVAL**  
Rector TUIASI



## Conference committees

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Prof.dr. **Dan Cașcaval**, **RECTOR**, "Gheorghe Asachi" Technical University of Iasi, Romania

### PRESIDENT

Prof.dr. **Maria Gavrilesu**, "Gheorghe Asachi" Technical University of Iasi, Romania

### CO-PRESIDENT

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- Prof.dr. **Mihai Gavrilaş**, Gheorghe Asachi Technical University of Iasi, Romania
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- Prof.dr. **Horia Iovu**, University Politehnica Bucharest
- Prof.dr. **Dumitru Marcel Istrate**, Gheorghe Asachi Technical University of Iasi, Romania



- Prof.dr. **Nicolas Kalogerakis**, Technical University of Crete, Chania, Greece
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- Prof.dr. **Irina Lungu**, Gheorghe Asachi Technical University of Iasi, Romania
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- Prof.dr. **Antonio Marzocchella**, University Federico II, Naples, Italy
- Prof.dr. **Omid Mahian**, Xi'an Jiaotong University, China
- Conf.dr. **Petru Mihai**, Gheorghe Asachi Technical University of Iasi, Romania
- Prof.dr. **Janus Mindykowski**, Gdynia Maritime University, Poland
- Prof.dr. **Alina-Adriana Minea**, Gheorghe Asachi Technical University of Iasi, Romania
- Prof.dr. **Corneliu Munteanu**, Gheorghe Asachi Technical University of Iasi, Romania
- Prof.dr. **Sohel Murshed**, University of Lisbon, Portugal
- Prof.dr. **Octavian Păstrăvanu**, Gheorghe Asachi Technical University of Iasi, Romania
- Prof.dr. **Doina Pîslă**, Technical University of Cluj-Napoca, Romania
- Prof.dr. **Radu-Emil Precup**, Politehnica University of Timișoara, Romania
- Prof.dr. **Alexandru Sălceanu**, Gheorghe Asachi Technical University of Iasi, Romania
- Prof. dr. **Neculai Eugen Seghedin**, Gheorghe Asachi Technical University of Iasi, Romania
- Prof.dr. **Irina Volf**, Gheorghe Asachi Technical University of Iasi, Romania

## **EXECUTIVE COMMITTEE**

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- Prof.dr. **Maricel Adam**
- Prof.dr. **Ioan Doroftei**
- Prof.dr. **Florin Leon**

## **SECRETARIAT**

- Eng. **Cristina Nagiț** ([doctorat@tuiasi.ro](mailto:doctorat@tuiasi.ro))
- Dr. **Sabina-Nicoleta Rotenștein** ([sabina-nicoleta.rotenstein@staff.tuiasi.ro](mailto:sabina-nicoleta.rotenstein@staff.tuiasi.ro))
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- PhD Student **Silvia-Nicoleta Plăcintă (Section 2)** ([silvia-nicoleta.placinta@student.tuiasi.ro](mailto:silvia-nicoleta.placinta@student.tuiasi.ro))
- PhD Student **Adriana-Mariana Asoltanei (Section 3)** ([adriana-mariana.asoltanei@student.tuiasi.ro](mailto:adriana-mariana.asoltanei@student.tuiasi.ro))
- PhD Student **Andrei Huțanu (Section 4)** ([andrei.hutanu2@student.tuiasi.ro](mailto:andrei.hutanu2@student.tuiasi.ro))
- Assist.prof.dr. **Elena Ionela Cherecheș (Section 5)** ([elena-ionela.chereches@academic.tuiasi.ro](mailto:elena-ionela.chereches@academic.tuiasi.ro))





## General information

### About our university

"Gheorghe Asachi" Technical University of Iasi is one of the most prestigious universities in Romania, being classified as an advanced research and education university (according to the Order of Ministry of Education and Research, MECTS nr. 5262/2011), whose mission is to carry out specific activities of creation, innovative capitalization of knowledge and its transfer to society in the fundamental fields of engineering sciences, architecture and urbanism, as well as in interdisciplinary and complementary fields, in the local community, at regional, national and international levels.

"Gheorghe Asachi" Technical University of Iasi has the oldest tradition in engineering education in Romania, initiated by Gheorghe Asachi, a representative of the Romanian Enlightenment, and established within the Greek Academy in Iasi (Royal Academy) on November 15, 1813, by the decree signed by Scarlat Calimachi, the ruler of Moldova at that time. This school can be considered the nucleus of higher technical education in Moldova, continuing education between 1834-1847 at the Mihăilean Academy and later at the University of Iasi in the School of Industrial Electricity (since 1910), the Electrotechnical Institute (1912) and the Department of Technological Chemistry (since 1911).

On November 7, 1912, the Faculty of Sciences of the University of Iasi was transformed into an independent department of higher education for teaching electrical engineering, applied chemistry and agricultural sciences. This event represents the "birth certificate" of what later became the Polytechnic Institute of Iasi ("Gheorghe Asachi" Technical University of Iasi today), respectively of the Faculty of Electrical Engineering, Energy and Applied Informatics and the Faculty of Chemical Engineering and Environment Protection.

A crucial moment in the history of our university is the Decision no. 205.660/ 03.12.1937 of the Ministry of National Education, when, the technical higher education is taken out from the aegis of the University of Iasi by the establishment of the „Gheorghe Asachi” Polytechnic School of Iași, as a distinct institution of engineering higher education, the only higher education institution authorized to grant from that date the title of engineer. The University began its activity on October 1, 1938, within three faculties: Industrial Chemistry, Electrical Engineering and Agricultural Sciences, of which the first two were based in Iasi and the third in Chisinau. The first diplomas were issued in 1940.

Through the education reform of 1948, the "Gheorghe Asachi" Polytechnic Institute was established in Iași, with four faculties and ten specializations: Industrial Chemistry (mineral chemistry, leather), Civil Engineering, Electrical Engineering, Mechanics (thermodynamic engineering, hydrotechnics, machine building, aero-naval engineering) with a duration of studies of five years. The Polytechnic Institute of Iași functioned until 1990 with 6 faculties and many newly created specializations. In 1990, four new faculties were established, coming from the faculties of Electrical Engineering and Mechanics.

In 1993 the name of "Polytechnic Institute of Iasi" was replaced by "Gheorghe Asachi" Technical University of Iasi (TUIASI). In 2004 the Architecture department within the Faculty of Constructions and Installations became the "G.M. Cantacuzino" Faculty of Architecture and since then 11 faculties operate within TUIASI.

Today, TUIASI develops programs for undergraduate, master, doctoral, postdoctoral studies and scientific research in interdisciplinary research areas, out of which 10 areas were classified in category A, according to Law 1/2011 and HG 789/2011. The doctoral activity is organized within an interdisciplinary doctoral school including 13 doctoral fields established according to national and international research priority areas.



## About the Conference program

The 6th edition of the International Conference of the Doctoral School of IOSUD "Gheorghe Asachi" Technical University of Iasi (CSD2023), which is organized under the generic "**Excellence in Doctoral Studies through Innovation, Convergence and Interdisciplinarity**" is programmed during May 17-19, 2022 in hybrid format, having 4 sections as videoconferences and an interdisciplinary section, held on-site, which includes papers from all doctoral fields (a fee is not charged).

During the event, plenary conferences are scheduled, lasting 40 minutes each (including discussions), as well as oral presentations lasting 15 minutes each (including discussions). The papers received in the frame of five planned sections will be held on each conference day in parallel sessions, each sessions being organized in blocks, separated by coffee breaks or lunch, coordinated by a chairperson.

The on-line sections of the Conference will be held on the Google Meet platform, at links which will be communicated to the attendees and guests before conference start, on the conference website.

### **VERY IMPORTANT**

**The authors who will hold oral presentations in both onsite and online format are invited to log in at the beginning of the session in which the presentation is scheduled in order to avoid unexpected breaks during the session.**

## **All oral presentations will be given in English.**

A PowerPoint support for your presentation adequate for maximum **15 minutes** would serve as visual aids that can enhance audience engagement and ensure a better understanding of your speech!

### Contact persons:

**Prof.dr. Maria Gavrilescu**

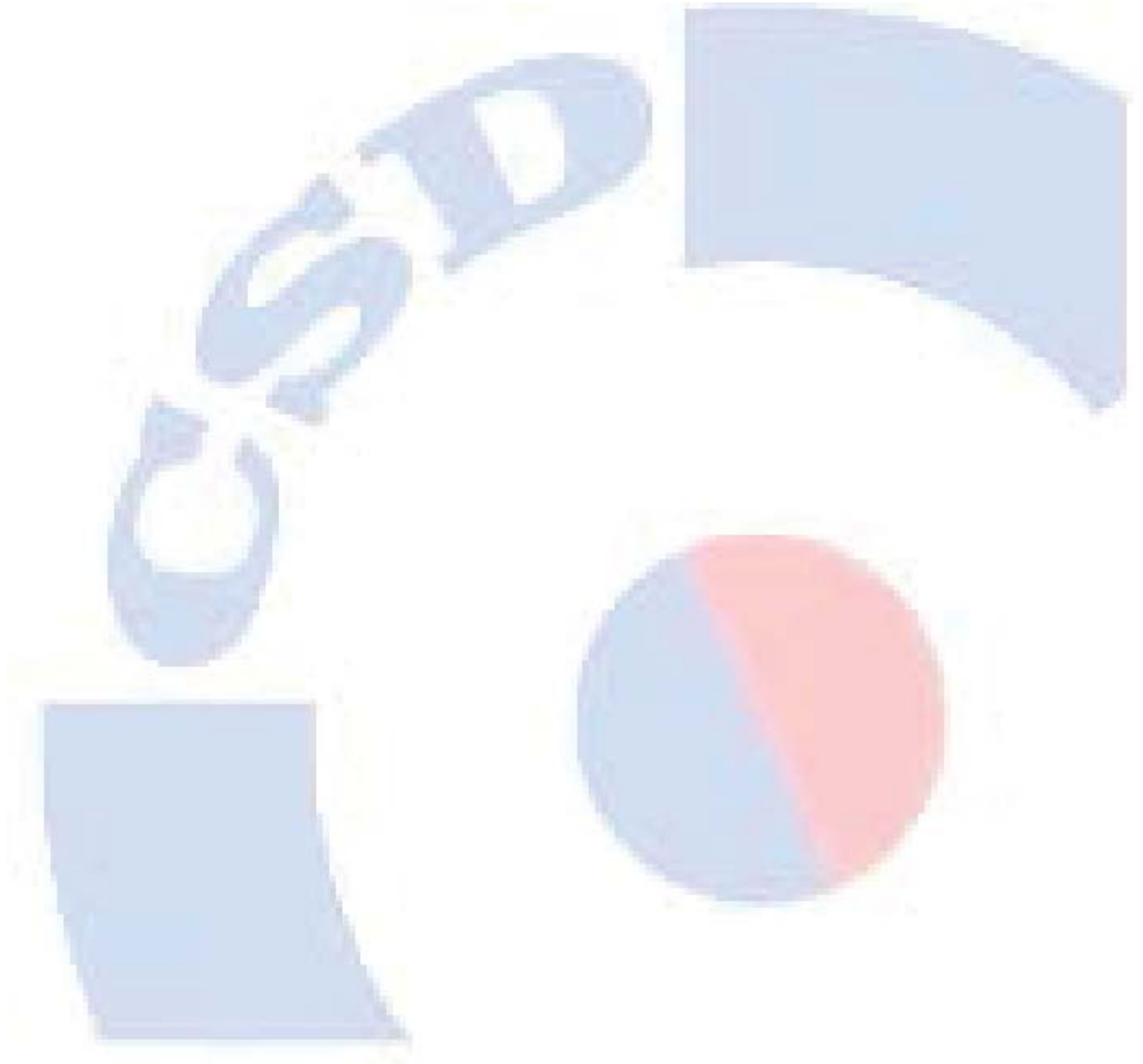
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## FIRST SIGHT CSD2024 CONFERENCE PROGRAM

**Wednesday, 15 May, 2024**

Time	Event
9.00-9.25	<b>Opening ceremony (online)</b>
9.30-10.10	<b>Plenary Conference 1</b>
10.10-10.50	<b>Plenary Conference 2</b>
<b>10.50-11.15</b>	<b>Coffee Break</b>
11.15-13.00	<b>Parallel Sessions On-line</b>
<b>13.00-14.00</b>	<b>Lunch</b>
14.00-15.30	<b>Parallel Sessions On-line</b>
<b>15.30-15.45</b>	<b>Coffee Break</b>
15.45-17.30	<b>Parallel Sessions On-line</b>

**Thursday, 16 May, 2024**

Time	Event
9.30-10.10	<b>Plenary Conference 3</b>
10.10-10.50	<b>Plenary Conference 4</b>
<b>10.50-11.15</b>	<b>Coffee Break</b>
11.15-13.00	<b>Parallel Sessions On-line</b>
<b>13.00-14.00</b>	<b>Lunch</b>



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14.00-15.45	<b>Parallel Sessions On-line</b>
15.45-16.00	<b>Coffee Break</b>
16.00-17.30	<b>Parallel Sessions On-line</b> <b>Workshop COMPETE 2.0</b> <b><i>Applications of artificial intelligence in the industrial domains</i></b> <b>On-site</b>

## Friday, 17 May, 2024

Time	Event
9.30-10.10	<b>Plenary Conference 5</b>
10.10-10.50	<b>Plenary Conference 6</b>
10.50-11.15	<b>Coffee Break</b>
11.15-13.00	<b>Session 1 On-site</b>
13.00-14.00	<b>Lunch</b>
14.00-15.45	<b>Session 2 On-site</b>
15.45-16.00	<b>Coffee Break</b>
16.00-17.15	<b>Session 3 On-site</b>
17.30	<b>Closing ceremony (on-site/on-line)</b>



## GENERAL CSD2024 CONFERENCE PROGRAM

Wednesday, 15 May, 2024

Time	Event
9.00-9.25	<b>Opening ceremony (Online)</b>
9.30-10.10	<b>Plenary Conference 1: Prof. dr. Horia IOVU (Online)</b>
10.10-10.50	<b>Plenary Conference 2: Prof. dr. Vincent NIERSTASZ (Online)</b>
<b>Link</b>	<a href="https://meet.google.com/vfs-wgjp-kbc?hs=224">https://meet.google.com/vfs-wgjp-kbc?hs=224</a>

10.50-11.15 **Coffee break**

11.15-13.00	<b>Parallel Session 1.1</b> Section 2. <b>Computers and information technology; Systems engineering</b> Energy engineering; Electronic engineering, telecommunications and information technology	<b>Parallel Session 2.1</b> Section 3. Chemistry; <b>Chemical engineering;</b> Environmental engineering	<b>Parallel Session 3.1</b> Section 3. <b>Chemistry;</b> Chemical engineering; Environmental engineering	<b>Parallel Session 4.1</b> Section 3. Chemistry; Chemical engineering; <b>Environmental engineering</b>
	<a href="https://meet.google.com/xej-cdbm-jyp">https://meet.google.com/xej-cdbm-jyp</a>	<a href="https://meet.google.com/dut-grui-wee">https://meet.google.com/dut-grui-wee</a>	<a href="https://meet.google.com/gsw-ofdt-pus">https://meet.google.com/gsw-ofdt-pus</a>	<a href="https://meet.google.com/zge-apit-xib">https://meet.google.com/zge-apit-xib</a>

13.00-14.00 **Lunch**

14.00-15.30	<b>Parallel Session 1.2</b> Section 3. Chemistry; <b>Chemical engineering;</b> Environmental engineering	<b>Parallel Session 2.2</b> Section 3. Chemistry; Chemical engineering;	<b>Parallel Session 3.2</b> Section 2. Computers and information technology; Systems	<b>Parallel Session 4.2</b> Section 2. Computers and information technology; Systems engineering
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		<b>Environmental engineering</b>	engineering Electrical engineering; <b>Energy engineering;</b> Electronic engineering, telecommunication s and information technology	<b>Electrical engineering;</b> Energy engineering; Electronic engineering, telecommunications and information technology
<b>Link</b>	<a href="https://meet.google.com/aab-htpm-fur">https://meet.google.com/aab-htpm-fur</a>	<a href="https://meet.google.com/sefovqa-noh">https://meet.google.com/sefovqa-noh</a>	<a href="https://meet.google.com/zmc-oebyticr">https://meet.google.com/zmc-oebyticr</a>	<a href="https://meet.google.com/rbs-bocv-oyk">https://meet.google.com/rbs-bocv-oyk</a>

<b>15.30-15.45</b>	<b>Coffee Break</b>			
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<b>15.45-17.30</b>	<b>Parallel Session 1.3</b> <b>Section 5.</b> Mechanical engineering; Industrial engineering; <b>Materials engineering;</b> Engineering and management	<b>Parallel Session 2.3</b> <b>Section 3.</b> Chemistry; Chemical engineering; <b>Environmental engineering</b>  <b>Section 4.</b> <b>Civil engineering and installations</b>	<b>Parallel Session 3.3</b> <b>Section 4.</b> <b>Civil engineering and installations</b>	<b>Parallel Session 4.3</b> <b>Section 5.</b> Mechanical engineering; <b>Industrial engineering;</b> Materials engineering; Engineering and management
<b>Link</b>	<a href="https://meet.google.com/rnz-dmkr-nef">https://meet.google.com/rnz-dmkr-nef</a>	<a href="https://meet.google.com/cjz-ikzy-hbg">https://meet.google.com/cjz-ikzy-hbg</a>	<a href="https://meet.google.com/xsd-kchh-xdi">https://meet.google.com/xsd-kchh-xdi</a>	<a href="https://meet.google.com/rsi-mkay-zgz">https://meet.google.com/rsi-mkay-zgz</a>



## Thursday, 16 May, 2024

Time	Event				
9.30-10.10	<b>Plenary Conference 3: Prof. dr. Sorin MUȘUROI (Online)</b>				
10.10-10.50	<b>Plenary Conference 4: Prof. dr. Cristian MAHULEA (Online)</b>				
Link	<a href="https://meet.google.com/ouj-wndn-npr?hs=224">https://meet.google.com/ouj-wndn-npr?hs=224</a>				
10.50-11.15	Coffee break				
11.15-13.00	<b>Online Parallel Session 1.4</b> Section 4. <b>Civil engineering and installations</b>	<b>Online Parallel Session 2.4</b> Section 2. Computers and information technology; Systems engineering <b>Electrical engineering;</b> Energy engineering; Electronic engineering, telecommunications and information technology	<b>Online Parallel Session 3.4</b> Section 5. Mechanical engineering; Industrial engineering; Materials engineering; <b>Engineering and management</b>	<b>Online Parallel Session 4.4</b> Section 2. Computers and information technology; Systems engineering Electrical engineering; Energy engineering; <b>Electronic engineering, telecommunication s and information technology</b>	
	Link	<a href="https://meet.google.com/npo-wrzp-sht">https://meet.google.com/npo-wrzp-sht</a>	<a href="https://meet.google.com/ngm-wuhg-frt">https://meet.google.com/ngm-wuhg-frt</a>	<a href="https://meet.google.com/djh-xavd-nop">https://meet.google.com/djh-xavd-nop</a>	<a href="https://meet.google.com/ges-gmvx-gwa">https://meet.google.com/ges-gmvx-gwa</a>
13.30-14.00	Lunch				
14.00-15.45	<b>Online Parallel Session 1.5</b> Section 4. <b>Civil engineering and installations</b>	<b>Online Parallel Session 2.5</b> Section 5. Mechanical engineering; Industrial engineering; Materials engineering; <b>Engineering and management</b>	<b>Online Parallel Session 3.5</b> Section 2. Computers and information technology; Systems engineering; <b>Electrical engineering;</b> Energy engineering; Electronic engineering, telecommunications and information technology	<b>Online Parallel Session 4.5</b> Section 2. Computers and information technology; Systems engineering; Electrical engineering; Energy	
	Link	<a href="https://meet.google.com/npo-wrzp-sht">https://meet.google.com/npo-wrzp-sht</a>	<a href="https://meet.google.com/ngm-wuhg-frt">https://meet.google.com/ngm-wuhg-frt</a>	<a href="https://meet.google.com/djh-xavd-nop">https://meet.google.com/djh-xavd-nop</a>	<a href="https://meet.google.com/ges-gmvx-gwa">https://meet.google.com/ges-gmvx-gwa</a>





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				engineering; Electronic engineering, telecommunications and information technology
<b>Link</b>	<a href="https://meet.google.com/yuw-ydoc-gbg">https://meet.google.com/yuw-ydoc-gbg</a>	<a href="https://meet.google.com/mmv-dsdb-zqw">https://meet.google.com/mmv-dsdb-zqw</a>	<a href="https://meet.google.com/qdr-vfmr-hwm">https://meet.google.com/qdr-vfmr-hwm</a>	<a href="https://meet.google.com/eqr-ijuz-grw">https://meet.google.com/eqr-ijuz-grw</a>

<b>15.45-16.00</b>	<b>Coffee break</b>
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<b>16.00-17.30</b>	<b>Online Parallel Session 1.6</b> Section 5. Mechanical engineering; Industrial engineering; <b>Materials engineering;</b> Engineering and management	<b>Online Parallel Session 2.6</b> Section 5. Mechanical engineering; Industrial engineering; Materials engineering; <b>Engineering and management</b>	<b>Online Parallel Session 3.6</b> Section 5. Mechanical engineering; <b>Industrial engineering;</b> Materials engineering; Engineering and management	<b>Online Parallel Session 4.6</b> Section 5. <b>Mechanical engineering;</b> Industrial engineering; Materials engineering; Engineering and management	<b>Onsite Workshop Compete 2.0</b> Applications of artificial intelligence in the industrial domains
	<b>Link</b>	<a href="https://meet.google.com/rsx-ixp-nmn">https://meet.google.com/rsx-ixp-nmn</a>	<a href="https://meet.google.com/ttm-ofrv-pab">https://meet.google.com/ttm-ofrv-pab</a>	<a href="https://meet.google.com/hrb-ojgg-qhs">https://meet.google.com/hrb-ojgg-qhs</a>	<a href="https://meet.google.com/kjd-bmhu-vbv">https://meet.google.com/kjd-bmhu-vbv</a>

**Friday, 17 May, 2024**

<b>Time</b>	<b>Event</b>
<b>9.30-10.10</b>	<b>Plenary Conference 5: Prof. dr. Maria VAMVAKAKI (Online)</b>
<b>10.10-10.50</b>	<b>Plenary Conference 6: Prof. dr. Davide FABIANI (Online)</b>
<b>Link</b>	<a href="https://meet.google.com/ztz-yeys-dxp?hs=224">https://meet.google.com/ztz-yeys-dxp?hs=224</a>

<b>10.50-11.05</b>	<b>Coffee break</b>
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<b>11.15-13.00</b>	<b>Session 1.7</b> <b>On-site</b>
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13.00-14.00	Lunch
14.00-15.45	<b>Session 2.7</b> <b>On-site</b>
15.45-16.00	Coffee Break
16.00-17.15	<b>Session 3.7</b> <b>On-site</b>
17.30	<b>Closing ceremony (on-site/on-line)</b>
<b>LINK:</b>	<a href="https://meet.google.com/yhd-qinm-xgp">https://meet.google.com/yhd-qinm-xgp</a>



# CSD2024 DETAILED CONFERENCE PROGRAM

**Wednesday, 15 May, 2024**

Time	Event	
9.00-9.25	<b>Opening ceremony (Online)</b>	
	<b>Prof.dr. Maria Gavrilescu</b>	Director of the Doctoral School "Gheorghe Asachi" Technical University of Iasi, Romania President of CSD2024
	<b>Prof.dr. Dan Cașcaval</b>	Rector of the "Gheorghe Asachi" Technical University of Iasi, Romania Honorary President of CSD2024
	<b>Prof.dr. Irina Lungu</b>	Vice-Rector International Affairs at the "Gheorghe Asachi" Technical University of Iași
	<b>Prof.dr. Alexandru Sălceanu</b>	Director of the Council for University Doctoral Studies "Gheorghe Asachi" Technical University of Iasi, Romania Co-President of CSD2024
	<b>Prof.dr. Maria Gavrilescu</b>	The official opening of CSD2024
<b>Link</b>	<a href="https://meet.google.com/vfs-wgjp-kbc?hs=224">https://meet.google.com/vfs-wgjp-kbc?hs=224</a>	

**PLENARY SESSION 1 (Online): Wednesday, 15 May, 9.30-10.50**

**Chairperson: Prof.dr. Maria Gavrilescu**

<b>9.30-10.10</b>	Trends in polymer-based nanocomposites	<b>Prof.dr. HORIA IOVU</b> National University of Science and Technology, Politehnica, Bucharest, Romania
<b>10.10-10.50</b>	Resource effective textile processes for functional and smart textiles	<b>Prof.dr. VINCENT NIERSTASZ</b> University of Borås, Sweden
<b>Link</b>	<a href="https://meet.google.com/vfs-wgjp-kbc?hs=224">https://meet.google.com/vfs-wgjp-kbc?hs=224</a>	
<b>10.50-11.15</b>	<b>Coffee break</b>	



**Online Parallel Session 1.1: Wednesday, 15 May, 11.15-13.00**

**Section 2. Computers and information technology; Systems engineering;** Electrical engineering; Energy engineering; Electronic engineering, telecommunications and information technology

**Chairperson: Prof. Florin Leon**

<https://meet.google.com/xej-cdbm-jyp>

Time	Oral presentation	Authors
11.15-11.30	A HIGH-LEVEL SYNTHESIS APPROACH TO MODELLING AND EVALUATION OF THE AXI5-STREAM PROTOCOL	<b><u>Cristian-Tiberius Axinte</u></b> Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Computers and information technology)
11.30-11.45	DOMAIN-SPECIFIC FPGA-BASED DIGITAL ACQUISITION SYSTEM FOR HARDWARE ACCELERATORS INTEGRATION	<b><u>Cosmin-Andrei Popovici</u></b> , Andrei Stan, Vasile-Ion Manta Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Computers and information technology)
11.45-12.00	ADVANCED SPEECH SEGMENTATION IN ROMANIAN NEWS BROADCASTS THROUGH MEDIAN FILTERING	<b><u>Vasile-Silviu Sărmășanu</u></b> Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Computers and information technology)
12.00-12.15	INNOVATIONS AND TECHNOLOGICAL UBIQUITY, FOR THE DEVELOPMENT OF E-BUSINESS, AT THE GOVERNMENT LEVEL	<b><u>Marius Ștefan</u></b> Bucharest University of Economic Studies, Bucharest, Romania (Computers and information technology)
12.15-12.30	ELECTRIC VEHICLE CHARGING STATION LAYOUT BASED ON GENETIC ALGORITHM AND AGENT SIMULATION	<b><u>Yanping Zhang</u></b> , Dan Chang, Daqing Gong Beijing Jiaotong University, School of Economics and Management, Xizhimenwai, Haidian District, Beijing, China (Systems engineering)
12.30-12.45	COMPARISON BETWEEN AN EXACT AND AN HEURISTIC-BASED METHOD FOR A VEHICLE ROUTING PROBLEM WITH TIME CONSTRAINTS	<b><u>Mihaela-Alexandra Barb-Ciorbea</u></b> Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Systems engineering)
12.45-13.00	MONITORING DISTRIBUTION NETWORKS TO DETECT WATER LOSSES -CASE STUDIES	<b><u>Alexandru Postăvaru</u></b> , Catrinel-Raluca Giurma-Handley Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Hydrotechnics, Geodesy and Environmental Engineering (Systems engineering)



13.00-14.00

Lunch

**Online Parallel Session 2.1: Wednesday, 15 May, 11.15-13.00**

**Section 3. Chemistry; Chemical engineering; Environmental engineering**

**Chairperson: Assoc. Prof. Adrian Ungureanu**

<https://meet.google.com/dut-grui-wee>

Time	Oral presentation	Authors
11.15-11.30	INTEGRATED SOLVENT-BEAD MILLING SERIAL EXTRACTION ON TWO MICROALGAE STRAIN BIOMASS: <i>Chlorella sorokiniana</i> AND <i>Galdieria sulphuraria</i>	<b>Elena Aurino</b> <sup>1</sup> , Luigi Marra <sup>1</sup> , Francesca Raganati <sup>1</sup> , Antonino Pollio <sup>2,3</sup> , Antonio Marzocchella <sup>1</sup> <sup>1</sup> Dipartimento di Ingegneria Chimica, dei Materiali e della Produzione Industriale, Università degli Studi di Napoli Federico II, P. le V. Tecchio 80, 80125 Napoli, Italy; <sup>2</sup> Dipartimento di Biologia, Università degli studi di Napoli Federico II, Via Cintia, 80126, Napoli, Italia; <sup>3</sup> Algal Collection of University of Naples Federico II, Università degli studi di Napoli Federico II, Via Cintia, 80126, Napoli, Italia (Chemical engineering)
11.30-11.45	C1 WASTE GAS FERMENTATION BY <i>Clostridium carboxidivorans</i> FOR ALCOHOLS PRODUCTION IN A CONTINUOUS GAS FED BIOREACTOR	<b>Sara Pisacane</b> , Fabiana Lanzillo, Francesca Raganati, Antonio Marzocchella Dipartimento di Ingegneria Chimica, dei Materiali e della Produzione Industriale - Università degli Studi di Napoli Federico II, P.le V. Tecchio 80, 80125 Napoli, Italy (Chemical engineering)
11.45-12.00	CONTINUOUS AUTOTROPHIC CULTIVATION OF <i>Galdieria sulphuraria</i> : A PREDICTIVE MODEL TO ASSESS PHOTON FLOW REGIMES AND CO <sub>2</sub> EFFECT ON BIOMASS AND METABOLITE PRODUCTIVITY	<b>Luigi Marra</b> <sup>1</sup> , Elena Aurino <sup>1</sup> , Francesca Raganati <sup>1</sup> , Antonino Pollio <sup>2,3</sup> , Antonio Marzocchella <sup>1</sup> <sup>1</sup> Dipartimento di Ingegneria Chimica, dei Materiali e della Produzione Industriale, Università degli Studi di Napoli Federico II, P. le V. Tecchio 80, 80125 Napoli, Italy; <sup>2</sup> Dipartimento di Biologia, Università degli studi di Napoli Federico II, Via Cintia, 80126, Napoli, Italia; <sup>3</sup> Algal Collection of University of Naples Federico II, Università degli studi di Napoli Federico II, Via Cintia, 80126, Napoli, Italia (Chemical engineering)
12.00-12.15	THE INFLUENCE OF THE THERMAL AND DIFFUSION PROPERTIES OF SOME INSULATING POROUS MATERIALS	<b>Adriana-Mariana Asoltanei</b> , Marius Sebastian Secula, Eugenia Teodora Iacob Tudose, Ioan Mămăligă "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Chemical engineering)



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12.15-12.30	EXPLOITING THE RECONSTRUCTION BY THE STRUCTURAL MEMORY FOR ENGINEERING LAYERED DOUBLE HYDROXIDES	<b>Denis Cutcovschi</b> , Sofronia Bouariu, Gabriela Carja "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Chemical engineering)
12.30-12.45	ADVANCED RECOVERY OF VALUABLE MATERIALS FROM E-WASTE	<b>Ștefan-Leontin Martinaș-Ioniță</b> , Gabriela Antoaneta Apostolescu, Maria Harja "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Chemical engineering)
12.55-13.00	THE RECOVERY OF WASTE COOKING OIL BY TRANSFORMING INTO VALUE-ADDED PRODUCTS	<b>Paula Olaru Simionescu Rusu</b> , Alina-Mirela Ipate, Gabriela Lisa "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Chemical engineering)
<b>13.00-14.00</b>	<b>Lunch</b>	

**Online Parallel Session 3.1: Wednesday, 15 May, 11.15-13.00**

**Section 3. Chemistry; Chemical engineering; Environmental engineering**

**Chairperson: Assoc. Prof. Cezar Catrinescu**

<https://meet.google.com/gsw-ofdt-pus>

Time	Oral presentation	Authors
11.15-11.30	XANTHAN GUM-BASED EMULSIONS IN FUNCTIONAL TEXTILES FOR SKINCARE APPLICATIONS	<b>Elena-Daniela Lotos</b> <sup>1</sup> , Angela Dănilă <sup>2</sup> , Marcela Mihai <sup>1</sup> , Bogdan C. Simionescu <sup>1</sup> <sup>1</sup> Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania; <sup>2</sup> "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Chemistry)
11.30-11.45	POLYELECTROLYTES/ LACCASE COMPOSITE BIOCATALYSTS FOR WATER CLEANING APPLICATIONS	<b>Larisa-Maria Petrila</b> <sup>1</sup> , Rénato Froidevaux <sup>2</sup> , Marcela Mihai <sup>1</sup> <sup>1</sup> "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania; <sup>2</sup> UMRt INRAE 1158 BioEcoAgro, Université de Lille, Villeneuve d'Ascq, France (Chemistry)
11.45-12.00	SUCCESSFUL DEGRADATION OF BISPHENOL A UNDER VISIBLE LIGHT IRRADIATION BY DOPED TITANIUM DIOXIDE CATALYSTS	<b>Yassine Jari</b> <sup>1</sup> , Lidia Favier <sup>2</sup> , Mohamed Chaker Necibi <sup>1</sup> , Bouchaib Gourich <sup>1,3</sup> , Christophe Vial <sup>4</sup> , Alaâeddine Elhalil <sup>3</sup> , Azzeddine El Midaoui <sup>1</sup> , Nicolas Roche <sup>1,5</sup>



		<p><sup>1</sup>International Water Research Institute (IWRI), Mohammed VI Polytechnic University, Morocco;</p> <p><sup>2</sup>Univ Rennes, Ecole Nationale Supérieure de Chimie de Rennes, CNRS, ISCR – UMR6226, France</p> <p><sup>3</sup>Laboratory of Process and Environmental Engineering, Higher School of Technology, Hassan II University, Morocco; <sup>4</sup>Université Clermont Auvergne, CNRS, Clermont Auvergne INP, Institut Pascal, France; <sup>5</sup>Aix-Marseille University, CNRS, IRD, INRAE, Coll France, CEREGE, CEDEX, France (Chemistry)</p>
12.00-12.15	EXPLORING POTENTIAL NANOPARTICLE EFFECTS ON CELLULAR RESPONSE IN 3D PRINTED SCAFFOLDS THROUGH LOCAL NANOMECHANICAL REINFORCEMENT	<p><b>Carmen-Valentina Nicolae<sup>1</sup></b>, Elena Olăreț<sup>1</sup>, Raluca-Elena Ginghină<sup>2</sup>, Sorina Dinescu<sup>3,4</sup>, Andrada Serafim<sup>1</sup>, Izabela-Cristina Stancu<sup>1</sup></p> <p><sup>1</sup>Advanced Polymer Materials Group, Faculty of Chemical Engineering and Biotechnologies, National University of Science and Technology Politehnica Bucharest, Romania; <sup>2</sup>Research and Innovation Center for CBRN Defense and Ecology, Bucharest, Romania; <sup>3</sup>Department of Biochemistry and Molecular Biology, University of Bucharest, Romania; <sup>4</sup>Research Institute of the University of Bucharest (ICUB), Bucharest, Romania (Chemistry)</p>
12.15-12.30	RAFT POLYMERIZATION SYNTHESIS OF POLY(2-(DIMETHYLAMINO) ETHYL ACRYLATE) AND ELECTROSTATIC COMPLEXATION WITH DEXTRAN SULFATE	<p><b>Melinda-Maria Bazarghideanu<sup>1</sup></b>, Marius-Mihai Zaharia<sup>1</sup>, Maria Karayianni<sup>1,2</sup>, Stergios Pispas<sup>1,2</sup>, Marcela Mihai<sup>1</sup></p> <p><sup>1</sup>"Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania; <sup>2</sup>Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation Athens, Greece (Chemistry)</p>
12.30-12.45	ENHANCED OXIDATIVE DEGRADATION OF REACTIVE RED 120 USING HETEROGENEOUS FENTON CATALYSTS BASED ON IRON OXIDE NANOPARTICLES CONFINED WITHIN THE PORES OF SBA-15 SILICA	<p><b>Mihaela Bectoras<sup>1</sup></b>, Cezar Catrinescu<sup>1</sup>, Adrian Ungureanu<sup>1</sup>, Carmen Ciotonea<sup>2</sup>, Cédric Gennequin<sup>2</sup>, Sébastien Royer<sup>3</sup></p> <p><sup>1</sup>"Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania; <sup>2</sup>Université du Littoral Côte d'Opale, Unité de Chimie Environnementale et Intéractions sur le Vivant-UCEIV, UR4492, SFR Condorcet FR CNRS 3417, Dunkerque, France; <sup>3</sup>Université de Lille, CNRS, Centrale Lille, Univ. Artois, UMR 8181 – UCCS – Unité de Catalyse et Chimie du Solide, Lille, France (Chemistry)</p>



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12.55-13.00	ANTIBIOTIC AND SILVER LOADED HYDROXYAPATITE FOR BONE TISSUE HEALING	<b>Sergiu Ionuț Buștiucel</b> , Margareta Gabriela Ciobanu "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Chemistry)
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<b>13.00-14.00</b>	<b>Lunch</b>	
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**Online Parallel Session 4.1: Wednesday, 15 May, 11.15-12.45**

**Section 3. Chemistry; Chemical engineering; Environmental engineering**

**Chairperson: Assoc. Prof. Brîndușa Slușer**

<https://meet.google.com/zge-apit-xib>

Time	Oral presentation	Authors
11.15-11.30	APPLICATION OF CIRCULAR ECONOMY PRINCIPLES IN BLUE ECONOMY SECTORS	<b>Letizia Caroscio</b> <sup>1</sup> , Cristian Chiavetta <sup>2</sup> , Alessandra Bonoli <sup>1</sup> <sup>1</sup> Department of Civil, Chemical, Environmental and Materials Engineering, University of Bologna, Italy; <sup>2</sup> ENEA - Italian National Agency for New Technologies, Energy and Sustainable Economic Development (Environmental engineering)
11.30-11.45	HARNESSING THE POWER OF GREEN PAVEMENT TO EFFECTIVELY ADDRESS ENVIRONMENTAL CHALLENGES IN URBAN AREAS	<b>Beatrice De Pascale</b> , Piergiorgio Tataranni, Department of Civil, Chemical, Environmental and Materials Engineering, University of Bologna, Italy (Environmental engineering)
11.45-12.00	PESTICIDE RESIDUE SCREENING IN CITRUS BASED ON GAS CHROMATOGRAPHY-TANDEM MASS SPECTROMETRY	<b>Brăduț-Bogdan Minea</b> <sup>1</sup> , Cristiana Radulescu <sup>1,2,3</sup> <sup>1</sup> National University of Science and Technology Politehnica Bucharest, Doctoral School Chemical Engineering and Biotechnology, Bucharest, Romania; <sup>2</sup> Valahia University of Targoviste, Institute of Multidisciplinary Research for Science and Technology, Targoviste, Romania; Valahia University of Targoviste, Faculty of Sciences and Arts, Targoviste, Romania (Environmental engineering)
12.00-12.15	WASTEWATER CLEANING WITH MAGNETIC NANOPARTICLES – THE CASE OF RHODAMINE B	<b>Andreea Roxana Fânaru Balint</b> <sup>1</sup> , Marian Grigoraș <sup>2</sup> , Gabriel Ababei <sup>2</sup> , Anda Les Agavriiloaei <sup>1</sup> , Dorina Creangă <sup>1</sup> <sup>1</sup> "Alexandru Ioan Cuza" University of Iasi, Faculty of Physics, Iasi, Romania; <sup>2</sup> National Institute of





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		Research and Development for Technical Physics, Iasi, Romania (Environmental engineering)
12.15-12.30	<i>In vivo</i> AND <i>in vitro</i> INVESTIGATION ON VALORIZATION OF FOOD BY-PRODUCTS AND WASTE	<b>Elena Petronela Bran</b> <sup>1</sup> , Daniela Nicuță <sup>2</sup> , Luminița Grosu <sup>3</sup> , Irina-Claudia Alexa <sup>3</sup> Adriana-Luminița Fînaru <sup>3</sup> <sup>1</sup> „Vasile Alecsandri” University of Bacău, Doctoral School, Bacău, Romania; <sup>2</sup> Department of Biology, Ecology and Protection of Environment; <sup>3</sup> Department of Chemical and Food Engineering, Bacău, Romania (Environmental engineering)
12.30-12.45	ANTIFUNGAL ACTIVITY OF EXTRACTS FROM <i>Sambucus nigra</i> AND <i>Juglans regia</i> BY-PRODUCTS	<b>Anca Sandu-Bălan Tăbăcariu</b> <sup>1,2</sup> , Oana-Irina Patriciu <sup>1</sup> , Ioana-Adriana Ștefănescu <sup>1</sup> , Irina-Loredana Ifrim <sup>1</sup> , Adriana-Luminița Fînaru <sup>1</sup> <sup>1</sup> „Vasile Alecsandri” University of Bacău, Faculty of Engineering, Bacău, Romania; <sup>2</sup> ”Ștefan Luchian” Secondary School, Moinesti, Romania (Environmental engineering)
<b>12.45-14.00</b>	<b>Lunch</b>	

**Online Parallel Session 1.2: Wednesday, 15 May, 14.00-15.30**

**Section 3. Chemistry; Chemical engineering; Environmental engineering**

**Chairperson: Prof. Maria Harja**

<https://meet.google.com/aab-htpm-fur>

Time	Oral presentation	Authors
14.00-14.15	THERMOSENSITIVE HYDROGELS – SYNTHESIS AND BIOMEDICAL APPLICATIONS	<b>Adina Maria Baroi Dănilă-Dediu</b> "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Chemical engineering)
14.15-14.30	ELABORATION AND CHARACTERIZATION THE COSMETIC PRODUCT: FROM CONCEPT TO MARKETING	<b>Claudia Bulai Maxim</b> "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Chemical engineering)
14.30-14.45	PHYSICO-CHEMICAL CHARACTERISTICS OF SOME ECOLOGICAL PRODUCTS USED FOR TEXTILE CARE	<b>Valentina Gabi Miron</b> , Niki Vlad Mancași "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management, Iasi, Romania (Chemical engineering)



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14.45-15.00	INFLUENCE OF IMPURITIES IN ELECTROLYTE ON THE MEMBRANE FOR BRINE ELECTROLYSIS PROCESS	<b>Valeria Danilova</b> , Liliana Lazăr, Ioan Mamaligă "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Chemical engineering)
15.00-15.15	THE USE OF WASTES AS RAW MATERIALS IN OBTAINING MATERIALS WITH PROMISING PROPERTIES	<b>Mihaela Caftanachi</b> <sup>1,2</sup> , <b>Maria Harja</b> <sup>1</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania; <sup>2</sup> S.C. Gemite RO SRL, Iasi, Romania
15.15-15.30	WASTES AND ADDITIVES USED TO REDUCE RAW MATERIALS CONSUMPTION	<b>Mihai Vrabie</b> <sup>1,2</sup> , <b>Maria Harja</b> <sup>1</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection, Iasi, 73 Mangeron Boulevard <sup>2</sup> S.C. Gemite RO SRL, Iasi, Romania (Chemical engineering)
<b>15.30-15.45</b>	<b>Coffee Break</b>	

**Online Parallel Session 2.2: Wednesday, 15 May, 14.00-15.30**

**Section 3. Chemistry; Chemical engineering; Environmental engineering**

**Chairperson: Prof. Laura Bulgariu**

<https://meet.google.com/sef-ovqa-noh>

Time	Oral presentation	Authors
14.00-14.15	METHODS OF REMOVAL OF ANIONIC DETERGENTS FROM WASTEWATER	<b>Mihaela Gabriela Staicu</b> <sup>1</sup> , Florica Manea <sup>2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania; <sup>2</sup> "Politehnica" University of Timisoara, Faculty of Industrial Chemistry and Environmental Engineering, Timișoara, Romania (Environmental engineering)
14.15-14.30	METHODS FOR THE ELIMINATION OF PER AND POLIFLUORALKYLIC SUBSTANCES - PROGRESS AND CHALLENGES	<b>Adina Carmen Gavrilesco</b> <sup>1</sup> , Manea Florica <sup>2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Romania, „Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania; <sup>2</sup> "Politehnica" University of Timisoara, Faculty of Industrial Chemistry and Environmental Engineering, Timișoara, Romania (Environmental engineering)
14.30-14.45	MANAGEMENT OF PACKAGING WASTE FROM E-COMMERCE IN	<b>Constantin Cîrjan</b> , Daniela Gavrilesco, Carmen Teodosiu



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	THE CONTEXT OF CIRCULAR ECONOMY	"Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Environmental engineering)
14.45-15.00	A PROSPECTIVE COMPARATIVE STUDY ON THE PERCEPTION OF NEARLY ZERO ENERGY BUILDINGS (NZEB) CONCEPT IN EUROPE	<b>Eduard Străinu</b> , Ioana Tănasă, Dumitru Botan, Brîndușa Slușer "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Environmental engineering)
15.00-15.15	PRELIMINARY STUDY OF REMAZOL ROSSO RB DYE ADSORPTION ONTO DRY FRESHWATER ALGAL BIOMASS	<b>Crinuta Larisa Ortovan</b> , Carmen Zaharia "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Environmental engineering)
15.15-15.30	STUDY ON THE PRODUCTION OF MAGNETITE NANOPARTICLES STABILIZED WITH SILVER FOR MEDICAL APPLICATIONS	<b>Helmina Ardeleanu, Dana Pricop, Dorina Creangă</b> "Alexandru Ioan Cuza" University of Iasi, Faculty of Physics, Iasi, Romania (Physics)
<b>15.15-15.45</b>	<b>Coffee Break</b>	

**Online Parallel Session 3.2: Wednesday, 15 May, 14.00-15.30**

**Section 2.** Computers and information technology; Systems engineering; Electrical engineering; **Energy engineering**; Electronic engineering, telecommunications and information technology

**Chairperson: Prof. Gheorghe Grigoraș**

<https://meet.google.com/zmc-oeby-icr>

Time	Oral presentation	Authors
14.00-14.15	DAY-AHEAD LOAD SHIFTING AS A DEMAND SIDE MANAGEMENT STRATEGY	<b>Mihaela Năstase</b> , Mihai Gavrilăș "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
14.15-14.30	RESILIENCE OF POWER SYSTEMS TO CYBER ATTACKS: EVALUATING TOOLS AND METHODOLOGIES FOR ENHANCED RESILIENCE	<b>Alin-Ionuț Pricop</b> , Mihai Gavrilăș "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)



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14.30-14.45	INFLUENCE OF PHOTOVOLTAIC PANELS ON THE NETWORKS OF DISTRIBUTION OPERATORS	<b>Nicolae Stănciulescu</b> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
14.45-15.00	INTEGRATION OF INTERNET OF THINGS AND DATA MINING CONCEPTS IN ENERGY CONSUMPTION MANAGEMENT: A LITERATURE REVIEW	<b>Răzvan Livadariu</b> , Gheorghe Grigoraș "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
15.00-15.15	EFFICIENT OPERATION OF ENERGY STORAGE SYSTEMS IN MICROGRIDS ENRICHED WITH EV	<b>Mihai-Andrei Luca</b> , Mihai Gavrilăș "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
15.15-15.30	VARIATION OF NUSSELT NUMBER FOR HEAT TRANSFER THROUGH A RECTANGULAR DUCT	<b>Andrei-Aurelian Ianoș</b> , Cătălin-Daniel Gălățanu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
<b>15.30-15.45</b>	<b>Coffee Break</b>	

**Online Parallel Session 4.2: Wednesday, 15 May, 14.00-15.30**

**Section 2. Computers and information technology; Systems engineering; Electrical engineering; Energy engineering; Electronic engineering, telecommunications and information technology**

**Chairperson: Prof. Ciprian Nemeș**

<https://meet.google.com/rbs-bocv-oyk>

Time	Oral presentation	Authors
14.00-14.15	AN OVERVIEW OF THE IMPROVEMENTS SUPPORTED BY ICNIRP 2020 GUIDELINES COMPARED TO THEIR PREVIOUS EDITIONS	<b>Petronela-Camelia Oprea</b> , Matei-Constantin <u>Moruz</u> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
14.15-14.30	INNOVATIVE VIRTUAL REALITY-BASED DESIGN AND EVALUATION OF A MECHATRONIC SYSTEM FOR HAND NEUROREHABILITATION	<b>Elena Nechifor</b> <sup>1</sup> , Sorin-George Nechifor <sup>1</sup> , Marian-Silviu Poboroniuc <sup>1</sup> , Cătălin Dosoftei <sup>2</sup> , Gabriel-Florentin Chiriac <sup>2</sup> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics; <sup>2</sup> "Gheorghe Asachi" Technical



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		University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering (Electrical engineering)
14.30-14.45	STUDY UPON THE INFLUENCE OF MOBILE PHONE PROTECTIVE CASE ON SAR DISTRIBUTION	<b>Petronela-Camelia Oprea</b> , Mădălina Cojocariu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
14.45-15.00	STUDY ON THE USE OF DIGITAL TWIN IN THE ANALYSIS OF PHOTOVOLTAIC SYSTEMS	<b>George Bălan</b> , Alexandru Sălceanu, Dorin-Dumitru Lucache "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
15.00-15.15	AN OVERVIEW AND CURRENT CHALLENGES IN RESPECT TO SCREEN-PRINTED ELECTROCHEMICAL ELECTRODES EMPLOYABILITY AS DISPOSABLE BIOSENSORS	<b>Tudor-Alexandru Filip</b> <sup>1</sup> , Mădălina-Petronela Simion <sup>1</sup> , Ina Țurcan <sup>2,3</sup> , Marius-Andrei Olariu <sup>1</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics; <sup>2</sup> "Ion Ionescu de la Brad" University of Life Sciences, Faculty of Horticulture; <sup>3</sup> "Alexandru Ioan Cuza" University of Iasi, Faculty of Physics, Iasi, Romania (Electrical engineering)
15.15-15.30	IMPROVING THE CONTROL'S NUMBER IN BRAIN-COMPUTER INTERFACE APPLICATIONS BASED ON MOTOR IMAGERY	<b>Silvia-Nicoleta Plăcintă</b> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
<b>15.30-15.45</b>	<b>Coffee Break</b>	

**Online Parallel Session 1.3: Wednesday, 15 May, 15.45-17.30**

**Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management**

**Chairperson: Prof. Leandru Bujoreanu**

<https://meet.google.com/rnz-dmkr-nef>

Time	Oral presentation	Authors
15.45-16.00	EASILY FORMABLE PARAFFIN-BASED COMPOSITES INCORPORATING IRON NANOPARTICLES WITH BOTH HYDROPHILIC AND HYDROPHOBIC CARBON SHELLS AS GAMMA-RAY SHIELD	<b>Jolanta Sobczak</b> <sup>1</sup> , Gawęł Żyła Doctoral School of the Rzeszów University of Technology, Rzeszów University of Technology, Rzeszów, Poland ; Department of Physics and Medical Engineering, Rzeszów University of Technology, Rzeszów, Poland



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		(Materials engineering)
16.00-16.15	REDUCING BUILDING SURFACE TEMPERATURE BY ADDING PCM LAYER INTO WALL CONFIGURATION	<b>Fardin Jafari</b> <sup>1</sup> , Giovanni Semprini <sup>2</sup> , Alessandra Bonoli <sup>1</sup> <sup>1</sup> University of Bologna, Department of Civil, Chemical, Environmental and Materials Engineering, Bologna, Italy; <sup>2</sup> University of Bologna, Faculty of Industrial Engineering, Bologna, Italy (Materials engineering)
16.15-16.30	SCRUTINIZING OF HEAT TRANSFER AND FLOW MECHANISM IN CIRCULAR BACKWARD-FACING STEP CONSIDERING FERROFLUID FLOW UNDER MAGNETIC FIELD EFFECT	<b>Emrehan Gürsoy</b> <sup>1</sup> , Engin Gedik <sup>2</sup> <sup>1</sup> Karabük University, Institute of Graduate Programs; <sup>2</sup> Karabük University, Faculty of Engineering, Karabük, Türkiye (Materials engineering)
16.30-16.45	PRELIMINARY RESULTS ON YSZ (HIGH Y <sub>2</sub> O <sub>3</sub> CONTENT) CERAMIC LAYERS	<b>Ionut Adomnitei</b> <sup>1</sup> , Gheorghe Bădărău <sup>1</sup> , Marian Luțcanu <sup>2</sup> , Daniela Lucia Chicet <sup>1</sup> , Nicanor Cimpoesu <sup>1</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering; <sup>2</sup> "Gheorghe Asachi" Technical University of Iasi, Department of Physics, Iasi, Romania (Materials engineering)
16.45-17.00	POLYMER COMPOSITES THERMISTORS USED AS HEAT FIRE DETECTORS: A SHORT REVIEW	<b>Cristian-Andrei Micu</b> , Petrică Vizureanu, Alin-Marian Cazac, Costică Bejinariu "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)
17.00-17.15	SAFETY HELMETS RECYCLING AND SELECTION: A SHORT REVIEW	<b>Cristian-Ștefan Bunduc</b> , Leandru Gheorghe Bujoreanu, Ramona Cimpoesu, Costică Bejinariu "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)
17.15-17.30	ADVANCED COMPOSITE MATERIALS USED IN THE AUTOMOTIVE INDUSTRY	Codrin-Dumitru Cîrlan, <b>Edmund Levardă</b> , Marius Petcu, Stefan Lucian Toma "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)

**Online Parallel Session 2.3: Wednesday, 15 May, 15.45-17.15**

**Section 3. Chemistry; Chemical engineering; Environmental engineering**

**Section 4. Civil engineering and installations**

**Chairperson: Assoc. Prof. Carmen Zaharia**

<https://meet.google.com/cjz-ikzy-hbg>



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Time	Oral presentation	Authors
15.45-16.00	EFFICIENT VISIBLE-LIGHT PHOTOCATALYTIC REMOVAL OF TARTRAZINE BY ZnO NANOPARTICLES: EVALUATING PHYTOTOXICITY OF TREATED SOLUTIONS	<b>Maria Paiu</b> <sup>1</sup> , Lidia Favier <sup>2</sup> , Doina Lutic <sup>3</sup> , Raluca-Maria Hlihor <sup>4</sup> , Maria Gavrilescu <sup>1,5</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Department of Environmental Engineering and Management, Iasi, Romania; <sup>2</sup> University of Rennes, Ecole Nationale Supérieure de Chimie de Rennes, CNRS, ISCR – UMR6226, F-35000 Rennes, France; <sup>3</sup> "Alexandru Ioan Cuza" University of Iasi, Faculty of Chemistry, Department of Chemistry, Iasi, Romania; <sup>4</sup> "Ion Ionescu de la Brad" Iasi University of Life Sciences, Faculty of Horticulture, Department of Horticultural Technologies, Iasi, Romania; <sup>5</sup> Academy of Romanian Scientists, Bucharest, Romania (Environmental engineering)
16.00-16.15	RETENTION OF RIFAMPICIN BY ADSORPTION ON PET FIBERS UNDER THE INFLUENCE OF SOME CATIONS AND ANIONS	<b>Elena Fasniuc-Pereu</b> , Laura Bulgariu "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Department of Environmental Engineering and Management, Iasi, Romania (Environmental engineering)
16.15-16.30	EFFECT OF GRAPE VARIETY AND EXTRACTION PROCEDURE ON THE PHENOLICS CONTENT AND ANTIOXIDANT ACTIVITY OF WHITE GRAPE BY-PRODUCTS	<b>Mihaela Nechifor Tudorache</b> <sup>1</sup> , Cristiana Rădulescu <sup>1,2,3,4</sup> <sup>1</sup> National University of Science and Technology POLITEHNICA Bucharest, Doctoral School Chemical Engineering and Biotechnology, Bucharest, Romania; <sup>2</sup> Valahia University of Targoviste, Institute of Multidisciplinary Research for Science and Technology, Targoviste, Romania; <sup>3</sup> Valahia University of Targoviste, Faculty of Sciences and Arts, Targoviste, Romania; <sup>4</sup> Academy of Romanian Scientists, Romania (Environmental engineering)
16.30-16.45	PRELIMINARY STUDY OF TWO COMMERCIAL FLOCCULANTS APPLIED FOR COLORED WASTEWATER TREATMENT	<b>Marius-Alexandru Afrășinei</b> , Corina-Petronela Mustereț, Carmen Zaharia "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Department of Environmental Engineering and Management, Iasi, Romania (Environmental engineering)
16.45-17.00	USE OF MODERN WATER LOSS DETECTION TECHNIQUES IN URBAN PIPE NETWORKS	<b>Vasile Stavarachi</b> , Mihail Luca



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		"Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Hydrotechnics, Geodesy and Environmental Engineering, Iasi, Romania (Civil Engineering and installations)
17.00-17.15	ANALYSIS OF THE TERRITORIAL EVOLUTION OF THE VALEA LUPULUI LOCALITY, IAȘI COUNTY, FOR THE PERIOD MARCH 2010 - MARCH 2024	<b>Veronica Muraru</b> , Florian Stătescu "Gheorghe Asachi" Technical University of Iași, Faculty of Hydrotechnics, Geodesy, and Environmental Engineering, Iasi, Romania (Civil Engineering and installations)

**Online Parallel Session 3.3: Wednesday, 15 May, 15.45-17.30**

**Section 4. Civil engineering and installations**

**Chairperson: Assoc. Prof. Petru Mihai**

<https://meet.google.com/xsd-kchh-xdi>

Time	Oral presentation	Authors
15.45-16.00	ASSESSING CRITERIA FOR MEASURING NORMAL ROUNDABOUT PERFORMANCE BASED ON GEOMETRIC CHARACTERISTICS	<b>Roozbeh Ebrahimi Golshanabadi</b> National University of Science and Technology "Politehnica" Bucharest, Faculty of Transportation, Bucharest, Romania (Civil engineering and installations)
16.00-16.15	SUSTAINABLE DEVELOPMENTS IN THE PORT OF CONSTANȚA ROMANIA	<b>Alexandru-Cristian Ionescu</b> , Romeo Ciortan "Ovidius" University Constanța, Faculty of Civil Engineering, (Civil engineering and installations)
16.15-16.30	STAINED GLASS WINDOWS, CANOPIES AND AWNINGS FROM HERITAGE BUILDINGS IN DOBROGEA	<b>Nicoleta Însurățelu</b> , Costel Coroban, Ana Maria Grămescu "Ovidius" University of Constanța, Faculty of History and Polytical Sciences, Constanța, Romania (Civil engineering and installations)
16.30-16.45	THEORETICAL ANALYSIS REGARDING COOLING PHOTOVOLTAIC THERMAL PANELS WITH WATER - CASE STUDY	<b>Marius Alexa</b> , Nicolae Țăranu, Sebastian Valeriu Hudișteanu, Nelu Cristian Cherecheș, Florin Emilian Țurcanu "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Installations, Iasi, Romania (Civil engineering and installations)
16.45-17.00	BIM DIMENSIONS APPLICATION FOR STRUCTURAL DESIGN	<b>Bogdan Chelaru</b> , Adrian Alexandru Șerbănoiu "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Installations, Iasi, Romania (Civil engineering and installations)
17.00-17.15	UTILIZATION OF SUSTAINABLE HYDROPHOBIC BIOMIMETIC	<b>Răducu-Mihai Geantău</b> , Ancuța Rotaru, Traian-Dănuț Babor





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	MATERIALS TO REDUCE SEEPAGE IN FOUNDATION WORKS	"Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Installations, Iasi, Romania (Civil engineering and installations)
17.15-17.30	SUSTAINABLE STONE MASONRY STRENGTHENING SYSTEM USING HEMP-BASED MATERIALS	<b>Ionuț Alexandru Spiridon</b> , Dorina Nicolina Isopescu "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Installations, Iasi, Romania (Civil engineering and installations)

**Online Parallel Session 4.3: Wednesday, 15 May, 15.45-17.30**

**Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management**

**Chairperson: Prof. Rodica Harpa**

<https://meet.google.com/rsi-mkay-zgz>

Time	Oral presentation	Authors
15.45-16.00	SOLUTION FOR ONLINE MARKETING – VIRTUAL TESTING ROOM	<b>Alice Mătășel</b> , Maria Carmen Loghin, Andreea Talpă "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management, Iasi, Romania (Industrial engineering)
16.00-16.15	DIABETIC FOOT COMPLICATIONS	<b>Adriana Chirilă</b> , Aura Mihai, Manuela-Lăcrămioara Avădanei, Mariana Costea, Alina Iovan-Dragomir "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management, Iasi, Romania (Industrial engineering)
16.15-16.30	TAILORED FIBER PLACEMENT APPLICATIONS	<b>Andreea Talpă</b> , Maria Carmen Loghin, Alice Mătășel "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management, Iasi, Romania (Industrial engineering)
16.30-16.45	THE ROUTE OF THE MATERIALS AND THE RETURN OF THE MATERIALS FROM THE TEXTILE INDUSTRY TO THE CIRCUIT OF NATURE	<b>Cezara Patrisia Lazăr</b> <sup>1,2</sup> , Antonela Curteza <sup>1</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management, Iasi, Romania <sup>2</sup> "Stefan cel Mare" University of Suceava, Faculty of Electrical Engineering and Computer Science, Suceava, Romania (Industrial engineering)



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16.45-17.00	OCCUPATIONAL SAFETY AND HEALTH WORK IN VIBRATION ENVIRONMENT	<b>Cristina Grosu</b> <sup>1,2</sup> , Mirela Blaga <sup>1</sup> <sup>1</sup> "Gheorghe Asachi" Technical University, Faculty of Industrial Design and Business Management, Iasi, Romania; <sup>2</sup> National Research & Development Institute for Textiles and Leather, Bucharest, Romania (Industrial engineering)
17.00-17.15	STATE-OF-THE-ART OF ADAPTIVE CLOTHING FOR PEOPLE WITH DISABILITIES	<b>Valentina Frunze</b> , Daniela Fărîmă "Gheorghe Asachi" Technical University, Faculty of Industrial Design and Business Management, Iasi, Romania (Industrial engineering)
17.15-17.30	PHYSICAL-MECHANICAL PROPERTIES OF COSMETOTEXTILES WITH ANTI-ACNE EFFECT	<b>Lucia-Oana Secareanu</b> <sup>1,2</sup> , Mirela Blaga <sup>1</sup> , <b>Alexandra-Gabriela Ene</b> <sup>2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University, Faculty of Industrial Design and Business Management, Iasi, Romania; <sup>2</sup> National Research & Development Institute for Textiles and Leather, Bucharest, Romania (Industrial engineering)



## Thursday, 16 May, 2024

### PLENARY SESSION 2 (Online): Thursday, 16 May, 9.30-10.50

Chairperson: **Prof. Alexandru Sălceanu**

9.30-10.10	Low-cost ferrite permanent magnet-assisted synchronous reluctance rotor: An alternative solution for rare earth permanent magnet synchronous motors	<b>Prof.dr. SORIN MUȘUROI</b> University Politehnica Timișoara, Romania
10.10-10.50	Current challenges in planning for teams of robots with high-level missions	<b>Prof.dr. CRISTIAN MAHULEA</b> Universidad de Zaragoza, Spain
Link	<a href="https://meet.google.com/ouj-wndn-npr?hs=224">https://meet.google.com/ouj-wndn-npr?hs=224</a>	
10.50-11.15	<b>Coffee break</b>	

### Online Parallel Session 1.4: Thursday, 16 May, 11.15-13.15

#### Section 4. Civil engineering and installations

Chairperson: **Assoc. Prof. Petru Mihai**

<https://meet.google.com/npo-wrzp-sht>

Time	Oral presentation	Authors
11.15-11.30	A SURVEY ON THE SEISMIC RETROFIT OF A REINFORCED CONCRETE BUILDING	<b>Alexandru-Nicolae Bizu</b> , Dorina-Nicolina Isopescu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
11.30-11.45	LONG-TERM BEHAVIOUR OF THE STRUCTURES BUILT WITHIN THE 1950s-1960s TO CONSOLIDATE THE SHORES AND CLIFFS OF THE BLACK SEA COAST IN CONSTANȚA CITY, ROMANI	<b>Mădălin-Cornel Văleanu</b> , Pavel Ionițoaiei, Ancuța Rotaru "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
11.45-12.00	INNOVATIVE HYDROGEN PLASMA-ASSISTED CONVERSION TECHNOLOGY OF CONSTRUCTION WASTE INTO ENERGY	<b>Iulian Cucos<sup>1</sup></b> , Dorina Isopescu <sup>2</sup> , Irina Baran <sup>2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Hydrotechnics, Geodesy & Environmental Engineering; <sup>2</sup> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)



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12.00-12.15	COMPARATIVE STUDY OF THERMAL CONDUCTIVITY IN LIGHTWEIGHT CONCRETE WITH DIFFERENT WASTE MATERIALS	<b>Radu Gabriel Mihai</b> , Ștefănică Eliza Vizitiu, Gabriel Bejan, Dorin Avram, Marinela Bărbuță, Ligia Melinte, Mowaffak Tawfik "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
12.15-12.30	MECHANICAL PROPERTIES AND FROST-THAW BEHAVIOR IN ROAD CONCRETE	<b>Bogdan Ionel Luca</b> <sup>1,2</sup> , Alexandru Panțiru <sup>1</sup> , Marinela Bărbuță <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania; <sup>2</sup> Romanian Association of Earthquake Engineering (Civil engineering and installations)
12.30-12.45	EVOLUTION AND INNOVATION OF INDUSTRIAL STEEL RACKING SYSTEMS: A STRUCTURAL AND FUNCTIONAL ANALYSIS	<b>Serban Iacob</b> , George Țăranu, Nicolae Țăranu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
12.45-13.00	NUMERICAL AND PHYSICAL EXPERIMENTS ON THE BEHAVIOR OF THE PERFORATED STEEL CORE COMPONENT OF BUCKLING RESTRAINED BRACES	<b>Cosmin-Petru Mocanu-Basalic</b> <sup>1</sup> , Septimiu George Luca <sup>1</sup> , Petru Mihai <sup>1</sup> , Irina Lungu <sup>1</sup> , Elena Basalic Mocanu <sup>2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania; <sup>2</sup> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Material Science and Engineering, Iasi, Romania (Civil engineering and installations)
13.00-13.15	CONSIDERATIONS ABOUT THE EFFICIENCY OF COMMONLY USED INSULATION MATERIALS AT EXTERNAL WALLS FOR HISTORIC BUILDINGS, USING NUMERICAL SIMULATION DATA AND FIELD MEASUREMENTS	<b>Petru Cătălin Miltiade</b> , Irina Baran, Laura Dumitrescu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
<b>13.15-14.00</b>	<b>Lunch</b>	

**Online Parallel Session 2.4: Thursday, 16 May, 11.15-13.15**

**Section 2.** Computers and information technology; Systems engineering; **Electrical engineering**; Energy engineering; Electronic engineering, telecommunications and information technology

**Chairperson: Prof. Marian Poboroniuc**

<https://meet.google.com/ngm-wuhg-frt>

Time	Oral presentation	Authors
11.15-11.30	CHARACTERIZATION OF SPATIAL AND TEMPORAL DISTRIBUTION OF	<b>Yining Wang</b> <sup>1</sup> , Zhenji Zhang <sup>2</sup> , Daqing Gong <sup>3</sup>



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	CHARGING STATION LOADS AND ANALYSIS OF INFLUENCING FACTORS	Beijing Jiaotong University, School of Economics and Management, Nr. 3 Shangyuan Village, Xizhimenwai, Haidian District, Beijing 100044, China (Electrical engineering)
11.30-11.45	STUDY ON THE ELECTROMAGNETIC EMISSIONS OF THE DEVICES THAT COULD BE USED IN A NEUROSURGERY OPERATING THEATRE	<b>Matei-Constantin Moruz</b> , Petronela-Camelia Oprea "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
11.45-12.00	BALANCED HYBRID FES&MECHATRONIC CONTROL SOFTWARE METHOD FOR HAND REHABILITATION IN STROKE PEOPLE	<b>Radu Ionascu</b> , Marian-Silviu Poboroniuc "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
12.00-12.15	EMPATHETIC HORIZONS: EXPLORING THE DEPTH AND BREADTH OF HUMAN EMPATHY IN AN INTERCONNECTED WORLD	<b>Daniela Anamaria Arsene Dolhăscu</b> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
12.15-12.30	THEORETICAL APPROACHES TO BIBLIOMETRIC TOOLS FOR SAR DISTRIBUTION	<b>Petronela-Camelia Oprea</b> , Matei-Constantin Moruz "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
12.30-12.45	RISKS AND LIMITATIONS OF THE USE OF TELEMEDICINE DEVICES FROM THE PERSPECTIVE OF ELECTROMAGNETIC INTERFERENCES	<b>Mădălina Cojocariu</b> , Petronela-Camelia Oprea "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
<b>12.45-14.00</b>	<b>Lunch</b>	

**Online Parallel Session 3.4: Thursday, 16 May, 11.15-13.00**

**Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management**

**Chairperson: Prof. Mirela Blaga**

<https://meet.google.com/djh-xavd-nop>

Time	Oral presentation	Authors
11.15-11.30	DIMENSIONS AND MANAGEMENT MODELS OF ORGANIZATIONAL WELLBEING	<b>Nicoleta-Andreea Filip<sup>1</sup></b> , Dănuț-Constantin Filip <sup>1</sup> , Ion Verzea <sup>1</sup> , Rachid Chaib <sup>2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania; <sup>2</sup> Freres Mentouri" University of Constantine, Department of Engineering, Transport and Environment, Constantine, Algeria



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		(Engineering and management)
11.30-11.45	DIMENSIONS AND MODELS OF DIGITIZED MANAGEMENT OF ORGANIZATIONS	<b>Dănuț-Constantin Filip</b> , Nicoleta-Andreea Filip, Ion Verzea "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
11.45-12.00	THEORETICAL RESEARCH INTO SUSTAINABLE SUPPLY CHAIN MANAGEMENT	<b>Ioana-Alexandra Sbîrcea</b> , Rebecca Ana Maria Chiriță, Cristina-Elena Ungureanu University Politehnica of Bucharest, Doctoral School of Entrepreneurship, Business Engineering and Management, Bucharest, Romania (Engineering and management)
12.00-12.15	RESEARCH ON PREDICTIVE MANAGEMENT SYSTEMS AND ANTICIPATORY MAINTENANCE TECHNOLOGIES OF PIPELINE TRANSPORT INFRASTRUCTURES	<b>Elena Cristina Anghel Vlădescu</b> University of Petroșani, Doctoral School, Petrosani, Romania (Engineering and management)
12.15-12.30	CRITICAL SUCCESS FACTORS FOR THE ADOPTION OF AGILE MATURITY MODELS IN MULTINATIONAL ORGANISATIONS	<b>Cristina-Elena Ungureanu</b> , Alina-Elena Ancu, Ioana-Alexandra Sbîrcea, Rebecca Ana Maria Chiriță National University of Science and Technology Politehnica Bucharest, Doctoral School of Entrepreneurship, Business Engineering and Management, Bucharest, Romania (Engineering and management)
<b>12.30-14.00</b>	<b>Lunch</b>	

**Online Parallel Session 4.4: Thursday, 16 May, 11.15-13.30**

**Section 2: Computers and information technology; Systems engineering; Electrical engineering; Energy engineering; Electronic engineering, telecommunications and information technology**

**Chairperson: Prof. Dan Dobrea**

<https://meet.google.com/ges-gmvx-gwa>

Time	Oral presentation	Authors
11.15-11.30	CLASSIFICATION OF FOCAL AND GENERALIZED EEG EPILEPTIC SIGNALS USING EMPIRICAL WAVELET TRANSFORM AND MULTIPLE CLASSIFIERS	<b>Mădălina-Giorgiana Murariu</b> , Mihaela Gavriliă, Daniela Tărniceriu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics, Telecommunications and Information Technology, Iași, Romania (Electronic engineering, telecommunications and information technology)
11.30-11.45	CYBERWARFARE DYNAMICS: STRATEGIC IMPLICATIONS IN THE DIGITAL DOMAIN	<b>Roxana Emanuela Ambrozie</b> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics,



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		Telecommunications and Information Technology, Iași, Romania (Electronic engineering, telecommunications and information technology)
11.45-12.00	ON THE DESIGN OF PLANAR INDUCTORS IN POWER APPLICATIONS	<b>Olimpian-Toma Păuleț</b> , Dorin Octavian Neacșu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electronics, Telecommunications and Information Technology, Iași, Romania (Electronic engineering, telecommunications and information technology)
12.00-12.15	A COMPARATIVE ANALYSIS OF THE EMOTION CLASSIFICATION IN FACIAL THERMAL IMAGES	<b>Sorin Marius Pavel</b> <sup>1</sup> , Dorel Aiordăchioaie <sup>2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics, Telecommunications and Information Technology, Iași, Romania; <sup>2</sup> "Dunarea de Jos" University of Galati, Faculty of Automation, Computers, Electrical and Electronics Engineering, Galati, Romania (Electronic engineering, telecommunications and information technology)
12.15-12.30	HOMOMORPHIC HASHING: ENABLING PRIVACY-PRESERVING ANALYTICS IN THE ERA OF BIG DATA	<b>Eduard Mihăilescu</b> , Mihaela Gavrilă, Doru Florin Chiper "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics, Telecommunications and Information Technology, Iași, Romania (Electronic engineering, telecommunications and information technology)
12.30-12.45	DESIGNING ALGORITHMS FOR OPTIMIZING VEHICLE MINIMUM TRAVEL DISTANCE	<b>Mihaela Gavrilă</b> <sup>1</sup> , Eduard Mihăilescu <sup>1</sup> , Daniela Târniceriu <sup>1</sup> , Mădălina Murariu <sup>1</sup> , Delia-Elena Bărbuță <sup>2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Electronics, Telecommunications and Information Technology; <sup>2</sup> Faculty of Automation Control and Computer Engineering, Iasi, Romania (Electronic engineering, telecommunications and information technology)
<b>12.45-14.00</b>	<b>Lunch</b>	

**Online Parallel Session 1.5: Thursday, 16 May, 14.00-15.30**

**Section 4. Civil engineering and installations**

**Chairperson: Assoc. Prof. Petru Mihai**

<https://meet.google.com/yuw-ydoc-gbg>

Time	Oral presentation	Authors
14.00-14.15	SHEAR STRUCTURAL RESPONSE OF STRENGTHENED UNREINFORCED STONE MASONRY WALLS USING	<b>Florin-Sergiu Alupoae</b> , Nicolae Țăranu, Dragoș Ungureanu, Cătălin Onuțu



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	TRADITIONAL AND MODERN TECHNIQUES EXPERIMENTAL SET-UP	"Gheorghe Asachi" Technical University of Iasi, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
14.15-14.30	IMPORTANCE OF ACHIEVING ZERO EMISSION BUILDINGS (ZEB) FOR SUSTAINABLE DEVELOPMENT	<b>Ioan Ursache</b> , Andrei Burlacu "Gheorghe Asachi" Technical University of Iasi, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
14.30-14.45	SUSTAINABLE HIGHWAY CONSTRUCTION PLANNING BY ADVANCING ENVIRONMENTAL CONSERVATION THROUGH AN INTEGRATED SOIL MAPPING AND LAND MANAGEMENT PLATFORM	<b>George-Călin Baltariu<sup>1</sup></b> , Ilinca-Maria Baltariu <sup>1,2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Faculty of Civil Engineering and Building Services, Iasi, Romania; <sup>2</sup> "Alexandru Ioan Cuza" University of Iasi, Faculty of Economics and Business Administration, Iasi, Romania (Civil engineering and installations)
14.45-15.00	REDUCING RESOURCE CONSUMPTION IN SUBSTRUCTURE WORKS BY REUSING WASTE	<b>Stelian-Ioan Tudoriu</b> , Decebal-Cristian Andrii, Anuța Rotaru "Gheorghe Asachi" Technical University of Iasi, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
15.00-15.15	STUDIES ON THE STABILIZATION OF FOUNDATION SOILS THROUGH ALTERNATIVE METHODS	<b>Marinela Scanghel</b> "Gheorghe Asachi" Technical University of Iasi, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
15.15-15.30	MANAGING URBAN PLANNING IN A MAJOR ROMANIAN CITY: INTEGRATING INDUSTRIAL HERITAGE FOR PUBLIC SPACE RECONFIGURATION - GROUND RULES AND KEY APPROACHES	<b>Razvan Nicolae Ivanciu</b> "Gheorghe Asachi" Technical University of Iasi, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
<b>15.30-16.00</b>	<b>Coffee break</b>	

**Online Parallel Session 2.5: Thursday, 16 May, 14.00-15.15**

**Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management**

**Chairperson: Prof. Manuela Avădanei**

<https://meet.google.com/mmv-dsdb-zqw>

Time	Oral presentation	Authors
14.00-14.15	PERSPECTIVE ON PERFORMANCE MANAGEMENT FORMS	<b>Rebecca Ana Maria Chiriță</b> , Cristina - Elena Ungureanu, Ioana-Alexandra Sbircea





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		University Politehnica of Bucharest, Doctoral School of Entrepreneurship, Business Engineering and Management, Bucharest, Romania (Engineering and management)
14.15-14.30	LEAN SIX SIGMA 4.0: AN INNOVATIVE STRATEGY FOR A SUSTAINABLE MANUFACTURING ECOSYSTEM	<b>Nicoleta-Mihaela Căsăneanu Dascălu</b> , Marius Pîslaru "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
14.30-14.45	THE EFFECT OF DIGITAL MARKETING STRATEGIES ON THE GROWTH OF THE COMPANY'S PERFORMANCE	<b>Sebastian Birzu</b> , Silvia Avasilcăi "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
14.45-15.00	MANAGEMENT RISK MODELS. THEORETICAL APPROACH	<b>Mihai-Doru Buliga</b> , Ion Verzea "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
15.00-15.15	EVALUATION OF SUSTAINABILITY IN THE PHARMACEUTICAL INDUSTRY VIA PERFORMANCE INDICATORS	<b>Laura-Crina Miraute Coca</b> , Marius Pîslaru "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
<b>15.15-16.00</b>	<b>Coffee break</b>	

**Online Parallel Session 3.5: Thursday, 16 May, 14.00-15.45**

**Section 2.** Computers and information technology; Systems engineering; **Electrical engineering**; Energy engineering; Electronic engineering, telecommunications and information technology

**Chairperson: Prof. Marius Olariu**

<https://meet.google.com/qdr-vfmr-hwm>

Time	Oral presentation	Authors
14.00-14.15	CURRENT DEVELOPMENTS IN THE TELEMEDICINE INFRASTRUCTURE IDENTIFIED WITH BIBLIOMETRIC TOOLS	<b>Mădălina Cojocariu</b> , Matei-Constantin Moruz, Petronela-Camelia Oprea "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Electrical engineering)
14.15-14.30	UPPER LIMB REHABILITATION WITH EXOSKELETON MECHATRONIC SYSTEMS AND VR TECHNOLOGY	<b>Sorin George Nechifor</b> <sup>1</sup> , Elena Nechifor <sup>1</sup> , Marian-Silviu Poboroniuc <sup>1</sup> , Cătălin Dosoftei <sup>2</sup> , Gabriel-Florentin Chiriac <sup>2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Electrical Engineering, Energetics and Applied Informatics; <sup>2</sup> Faculty of Automatic Control and Computer Engineering



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		(Electrical engineering)
14.30-14.45	STUDY ON ELECTROMAGNETIC INTERFERENCE IN DIFFERENT OPERATING ROOMS	<b>Marina-Georgiana Roman</b> , Lidia Nedelcu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Electrical engineering)
14.45-15.00	PREDICTIVE MAINTENANCE FOR MEDICAL VENTILATORS BASED ON SOUND AND ELECTROMAGNETIC FIELD MEASUREMENTS	<b>Lidia Nedelcu</b> , Marina-Georgiana Roman "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Electrical engineering)
15.00-15.15	IDENTIFICATION AND CHARACTERIZATION OF ELECTROMAGNETIC INTERFERENCES IN THE MEDICAL IMAGING CLINICAL CENTER	<b>Adelina-Cristina Căsuță</b> , Alexandru-Marian Bordaș "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Electrical engineering)
15.15-15.30	PERFORMANCE IMPROVEMENT OF DISTRIBUTION TRANSFORMERS FOR THE ENERGY SYSTEM	<b>Veronica-Carmen Gheorghe</b> , Radu Burlică "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Electrical engineering)
15.30-15.45	A COMPARATIVE FEM STUDY BETWEEN PERMANENT MAGNET AND WOUND FIELD SYNCHRONOUS MACHINES	<b>Mihăiță-Emanuel Anton</b> "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Electrical engineering)
<b>15.45-16.00</b>	<b>Coffee break</b>	

**Online Parallel Session 4.5: Thursday, 16 May, 14.00-15.00**

**Section 2. Computers and information technology; Systems engineering; Electrical engineering; Energy engineering; Electronic engineering, telecommunications and information technology**

**Chairperson: Prof. Dan Dobra**

<https://meet.google.com/eqr-ijuz-qrw>

Time	Oral presentation	Authors
14.00-14.15	NEW FIRE AND SMOKE DATASET USED FOR TRAINING YOLO AND PERFORMANCE EVALUATION	<b>Constantin Catargiu</b> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics, Telecommunications, and Information Technology Iasi, Romania (Electronic engineering, telecommunications and information technology)
14.15-14.30	FOREARM ELECTROMYOGRAM-BASED BIOMETRICS USING BAG-OF-WORDS CLASSIFIERS	<b>Irina Pavel</b> , Iulian Ciocoiu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics, Telecommunications, and Information Technology Iasi, Romania



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		(Electronic engineering, telecommunications and information technology)
14.30-14.45	GENERATIVE AI: ITS IMPACT, CHALLENGES, AND CONSEQUENCES ACROSS IT OCCUPATIONS	<b>Alexandra-Iulia David</b> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics, Telecommunications, and Information Technology Iasi, Romania (Electronic engineering, telecommunications and information technology)
14.45-15.00	GESTURE IDENTIFICATION AND AUTHENTICATION BASED ON EMG SIGNALS USING BAG-OF WORDS CLASSIFIER	<b>Iulia-Petronela Onică</b> , Iulian Ciocoiu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics, Telecommunications, and Information Technology Iasi, Romania (Electronic engineering, telecommunications and information technology)
15.00-15.15	IMPACT OF ENERGY PRODUCTION FROM RENEWABLE SOURCES ON THE INVESTMENT PLAN OF ELECTRICITY DISTRIBUTORS	<b>Gabriel-Dorin Melus</b> "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Energy engineering)
<b>15.15-16.00</b>	<b>Coffee break</b>	

**Online Parallel Session 1.6: Thursday, 16 May, 16.00-17.30**

**Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management**

**Chairperson: Prof. Leandru Bujoreanu**

<https://meet.google.com/rsx-iqxp-nmn>

Time	Oral presentation	Authors
16.00-16.15	IN VITRO INVESTIGATION OF BIODEGRADABLE ZnTi ALLOYS ON CORROSION BEHAVIOUR IN A PHYSIOLOGICAL FLUID	<b>Alexandra-Tamara Sutic</b> , Romeu Chelariu, Nicanor Cimpoesu, Ramona Cimpoesu, Mihai Axinte, Ana-Maria Roman, Gheorghe Bădărău "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)
16.15-16.30	ANALYSIS OF THE MAIN SOLICITATIONS OF MATERIALS FOR SALT WATER PUMPS	<b>Magdalena-Gabriela Hutanu</b> , Nicanor Cimpoesu, Liviu Andrusca, Vasile Manole, Mihai Axinte "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)
16.30-16.45	ENHANCING ORTHOPEDIC APPLICATIONS: A COMPARATIVE STUDY OF TiMoSi AND Ti6Al4V ALLOYS FOR IMPROVED	<b>Ion Ghiculescu</b> <sup>1</sup> , Marius Albert Mazilu <sup>1</sup> , Mihai Tofan <sup>1</sup> , Andrei Victor Sandu <sup>1,2</sup> , Madalina Simona Baltatu <sup>1</sup> , Petrică Vizureanu <sup>1,3</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering; <sup>2</sup> Academy of



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	BIOCOMPATIBILITY AND MECHANICAL PROPERTIES	Romanian Scientists, Bucharest, Romania; <sup>3</sup> Academy of Technical Sciences, Bucharest, Romania (Materials engineering)
16.45-17.00	MODERN METHODS OF SEVERE PLASTIC DEFORMATION: A SHORT REVIEW	<b>Ștefana Dochita-Agop</b> , Ioan-Gabriel Sandu, Nicanor Cimpoesu, Costică Bejinariu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)
17.00-17.15	IMPACT OF CHEMICAL CORROSION ON MECHANICAL CHARACTERISTICS OF MORTAR WITH NANOPARTICLES ADDITION	<b>Elena Basalic Mocanu</b> <sup>1</sup> , Daniel Lepadatu <sup>2</sup> , Cosmin Mocanu <sup>2</sup> , Ramona Cimpoesu <sup>1</sup> , Loredana Judele <sup>2</sup> , Nicanor Cimpoesu <sup>1</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, <sup>2</sup> Faculty of Civil Engineering and Building Services, Iasi, Romania (Materials engineering)
17.15-17.30	A DOCUMENTARY SYNTHESIS OF THE RESEARCH-DEVELOPMENT STAGE OF SOLID-STATE ORDER-DISORDER TRANSITION IN Cu-BASED SHAPE MEMORY ALLOYS	<b>Șerban Chimir</b> , Leandru-Gheorghe Bujoreanu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)

**Online Parallel Session 2.6: Thursday, 16 May, 16.00-17.00**

**Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management**

**Chairperson: Prof. Antonela Curteza**

<https://meet.google.com/ttm-ofrv-pab>

Time	Oral presentation	Authors
16.00-16.15	RESEARCH AND CONTRIBUTIONS REGARDING THE ROLE OF THE INFORMATION SYSTEM IN ORGANIZATIONAL SUSTAINABILITY MANAGEMENT	<b>Ștefana-Cătălina Pohontu-Dragomir</b> , Ionuț-Viorel Herghiligiu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management (Engineering and management)
16.15-16.30	DIGITAL TOOLS FOR DEVELOPING SUSTAINABLE SHAPES OF CLOTHING PRODUCTS FOR CUSTOMERS WITH SPECIAL NEEDS	<b>Mălina-Ioana Roșca</b> , Ana-Diana Vatră, Manuela Lăcrămioara Avădanei "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management (Engineering and management)
16.30-16.45	EXPLORING MOST USED METHODS OF EVALUATING HUMAN RESOURCE PERFORMANCE: IMPLICATIONS FOR ORGANIZATIONAL SUCCESS	<b>Florentina Bîrlădeanu Eftincă</b> , Silvia Avasilcăi, Adriana Bujor, Ana Maria Dobranici Dumitrescu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management (Engineering and management)



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16.45-17.00	ROMANIAN PRE-UNIVERSITY EDUCATION INSTITUTIONS: SOCIAL OR BUSINESS ORGANIZATIONS?	<b>Ana Maria Dobranici Dumitrescu</b> , Silvia Avasilcăi, Adriana Bujor, Florentina Bîrlădeanu Eftincă "Gheorghe Asachi" Technical University of Iasi-Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Environmental engineering)
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**Online Parallel Session 3.6: Thursday, 16 May, 16.00-17.45**

**Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management**

**Chairperson: Prof. Daniela Popescu**

<https://meet.google.com/hrb-ojgg-qhs>

Time	Oral presentation	Authors
16.00-16.15	PILLARS OF THE INDUSTRY 5.0 USED IN INDUSTRIAL ENGINEERING	<b>Florin-Daniel Eduțanu</b> "Gheorghe Asachi" Technical University of Iasi, Faculty of Faculty of Machine Manufacturing and Industrial Management Iasi, Romania (Industrial engineering)
16.15-16.30	IMPROVED PROPERTIES BY FFF BICOMPONENT 3D PRINTING OF POLYMERS – A REVIEW	<b>Maria Catana</b> , Simona-Nicoleta Mazurchevici, Dumitru Nedelcu "Gheorghe Asachi" Technical University of Iasi, Faculty of Faculty of Machine Manufacturing and Industrial Management Iasi, Romania (Industrial engineering)
16.30-16.45	METHODS AND TOOLS IN A STEP BY STEP APPROACH FOR CAPABILITY ANALYSIS WITH A CASE STUDY FOR THE IMPROVEMENT OF A GRINDING PROCESS WITHIN AN AUTOMATED UNIT	<b>Laurențiu Larco</b> "Gheorghe Asachi" Technical University of Iasi, Faculty of Faculty of Machine Manufacturing and Industrial Management Iasi, Romania (Industrial engineering)
16.45-17.00	PROCESS PARAMETERS REGARDING INFILL, AVAILABLE IN THE ULTIMAKER CURA SOFTWARE	<b>Alexandru-Ionuț Irimia</b> , Vasile Ermolai, Răzvan Stavarache, Gheorghe Nagiț "Gheorghe Asachi" Technical University of Iasi, Faculty of Faculty of Machine Manufacturing and Industrial Management Iasi, Romania (Industrial engineering)
17.00-17.15	HARNESSING HEAT FROM VEHICLE EXHAUST FOR AUTOMOTIVE APPLICATION	<b>Robert-Marian Bleotu</b> , Cosmin Preda "Lucian Blaga" University of Sibiu, Department of Industrial Machinery and Equipment, Victoriei Street 10, 550024, Sibiu, Romania (Industrial engineering)
17.15-17.30	3D PRINTING OF PARTS USING BIODEGRADABLE FILAMENTS	<b>Lucian-Corneliu Dârlău</b>



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	REINFORCED WITH METALLIC PARTICLES	"Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Machine Manufacturing and Industrial Management, Iasi, Romania (Industrial engineering)
17.30-17.45	REINFORCING INFILL STRUCTURE FOR MATERIAL EXTRUSION ADDITIVE MANUFACTURING	<b>Răzvan Cosmin Stavarache</b> , Vasile Ermolai, Alexandru Ionuț Irimia "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Machine Manufacturing and Industrial Management, Iasi, Romania (Industrial engineering)
17.45-18.00	PLASMA JET COPPER COATING OF 3D PRINTED BIODEGRADABLE MATERIALS – A REVIEW	<b>Mihaela Feraru Ilie</b> , Simona-Nicoleta Mazurchevici, Dumitru Nedelcu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Machine Manufacturing and Industrial Management, Iasi, Romania (Industrial engineering)

**Online Parallel Session 4.6: Thursday, 16 May, 16.00-18.00**

**Section 5: Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management**

**Chairperson: Prof. Ioan Doroftei**

<https://meet.google.com/kjd-bmhu-vbv>

Time	Oral presentation	Authors
16.00-16.15	DESIGN ANALYSIS OF GEAR WITH THE USAGE OF THE ADVANCED COMPUTER PROGRAM	<b>Nikola Veleski</b> , Ljupco Trajcevski "University „St. Kliment Ohridski“ Bitola, Faculty of Technical Sciences, Bitola, North Macedonia (Mechanical engineering)
16.15-16.30	EXPLORING THE HYPERELASTIC BEHAVIOR OF EPDM RUBBER SPRINGS: A COMPREHENSIVE ANALYSIS	<b>George Popa</b> <sup>1,2</sup> , Dragoș Luca <sup>2</sup> , Viorel Paleu <sup>1,2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania; <sup>2</sup> Continental Automotive Iași, Romania (Mechanical engineering)
16.30-16.45	OVERVIEW ON VEHICLE - BRIDGE COUPLED VIBRATIONS	<b>Adi-Mihăiță Velniciuc</b> "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
16.45-17.00	OPTIMIZATION OF PROTECTIVE THERMAL SHIELDS FOR TEG ENERGY RECOVERY DEVICES IN ICE SYSTEMS	<b>George Achitei</b> , Lamara Achitei, Aristotel Popescu "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
17.00-17.15	ASSESSMENT OF POLYCRYSTALLINE, MONOCRYSTALLINE, AND AMORPHOUS SOLAR PANELS UNDER DYNAMIC ENVIRONMENTAL CONDITIONS: PERFORMANCE	<b>Eduard Enasel</b> , Gheorghe Dumitrașcu "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)



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	INSIGHTS FOR RENEWABLE ENERGY APPLICATIONS	
17.15-17.30	HYDRAULIC MANIFOLDS BLOCKS – OPTIMIZATIONS, SIMULATIONS AND TESTING METHODS. A REVIEW	<b>Narcis Ioan Tica</b> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Faculty of Machine Manufacturing and Industrial Management, Iasi, Romania (Mechanical engineering)
17.30-17.45	THE PROCESS OF MAKING COMPOSITE MATERIALS WITH CARBON FIBER, BASALT OR FLAX	<b>Ionuț Mititelu</b> , Paul Doru Bârsănescu "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
17.45-18.00	ASSESSMENT OF HARMFUL EMISSIONS BY COMBUSTION PROCESSES OF NATURAL GAS AND HYDROGEN MIXTURES, AT PRESCRIBED COMBUSTION TEMPERATURE AND PRESSURE	<b>Ovidiu Trofin</b> <sup>1</sup> , Mădălina Boțu <sup>1</sup> , Gheorghe Dumitrașcu <sup>2</sup> <sup>1</sup> National Research and Development Institute for Gas Turbines, COMOTI, Bucharest, Romania <sup>2</sup> "Gheorghe Asachi" Technical University of Iași, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)

**Onsite Parallel Session 5.6: Thursday, 16 May, 16.00-17.30, SALA C101, CORP T, ET.1**  
**WORKSHOP: Applications of artificial intelligence in the industrial domains**  
**Chairpersons: Prof. Maria-Carmen Loghin, Lector dr. Alin Dragomir**

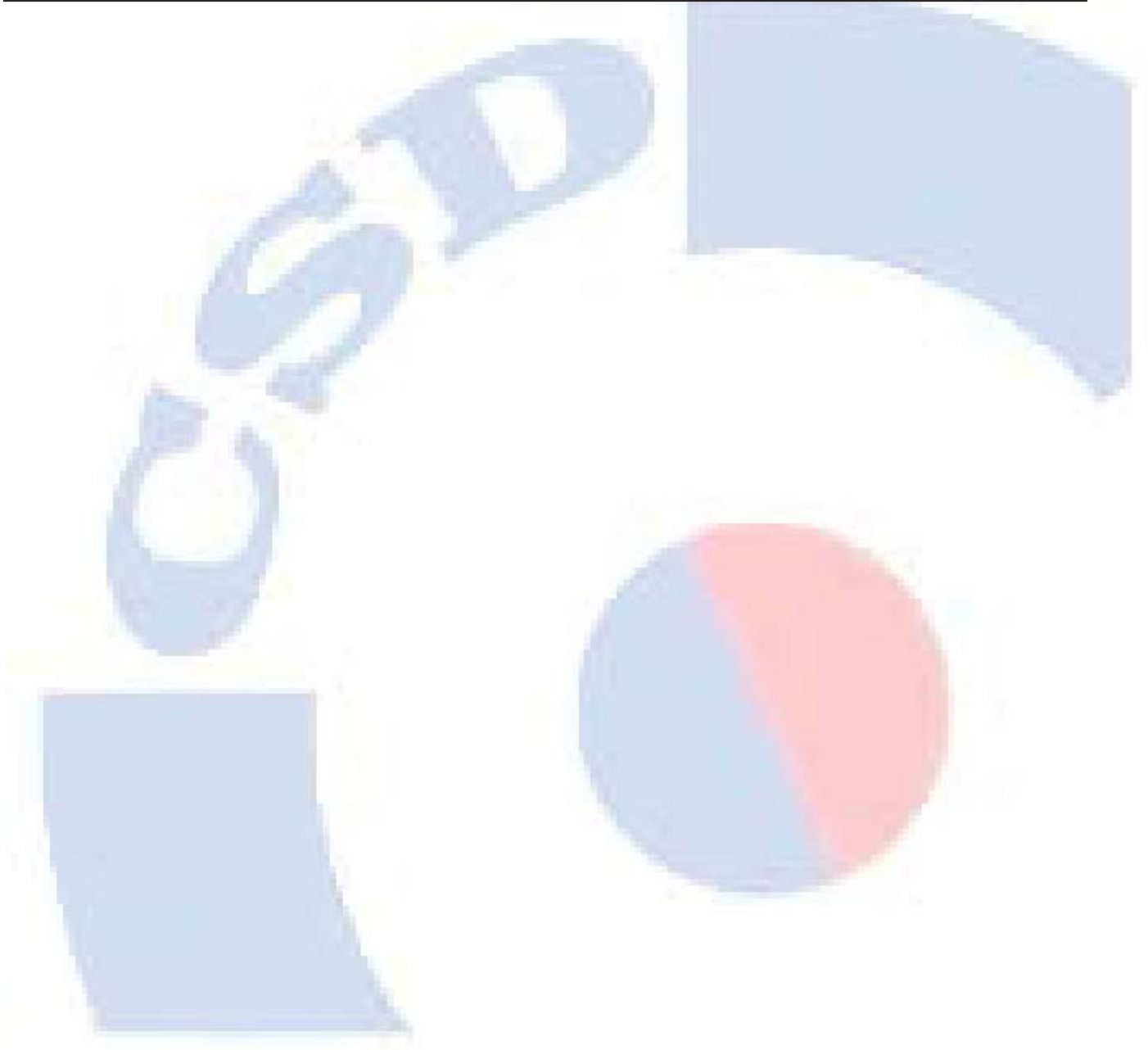
Time	Oral presentation	Authors
16.00-16.15	FUZZY SYSTEM WITH NEURAL NETWORK - GENERATED RULES IN AN ARTIFICIAL INTELLIGENCE APPLICATION FOR EVALUATING TECHNICAL RESILIENCE	<b>Adrian Vilcu</b> , Mădălina Laura Veleșcu "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania
16.15-16.30	IMPROVING INFRARED THERMOGRAPHIC INSPECTIONS OF ELECTRICAL INSTALLATIONS THROUGH THE CONTRIBUTION OF ARTIFICIAL INTELLIGENCE	<b>Alin Dragomir</b> , Maricel Adam, Silviu Marian Antohei "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania
16.30-16.45	AUTONOMOUS MOBILE ROBOTS LOGISTICS APPLICATION USING MULTI-PARAMETRIC MODEL PREDICTIVE CONTROL – AN ARTIFICIAL INTELLIGENCE FORMULATION	<b>Anca Maxim</b> , Ovidiu Păucă, Constantin Florin Căruntu "Gheorghe Asachi" Technical University of Iasi, Faculty of Automatic Control and Computer Engineering, Iasi, Romania
16.45-17.00	EVALUATION OF POST-SEISMIC EVACUATION USING ARTIFICIAL MULTIAGENT SYSTEMS – CASE STUDY	<b>Georgiana Bunea</b> <sup>1</sup> , Florin Leon <sup>2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Civil Engineering and Building Services; <sup>2</sup> Faculty of Automatic Control and Computer Engineering, Iasi, Romania



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17.00-17.15	ENHANCING VEHICLE ASSEMBLY WITH AI-DRIVEN GAZE DETECTION IN AUGMENTED REALITY SYSTEMS	<b>Petronela Bonteanu</b> , Gabriel Bonteanu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electronics, Telecommunications and Information Technology, Iasi, Romania
17.15-17.30	ARTIFICIAL INTELLIGENCE SYSTEMS IN ELECTRICAL SWITCHBOARDS	<b>Silviu Marian Antohi</b> , Maricel Adam, Alin Dragomir "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania







## Friday, 17 May, 2024

### PLENARY SESSION 3 (Online): Friday, 17 May, 9.30-10.50

Chairperson: **Prof. Alina-Adriana Minea**

9.30-10.10	Photodegradable polymers and polymer networks	<b>Prof. dr. MARIA VAMVAKAKI</b> Technical University of Crete, Greece
10.10-10.50	Dielectric spectroscopy: a viable tool for cable insulation diagnosis	<b>Prof. dr. DAVIDE FABIANI</b> Alma Mater Studiorum – Università di Bologna, Italy
Link	<a href="https://meet.google.com/ztz-yeys-dxp?hs=224">https://meet.google.com/ztz-yeys-dxp?hs=224</a>	
10.50-11.15	<b>Coffee break</b>	

### Onsite Session 1.7: Friday, 17 May, 11.15-12.45, SALA C101, CORP T, ET.1

#### Section 1. Interdisciplinary studies

Chairpersons: **Prof. Maria Gavrilescu, Prof. Nicolae Hurduc**

Time	Oral presentation	Authors
11.15-11.30	IMMOBILIZED BACTERIAL CELLS ON A NATURAL CARBONACEOUS MATERIAL FOR DIETHYL PHTHALATE BIODEGRADATION	<b>Emanuel Gheorghită Armanu</b> <sup>1</sup> , Simone Bertoldi <sup>2</sup> , Christian Eberlein <sup>2</sup> , Hermann J. Heipieper <sup>2</sup> , Marius Sebastian Secula <sup>1</sup> , Irina Volf <sup>1</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania; <sup>2</sup> Helmholtz Centre for Environmental Research (UFZ), Department of Molecular Environmental Biotechnology, Leipzig, Germany (Environmental engineering)
11.30-11.45	IMPROVING THE PROFITABILITY OF SOLAR PLANTS BY INTEGRATING THEM WITH SCADA SYSTEMS AND THE ENERGY EQUILIBRIUM MARKET THROUGH THE IMPLEMENTATION OF ENERGY STORAGE SYSTEMS	<b>Aurel-David Paizan</b> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical, Energetics and Applied Informatics Engineering, Iasi, Romania. (Electrical engineering)
11.45-12.00	CHARACTERIZATION AND ELIMINATION OF ARTIFACTS CAUSED BY CONDUCTED EMISSIONS IN ULTRASOUND IMAGING EQUIPMENT	<b>Alexandru-Marian Bordaș</b> , Adelina-Cristina Căsuță "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical, Energetics and Applied Informatics Engineering (Electrical engineering)



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12.00-12.15	SAFETY HELMETS RECYCLING AND SELECTION: A SHORT REVIEW	<b>Cristian-Stefan Bunduc</b> , Leandru Gheorghe Bujoreanu, Ramona Cimpoesu, Costica Bejinariu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)
12.15-12.30	THE IMPACT OF TRANSCRANIAL ELECTRICAL STIMULATION ON NEUROPSYCHOLOGICAL PROCESSES IN FEAR MEMORY	<b>Alexandru Buzamat</b> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electrical, Energetics and Applied Informatics Engineering (Electrical engineering)
12.30-12.45	K-MEANS CLUSTERING-BASED OPTIMAL PLACEMENT METHODOLOGY OF ELECTRIC VEHICLE CHARGING STATIONS IN PHOTOVOLTAIC RICH DISTRIBUTION NETWORKS	<b>Ecaterina Chelaru</b> , Gheorghe Grigoraș "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electrical, Energetics and Applied Informatics Engineering (Energy engineering)
12.45-13.00	NANOENCAPSULATION OF PHASE CHANGE MATERIALS: A SHORT OVERVIEW	<b>Nicoleta Cojocariu</b> "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania (Materials science)
<b>13.00-14.00</b>	<b>Lunch</b>	

**Onsite Session 2.7: Friday, 17 May, 14.00-15.45, SALA C101, CORP T, ET.1**

**Section 1. Interdisciplinary studies**

**Chairpersons: Prof. Maria-Carmen Loghin, Prof. Aristotel Popescu**

Time	Oral presentation	Authors
14.00-14.15	Synthesis and characterisation of bent core liquid crystals with cholesteryl chiral unit	<b>Iulian Berladean</b> <sup>1,2</sup> , Irina Carlescu <sup>1</sup> , Yahia Boussoualem <sup>2</sup> , Nicolae Hurduc <sup>1</sup> , Abdelylah Daoudi <sup>2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Department of Natural and Synthetic Polymers, Iasi, Romania; <sup>2</sup> Univ. Littoral Cote d'Opale, Unite de Dynamique et Structure de Materiaux Moleculaires, Dunkerque, France (Chemistry)
14.15-14.30	INFLUENCE OF LOW FREQUENCY TRANSDERMAL ELECTRICAL IMPULSES ON THE INCREASE OF THE VAGUS NERVE TONE	<b>Mihai Costache</b> "Al. I. Cuza" University of Iasi, Faculty of Physics, Iasi, Romania (Physics)
14.30-14.45	BIOACTIVE COMPOUNDS IN SEA BUCKTHORN AND THEIR EFFICACY IN	<b>Oana Cucoveică</b> , Leonard Ionuț-Atanase "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of



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	INFLAMMATORY SYNDROME OF THE ORAL CAVITY	Chemical Engineering and Environmental Protection, Iasi, Romania (Chemical engineering)
14.45-15.00	ROBOT TECHNOLOGY USED IN REHABILITATION – A STUDY COMPARISON WITH OVERGROUND GAIT TRAINING IN HEMIPLEGIC PATIENT	<b>Marius Dobîndă</b> "Alexandru Ioan Cuza" University of Iasi, Faculty of Physics, Iasi, Romania (Physics)
15.00-15.15	STUDY ON THE PHOTOCHEMICAL SYNTHESIS OF SILVER NANOPARTICLES USING CHEMICAL AND BIOLOGICAL REDUCERS – PRELIMINARY RESULTS	<b>Ramona Plesnicute</b> <sup>1</sup> , Iuliana Motrescu <sup>2</sup> , Anda Les Agavriloaei <sup>1</sup> , Dorina Creangă <sup>1</sup> <sup>1</sup> "Alexandru Ioan Cuza" University of Iasi, Faculty of Physics; <sup>2</sup> Ion Ionescu de la Brad University of Life Sciences, Iasi, Romania (Physics)
15.15-15.30	EXPLORING INNOVATIONS IN HYBRID HYDROGELS FOR EFFECTIVENESS IN TREATING VARICOSE ULCERS IN THE CONTEXT OF VASCULAR HEALTH	<b>Elena Farcaș</b> <sup>1</sup> , Leonard Ionuț Atanase <sup>2,3</sup> <sup>1</sup> "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection; <sup>2</sup> "Apollonia" University of Iasi, Romania; <sup>3</sup> Academy of Romanian Scientists, Bucharest, Romania (Chemical engineering)
15.30-15.45	ADVANCING RESPONSIBLE TOURISM-IMPLEMENTING SUSTAINABLE DEVELOPMENT GOAL TARGETS IN TOURIST DESTINATIONS	<b>Raluca-Maria Tâbuleac</b> <sup>1</sup> , Maria Gavrilescu <sup>1,2</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania; <sup>2</sup> Academy of Romanian Scientists, Bucharest, Romania (Environmental engineering)
<b>15.45-16.00</b>	<b>Coffee break</b>	

**Onsite Session 3.7: Friday, 17 May, 16.00-17.15, SALA C101, CORP T, ET.1**

**Section 1. Interdisciplinary studies**

**Chairpersons: Prof. Alexandru Sălceanu, Assoc. Prof. Bogdan Istrate**

Time	Oral presentation	Authors
16.00-16.15	KEY ASPECTS REGARDING THE IMPLEMENTATION OF A PHOTOVOLTAIC PARK IN ORDER TO CREATE A REDUCTION IN CARBON EMISSIONS	<b>Stefan-Andrei Nădăbaică</b> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical, Energetics and Applied Informatics Engineering, Iasi, Romania. (Electrical engineering)
16.15-16.30	A CUTTING-EDGE SENSORY DEVICE FOR EVALUATING PELVIC FLOOR MUSCLE STRENGTH	<b>Alina Roxana Miron</b> , Marian-Silviu Poboroniuc "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering,



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		Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
16.30-16.45	DESIGNING, MANUFACTURING AND TESTING OF AN EXPERIMENTAL SETUP FOR THE STUDY OF SHAPE MEMORY EFFECT IN R-PET THERMOFORMED CUPS	<b>Ștefan Dumitru Sava<sup>1</sup></b> , Mihai Axinte <sup>1</sup> , Romario Patraș <sup>2</sup> , Leandru-Gheorghe Bujoreanu <sup>1</sup> <sup>1</sup> "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, <sup>2</sup> Faculty of Architecture, Iasi, Romania (Materials engineering)
16.45-17.00	IN-DEPTH THEORETICAL AND EXPERIMENTAL REVIEW ON DIELECTROPHORETIC MANIPULATION OF BIOLOGICAL CELLS	<b>Mădălina-Petronela Simion</b> , Tudor-Alexandru Filip, Marius-Andrei Olariu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical, Energetics and Applied Informatics Engineering, Iasi, Romania (Electrical engineering)
17.00-17.15	EXPLORING GRADIENT BOOSTING MACHINE FOR PARKINSON'S DISEASE CLASSIFICATION USING ACCELEROMETER DATA	<b>Andrei Stoleru</b> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Computers and information technology)
<b>17.30</b>	<b>CSD2023 Closing ceremony (Online/Onsite)</b>	
Link	<a href="https://meet.google.com/yhd-qinm-xgp">https://meet.google.com/yhd-qinm-xgp</a>	

### SOME KEY FIGURES:

- ✓ 177 papers
- ✓ participants from 9 countries (authors and co-authors)
- ✓ 16 Romanian universities, 14 foreign universities
- ✓ Romanian Academy and 2 branch Romanian Academies
- ✓ 6 research and development Romanian institutes and agencies, 3 foreign research and development institutes and agencies
- ✓ 2 companies
- ✓ 1 secondary school



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