

8TH INTERNATIONAL CONFERENCE OF THE DOCTORAL SCHOOL CONFERENCE PROGRAM

MAY, 14-16, 2025
IASI, ROMANIA

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



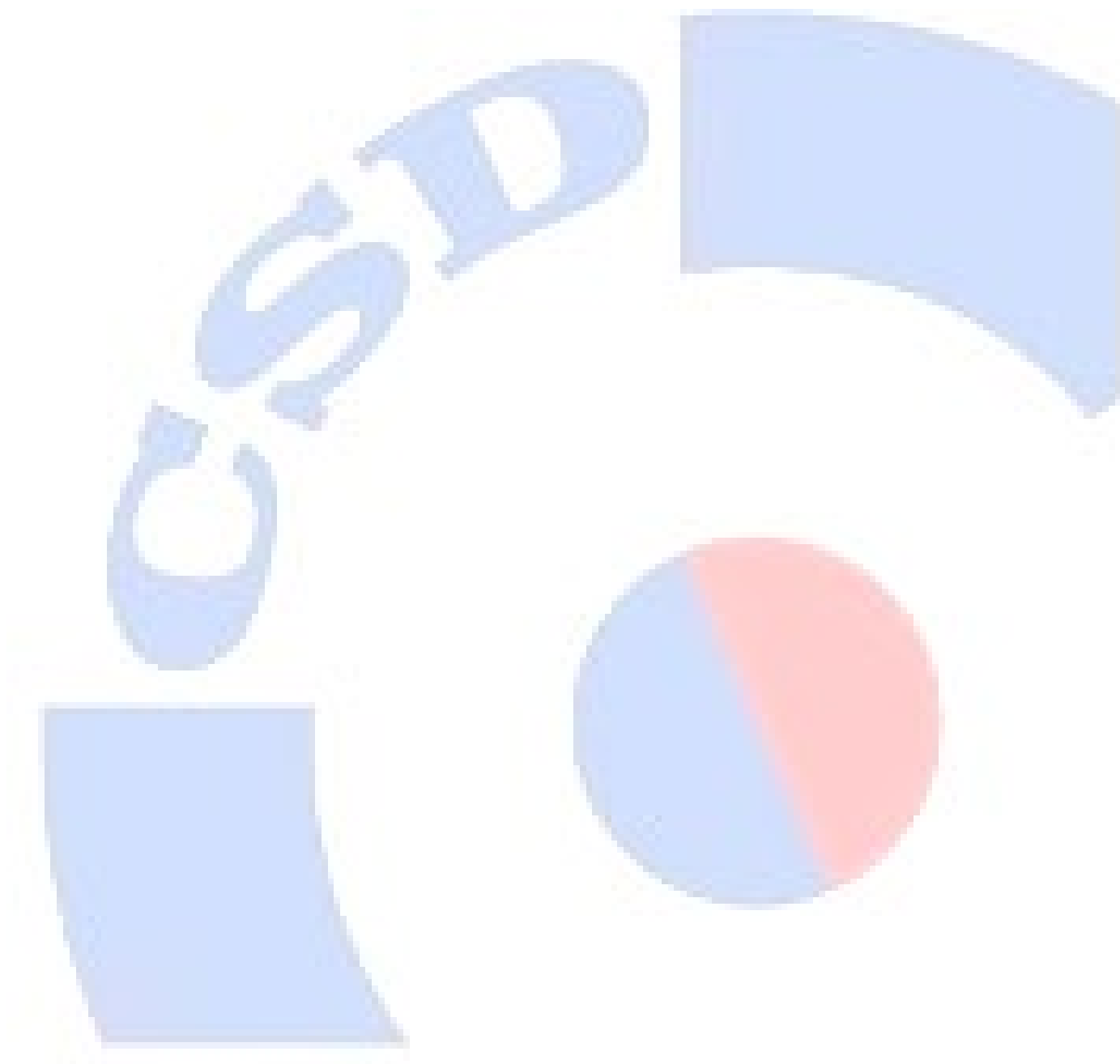
www.conferinta-csd.tuiasi.ro



**Welcome to CSD2025,
wishing you a successful
conference!**



"Gheorghe Asachi" Technical University of Iași, Romania
8th International Conference of the Doctoral School
May 14 - 16, 2025, Iași, România





"Gheorghe Asachi" Technical University of Iasi, Romania
8th International Conference of the Doctoral School
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8th International Conference of the Doctoral School

"Gheorghe Asachi" Technical University of Iasi

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

CONFERENCE PROGRAMME

May 14 – 16, 2025

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**)



Organizer's Message

Dear PhD Students,

Dear Colleagues and Guests,

Dear Participants,

At its eighth edition, the International Conference of the Doctoral School at the "Gheorghe Asachi" Technical University of Iasi (TUIASI) is dedicated to all PhD students from Technical Universities from Romania included in the Romanian Alliance of Universities of Science and Technology (ARUST), but not only. The goal is to share their research, to exchange ideas, and to make new connections. The conference is a great chance for PhD students to refine their research methods, encourage interdisciplinary teamwork, and keep growing. For three days, there will be panel sessions where PhD students can talk about and discuss their research papers. The schedule also includes plenary conferences held by prominent professors from universities closely associated with TUIASI through collaborations.

This event aims to bring together different presentations covering important issues in the TUIASI thirteen doctoral fields, such as *Chemistry, Computers and Information Technology, Chemical Engineering, Civil Engineering, Electrical Engineering, Electronic Engineering, Telecommunications, Information Technologies, Energetic Engineering, Industrial Engineering, Materials Engineering, Mechanical Engineering, Environmental Engineering, Systems Engineering, and Engineering and Management.*

By connecting these scientific fields, encouraging innovation through teamwork, and focusing on international collaboration, the conference acts as a meeting point for new ideas and advancements in science. This approach ensures that doctoral programs provide PhD students with the right skills and knowledge for jobs in social institutions, contributing to a sustainable economy. For PhD students in the earlier stages of doctoral studies, the conference provides an opportunity to train for their first contributions to a certain scientific field, while for the PhD students in later stages, the communications held during conference can be seen as a scientific step towards the jobs market. This connects with the university's commitment to making courses more international, increasing mobility for students and staff, and promoting understanding between different cultures. It also ties in with the university's role as a partner in the European "Ingenium" project, which involves ten European institutions of higher education working together to improve study programs using digital tools shared within the INGENIUM Alliance.

Together, let's bridge scientific fields, foster innovation through collaboration, and embrace the spirit of internationalization. Join us in creating an academic intersection where new ideas flourish and progress takes center stage. We look forward to your active participation and the joint impact we can make at this conference.

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

Welcome to CSD2025, 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

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- Prof.dr. **Luis Lugo**, University of Vigo, Spain
- Prof. dr. **Irina Lungu**, Gheorghe Asachi Technical University of Iasi, Romania
- Prof.dr. **Omid Mahian**, Xi'an Jiaotong University, China
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- Prof.dr. **Antonio Marzocchella**, University Federico II, Naples, Italy
- 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. **Doina Pîslă**, Technical University of Cluj-Napoca, Romania
- Prof.dr. **Radu-Emil Precup**, Politehnica University of Timișoara, Romania
- Prof. dr. **Neculai Eugen Seghedin**, Gheorghe Asachi Technical University of Iasi, Romania
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- Prof. dr. **Ionuț Ovidiu Toma**, Gheorghe Asachi Technical University of Iasi, Romania

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

SECRETARIAT

- Eng. **Cristina Nagiț** (doctorat@tuiasi.ro)
- Dr. **Sabina-Nicoleta Rotenștein** (sabina-nicoleta.rotenstein@staff.tuiasi.ro)
- MA **Sabina Bobu** (sabina.bobu@staff.tuiasi.ro)
- PhD Student **Nicolae-Răzvan Mititelu (Section 1)**
(nicolae-razvan.mititelu@student.tuiasi.ro)
- PhD Student **Alexandru Baci** (**Section 2**) (mihai-alexandru.baciu@student.tuiasi.ro)
- PhD Student **Raluca-Maria Țăbuleac (Section 3)**
(raluca-maria.tabuleac@staff.tuiasi.ro)
- PhD Student **Dumitrița Vataman (Section 4)** (dumitrita.vataman@student.tuiasi.ro)
- PhD Student **Cristian-Stefan Bunduc (Section 5)**
(cristian-stefan.bunduc@student.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, MECS 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 8th edition of the International Conference of the Doctoral School of IOSUD "Gheorghe Asachi" Technical University of Iasi (CSD2025), which is organized under the generic "**Excellence in Doctoral Studies through Innovation, Convergence and Interdisciplinarity**" is programmed during May 14-16, 2025 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. Gabriela Lisa

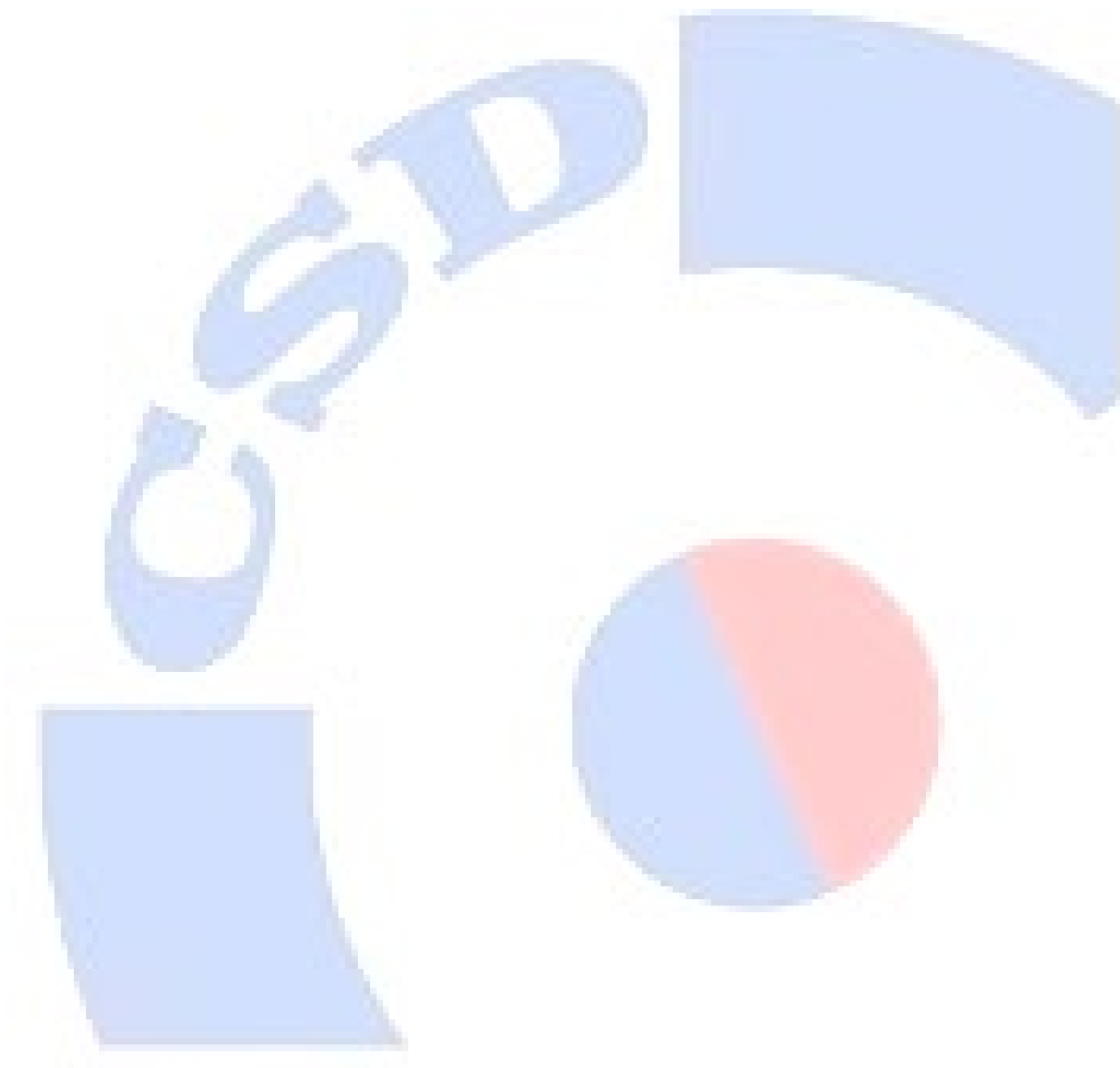
gabriela.lisa@academic.tuiasi.ro; +40 746140086

MA Sabina Bobu

sabina.bobu@staff.tuiasi.ro; +40 756640335



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FIRST SIGHT CSD2025 CONFERENCE PROGRAM

Wednesday, 14 May, 2025

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

Thursday, 15 May, 2025

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



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14.00-15.45	Parallel Sessions On-line
15.45-16.00	Coffee Break
16.00-17.30	Parallel Sessions On-line

Friday, 16 May, 2025

Time	Event
9.30-10.10	Plenary Conference 5
10.10-10.50	Plenary Conference 6
10.50-11.15	Coffee Break
11.15-12.30	Session 1 On-site
12.30-14.00	Lunch
14.00-15.15	Session 2 On-site
15.30	Closing ceremony (on-site/on-line)



GENERAL CSD2025 CONFERENCE PROGRAM

Wednesday, 14 May, 2025

Time	Event			
9.00-9.25	Opening ceremony (Online)			
9.30-10.10	Plenary Conference 1: Prof. dr. Doina LOGOFĂTU (Online)			
10.10-10.50	Plenary Conference 2: Prof. dr. Burak ÖZKAL (Online)			
Link	HTTPS://MEET.GOOGLE.COM/WHC-TNNJ-WTQ			
10.50-11.15	Coffee break			
11.15-13.00	Parallel Session 1.1 Section 2. Computers and information technology; Systems engineering Energy engineering; Electronic engineering, telecommunications and information technology	Parallel Session 2.1 Section 3. Chemistry; Chemical engineering; Environmental engineering	Parallel Session 3.1 Section 3. Chemistry; Chemical engineering; Environmental engineering	Parallel Session 4.1 Section 3. Chemistry; Chemical engineering; Environmental engineering
	Link	https://meet.google.com/xkx-hqcn-rhy	https://meet.google.com/rcw-eqfo-cjo	https://meet.google.com/vco-cthz-zsb
13.00-14.00	Lunch			
14.00-15.30	Parallel Session 1.2 Section 3. Chemistry; Chemical engineering; Environmental engineering	Parallel Session 2.2 Section 3. Chemistry; Chemical engineering; Environmental engineering	Parallel Session 3.2 Section 2. Computers and information technology; Systems engineering Electrical engineering;	Parallel Session 4.2 Section 2. Computers and information technology; Systems engineering Electrical engineering; Energy engineering;
	Link	https://meet.google.com/xkx-hqcn-rhy	https://meet.google.com/rcw-eqfo-cjo	https://meet.google.com/vco-cthz-zsb



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			Energy engineering; Electronic engineering, telecommunication s and information technology	Electronic engineering, telecommunications and information technology
Link	https://meet.google.com/yxk-efcq-jem	https://meet.google.com/zyv-fzvv-tij	https://meet.google.com/fwn-rnhj-yrq	https://meet.google.com/obr-hbaj-rih

15.30-15.45	Coffee Break
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15.45-18.00	Parallel Session 1.3 Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management	Parallel Session 2.3 Section 3. Chemistry; Chemical engineering; Environmental engineering	Parallel Session 3.3 Section 4. Civil engineering and installations	Parallel Session 4.3 Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management	Parallel Session 5.1 Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management
Link	https://meet.google.com/ksd-prts-jrg	https://meet.google.com/fjh-iqcj-xvy	https://meet.google.com/fcf-vioc-uud	https://meet.google.com/vec-oohk-jxr	https://meet.google.com/cky-hgji-ioh



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Thursday, 15 May, 2025

Time	Event
9.30-10.10	Plenary Conference 3: Prof. dr. Dan Doru MICU (Online)
10.10-10.50	Plenary Conference 4: Prof. dr. Ciprian ALECSANDRU (Online)
Link	https://meet.google.com/odh-bfpt-mth

10.50-11.15	Coffee break
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11.15-13.00	Parallel Session 1.4 Section 4. Civil engineering and installations	Parallel Session 2.4 Section 2. Computers and information technology; Systems engineering Electrical engineering; Energy engineering; Electronic engineering, telecommunications and information technology	Parallel Session 3.4 Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management	Parallel Session 4.4 Section 2. Computers and information technology; Systems engineering Electrical engineering; Energy engineering; Electronic engineering, telecommunications and information technology
Link	https://meet.google.com/cdv-pioq-qvg	https://meet.google.com/uon-jccp-mzb	https://meet.google.com/oxp-kbyn-azv	https://meet.google.com/pqv-qnze-esh

13.30-14.00	Lunch
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14.00-15.45	Parallel Session 1.5 Section 4. Civil engineering and installations	Parallel Session 2.5 Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management	Parallel Session 3.5 Section 2. Computers and information technology; Systems engineering; Electrical engineering; Energy engineering; Electronic engineering,	Parallel Session 4.5 Section 2. Computers and information technology; Systems engineering; Electrical engineering; Energy engineering;	Parallel Session 5.2 Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management
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			telecommunications and information technology	Electronic engineering, telecommunications and information technology	
Link	https://meet.google.com/vad-hhcs-woz	https://meet.google.com/dfs-ofsh-mcr	https://meet.google.com/djs-hodo-nmp	https://meet.google.com/srm-xqxo-sbe	https://meet.google.com/msy-kkwf-jzo
15.45-16.00	Coffee break				
16.00-17.30	Online Parallel Session 1.6 Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management	Online Parallel Session 2.6 Section 2. Computers and information technology; Systems engineering Energy engineering; Electronic engineering, telecommunications and information technology	Online Parallel Session 3.6 Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management	Online Parallel Session 4.6 Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management	Online Parallel Session 5.3 Section 2. Computers and information technology; Systems engineering; Electrical engineering; Energy engineering; Electronic engineering, telecommunications and information
Link	https://meet.google.com/hwo-xgso-gth	https://meet.google.com/cug-jebe-kdm	https://meet.google.com/tkb-jznh-tsk	https://meet.google.com/ppd-ibmu-seb	https://meet.google.com/ywj-rnrh-mgt



Friday, 16 May, 2025

Time	Event
9.30-10.10	Plenary Conference 5: Prof. dr. Jocelyne BRENDLE (Online)
10.10-10.50	Plenary Conference 6: Prof. dr. Sinan MÜFTÜ (Online)
Link	https://meet.google.com/pit-sewf-vhp
10.50-11.15	Coffee break
11.15-12.30	Session 1.7 On-site: Amphitheater T3, Rectorate Building, ground floor
12.30-14.00	Lunch
14.00-15.15	Session 2.7 On-site: Amphitheater T3, Rectorate Building, ground floor
15.30	Closing ceremony (on-site/on-line)
LINK:	https://meet.google.com/yui-cnrc-drk



CSD2025 DETAILED CONFERENCE PROGRAM

Wednesday, 14 May, 2025

Time	Event	
9.00-9.25	Opening ceremony (Online)	
	Prof.dr. Gabriela Lisa	Director of the Doctoral School "Gheorghe Asachi" Technical University of Iasi, Romania President of CSD2025
	Prof.dr. Dan Cașcaval	Rector of the "Gheorghe Asachi" Technical University of Iasi, Romania Honorary President of CSD2024
	Prof.dr. Irina Lungu	Vice-Rector International Affairs at the "Gheorghe Asachi" Technical University of Iași
	Prof.dr. Alexandru Sălceanu	Director of the Council for University Doctoral Studies "Gheorghe Asachi" Technical University of Iasi, Romania Co-President of CSD2025
	Prof.dr. Gabriela Lisa	The official opening of CSD2025
Link	HTTPS://MEET.GOOGLE.COM/WHC-TNNJ-WTQ	

PLENARY SESSION 1 (Online): Wednesday, 14 May, 9.30-10.50

Chairperson: Prof. dr. Florin Leon, Prof. dr. Leandru-Gheorghe Bujoreanu

9.30-10.10	Bio-Inspired Computational Approaches for Real-World Systems	Prof.dr. DOINA LOGOFĂTU Frankfurt University of Applied Sciences, Frankfurt am Main, Germany
10.10-10.50	Importance of Research on New Materials and Related Technologies to Overcome Contemporary Engineering	Prof.dr. BURAK ÖZKAL Yurtbay Seramik, Istanbul, Turkey
Link	HTTPS://MEET.GOOGLE.COM/WHC-TNNJ-WTQ	
10.50-11.15	Coffee break	



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Online Parallel Session 1.1: Wednesday, 14 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. dr. Florin Leon

<https://meet.google.com/xkx-hqcn-rhy>

Time	Oral presentation	Authors
11.15-11.30	PREVENTING COGNITIVE DECLINE WITH THE HELP OF SOCIAL ROBOTS	<u>Marin Iulian-Andrei</u> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Computers and information technology)
11.30-11.45	PROTECTING DATA PRIVACY IN ARTIFICIAL INTELLIGENCE MODELS	<u>Mihail-Cristian Heghea</u> , Silviu-Dumitru Pavăl, 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	ADVANCING COGNITIVE CAPABILITIES IN LARGE LANGUAGE MODELS WITH IDEA EMBEDDINGS	<u>Robert Chihai</u> ¹ , <u>Florin Leon</u> ¹ , <u>Maria Trocan</u> ² "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania Institut Supérieur d'Electronique de Paris (ISEP), Paris, France (Computers and information technology)
12.00-12.15	SCENARIO GENERATION USING TRANSFORMERS FOR RETAIL DATA	<u>Alexandru Grigoras</u> , Florin Leon "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Computers and information technology)
12.15-12.30	VIBRATIONS IN HYBRID SOFT ACTUATORS: AN EXPERIMENTAL STABILITY ANALYSIS	<u>Florian-Alexandru Brașoveanu</u> , Adrian Burlacu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Computers and information technology)
12.30-12.45	PANOPTIC SEGMENTATION TECHNIQUES	<u>Elena-Claudia Maftai</u> , Otilia Zvoristeanu, Vasile-Ion Manta "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Computers and information technology)
12.45-13.00	USING PDE FOR SEGMENTING AUDIO STREAMS INTO INDIVIDUAL NEWS ITEMS	<u>Vasile-Silviu Sarmasanu</u> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania



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		(Computers and information technology)
13.00-13.15	HYBRID FEATURE SELECTION FOR ACCURATE AND INTERPRETABLE ENSEMBLE MODELS IN WEARABLE SENSOR-BASED PARKINSON'S DISEASE DIAGNOSIS	Andrei Stoleru "Gheorghe Asachi" Technical University of Iasi, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Computers and information technology)

13.15-14.00	Lunch	
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Online Parallel Session 2.1: Wednesday, 14 May, 11.15-13.00

Section 3. Chemistry; Chemical engineering; Environmental engineering

Chairperson: Prof. dr. Adrian Ungureanu

<https://meet.google.com/rcw-eqfo-cjo>

Time	Oral presentation	Authors
11.15-11.30	ADSORPTION OF OFLOXACIN FROM WASTEWATER: A COMPARATIVE STUDY	Diana Hanganu , Gabriela Antoaneta Apostolescu, Maria Harja "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Chemical engineering)
11.30-11.45	SOLAR-LIGHT RESPONSIVE COPPER NANOPARTICLES/LAYERED DOUBLE HYDROXIDES HETEROSTRUCTURES AS ACTIVE ENVIRONMENTAL CATALYSIS	Oleg Tihon , Sofronia Bouariu, Gabriela Carja, Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Chemical engineering)
11.45-12.00	HETEROSTRUCTURES BASED ON LAYERED DOUBLE HYDROXIDES AS NOVEL ENVIRONMENTAL ACTIVE PHOTOCATALYSTS	Andreea Loredana Gavrilă , Gabriela Carja, Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Chemical engineering)
12.00-12.15	EXPERIMENTAL RESEARCH ON MOISTURE REMOVAL FROM SPENT COFFEE GROUNDS	Laurențiu-Constantin Mihăilă , Cătălin Lisa, Ioan Mămăligă, Gabriela Lisa "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Chemical engineering)
12.15-12.30	HETEROSTRUCTURES BASED ON LAYERED DOUBLE HYDROXIDES FOR SOLAR - DRIVEN CATALYSIS	Denis Cutcovschi , Gabriela Carja "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Chemical engineering)
12.30-12.45	VALORIZATION OF PRUNUS	Nicoleta Tofănescu (Mihai) , Andrei Popescu, Vasilica



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	SPINOSA EXTRACT AS SUSTAINABLE COLORING AGENTS IN TEXTILE FINISHING: A GREEN CHEMISTRY APPROACH	Popescu "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Chemical engineering)
12.45-13.00	REVIEW - CHEMICAL FUNCTIONALIZATION OF COTTON CELLULOSIC TEXTILES BY SELECTIVE OXIDATION	Romeo Pruneanu , Vasilica Popescu, Melinda Pruneanu "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Chemical engineering)
13.00-14.00	Lunch	

Online Parallel Session 3.1: Wednesday, 14 May, 11.15-12.45

Section 3. Chemistry; Chemical engineering; Environmental engineering

Chairperson: Prof. dr. Cezar Catrinescu

<https://meet.google.com/vco-cthz-zsb>

Time	Oral presentation	Authors
11.15-11.30	COMPOSITE HYDROGELS BASED ON CALCIUM PHOSPHATES WITH APPLICATIONS IN MEDICINE	Daniela Florentina Gheorghită , Margareta Gabriela Ciobanu "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Chemistry)
11.30-11.45	MULTIFUNCTIONAL HYBRID BIOMATERIALS BASED ON HYDROXYAPATITE LOADED WITH ANTIBIOTIC	Sergiu Ionuț Buștiucel , Margareta Gabriela Ciobanu "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Chemistry)
11.45-12.00	HYDROGENATION OF LEVULINIC ACID TO γ -VALEROLACTONE OVER HIGHLY DISPERSED AND STABLE COPPER NANOCATALYSTS SYNTHESIZED ON MESOPOROUS SILICA BY DEPOSITION - PRECIPITATION	Mihaela Bectoras ^{1,2} , Cezar Catrinescu ¹ , Adrian Ungureanu ¹ , Carmen Ciotonea ² , Sébastien Royer ² ¹ "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection ² Université du Littoral Côte d'Opale, Unité de Chimie Environnementale et Interactions sur le Vivant-UCEIV, Dunkerque, France (Chemistry)
12.00-12.15	NON-THERMAL PLASMA TREATMENT OF ACETONE-	Vasile-Daniel Asmarandei , Bogdan-Andrei Pingescu, Radu Burlică, Petronela-Camelia Oprea,



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	POLLUTED WASTEWATER FROM CHEMICAL INDUSTRY PROCESSES	Răzvan Beniugă, Dragoș Astanei "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electrical Engineering, Energetics and Applied Informatics (Environmental engineering)
12.15-12.30	DEVELOPMENT AND CHARACTERIZATION OF TREE TROPICAL WOOD SPECIES (AYOUS, AZOBE AND IROKO) AND A NATURAL BINDER	Mfourigam Issofa¹ , Evariste Fongnzossie ¹ , Joseph Zobo Mfomo ¹ , Achille Bernard Biwole ¹ , Nsangou Abdouramane ² , Doina Sibiescu ³ ¹ University of Douala, Advanced teacher's Training School for Technical Education, Douala, Cameroon ² University of Dschang, Department of Decorative Arts, Institute of Fine Arts, Foumban, Cameroon ³ Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Chemistry)
12.30-12.45	SUSTAINABILITY INDICATORS FOR WATER MANAGEMENT: ENERGY CONSUMPTION IN TREATMENT PROCESSES	Al Refai Malek Mohamed Yousef , Daniela Fighir, Brindusa Sluser "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Environmental engineering)
13.00-14.00	Lunch	

Online Parallel Session 4.1: Wednesday, 14 May, 11.15-13.00

Section 3. Chemistry; Chemical engineering; Environmental engineering

Chairperson: Prof. dr. Brîndușa Slușer

<https://meet.google.com/gqv-kgun-pbd>

Time	Oral presentation	Authors
11.15-11.30	EQUILIBRIUM AND KINETIC STUDIES OF HG(II) ION ADSORPTION FROM AQUEOUS SOLUTIONS BY CLAY ADSORBENT	Bianca Canschi , Carmen Zaharia, Maria-Cristina Popescu, Laura Bulgariu "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Environmental engineering)
11.30-11.45	PATHWAYS TO CIRCULARITY: SUSTAINABLE APPROACHES IN WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT MANAGEMENT	Ana-Maria Lupu , Brîndușa-Mihaela Slușer "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Environmental engineering)



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11.45-12.00	EVOLUTION OF CAR FLEET IN IAȘI CITY AND THE IMPACT ON LIFE QUALITY	Andrei Hâncu , Cătălin Dumitrel Balan, Brîndușa Mihaela Slușer "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Environmental engineering)
12.00-12.15	ANALYSIS OF WASTE VALORIZATION INTO BIOGAS PLANTS	Georgiana Petrea , Brîndușa-Mihaela Slușer "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Environmental engineering)
12.15-12.30	ATMOSPHERIC EMISSIONS AND EFFECTS ON URBAN AREA ENVIRONMENT GENERATED BY CONSTRUCTION INDUSTRY	Gabriela Ungureanu ¹ , Bogdan Chelaru ² , Irina Volf ¹ ¹ "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania ² "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Civil Engineering and Building Services, Romania (Environmental engineering)
12.30-12.45	INTEGRATING CIRCULAR DESIGN PRINCIPLES INTO PLASTIC WASTE REDUCTION AND RECOVERY STRATEGIES	Mădălina-Maria Enache , Carmen Teodosiu "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Environmental engineering)
12.45-13.00	CIRCULAR BIOECONOMY IN ACTION: CASE STUDIES ON FOOD WASTE VALORIZATION FOR NUTRACEUTICAL AND COSMETIC PRODUCTS	Paula-Sânziana Oprea ¹ , Elena-Diana Comăniță Ungureanu ¹ , Maria Gavrilescu ^{1,2,3} ¹ "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania ² Academy of Romanian Scientists, Bucharest, Romania ³ Academy of Technical Sciences of Romania, Bucharest, Romania (Environmental engineering)
13.00-14.00	Lunch	



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Online Parallel Session 1.2: Wednesday, 14 May, 14.00-15.30

Section 3. Chemistry; Chemical engineering; Environmental engineering

Chairperson: Prof. dr. Maria Harja

<https://meet.google.com/yxk-efcq-jem>

Time	Oral presentation	Authors
14.00-14.15	SUSTAINABLE ELECTORRHEOLOGICAL LUBRICANTS. EFFECT OF ELECTRIC FIELD ON FILM THICKNESS IN ROLLING CONDITIONS	María García-Pérez¹ , Samuel Fernández-Silva ¹ , Romeo Glovnea ² , Claudia Roman ¹ , Miguel Ángel Delgado ¹ , Moisés García-Morales ¹ ¹ University of Huelva, School of Engineering, Huelva, Spain ² University of Sussex, School of Engineering and Informatics, Sussex House, United Kingdom (Chemical engineering)
14.15-14.30	MODERN APPROACHES TO VEGETABLE OIL FRACTIONATION	Nicoleta-Oana Demostene¹ , Bianca Simedrea ¹ , Petrica Iancu ¹ , Oana Parvulescu ¹ , Roxana Tarpan ² , Tănase Dobre ¹ ¹ National University of Science and Technology POLITEHNICA Bucharest, Bucharest, Romania, ² Universitatea Ovidius Constanta, Constanța, Romania (Chemical engineering)
14.30-14.45	TRENDS FOR ENERGY EFFICIENCY AND COST REDUCTION OF THE BRINE ELECTROLYSIS FOR CHLOR-ALKALI MEMBRANE CELL PROCESSES	Dumitru Coman^{1,2} , Liliana Lazăr ¹ , Ioan Mamăligă ¹ ¹ "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania ² Chimcomplex S.A. Borzesti, Onesti, Romania (Chemical engineering)
14.45-15.00	NATURAL DEEP EUTECTIC SOLVENTS (NADES): SUSTAINABLE SOLVENTS FOR ENHANCED BIOACTIVE PHYTOEXTRACTS WITH POTENTIAL IN DERMATO-COSMETIC APPLICATIONS	Claudia Bulai (Maxim) "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Chemical engineering)
15.00-15.15	PERFORMANCE OF NEW CHELATING RESIN IN BRINE HARDNESS REMOVAL TO FEED THE CHLOR-ALKALI MEMBRANE CELL PROCESS	Valeria Danilova , Liliana Lazăr, Ioan Mamăligă "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Chemical engineering)
15.15-15.30	OPTIMIZED EXTRACTION OF PRECIOUS AND RARE MATERIALS FROM E-WASTE	Stefan-Leontin Martinas-Ioniță , Gabriela Antoaneta Apostolescu, Maria Harja "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Chemical engineering)



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15.30-15.45

Coffee Break

Online Parallel Session 2.2: Wednesday, 14 May, 14.00-15.15

Section 3. Chemistry; Chemical engineering; Environmental engineering

Chairperson: Prof. dr. Laura Bulgariu

<https://meet.google.com/zyv-fzvv-tij>

Time	Oral presentation	Authors
14.00-14.15	A CRITICAL SURVEY ON SUSTAINABLE APPROACH FOR AGRICULTURAL SOIL RESILIENCE	Maria-Bianca Aiordăchioaie , Irina Volf "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Environmental engineering)
14.15-14.30	EXPERIMENTAL RESULTS ASSOCIATED WITH THE PHYSICAL-CHEMICAL ANALYSIS METHODS USED FOR WASTEWATER CHARACTERIZATION IN A CATTLE ZOOTECHNICAL FARM	Cristina-Alexandra Haivas , Carmen Zaharia "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Environmental engineering)
14.30-14.45	EXPERIMENTAL MODELING STUDY OF COAGULATION-FLOCCULATION TREATMENT PROCESS APPLIED FOR TEXTILE EFFLUENTS CONTAINING REACTIVE REMAZOL ROSSO RB DYE USING COMMERCIAL HYBRID COMPOSITE MATERIALS	Marius-Alexandru Afrasinei , Corina-Petronela Musteret, Carmen Zaharia "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Environmental engineering)
14.45-15.00	EXPERIMENTAL ADSORPTION MODELING AND OPTIMIZATION STUDY OF REMAZOL ROSSO RB DYE REMOVAL FROM AQUEOUS SYSTEMS USING ALGAL BIOMASS-BASED ADSORBENT	Crinuta-Larisa Ortovan , Carmen Zaharia "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Environmental engineering)
15.00-15.15	ASSESSING ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) INTEGRATION IN TOURISM AND HOSPITALITY: A COMPARATIVE ANALYSIS OF GLOBAL STANDARDS AND INDUSTRY PRACTICES	Raluca-Maria Tâbuleac ¹ , Tiberiu Vlad Simion ¹ , Maria Gavrilescu ^{1,2,3} ¹ "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania ² Academy of Romanian Scientists, Bucharest, Romania ³ Academy of Technical Sciences of Romania, Bucharest, Romania (Environmental engineering)

15.15-15.45

Coffee Break



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Online Parallel Session 3.2: Wednesday, 14 May, 14.00-16.00

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

Chairperson: Prof. dr. Cristian Zet

<https://meet.google.com/fwn-rnhj-yrq>

Time	Oral presentation	Authors
14.00-14.15	APPLICATIONS OF DIGITAL TWIN SYSTEMS IN THE AUTOMOTIVE INDUSTRY	<u>George Balan</u> , Alexandru Sălceanu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
14.15-14.30	DESIGN AND INTEGRATION OF A PNEUMATICALLY-ACTUATED GLOVE WITH MICROSOFT HOLOLENS FOR NEUROREHABILITATION	<u>Elena Nechifor</u> , Marian-Silviu Poboroniuc, Sorin-George Nechifor "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
14.30-14.45	THERMAL DRIFT OF TEMPERATURE SENSORS – A SHORT REVIEW	<u>Gina-Ionela Tătaru</u> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
14.45-15.00	FATIGUE AND DISTRACTION SYSTEMS REVIEW	<u>Iulian-Constantin Cadare</u> , Cristian Zet "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
15.00-15.15	EFFECTS OF ARTIFICIAL LIGHT ON HUMAN HEALTH	<u>Andrei-Marian Vieru</u> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
15.15-15.30	3D SYSTEM FOR LEARNING TO OPERATE INTRAORAL X-RAY DEVICE	<u>Lucian Balan</u> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
15.30-15.45	ADVANCED APPROACHES IN ECG SIGNAL ACQUISITION AND PROCESSING FOR BIOMEDICAL APPLICATIONS	<u>Madalina-Elena Datcu</u> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
15.45-16.00	GLARE ASSESSMENT IN LIGHTING ENGINEERING – LITERATURE REVIEW	<u>Andrei-Aurelian Ianos</u> , Catalin-Daniel Galatanu "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)



Online Parallel Session 4.2: Wednesday, 14 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. dr. Cristian Foșalău

<https://meet.google.com/obr-hbaj-rih>

Time	Oral presentation	Authors
14.00-14.15	OVERVIEW OF INVESTMENT PLAN OF ELECTRICITY DISTRIBUTION OPERATORS	<u>Gabriel – Dorin Melus</u> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
14.15-14.30	COMPARATIVE ANALYSIS OF ACTIVE AND PASSIVE ELECTRODES IN TMS-EEG	<u>Buzamat Alexandru</u> , Marian-Silviu Poboroniuc "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
14.30-14.45	MACHINE LEARNING ALGORITHMS FOR MONITORING CATTLE BEHAVIOUR	<u>Mihai-Sebastian Carp</u> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
14.45-15.00	CELLULAR IOT-BASED ENERGY MONITORING FOR ISO 50001 COMPLIANCE: SYSTEM DEVELOPMENT AND IMPLEMENTATION	<u>Dominik-Andreas Schreiber</u> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
15.00-15.15	DESIGN AND SIMULATION OF DIGITIZATION METHODS USED IN CONTROL OF POWER CONVERTERS	<u>Cornel Iulian Postolache</u> , Dorin-Octavian Neacșu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
15.15-15.30	ABOUT CONTACT RESISTANCE AND VIBRATION MONITORING OF A POWER CIRCUIT BREAKER	<u>Adrian Anton</u> , Mihai Andrușcă, Maricel Adam, Marian Micu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
15.30-15.45	Coffee Break	



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

Chairperson: Prof. dr. Leandru-Gheorghe Bujoreanu

<https://meet.google.com/ksd-prts-jrg>

Time	Oral presentation	Authors
15.45-16.00	THE EASY-IN-SHAPE-DEFINITION GAMMA-RAY SHIELDS – AN INTRODUCTION OF PARAFFIN-BASED COMPOSITES FILLED WITH HIGH DENSITY PARTICLES	Jolanta Sobczak¹ , Krzysztof Cioch ¹ , Gawel Żyta ² ¹ Doctoral School of the Rzeszów University of Technology, Rzeszów University of Technology, Rzeszów, Poland ; ² Department of Physics and Medical Engineering, Rzeszów University of Technology, Rzeszów, Poland (Materials engineering)
16.00-16.15	AN OVERVIEW OF THE STATE OF THE ART OF THERMOCHEMICAL TREATMENT OF GEARS	Catalin Cucuzel , Leandru-Gheorghe Bujoreanu "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)
16.15-16.30	DEVELOPMENT OF A PID-CONTROLLED WATER HEATING SYSTEM FOR RELIABLE SME ANALYSIS IN THERMOFORMED R-PET CUPS	Stefan Dumitru Sava , Leandru-Gheorghe Bujoreanu "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)
16.30-16.45	OBTAINING AND ANALYSIS OF HIGH YTTRIA – YSZ COATINGS ON METALLIC SUBSTRATE	Ionut Adomnitei¹ , Bogdan Istrate² , Daniela Lucia Chicet¹ , Nicanor Cimpoesu¹ ¹ "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering; ² "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanics, Iasi, Romania (Materials engineering)
16.45-17.00	TITANIUM ALLOYS AND THE ROLE OF ALLOYING ELEMENTS IN MATERIAL PERFORMANCE	Ghiclescu Ion¹ , Baltatu Madalina Simona ¹ , Pruteanu Andrei ¹ , Tofan Mihai ¹ , Sandu Andrei Victor ^{1,2} , Vizureanu Petrica ^{1,2} ¹ "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania ² Academy of Romanian Scientists, Bucharest, Romania (Materials engineering)
17.00-17.15	ADVANCED TITANIUM ALLOYS FOR MEDICAL AND INDUSTRIAL USE	Pruteanu Andrei¹ , Madalina Simona Baltatu ¹ , Ghiclescu Ion ¹ , Tofan Mihai ¹ , Vizureanu Petrica ² ¹ "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania ² Academy of Romanian Scientists, Bucharest,



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		Romania (Materials engineering)
17.15-17.30	ENHANCING THE MECHANICAL PROPERTIES OF BIODEGRADABLE ZINC ALLOYS THROUGH SEVERE PLASTIC DEFORMATION TECHNIQUES	Tiberiu Sutic , Radu Ioachim Comaneci, Romeu Chelariu, Nicanor Cimpoesu "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)
17.30-17.45	A REVIEW OF THE CURRENT STATUS OF WIRE DRAWING RESEARCH	Costel Jipa , Dorin Luca "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)
17.45-18.00	STRUCTURAL AND MECHANICAL BEHAVIOR OF 316L STAINLESS STEEL UNDER COMBINED TENSILE AND TORSIONAL LOADING	Magdalena-Gabriela Hutanu , Nicanor Cimpoesu, Liviu Andrusca, Vasile Manole, Mihai Axinte "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)

Online Parallel Session 2.3: Wednesday, 14 May, 15.45-17.00

Section 3. Chemistry; Chemical engineering; Environmental engineering

Chairperson: Prof. dr. Carmen Zaharia

<https://meet.google.com/fjh-iqcj-xvy>

Time	Oral presentation	Authors
15.45-16.00	CRITICAL ANALYSIS OF DRINKING WATER QUALITY POLICIES AND REGULATIONS IN ROMANIA	Madalina Elena Abalasei , Carmen Teodosiu "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Environmental engineering)
16.00-16.15	MANAGERIAL SUSTAINABLE BEHAVIOR DEVELOPMENT TOWARDS ECOLOGICAL WORKING ENVIRONMENT IN THE CONTEXT OF OCCUPATIONAL HEALTH AND SAFETY	Alina Mircea , Carmen Ioan, Brîndușa Slușer "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection (Environmental engineering)
16.15-16.30	PHOSPHORUS RECOVERY FROM SEWAGE SLUDGE ASH: CHEMICAL PROCESSING AND GRANULATION FOR SUSTAINABLE FERTILISER PRODUCTION	Sebastian Jan Baranyai "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Environmental engineering)
16.30-16.45	TOURISM AND FREE MOVEMENT IN THE EUROPEAN UNION: ENVIRONMENTAL CHALLENGES	Tiberiu Vlad Simion¹ , Raluca-Maria Mighiu (Țăbuleac) ^{1,2,3} ¹ "Gheorghe Asachi" Technical University of Iasi,



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	AND PATHWAYS TO SUSTAINABLE DEVELOPMENT	<p>"Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iași, Romania</p> <p>²Academy of Romanian Scientists, Bucharest, Romania</p> <p>³Academy of Technical Sciences of Romania, Bucharest, Romania</p> <p>(Environmental engineering)</p>
16.45-17.00	INTEGRATING QUALITY AND ENVIRONMENTAL SYSTEMS IN HEALTHCARE: A STRATEGIC FRAMEWORK FOR SUSTAINABLE INSTITUTIONAL TRANSFORMATION	<p><u>Dana-Gabriela Simion Ludusanu</u>^{1,2}, Grigore Tinică^{2,3}, Maria Gavrilescu^{1,4,5}</p> <p>¹"Gheorghe Asachi" Technical University of Iași, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection</p> <p>²Institute of Cardiovascular Diseases, Iași, Romania</p> <p>³"Grigore T. Popa" University of Medicine and Pharmacy, Iași, Romania</p> <p>⁴Academy of Romanian Scientists, Bucharest, Romania</p> <p>⁵Academy of Technical Sciences of Romania, Bucharest, Romania</p> <p>(Environmental engineering)</p>



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Online Parallel Session 3.3: Wednesday, 14 May, 15.45-17.15

Section 4. Civil engineering and installations

Chairperson: Lecturer dr. Maria Scutaru

<https://meet.google.com/fcf-vioc-uud>

Time	Oral presentation	Authors
15.45-16.00	ASPHALT PRODUCED WITH A WASTE. DETERMINING THE SWELLING OF ASPHALT MIXTURE WITH STEEL SLAG	Andreea Monoranu, Gheorghe Gugiuman "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
16.00-16.15	INNOVATIVE APPLICATIONS OF RECYCLED PET IN ROAD ENGINEERING: A REVIEW OF METHODS AND IMPACTS	Chicuş Claudiu , Gugiuman Gheorghe "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
16.15-16.30	EARTHQUAKE RESISTANT REINFORCED CONCRETE STRUCTURAL SYSTEMS FOR HIGH-RISE RESIDENTIAL BUILDINGS	Fabian-Leonard Tiba , Sergiu-Andrei Băetu, Ioana Olteanu, Irina Lungu "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
16.30-16.45	CONCEPT OF SPECIAL CONSTRUCTIVE STRUCTURE TO CONSOLIDATE THE BLACK SEA CLIFFS ALONG TO THE ROMANIAN COASTLINE	Mădălin-Cornel Văleanu , Paul Turcanu, Ancuța Rotaru "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
16.45-17.00	THE ASSESSMENT OF NATURAL INSTABILITY PHENOMENA OF THE BLACK SEA CLIFFS. STUDY CASE: 23 AUGUST AREA (CONSTANTA COUNTY – ROMANIA)	Mădălin-Cornel Văleanu , Ancuța Rotaru "Gheorghe Asachi" Technical University of Iasi, Romania Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
17.00-17.15	EVALUATION OF THE CAUSES THAT LED TO THE DEGRADATION OF THE STRUCTURAL WORKS IMPLEMENTED FOR THE CONSOLIDATION OF THE BLACK SEA CLIFFS. CASE STUDY: NORTHERN SEA CLIFF - CONSTANȚA (ROMANIA)	Mădălin-Cornel Văleanu , Pavel Ionițoaiei, Ancuța Rotaru "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)



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Online Parallel Session 4.3: Wednesday, 14 May, 15.45-17.30

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

Chairperson: Prof. dr. Daniela Popescu

<https://meet.google.com/vec-oohk-jxr>

Time	Oral presentation	Authors
15.45-16.00	CHARACTERIZATION OF LASER-TEXTURED SURFACES – A REVIEW	Petronela- Daniela Rusu (Ostahie) "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Faculty of Machine Manufacturing and Industrial Management Iasi, Romania (Industrial engineering)
16.00-16.15	ENHANCING SUBSTATION FOULING DETECTION IN DISTRICT HEATING SYSTEMS	Alexandru Cebotari , Daniela Popescu Faculty of Faculty of Machine Manufacturing and Industrial Management Iasi, Romania (Industrial engineering)
16.15-16.30	A SYSTEMATIC REVIEW OF THE PRINCIPLES OF INDUSTRY 4.0	Florin-Daniel Edutanu , Dragos-Florin Chitariu, Mariana Ciorap, Lucian-Claudiu Grigoruta "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Faculty of Machine Manufacturing and Industrial Management Iasi, Romania (Industrial engineering)
16.30-16.45	OPTIMIZATION OF PARAMETRIZED HEAT FINS DESIGN BASED ON THERMAL SIMULATION	Andreea Istrate , Oana Dodun "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Faculty of Machine Manufacturing and Industrial Management Iasi, Romania (Industrial engineering)
16.45-17.00	SOME EXPERIMENTAL APPROACHES TO THE EVOLUTION OF RADIAL RUNOUT MEASURED ON A CYLINDRICAL WORKPIECE PLACED IN A LATHE JAW CHUCK	Cristiana Bisoc (Grigoruta) , Lucian-Claudiu Grigoruta, Constantin-Gheorghe Mihai, Mohammed Khair, Eduard-Neculai Bumbu, Mihaita Horodincea "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Faculty of Machine Manufacturing and Industrial Management Iasi, Romania (Industrial engineering)
17.00-17.15	STUDY ON THE OPTIMIZATION OF MACHINING PROCESSES WITH COMBINED TOOLS	Lucian-Claudiu Grigoruta , Cristiana Bisoc "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Faculty of Machine Manufacturing and Industrial Management Iasi, Romania (Industrial engineering)
17.15-17.30	PLASTIC MANUFACTURING	Ana Ghimp



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	PROCESSES FOR AUTOMOTIVE APPLICATIONS	¹ Continental Automotive Romania (Industrial engineering)
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Online Parallel Session 5.1: Wednesday, 14 May, 15.45-17.45

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

Chairperson: Prof. Dr. Ing. Rodica Harpa

<https://meet.google.com/cky-hgji-ioh>

Time	Oral presentation	Authors
15.45-16.00	BARRIERS IN THE ADOPTION OF METAVERSE FOR BUSINESS MODEL INNOVATION	Andreea-Gabriela Gradinaru , Silvia Avasilcai "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
16.00-16.15	THE METHOD OF REDUCING DISTORTIONS IN THE RADAR IMAGE OF THE EARTH'S SURFACE CAUSED BY CHANGES IN THE COURSE OF THE MOVEMENT OF THE SYNTHETIC APERTURE RADAR	Andrei Sidorov ¹ , Svetlana Svistova ² , Tatiana Nikitina ³ ¹ "Alexandru Ioan Cuza" University of Iasi, Faculty of Economics and Business Administration, Iasi, Romania ² RTU MIREA – Russian Technological University, Department of higher mathematics No. 1, Institute of Artificial Intelligence, Moscow, 119454, Russia ³ RTU MIREA – Russian Technological University, Department of Higher and Applied Mathematics, M.V. Lomonosov Institute of Fine Chemical Technologies, Moscow, 119454, Russia (Engineering and management)
16.15-16.30	PUBLIC PROCUREMENT AND SUSTAINABLE INVESTMENTS IN RIVER BASIN ADMINISTRATIONS	Ramona Ionela Ruget , Ionut Viorel Herghelegiu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
16.30-16.45	WORK ENVIRONMENT: A FACTOR THAT INFLUENCES EMPLOYEE PERFORMANCE	Florentina Birladeanu (Eftinca) , Silvia Avasilcai, Adriana Bujor, Ana Maria Dobranici (Dumitrescu) "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
16.45-17.00	OPEN INNOVATION IN THE AUTOMOTIVE INDUSTRY: ADVANCING AUTONOMOUS DRIVING THROUGH AI	George Victor Gall , Silvia Avasilcai "Gheorghe Asachi" Technical University, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
17.00-17.15	BEYOND THE HUMAN RESOURCE	Mihai-Doru Buliga , Ion Verzea



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	MANAGEMENT RISK	"Gheorghe Asachi" Technical University, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
17.15-17.30	CORPORATE SUSTAINABILITY PERFORMANCE: EVALUATION METHODOLOGICAL FRAMEWORK	Andrei Mamaliga , Nicoleta-Mihaela Casaneanu (Dascalu), Laura-Crina Miraute (Coca), Marius Pislaru "Gheorghe Asachi" Technical University, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
17.30-17.45	DOES THE CIRCULAR ECONOMY INFLUENCE ECONOMIC DEVELOPMENT? A DATA-DRIVEN ANALYSIS OF RESOURCE MANAGEMENT	Timea Agache ¹ , Larisa Ivascu ^{1,2} ¹ Politehnica University of Timisoara, 2 Victoriei Square, 300006 Timisoara, Romania, Faculty of Management and Engineering ² Academy of Romanian Scientists, 3 Ilfov, 050044, Bucharest, Romania (Engineering and management)



Thursday, 15 May, 2025

PLENARY SESSION 2 (Online): Thursday, 15 May, 9.30-10.50

Chairpersons: **Prof.dr.GHEORGHE GRIGORAȘ**, **Prof.dr.DORINA-NICOLINA ISOPESCU**

9.30-10.10	European Project Insights on Energy Transition and Decarbonization	Prof.dr. DAN DORU MICU Technical University of Cluj-Napoca, Romania
10.10-10.50	Conventional and Autonomous Vehicular Traffic: Ameliorating Operations, Safety and Environmental Impacts	Prof.dr. CIPRIAN ALECSANDRU Concordia University, Montreal, Canada
Link	https://meet.google.com/odh-bfpt-mth	
10.50-11.15	Coffee break	

Online Parallel Session 1.4: Thursday, 15 May, 11.15-13.00

Section 4. Civil engineering and installations

Chairperson: **Assist. Prof. dr. Anca Zaborila**

<https://meet.google.com/cdv-pioq-qvg>

Time	Oral presentation	Authors
11.15-11.30	CRITICAL PARAMETERS FOR OPTIMIZING THE TERTIARY TREATMENT STAGE	Alexandru-Ion Pascariu , Mihai Dima, Marius Telișcă, Andreea Silvia Popa "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Hydrotechnics, Geodesy, and Environmental Engineering, Iasi, Romania (Civil engineering and installations)
11.30-11.45	INTERINSTITUTIONAL RESPONSIBILITIES IN MANAGING ATERCOURSE INTERVENTIONS AND THE NEED FOR UNIFIED MANAGEMENT	Andreea Silvia Popa , Mihai Dima, Marius Telișcă, Pascariu Alexandru "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Hydrotechnics, Geodesy, and Environmental Engineering, Iasi, Romania (Civil engineering and installations)
11.45-12.00	MODERNIZATION OF THE MONITORING SYSTEM OF EARTH DAM DISPLACEMENTS	Bogdan Rusu , Mihail Luca "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Hydrotechnics, Geodesy, and Environmental Engineering, Iasi, Romania (Civil engineering and installations)
12.00-12.15	CALCULATION OF SEASONALITY INDICATORS OF MINIMUM RUNOFF IN THE CONTEXT OF CURRENT CLIMATE CHANGES	Marius Munteanu , Ion Giurma "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Hydrotechnics, Geodesy, and Environmental Engineering, Iasi, Romania



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		(Civil engineering and installations)
12.15-12.30	SUSTAINABLE USE OF SOILS IN AGRICULTURE	Otilia Pitulac "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Hydrotechnics, Geodesy, and Environmental Engineering, Iasi, Romania (Civil engineering and installations)
12.30-12.45	WATER LOSSES IN SUPPLY NETWORKS: ANALYSIS OF EVALUATION METHODS AND OPTIMIZATION STRATEGIES	Vasile Stavarachi , Mihail Luca "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Hydrotechnics, Geodesy, and Environmental Engineering, Iasi, Romania (Civil engineering and installations)
12.45-13.00	BÂRNOVA TERRITORIAL ADMINISTRATIVE UNIT, IASI COUNTY -EVALUATION OF THE DYNAMICS OF BUILT-UP LAND	Veronica Muraru , Florian Stătescu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Hydrotechnics, Geodesy, and Environmental Engineering, Iasi, Romania (Civil engineering and installations)
13.00-14.00	Lunch	

Online Parallel Session 2.4: Thursday, 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. dr. Gheorghe Grigoraș

<https://meet.google.com/uon-jccp-mzb>

Time	Oral presentation	Authors
11.15-11.30	AN EFFICIENT FRAMEWORK FOR EXPLAINABLE CLUSTERING USED IN THE CLASSIFICATION PROCESS OF THE MEDIUM VOLTAGE FEEDERS	Mihai-Alexandru Baci , Gheorghe Grigoraș "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
11.30-11.45	LEVERAGING ELECTRIC VEHICLE INTEGRATION FOR OPTIMIZING DISTRIBUTION NETWORKS	Nicolae-Cosmin Despa , Adi-Aurelian Gugiuman and Bogdan-Constantin Neagu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
11.45-12.00	THE INTEGRATION OF PROSUMERS INTO LOCAL ELECTRICITY MARKETS	Elena-Mădălina Armenia , Mihai Gavrilăș "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
12.00-12.15	THE EUROPEAN ENERGY TRANSITION: CURRENT CONTEXT	Sergiu-Paul Popa , Marcel-Dumitru Istrate "Gheorghe Asachi" Technical University of Iasi,



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	AND INDEPENDENCE	Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
12.15-12.30	IMPROVING POWER QUALITY INDICES VIA SMART DEPLOYMENT OF REMOTE-CONTROLLED SWITCHES IN DISTRIBUTION NETWORKS	Claudia Bondar , Constantin Zetu and Bogdan-Constantin Neagu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
12.30-12.45	APPLYING PETRI NETS FOR CYBERATTACK ANALYSIS IN POWER SYSTEMS	Alin-Ionuț Pricop , Mihai Gavrilăș "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
12.45-13.00	HARMONIZING COST-EFFICIENCY AND RENEWABLE INTEGRATION IN NEARLY ZERO-ENERGY BUILDINGS: A COMPARATIVE AND PRACTICAL INSIGHT	Sergiu-Paul Popa , Marcel-Dumitru Istrate, Răzvan-Constantin Beniușă "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Energy engineering)
13.00-14.00	Lunch	

Online Parallel Session 3.4: Thursday, 15 May, 11.15-12.45

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

Chairperson: Prof. dr. Silvia Avasilcăi

<https://meet.google.com/oxp-kbyn-azv>

Time	Oral presentation	Authors
11.15-11.30	ASSESSING LEADERSHIP AND MANAGEMENT BEHAVIORS IN A TECHNICAL HIGH SCHOOL	Ana Maria Dobranici (Dumitrescu) , Silvia Avasilcai, Adriana Bujor, Florentina Birladeanu (Eftinca) "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
11.30-11.45	GAPS AND OPPORTUNITIES AT THE INTERSECTION OF LEAN SIX SIGMA, EMERGING TECHNOLOGIES AND SUSTAINABILITY IN MANUFACTURING	Nicoleta-Mihaela Casaneanu (Dascalu) , Laura-Crina Miraute (Coca), Andrei Mamaliga, Marius Pislaru "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Engineering and management)
11.45-12.00	DIGITAL USE IN THE PHARMACEUTICAL INDUSTRY TO IMPROVE ENVIRONMENTAL PERFORMANCE: A REVIEW OF	Laura-Crina Miraute (Coca) , Nicoleta Mihaela Casaneanu (Dascalu), Marius Pislaru "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania



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	RECENT LITERATURE	(Engineering and management)
12.00-12.15	LEVERAGING INFORMATION SYSTEM TO DRIVE ORGANIZATIONAL SUSTAINABILITY: CHALLENGES AND OPPORTUNITIES	Stefana-Catalina Pohontu-Dragomir , Ionut-Viorel Herghiligiu "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business (Engineering and management)
12.15-12.30	COMPARATIVE ANALYSIS OF RCM AND FMEA IN THE CONTEXT OF ECO-MAINTENANCE SUSTAINABILITY AND CIRCULAR ECONOMY	Denisa-Alexandra Nica , Ion Verzea "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business (Engineering and management)
12.30-12.45	THE INFLUENCE OF EMPLOYEE-MANAGER RELATIONSHIP ON WELLBEING IN AN ORGANISATION	Nicoleta-Andreea Filip , Ion Verzea, Danut-Constantin Filip "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business (Engineering and management)
12.45-14.00	Lunch	

Online Parallel Session 4.4: Thursday, 15 May, 11.15-12.45

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

Chairperson: Prof. dr. Ion Bogdan

<https://meet.google.com/pqv-qnze-esh>

Time	Oral presentation	Authors
11.15-11.30	A NATIVE AI APPROACH FOR FUTURE TELECOM INTENT-DRIVEN MANAGEMENT AND ORCHESTRATION SYSTEMS	Marius Iordache , Cristian Patachia "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	EFFICIENCY OF USING NOISE CORRELATORS IN DIAGNOSING AND REDUCING LOSSES IN DRINKING WATER NETWORKS	Postavaru Alexandru , Catrinel "Raluca Giurma" Handley "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Hydrotechnics, Geodesy and Environmental Engineering, Iași, Romania (Civil engineering and installations)
11.45-12.00	INTERFERENCE MANAGEMENT IN 5G AND BEYOND NETWORKS	Cristina-Vasilica Tanasa , Ion Bogdan "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	ENHANCED VALIDATION OF RAY TRACING SIMULATIONS USING	Andreea-Valentina Militaru , Ion Bogdan "Gheorghe Asachi" Technical University of Iasi,



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	MULTI-INTERSECTION 5G MEASUREMENTS IN URBAN ENVIRONMENTS	Faculty of Electronics, Telecommunications and Information Technology, Iași, Romania (Electronic engineering, telecommunications and information technology)
12.15-12.30	A MARKET OVERVIEW OF Gan, Sic AND SUPERJUNCTION POWER DEVICES	Tudorel Leampăr , Dorin Octavian Neacșu "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	DESIGN AND IMPLEMENTATION OF AN ELECTRONIC THROTTLE CONTROL SYSTEM FOR A FORMULA STUDENT VEHICLE	Andrei Armasu , Iulian Rusu, Stefan Grigorean "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics, Telecommunications and Information Technology, Iași, Romania (Electronic engineering, telecommunications and information technology)
12.45-14.00	Lunch	

Online Parallel Session 1.5: Thursday, 15 May, 14.00-15.45

Section 4. Civil engineering and installations

Chairperson: Assist. Prof. dr. Tudor Petrescu

<https://meet.google.com/vad-hhcs-woz>

Time	Oral presentation	Authors
14.00-14.15	FIRE HAZARDS IN SOLAR PHOTOVOLTAIC INSTALLATIONS: A MULTIDISCIPLINARY APPROACH TO RISK MITIGATION	Adrian Nenu, Andrei Burlacu "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
14.15-14.30	INTEGRATING 3D PRINTING INTO CONSTRUCTION MANAGEMENT: TOWARDS A NEW PARADIGM OF DIGITALIZED PROJECT DELIVERY	Alexandru Florin Mustiață , Nicolae Țăranu, Dragoș Ungureanu, Cătălin Onuțu, Victor Cojocariu "Ovidius" "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
14.30-14.45	OPTIMIZED MORTAR COMPOSITIONS WITH STEEL FIBERS AND TREATED RECYCLED RUBBER: PRELIMINARY ASSESSMENT OF STRUCTURAL AND ENVIRONMENTAL PERFORMANCE	Bogdan Alexandru Ghileschi , Dorina-Nicolina Isopescu, Dumitrița Vataman "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
14.45-15.00	SUSTAINABILITY GOALS AND THE ROLE OF CONSTRUCTION SECTOR. PRELIMINARY RESULTS ON THE	Dumitrița Vataman , Dorina Nicolina Isopescu, Bogdan Alexandru Ghileschi "Gheorghe Asachi" Technical University of Iasi,



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	IMPACT OF USING HEMP AND WOOL FIBERS IN A MORTAR MIX	Romania, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
15.00-15.15	PERFORMANCE OF GREEN CONCRETE INCORPORATING MARBLE WASTE AND FIBER REINFORCEMENT	Tawfik Mowaffak , Roșca Bogdan, Marinescu Lucian, Bărbuță Marinela "Gheorghe Asachi" Technical University of Iasi, Faculty of Civil Engineering and Building Services, Romania (Civil engineering and installations)
15.15-15.30	THE POTENTIAL OF LOW-COST SENSOR USE IN STUDY OF OPTIMIZED NATURAL VENTILATION IN BUILDINGS	Radu-Mihai Panduru , Irina Baran, Laura Dumitrescu, Emilian-Florin Țurcanu, Sebastian-Valeriu Hudișteanu, Cristian-Nelu Cherecheș "Gheorghe Asachi" Technical University of Iasi, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
15.30-15.45	THE EVOLUTION, PERFORMANCE AND APPLICATION OF HEMP-LIME CONCRETE FOR SUSTAINABLE CONSTRUCTIONS	Teodor Gavril , Irina Baran, Laura Dumitrescu "Gheorghe Asachi" Technical University of Iasi, Faculty of Civil Engineering and Building Services, Iasi, Romania (Civil engineering and installations)
15.45-16.00	Coffee break	

Online Parallel Session 2.5: Thursday, 15 May, 14.00-16.00

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

Chairperson: Prof. dr. Irina Niculina Cristian

<https://meet.google.com/dfs-ofsh-mcr>

Time	Oral presentation	Authors
14.00-14.15	RAW MATERIALS AND STRUCTURAL INNOVATIONS IN THE DESIGN OF BALLISTIC PANELS MADE FROM TEXTILE COMPOSITE MATERIALS	Niki Vlad Mancasi, Irina Niculina "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Industrial engineering)
14.15-14.30	TECHNIQUES FOR RECONSTRUCTING OLD EMBROIDERIES THROUGH DIGITIZATION	Cristina Pascal¹ , Madalin-Cornel Valeanu ² , Irina-Niculina Cristian ¹ ¹ "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania ² "Moldova" National Museum Complex of Iasi-Romania, Moldova History Museum, Iasi, Romania (Industrial engineering)
14.30-14.45	THE FASHION INDUSTRY BETWEEN ENVIRONMENTAL IMPACT AND CIRCULAR SOLUTIONS	Lavinia Maria Popa , Antonela Curteza "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania



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14.45-15.00	TECH-DRIVEN APPROACHES TO MAXIMIZE WORK EFFICIENCY	Laura-Diana Luca "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Industrial engineering)
15.00-15.15	MODERN AND SUSTAINABLE EMBELLISHMENT TECHNIQUE FOR FASHION DESIGN USING 3DP TECHNOLOGY	Iuliana Streba , Antonela Curteza "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Industrial engineering)
15.15-15.30	THE INFLUENCE OF FDM PRINTING PARAMETERS ON PRINTING ONTO TEXTILE SUBSTRATES	Radu Firicel , Savin Dorin Ionesi, Maria Carmen Loghin "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Industrial engineering)
15.30-15.45	WEARABLE SENSORS IN CLOTHING FOR PEOPLE WITH NEUROLOGICAL DISABILITIES	Valentina Frunze , Daniela Farima "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania (Industrial engineering)
15.45-16.00	TEXTILE MATERIALS FOR PROTECTION AGAINST VIBRATIONS	Mihaela Perdevară , Mirela Blaga "Gheorghe Asachi" Technical University of Iasi, Faculty of Industrial Design and Business Management, Iasi, Romania
16.00-16.15	Coffee break	

Online Parallel Session 3.5: Thursday, 15 May, 14.00-15.15

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

Chairperson: Prof. dr. Cătălin-Daniel Gălățanu

<https://meet.google.com/djs-hodo-nmp>

Time	Oral presentation	Authors
14.00-14.15	A POLYNOMIAL-BASED MODELING APPROACH FOR SWITCHING ENERGY LOSS IN SIC MOSFETS USING NON-INTEGERS EXPONENTS AND THREE KEY VARIABLES	Ștefan-Marius Panaite , Dimitri Grigoraș, Mihai Albu, Marian-Silviu Poboroniuc "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Electrical engineering)
14.15-14.30	ADVANCED TECHNIQUES IN ULTRASOUND IMAGE PROCESSING: FILTERING AND OPTIMIZATION METHODS	Alexandru-Marian Bordaș , Adelina-Cristina Căsuță "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Electrical engineering)
14.30-14.45	THE ROLE OF ELECTROMANETIC	Adelina-Cristina Căsuță , Alexandru-Marian Bordaș



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	INTERFERENCE ASSESSMENT IN MAGNETIC RESONANCE SYSTEM DESIGN AND OPERATION	"Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Electrical engineering)
14.45-15.00	ELECTROMAGNETIC PERFORMANCE COMPARISON OF LOW-COST FERRITE AND RARE-EARTH NEODYMIUM PM SYNCHRONOUS MACHINES	<u>Mihăiță-Emanuel Anton</u> "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Electrical engineering)
15.00-15.15	DESIGN OF A HIGH-SPEED PERMANENT MAGNET SYNCHRONOUS MOTOR WITH A 9/8 STRUCTURE FOR ELECTRIC GO-KARTS	<u>Mihăiță-Emanuel Anton</u> "Gheorghe Asachi" Technical University of Iasi, Romania, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iași, Romania (Electrical engineering)
15.15-16.00	Coffee break	

Online Parallel Session 4.5: Thursday, 15 May, 14.00-15.15

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

Chairperson: Prof. dr. Dan Marius Dobrea

<https://meet.google.com/srm-xqxo-sbe>

Time	Oral presentation	Authors
14.00-14.15	USING BAG-OF-WORDS CLASSIFICATION MODELS AND ELECTROMYOGRAM SIGNALS FOR MULTIDAY PERSONAL IDENTIFICATION AND AUTHENTICATION	<u>Irina Pavel</u> , Iulian Aurelian Ciocoiu "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	TRUST IN INTERVEHICULAR COMMUNICATION	<u>Roxana Emanuela Ambrozie</u> "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics, Telecommunications, and Information Technology Iasi, Romania (Electronic engineering, telecommunications and information technology)
14.30-14.45	REAL-TIME FIREARM DETECTION IN VIDEO USING ENHANCED YOLO MODELS AND A CUSTOM INCIDENT DATASET	<u>Catargiu Constantin</u> "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	STUDY OF SPATIAL MULTIPLEXING TECHNIQUE IN MIMO SYSTEMS	<u>Ana-Maria Oancă¹</u> , George-Cristian Oancă ² ¹ "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics, Telecommunications, and Information Technology Iasi, Romania



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		2 nd Dunărea de Jos University of Galati", Faculty of Automation, Computers, Electrical and Electronics Engineering, Galati, Romania (Electronic engineering, telecommunications and information technology)
15.00-15.15	TAMPER-EVIDENT MEDIA: A TAXONOMY OF SELF-DESCRIBING TRUST SIGNALS IN DIGITAL CONTENT	Eduard Mihăilecu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Electronics, Telecommunications, and Information Technology Iasi, Romania (Electronic engineering, telecommunications and information technology)

15.15-16.00 Coffee break

Online Parallel Session 5.2: Thursday, 15 May, 14.00-15.15

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

Chairperson: Prof. dr. Aristotel Popescu

<https://meet.google.com/msy-kkwf-jzo>

Time	Oral presentation	Authors
14.00-14.15	SMART SAFETY SOLUTIONS FOR PASSENGER TRANSPORT: WEARABLE HEALTH MONITORING AND VEHICLE AUTOMATION	Adriana-Laura Bucura (Manea) Politehnica University of Bucharest, Faculty of Industrial Engineering and Robotics, Bucharest, Romania (Mechanical engineering)
14.15-14.30	ASSEMBLY STRATEGIES FOR THREADED FASTENERS	Dragos Luca^{1,2} , George Popa ^{1,2} , Laura-Diana Luca ³ , Viorel Paleu ^{1,2} ¹ "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Mechanical Engineering, Iasi, Romania ² Continetal Automotive Romania Iasi, Romania ³ "Gheorghe Asachi" Technical University of Iasi-Romania, Industrial Design and Business Management Faculty, Iasi, Romania (Mechanical engineering)
14.30-14.45	REAL-TIME MONITORING AND EFFICIENCY ANALYSIS OF PHOTOVOLTAIC SYSTEMS FOR HYBRID ENERGY APPLICATIONS USING A MULTI-MICROCONTROLLER EXPERIMENTAL PLATFORM	Eduard Enasel , Gheorghe Dumitrascu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
14.45-15.00	OVERVIEW OF METHODS FOR ANALYZING MECHANICAL VIBRATIONS IN PCBS	Cosmin Bumbea , Carmen Bujoreanu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
15.00-15.15	IMPROVING THERMAL SHIELDS TO	George Achitei , Lamara Achitei, Daria Sachelarie,



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	PROTECT THERMOELECTRIC GENERATORS (TEGS) IN AUTOMOTIVE ENERGY RECOVERY SYSTEMS	Aristotel Popescu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
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15.15-16.00 Coffee break

Online Parallel Session 1.6: Thursday, 15 May, 16.00-17.15

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

Chairperson: Prof. dr. Marcelin Benchea

<https://meet.google.com/hwo-xgso-gth>

Time	Oral presentation	Authors
16.00-16.15	REVIEW OF MAGNESIUM ALLOYS FOR BONE IMPLANTS – BIODEGRADABILITY, BIOCOMPATIBILITY, AND MECHANICAL PROPERTIES	Mihaela-Titiana Petrovan "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Mechanical Engineering, Iasi, Romania (Materials engineering)
16.15-16.30	THE CURRENT STATE OF DENTAL IMPLANT TYPES WITH DIFFERENT DESIGNS AND HIGH BIOCOMPATIBILITY	Marius Vacaru Carnaru , Gabriela Stan, Trifautanu Petru, "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Mechanical Engineering, Iasi, Romania (Materials engineering)
16.30-16.45	APPLICATIONS IN OBTAINING SCAFFOLDS FROM BIOMATERIALS FOR USE IN DENTAL MEDICINE	Ioana-Ilinca Volocaru "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Mechanical Engineering, Iasi, Romania (Materials engineering)
16.45-17.00	STUDY OF CARBON CAPTURE IN INTERNAL COMBUSTION ENGINES	Ioana Ramona Grigoras , Valentin Popovici, Stefan Petrovan "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
17.00-17.15	ATMOSPHERIC PLASMA SPRAYING OF WEAR-RESISTANT COATINGS ON CARDAN JOINT TRUNNIONS: MATERIALS AND MORPHOLOGICAL EVALUATION	Anisoara Dascalu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Mechanical Engineering, Iasi, Romania (Materials engineering)



Online Parallel Session 2.6: Thursday, 15 May, 16.00-17.30

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

Chairperson: Prof. dr. Marius Kloetzer

<https://meet.google.com/cug-jebe-kdm>

Time	Oral presentation	Authors
16.00-16.15	REAL-TIME VISION-BASED CONTROL SYSTEM FOR LAB-SCALE AUTONOMOUS VEHICLES	Gabriela-Monica Cocut , Florin-Catalin Braescu, Constantin-Florin Caruntu „Gheorghe Asachi” Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Systems engineering)
16.15-16.30	INTEGRATED VELOCITY OPTIMIZATION IN NONLINEAR MODEL PREDICTIVE VEHICLE CONTROL	Georgiana-Sinziana Pauca , Constantin-Florin Caruntu „Gheorghe Asachi” Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Systems engineering)
16.30-16.45	INTEGRATION OF FORMAL PATH PLANNING SOLUTIONS BASED ON DISCRETE-EVENT-SYSTEMS INTO MATLAB TOOLBOX RMTOOL	Sofia Hustiu ¹ , Octavian Cezar Păstrăvanu ¹ , Cristian Mahulea ² ¹ „Gheorghe Asachi” Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania ² University of Zaragoza, Zaragoza, Spain (Systems engineering)
16.45-17.00	AN EVALUATION OF BIDIRECTIONAL INVARIANT DESCRIPTORS USING A DUAL LIE ALGEBRA FRAMEWORK	Aura Ganciu , Adrian Burlacu „Gheorghe Asachi” Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Systems engineering)
17.00-17.15	SOFTWARE-IN-THE-LOOP FRAMEWORK FOR LOGISTIC ENVIRONMENTS USING AUTONOMOUS MOBILE ROBOTS	Andrei Iulian Iancu „Gheorghe Asachi” Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania (Systems engineering)
17.15-17.30	ANOMALY DETECTION OF UNDERBRAKE SCENARIOS USING NEURAL NETWORKS	Teofil-Constantin Ciobanu ¹ , Otilia-Cristiana Chioaru ¹ , George Maties ² , Letitia Mirea ¹ , Constantin-Florin Caruntu ¹ ¹ „Gheorghe Asachi” Technical University of Iasi-Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania ² „Gheorghe Asachi” Technical University of Iasi-Romania, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Systems engineering)



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Online Parallel Session 3.6: Thursday, 15 May, 16.00-17.30

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

Chairperson: Prof. dr. Viorel Paleu

<https://meet.google.com/cug-jebe-kdm>

Time	Oral presentation	Authors
16.00-16.15	THERMOELECTRIC GENERATORS IN AUTOMOTIVE APPLICATIONS: A COMPREHENSIVE REVIEW OF CONCEPTS, MATERIALS, AND INTEGRATION STRATEGIES	Lamara Achitei , George Achitei, Aristotel Popescu "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
16.15-16.30	OPTIMIZATION OF AIR CONDITIONING AIRFLOW IN ROAD VEHICLES FOR ENHANCED ENERGY EFFICIENCY AND THERMAL COMFORT	Daria Sachelarie , George Achitei, Aristotel Popescu "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
16.30-16.45	EFFECTS OF CUTTING PARAMETERS ON THE FLANK WEAR OF CUTTING TOOLS WITH A CUTTING EDGE	Alexandru Mihai Pinca-Bretotean ¹ , Cosmin Preda ² , Robert Marian Bleotu ² ¹ Politehnica University of Timisoara, Engineering and Management Department, Hunedoara, Romania ² Lucian Blaga University of Sibiu, Machines and Industrial Equipment Department, Sibiu, Romania (Mechanical engineering)
16.45-17.00	STUDY AND ANALYSIS OF THE INTEGRATION OF ENERGY RECOVERY SYSTEMS IN HYBRID VEHICLES	Cosmin Preda ¹ , Robert Marian Bleotu ¹ , Alexandru Mihai Pinca-Bretotean ² ¹ Lucian Blaga University of Sibiu, Machines and Industrial Equipment Department, Sibiu, Romania ² Politehnica University of Timisoara, Engineering and Management Department, Hunedoara, Romania (Mechanical engineering)
17.00-17.15	THE WEIGHT INFLUENCE OF IN-WHEEL MOTOR ON MACPHERSON SUSPENSION HARD POINTS	Valentin Popovici , Ioana Ramona Grigoras, Alexandru-Gabriel Popa "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
17.15-17.30	NVH INVESTIGATION OF VEHICLE CHASSIS	Alexandru Maftei ¹ , Tony Pernin ² , Coman Bogdan ¹ , Carmen Bujoreanu ¹ ¹ "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania ² Institut Supérieur de l'Automobile et des Transports, Nevers, France (Mechanical engineering)



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Online Parallel Session 4.6: Thursday, 15 May, 16.00-17.30

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

Chairperson: Prof. dr. Ioan Doroftei

<https://meet.google.com/ppd-ibmu-seb>

Time	Oral presentation	Authors
16.00-16.15	MOBILE ROBOTS FOR LIFTING AND TRANSPORTING OBJECTS OF ANY SHAPE – A REVIEW	Alin-Stefan Diaconu¹ , Ioan Doroftei ^{1,2,3} ¹ "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania ² Technical Sciences Academy of Romania, Bucharest, Romania ³ Academy of Romanian Scientists, Bucharest, Romania (Mechanical engineering)
16.15-16.30	MECHANISMS WITH INTERNAL-EXTERNAL GEAR PAIRS HAVING SMALL DIFFERENCE IN NUMBERS OF TEETH	Ovidiu-Vasile Crivoi¹ , Ioan Doroftei ^{1,2,3} ¹ "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania ² Technical Sciences Academy of Romania, Bucharest, Romania ³ Academy of Romanian Scientists, Bucharest, Romania (Mechanical engineering)
16.30-16.45	BIOMECHANICS-DRIVEN DEVELOPMENT OF PROSTHETIC FINGERS: A TWO PHALANX APPROACH	Radu-Octavian Sandu¹ , Ioan Doroftei ^{1,2,3} ¹ "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania ² Technical Sciences Academy of Romania, Bucharest, Romania ³ Academy of Romanian Scientists, Bucharest, Romania (Mechanical engineering)
16.45-17.00	APPLICATION OF TECHNICAL CREATIVITY TECHNIQUES AND METHODS FOR OPTIMIZING THE PENDULUM-TYPE OSCILLATOR MODEL	Maria Rediu "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
17.00-17.15	AN APPLICATION TO DUAL ALGEBRA FOR PROPOSING A NOVEL METHOD FOR QUALITY INDICATORS OF SURFACES: EVALUATING ROAD REPAIRS WITH SMARTPHONE ACCELEROMETER DATA	Daniel Condurache, Ionut Popa , Mihail Cojocari "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)
17.15-17.30	KINETIC RECOVERY OF FINGER JOINTS USING 3D PRINTING TECHNOLOGY AND INERTIAL SENSORS	Irina Duduca¹ , Cezar Mucileanu ¹ , Mariana Rotariu ^{1,2} ¹ University of Medicine and Pharmacy "Grigore T. Popa" Iasi, Faculty of Medical Bioengineering, Iasi, Romania ² "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Mechanical Engineering, Iasi, Romania (Mechanical engineering)



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Online Parallel Session 5.3: Thursday, 15 May, 16.00-17.00

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

Chairperson: Assoc. Prof. dr. Sebastian Arădoae

<https://meet.google.com/ywj-rnrh-mgt>

Time	Oral presentation	Authors
16.00-16.15	THE INFLUENCE OF RC SNUBBER IN THE PATH OF THE GATE DRIVER CIRCUIT OF SiC DEVICE OF A HALF BRIDGE CONFIGURATION	<u>Dimitri Grigoras</u> , Ștefan-Marius Panaite "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi Romania (Electrical engineering)
16.15-16.30	MAPPING SCIENTIFIC PROGRESS IN NEUROSURGICAL EQUIPMENT FROM THE PERSPECTIVE OF ELECTROMAGNETIC INTERFERENCE IN OPERATING THEATRES	<u>Matei-Constantin Moruz</u> , Petronela-Camelia Oprea "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi Romania (Electrical engineering)
16.30-16.45	NIGHT VISION TECHNOLOGIES IN AUTOMOTIVE SAFETY – INTEGRATION AND POTENTIAL	<u>Andrei Diaconu</u> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi Romania (Electrical engineering)
16.45-17.00	ENGINEERING APPROACHES IN EXOSOME-BASED THERAPIES	<u>Martin Wyss</u> "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi Romania (Electrical engineering)



Friday, 16 May, 2025

PLENARY SESSION 3 (Online): Friday, 16 May, 9.30-10.50

Chairperson: **Prof. dr. Cezar-Florin Catrinescu, Prof. dr. Corneliu MUNTEANU**

9.30-10.10	Recent Advances and Perspectives in the Field of Clay Minerals	Prof. dr. JOCELYNE BRENDLE Institute of Materials Science of Mulhouse, CNRS-Universite de Haute-Alsace, France
10.10-10.50	Mechanical Properties and Microstructure of Annealed Ni/CrC-NiCr Metal Matrix Composite Prepared by Cold Sprayed Deposition	Prof. dr. SINAN MÜFTÜ Northeastern University, Boston, United States of America
Link	https://meet.google.com/pit-sewf-vhp	
10.50-11.15	Coffee break	

Onsite Session 1.7: Friday, 16 May, 11.15-12.30

Section 1. Interdisciplinary studies

Chairpersons: **Prof. dr. Maria Gavrilescu**

Time	Oral presentation	Authors
11.15-11.30	STUDY OF MASS AND HEAT TRANSFER IN SUBLIMATION USING THERMOGRAVIMETRIC ANALYSIS	Laura Nistor ¹ , Cătălin Lisa ¹ , Tsuyoshi Michinobu ² , Gabriela Lisa ¹ ¹ "Gheorghe Asachi" Technical University of Iasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania; ² Tokyo Institute of Technology, Department of Materials Science and Engineering, Tokyo, Japan (Chemical engineering)
11.30-11.45	INVESTIGATION OF THE FLUORESCENT BEHAVIOR OF A PULLULAN DERIVATIVE WITH PENDING NITRILE GROUPS IN THE PRESENCE AND THE ABSENCE OF METAL IONS SOLUTION	Ioana-Sabina Trifan , Mioara Murariu, Gabriela Biliuta, Sergiu Coseri "Petru Poni" Institute of Macromolecular Chemistry, Departament of Polyaddition and Photochemistry, Iasi, Romania (Chemistry)
11.45-12.00	SURFACTANTS EMPLOYED FOR NANOFLUIDS STABILIZATION: RECENT RESEARCH AND TRENDS	George Cătălin Tofan "Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science and Engineering, Iasi, Romania (Materials engineering)
12.00-12.15	LOW MOLECULAR MASS POLYETHYLENE GLYCOL MIXTURES FOR HEAT TRANSFER APPLICATIONS	Nicoleta Cojocariu "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Materials Science and Engineering, Iasi, Romania



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		(Materials engineering)
12.15-12.30	TEXTILE MATERIALS FOR TRANSDERMAL THERAPY IN MEDICINE AND PSYCHIATRY	Diana Andreea Plăcintă^{1,2} , Mirela Blaga ¹ ¹ "Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management, Iasi, Romania ² "University of Medicine and Pharmacy "Gr. T. Popa" of Iasi-Romania, Faculty of Medicine, Iasi, Romania (Industrial engineering)

12.30-14.00	Lunch
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Onsite Session 2.7: Friday, 16 May, 14.00-15.15

Section 1. Interdisciplinary studies

Chairpersons: Prof. dr. Ionut-Ovidiu Toma

Time	Oral presentation	Authors
14.00-14.15	IMPROVEMENT OF THE TECHNOLOGY FOR MANUFACTURING PUNCHES AS COMPONENTS OF THE MOLDS USED IN VIBROPRESSING PAVERS	Ștefan Jureschi , Margareta Coteață, Ioan Surugiu, Laurențiu Slătineanu "Gheorghe Asachi" Technical University of Iasi, Faculty of Machine Manufacturing and Industrial Management, Iasi, Romania (Industrial engineering)
14.15-14.30	ASSESSMENT OF POLYMERIC MATERIALS USING ABRASIVE EROSION: AN ISHIKAWA DIAGRAM APPROACH	Roxana Hobjălă "Gheorghe Asachi" Technical University of Iasi, Faculty of Machine Manufacturing and Industrial Management, Iasi, Romania (Industrial engineering)
14.30-14.45	AN INNOVATIVE METHOD OF REPRESENTING THE DOUBLE ORTHOGONAL PROJECTION OF A LINE	Alexandru Ionuț Irimia , Cristiana Grigoruță, Gheorghe Nagiț "Gheorghe Asachi" Technical University of Iasi, Faculty of Machine Manufacturing and Industrial Management, Iasi, Romania (Industrial engineering)
14.45-15.00	STUDY ON THE TIGHTNESS OF PARTS MANUFACTURED BY FDM	Alexandru Ionuț Irimia , Vasile Ermolai, Gheorghe Nagiț "Gheorghe Asachi" Technical University of Iasi, Faculty of Machine Manufacturing and Industrial Management, Iasi, Romania (Industrial engineering)
15.30	CSD2025 Closing ceremony (Online/Onsite)	
Link	https://meet.google.com/yui-cnrc-drk	



SOME KEY FIGURES:

- ✓ **180 papers**
- ✓ **6 plenary conferences**
- ✓ **participants from 12 countries (authors and co-authors)**
- ✓ **10 Romanian universities, 11 foreign universities**
- ✓ **2 branch Romanian Academies**
- ✓ **3 research and development Romanian institutes and agencies, 3 foreign research and development institutes and agencies**
- ✓ **3 companies**



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