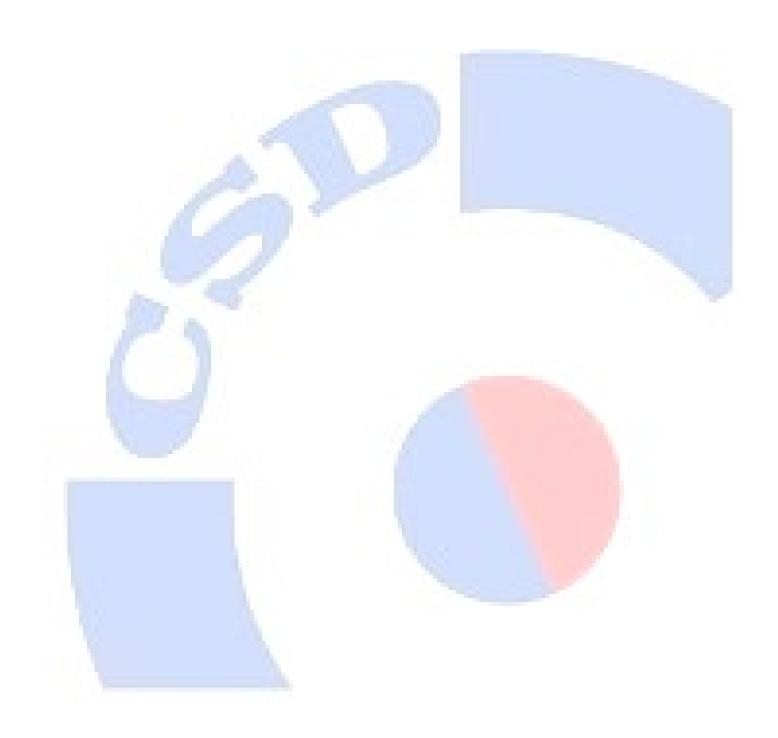
Welcome to CSD2025, wishing you a successful conference!













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 IAŞI, 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 CAŞCAVAL
Rector TUIASI





Conference committees

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PRESIDENT

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- Prof. dr. Maria Carmen Loghin, Gheorghe Asachi Technical University of Iasi, Romania
- Prof.dr. Luis Lugo, University of Vigo, Spain
- Prof. dr. Irina Lungu, Gheorghe Asachi Technical University of Iasi, Romania
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- Prof.dr. Vasile-Ion Manta, Gheorghe Asachi Technical University of Iasi, Romania
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- Prof.dr. Janus Mindykowski, Gdynia Maritime University, Poland
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- 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
- Prof. dr. Marinel Costel Temneanu, Gheorghe Asachi Technical University of Iasi, Romania
- Prof. dr. Ionuţ Ovidiu Toma, Gheorghe Asachi Technical University of Iasi, Romania

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- Prof.dr. Maricel Adam
- Prof.dr. loan Doroftei
- Prof.dr. Florin Leon

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- 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, MECTS nr. 5262/2011), whose mission is to carry out specific activities of creation, innovative capitalization of knowledge and its transfer to society in the fundamental fields of engineering sciences, architecture and urbanism, as well as in interdisciplinary and complementary fields, in the local community, at regional, national and international levels.

"Gheorghe Asachi" Technical University of lasi 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 lasi (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 lasi 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 lasi 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 lasi by the establishment of the "Gheorghe Asachi" Polytechnic School of Iaşi, 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 Iaşi, 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 Iaşi 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

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

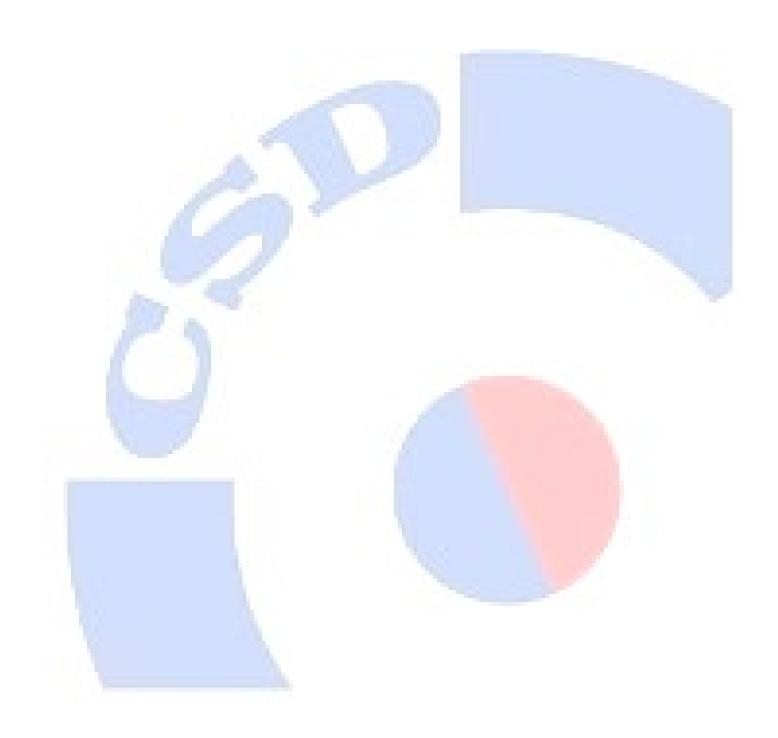
MA Sabina Bobu

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













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
	APPEAR OF THE PERSON OF THE PE
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	P	arallel Sessions On-line
13.00-14.00	Lunch	





14.00-15.45		Parallel Sessions On-line	
15.45-16.00	Coffee Break		
		Parallel Sessions	
16.00-17.30		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
100	
11 15 12 20	Session 1
11.15-12.30	On-site
12.30-14.00	Lunch
14.00-15.15	Session 2
14.00-13.13	On-site 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	Plenary Conference 2: Prof. dr. Burak ÖZKAL (Online)						
Link	HTTPS://MEET.GO			•				
	- 40							
10.50-11.15	Coffee break	200						
	E ASSI							
	Parallel	Parallel	Parallel	Parallel Session				
	Session 1.1	Session 2.1	Session 3.1	4.1				
	Section 2.	Section 3.	Section 3.	Section 3.				
	Computers and	Chemistry;	Chemistry;	Chemistry; Chemica				
- 20	information	Chemical	Chemical	engineering;				
	technology; Systems	engineering;	engineering;	Environmental				
11.15-13.00	engineering	Environmental	Environmental	engineering				
	Energy engineering; engineering		engineering					
	Electronic engineering,			The same of the sa				
	telecommunications	100						
	and information	1.0						
	technology							
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		eqfo-cjo	zsb					
13.00-14.00	Lunch							
- 97	Parallel	Parallel	Parallel	Parallel				
	Session 1.2	Session 2.2	Session 3.2	Session 4.2				
	Section 3.	Section 3.	Section 2.	Section 2.				
	Chemistry; Chemical	Chemistry;	Computers and	Computers and				
14.00-15.30	engineering;	Chemical	information	information				
17.00-13.30	Environmental	engineering;	technology;	technology; System				
	engineering	Environmental	Systems	engineering				
		engineering	engineering	Electrical				
			Electrical	engineering; Energ				
			engineering;	engineering;				







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			Electronic	telecommunications
			engineering,	and information
			telecommunication	technology
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15.30-15.45		Coffee Break			
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	Parallel	Parallel	Parallel	Parallel	Parallel
	Session 1.3	Session 2.3	Session 3.3	Session 4.3	Session 5.1
	Section 5.	Section 3.	Section 4.	Section 5.	Section 5.
	Mechanical	Chemistry;	Civil engineering	Mechanical	Mechanical
15 45	engineering;	Chemical	and installations	engineering;	engineering;
15.45-	Industrial	engineering;		Industrial	Industrial
18.00	engineering;	Environmental		engineering;	engineering;
- 2	Materials	engineering		Materials	Materials
	engineering;			engineering;	engineering;
	Engineering and			Engineering and	Engineering and
	management			management	management
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		iqcj-xvy	vioc-uud	oohk-jxr	ioh







Thursday, 15 May, 2025

Time	Event						
9.30-10.10	Plenary Conference 3: Prof. dr. Dan Doru MICU (Online)						
10.10-10.50	Plenary Confere	nce 4: Prof. dr. Cip	rian ALECSANDRU	(Online)			
Link	https://meet.go	ogle.com/odh-bfp	t-mth				
10.50-11.15	Coffee break						
10.50-11.15	Coffee break		_				
	Parallel	Parallel Session	Parallel	Parallel			
	Session 1.4	2.4	Session 3.4	Session 4.4			
11.15-13.00	Section 4. Civil engineering and installations	Section 2. Computers and information technology; Systems engineering Electrical engineering; Energy engineering; Electronic engineering, telecommunications and information technology	Section 5. Mechanical engineering; Industrial engineering; Materials engineering; Engineering and management	Section 2. Computers and information technology; Systems engineering Electrical engineering; Energy engineering; Electronic engineering, telecommunications and information technology			
Link	https://meet.googl e.com/cdv-pioq-	https://meet.google .com/uon-jccp-mzb	https://meet.googl e.com/oxp-kbyn- azv	https://meet.google. com/pqv-qnze-esh			
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13.30-14.00	Lunch		00	1002			

	Parallel	Parallel	Parallel	Parallel	Parallel
	Session 1.5	Session 2.5	Session 3.5	Session 4.5	Session 5.2
	Section 4.	Section 5.	Section 2.	Section 2.	Section 5.
	Civil engineering	Mechanical	Computers and	Computers and	Mechanical
14.00	and installations	engineering;	information	information	engineering;
14.00-		Industrial	technology; Systems	technology;	Industrial
15.45		engineering;	engineering;	Systems	engineering;
		Materials	Electrical	engineering;	Materials
		engineering;	engineering; Energy	Electrical	engineering;
		Engineering and	engineering;	engineering;	Engineering and
		management	Electronic	Energy	management
			engineering,	engineering;	







			telecommunications and information technology	Electronic engineering, telecommunicat ions and information	
Link	https://meet.googl e.com/vad-hhcs-	https://meet.goo gle.com/dfs-	https://meet.google .com/djs-hodo-nmp	https://meet.go ogle.com/srm-	https://meet.go ogle.com/msy-
15.45-16.00	Coffee break	ofsh-mcr		xqxo-sbe	kkwf-jzo

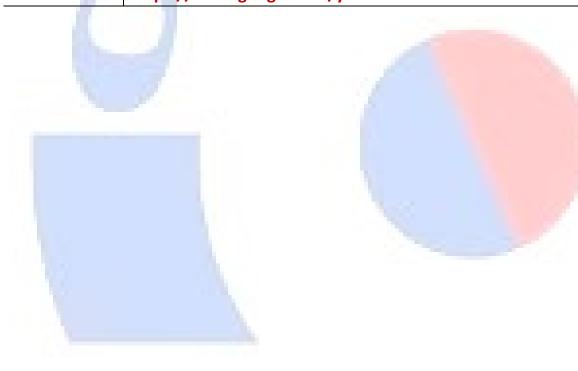
	Online	Online Parallel	Online	Online	Online Parallel
	Parallel	Session 2.6	Parallel	Parallel	Session 5.3
	Session 1.6	Section 2.	Session 3.6	Session 4.6	Section 2.
	Section 5.	Computers and	Section 5.	Section 5.	Computers and
	Mechanical	information	Mechanical	Mechanical	information
	engineering;	technology;	engineering;	engineering;	technology;
16.00-	Industrial	Systems	Industrial	Industrial	Systems
17.30	engineering;	engineering	engineering;	engineering;	engineering;
17.50	Materials	Energy	Materials	Materials	Electrical
	engineering;	engineering;	engineering;	engineering;	engineering; Energy
	Engineering and	Electronic	Engineering and	Engineering and	engineering;
	management	engineering,	management	management	Electronic
	management	telecommunicatio	management	management	engineering,
		ns and information			telecommunications
- 1	37	technology			and information
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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
12.30-14.00	Lunch
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14.00-15.15	Session 2.7 On-site
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
	Opening ceremony (Online)	
	Prof.dr. Gabriela Lisa Prof.dr. Dan Cașcaval	Director of the Doctoral School "Gheorghe Asachi" Technical University of Iasi, Romania President of CSD2025 Rector of the "Gheorghe Asachi" Technical University of Iasi, Romania
9.00-9.25	Prof.dr. Irina Lungu	Honorary President of CSD2024 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.CO	OM/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	
10.00 11.13	COLLEC MICCH	







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	Marin Iulian-Andrei "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	Mihail-Cristian Heghea, 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	Robert Chihaia ¹ , Florin Leon ¹ , Maria Trocan 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	Alexandru Grigoraș, 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	Florian-Alexandru Braşoveanu, 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	Elena-Claudia Maftei, 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	Vasile-Silviu Sarmasanu Gheorghe Asachi" Technical University of Iasi- Romania, Faculty of Automatic Control and Computer Engineering, Iasi, Romania







		(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	

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 Gavrila, 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	Laurenţiu-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	<u>Denis Cutcovschi</u> , 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







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

13.00-14.00 Lunch

Online Parallel Session 3.1: Wednesday, 14 May, 11.15-13.00

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 Gheorghiță, 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 Ionut Bustiucel, 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 y-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 Intéractions sur le Vivant-UCEIV, Dunkerque, France (Chemistry)
12.00-12.15	CALCULATION OF SEASONALITY INDICATORS OF MINIMUM	Munteanu Marius, Giurma Ion "Gheorghe Asachi" Technical University of Iasi-







	RUNOFF IN THE CONTEXT OF	Romania, Faculty of Hydrotechnics, Geodesy and
	CURRENT CLIMATE CHANGES	Environmental Engineering
		(Environmental engineering)
12.15-12.30	NON-THERMAL PLASMA TREATMENT OF ACETONE- POLLUTED WASTEWATER FROM CHEMICAL INDUSTRY PROCESSES	Vasile-Daniel Asmarandei, Bogdan-Andrei Pingescu, Radu Burlică, Petronela-Camelia Oprea, Răzvan Beniugă, Dragoș Astanei "Gheorghe Asachi" Technical University of Iasi- Romania, Faculty of Electrical Engineering, Energetics and Applied Informatics (Environmental engineering)
12.30-12.45	DEVELOPMENT AND CHARACTERIZATION OF TREE TROPICAL WOOD SPECIES (AYOUS, AZOBE AND IROKO) AND A NATURAL BINDER	Mfourigam Issofa ¹ , 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)
12.45-13.00	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, 11.15-12.45

Section 3. Chemistry; Chemical engineering; Environmental engineering

Chairperson: Prof. dr. Brinduşa Sluşer 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:	Ana-Maria Lupu, Brînduşa-Mihaela Sluşer







	SUSTAINABLE APPROACHES IN	"Gheorghe Asachi" Technical University of Iasi,
	WASTE ELECTRICAL AND	"Cristofor Simionescu" Faculty of Chemical
	ELECTRONIC EQUIPMENT	Engineering and Environmental Protection, lasi,
	MANAGEMENT	Romania
		(Environmental engineering)
		Andrei Hâncu, Cătălin Dumitrel Balan, Brîndușa
	EVOLUTION OF CAR FLEET IN LAST	Mihaela Sluşer
44 45 43 00	EVOLUTION OF CAR FLEET IN IAȘI	"Gheorghe Asachi" Technical University of lasi,
11.45-12.00	CITY AND THE IMPACT ON LIFE	Romania, "Cristofor Simionescu" Faculty of
	QUALITY	Chemical Engineering and Environmental
		Protection
	-	(Environmental engineering)
	A 7000	Georgiana Petrea, Brînduşa-Mihaela Sluşer
	ANALYSIS OF WASTE	"Gheorghe Asachi" Technical University of Iasi,
12.00-12.15	VALORIZATION INTO BIOGAS	Romania, "Cristofor Simionescu" Faculty of
	PLANTS	Chemical Engineering and Environmental
		Protection
		(Environmental engineering)
		Gabriela Ungureanu ¹ , Bogdan Chelaru ² , Irina Volf ¹
200	45	¹ "Gheorghe Asachi" Technical University of Iasi,
	ATMOSPHERIC EMISSIONS AND	"Cristofor Simionescu" Faculty of Chemical
	EFFECTS ON URBAN AREA	Engineering and Environmental Protection, lasi,
12.15-12.30	ENVIRONMENT GENERATED BY	Romania
	CONSTRUCTION INDUSTRY	² " Gheorghe Asachi" Technical University of Iasi-
	2.50	Romania, Faculty of Civil Engineering and Building
		Services, Romania
		(Environmental engineering)
		Mădălina-Maria Enache, Carmen Teodosiu
	INTEGRATING CIRCULAR DESIGN	"Gheorghe Asachi" Technical University of Iasi,
12.30-12.45	PRINCIPLES INTO PLASTIC WASTE	Romania, "Cristofor Simionescu" Faculty of
12.30-12.43	REDUCTION AND RECOVERY	Chemical Engineering and Environmental
	STRATEGIES	Protection
		(Environmental engineering)







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 ELECTRORHEOLOGICAL LUBRICANTS. EFFECT OF ELECTRIC FIELD ON FILM THICKNESS IN ROLLING CONDITIONS	María García-Pérez ¹ , 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
14.15-14.30	MODERN APPROACHES TO VEGETABLE OIL FRACTIONATION	(Chemical engineering) Nicoleta-Oana Demostene ¹ , Bianca Simedrea ¹ , Petrica lancu 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	TRENDS FOR ENERGY EFFICIENCY AND COST REDUCTION OF THE BRINE ELECTROLYSIS FOR CHLOR- ALKALI MEMBRANE CELL PROCESSES	Valeria Danilova, Liliana Lazăr, Ioan Mamaligă "Gheorghe Asachi" Technical University of Iasi, Romania, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iasi, Romania (Chemical engineering)
15.15-15.30	OPTIMIZED EXTRACTION OF PRECIOUS AND RARE MATERIALS FROM E-WASTE	Stefan-Leontin Martinas-Ionită, 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)







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

Coffee Break

15.15-15.45

Time	Oral presentation	Authors
		Maria-Bianca Aiordăchioaie, Irina Volf
		"Gheorghe Asachi" Technical University of Iasi,
44.00.44.45	A CRITICAL SURVEY ON	Romania, "Cristofor Simionescu" Faculty of
14.00-14.15	SUSTAINABLE APPROACH FOR	Chemical Engineering and Environmental
	AGRICULTURAL SOIL RESILIENCE	Protection, lasi, Romania
	AD VIII	(Environmental engineering)
	EXPERIMENTAL RESULTS	Cristina-Alexandra Haivas, Carmen Zaharia
	ASSOCIATED WITH THE PHYSICAL-	"Gheorghe Asachi" Technical University of Iasi,
4445 44 20	CHEMICAL ANALYSIS METHODS	Romania, "Cristofor Simionescu" Faculty of
14.15-14.30	USED FOR WASTEWATER	Chemical Engineering and Environmental
	CHARACTERIZATION IN A CATTLE	Protection, Iasi, Romania
	ZOOTECHNICAL FARM	(Environmental engineering)
	EXPERIMENTAL MODELING STUDY	Marius-Alexandru Afrasinei, Corina-Petronela
- 10	OF COAGULATION-FLOCCULATION	Musteret, Carmen Zaharia
	TREATMENT PROCESS APPLIED	"Gheorghe Asachi" Technical University of Iasi,
44.00.44.45	FOR TEXTILE EFFLUENTS	Romania, "Cristofor Simionescu" Faculty of
14.30-14.45	CONTAINING REACTIVE REMAZOL	Chemical Engineering and Environmental
	ROSSO RB DYE USING	Protection, Iasi, Romania
	COMMERCIAL HYBRID COMPOSITE	(Environmental engineering)
	MATERIALS	
	EXPERIMENTAL ADSORPTION	Crinuta-Larisa Ortovan, Carmen Zaharia
	MODELING AND OPTIMIZATION	"Gheorghe Asachi" Technical University of Iasi,
14 45 45 00	STUDY OF REMAZOL ROSSO RB	Romania, "Cristofor Simionescu" Faculty of
14.45-15.00	DYE REMOVAL FROM AQUEOUS	Chemical Engineering and Environmental
	SYSTEMS USING ALGAL BIOMASS-	Protection, Iasi, Romania
	BASED ADSORBENT	(Environmental engineering)
		Raluca-Maria Ţâbuleac¹, Tiberiu Vlad Simion¹,
		Maria Gavrilescu ^{1,2,3}
	ACCECCING ENVIRONMENTAL	^{1"} Gheorghe Asachi" Technical University of Iasi,
	ASSESSING ENVIRONMENTAL,	Romania, "Cristofor Simionescu" Faculty of
	SOCIAL, AND GOVERNANCE (ESG)	Chemical Engineering and Environmental
15.00-15.15	INTEGRATION IN TOURISM AND	Protection, Iasi, Romania
	HOSPITALITY: A COMPARATIVE	² Academy of Romanian Scientists, Bucharest,
	AND INDUSTRY DRACTICES	Romania
	AND INDUSTRY PRACTICES	³ Academy of Technical Sciences of Romania,
		Bucharest, Romania
		(Environmental engineering)







Online Parallel Session 3.2: Wednesday, 14 May, 14.00-15.45

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

Chairperson: Prof. 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	George Balan, 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	Elena Nechifor, Marian-Silviu Poboroniuc, Sorin-George Nechifor "Gheorghe Asachi" Technical University of lasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)
14.30-14.45	THERMAL DRIFT OF TEMPERATURE SENSORS – A SHORT REVIEW	Gina-Ionela Tătaru "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	Iulian-Constantin Cadare, 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	Andrei-Marian Vieru "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	Lucian Balan "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	Madalina-Elena Datcu "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi, Romania (Electrical engineering)



15.30-15.45

Coffee Break



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



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
		Gabriel - Dorin Melus
	OVERVIEW OF INVESTMENT PLAN	"Gheorghe Asachi" Technical University of Iasi,
14.00-14.15	OF ELECTRICITY DISTRIBUTION	Faculty of Electrical Engineering, Energetics and
	OPERATORS	Applied Informatics, Iasi, Romania
	100° - 100°	(Energy engineering)
	11 1100 11	Buzamat Alexandru, Marian-Silviu Poboroniuc
	COMPARATIVE ANALYSIS OF	"Gheorghe Asachi" Technical University of lasi,
14.15-14.30	ACTIVE AND PASSIVE ELECTRODES	Faculty of Electrical Engineering, Energetics and
	IN TMS-EEG	Applied Informatics, Iasi, Romania
	-	(Electrical engineering)
		Mihai-Sebastian Carp
	MACHINE LEARNING ALGORITHMS	"Gheorghe Asachi" Technical University of Iasi,
14.30-14.45	FOR MONITORING CATTLE	Faculty of Electrical Engineering, Energetics and
	BEHAVIOUR	Applied Informatics, Iasi, Romania
		(Electrical engineering)
	CELLULAR IOT-BASED ENERGY	Dominik-Andreas Schreiber
	MONITORING FOR ISO 50001	"Gheorghe Asachi" Technical University of Iasi,
14.45-15.00	COMPLIANCE: SYSTEM	Faculty of Electrical Engineering, Energetics and
	DEVELOPMENT AND	Applied Informatics, Iasi, Romania
	IMPLEMENTATION	(Electrical engineering)
	DESIGN AND SIMULATION OF	Cornel Iulian Postolache, Dorin-Octavian Neacșu
	DIGITIZATION METHODS USED IN	"Gheorghe Asachi" Technical University of Iasi,
15.00-15.15	CONTROL OF POWER	Faculty of Electrical Engineering, Energetics and
	CONVERTERS	Applied Informatics, Iasi, Romania
	CONVENTERS	(Electrical engineering)
		Adrian Anton, Mihai Andruşcă, Maricel Adam,
	ABOUT CONTACT RESISTANCE AND VIBRATION MONITORING OF A POWER CIRCUIT BREAKER	Marian Micu
15.15-15.30		"Gheorghe Asachi" Technical University of Iasi,
13.13-13.30		Faculty of Electrical Engineering, Energetics and
		Applied Informatics, Iasi, Romania
		(Electrical engineering)







Online Parallel Session 1.3: Wednesday, 14 May, 15.45-18.00

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
		Jolanta Sobczak ¹ , Krzysztof Cioch ¹ , Gaweł Żyła ²
	THE EASY-IN-SHAPE-DEFINITION	¹ Doctoral School of the Rzeszów University of
	GAMMA-RAY SHIELDS – AN	Technology, Rzeszów University of Technology,
15.45-16.00	INTRODUCTION OF PARAFFIN-	Rzeszów, Poland; ² Department of Physics and
	BASED COMPOSITES FILLED WITH	Medical Engineering, Rzeszów University of
	HIGH DENSITY PARTICLES	Technology, Rzeszów, Poland
	1 100	(Materials engineering)
	A 4000	Catalin Cucuzel, Leandru-Gheorghe Bujoreanu
	AN OVERVIEW OF THE STATE OF	"Gheorghe Asachi" Technical University of Iasi,
16.00-16.15	THE ART OF THERMOCHEMICAL	Faculty of Materials Science and Engineering, lasi,
-0.00 -0.10	TREATMENT OF GEARS	Romania
200		(Materials engineering)
		Stefan Dumitru Sava, Leandru-Gheorghe
1.00	DEVELOPMENT OF A PID-	Bujoreanu
	CONTROLLED WATER HEATING	"Gheorghe Asachi" Technical University of Iasi,
16.15-16.30	SYSTEM FOR RELIABLE SME	Faculty of Materials Science and Engineering, Iasi,
	ANALYSIS IN THERMOFORMED R-	Romania
	PET CUPS	(Materials engineering)
		Ionut Adomnitei ¹ , Bogdan Istrate ² , Daniela Lucia
	36	Chicet ¹ , Nicanor Cimpoesu ¹
	OBTAINING AND ANALYSIS OF	^{1"} Gheorghe Asachi" Technical University of Iasi,
16.30-16.45	HIGH YTTRIA – YSZ COATINGS ON	Faculty of Materials Science and Engineering;
10.30-10.43	METALLIC SUBSTRATE	^{2"} Gheorghe Asachi" Technical University of lasi,
	WETALLIC SOBSTRATE	
		Faculty of Mechanics, Iasi, Romania
		(Materials engineering)
		Ghiculescu Ion ¹ , Baltatu Madalina Simona ¹ ,
		Pruteanu Andrei ¹ , Tofan M <mark>ihai¹</mark> , Sandu Andrei
	TITANUMA ALLONG AND THE BOLE	Victor ^{1,2} , Vizureanu Petrica ^{1,2}
	TITANIUM ALLOYS AND THE ROLE	"Gheorghe Asachi" Technical University of Iasi,
16.45-17.00	OF ALLOYING ELEMENTS IN	Faculty of Materials Science and Engineering, Iasi,
	MATERIAL PERFORMANCE	Romania
		² Academy of Romanian Scientists, Bucharest,
		Romania
		(Materials engineering)
		Pruteanu Andrei ¹ , Madalina Simona Baltatu ¹ ,
	ADVANCED TITANIUM ALLOYS FOR	Ghiculescu Ion ¹ , Tofan Mihai ¹ , Vizureanu Petrica ²
17.00-17.15	MEDICAL AND INDUSTRIAL USE	¹ "Gheorghe Asachi" Technical University of Iasi,
		Faculty of Materials Science and Engineering, lasi,
		Romania







		² Academy of Romanian Scientists, Bucharest,
		Romania
		(Materials engineering)
	CALLANCING THE MECHANICAL	Tiberiu Sutic, Radu Ioachim Comaneci, Romeu
	ENHANCING THE MECHANICAL	Chelariu, Nicanor Cimpoesu
47.45.47.20	PROPERTIES OF BIODEGRADABLE	"Gheorghe Asachi" Technical University of Iasi,
17.15-17.30	ZINC ALLOOYS THROUGH SEVERE	Faculty of Materials Science and Engineering, Iasi,
	PLASTIC DEFORMATION	Romania
	TECHNIQUES	(Materials engineering)
		Costel Jipa, Dorin Luca
	A REVIEW OF THE CURRENT	"Gheorghe Asachi" Technical University of Iasi,
17.30-17.45	STATUS OF WIRE DRAWING	Faculty of Materials Science and Engineering, lasi,
	RESEARCH	Romania
	JDL 7000L	(Materials engineering)
	The same of the sa	Magdalena-Gabriela Hutanu, Nicanor Cimpoesu,
17.45-18.00	STRUCTURAL AND MECHANICAL	Liviu Andrusca, Vasile Manole, Mihai Axinte
	BEHAVIOR OF 316L STAINLESS	"Gheorghe Asachi" Technical University of lasi,
	STEEL UNDER COMBINED TENSILE	Faculty of Materials Science and Engineering, lasi,
	AND TORSIONAL LOADING	Romania
		(Materials engineering)

Online Parallel Session 2.3: Wednesday, 14 May, 15.45-17.15

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, Brînduşa Sluşer "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	CIRCULAR BIOECONOMY IN ACTION: CASE STUDIES ON FOOD	Paula-Sânziana Oprea ¹ , Elena-Diana Comăniță Ungureanu ¹ , Maria Gavrilescu ^{1,2,3}







	WASTE VALORIZATION FOR	¹ "Gheorghe Asachi" Technical University of Iasi,
	NUTRACEUTICAL AND COSMETIC	"Cristofor Simionescu" Faculty of Chemical
	PRODUCTS	Engineering and Environmental Protection, lasi,
		Romania
		² Academy of Romanian Scientists, Bucharest,
		Romania
		³ Academy of Technical Sciences of Romania,
		Bucharest, Romania
		(Environmental engineering)
-		Tiberiu Vlad Simion ¹ , Raluca-Maria Mighiu
		(Ţâbuleac) ¹ , Maria Gavrilescu_ ^{1,2,3}
		¹ "Gheorghe Asachi" Technical University of Iasi,
	TOURISM AND FREE MOVEMENT	"Cristofor Simionescu" Faculty of Chemical
	IN THE EUROPEAN UNION:	Engineering and Environmental Protection, lasi,
16.45-17.00	ENVIRONMENTAL CHALLENGES	Romania
	AND PATHWAYS TO SUSTAINABLE	² Academy of Romanian Scientists, Bucharest,
	DEVELOPMENT	Romania
		³ Academy of Technical Sciences of Romania,
		Bucharest, Romania
	400	(Environmental engineering)
	No. of the last of	Dana-Gabriela Simion Luduşanu ^{1,2} , Grigore
	The state of the s	Tinică ^{2,3} , Maria Gavrilescu ^{1,4,5}
		¹ "Gheorghe Asachi" Technical University of Iasi,
		Romania, "Cristofor Simionescu" Faculty of
	INTEGRATING QUALITY AND	Chemical Engineering and Environmental
	ENVIRONMENTAL SYSTEMS IN	Protection
17.00.17.15	HEALTHCARE: A STRATEGIC	² Institute of Cardiovascular Diseases, Iasi, Romania
17.00-17.15	FRAMEWORK FOR SUSTAINABLE	³ "Grigore T. Popa"University of Medicine and
	INSTITUTIONAL	Pharmacy, Iași, Ro <mark>mania</mark>
	TRANSFORMATION	⁴ Academy of Romanian Scientists, Bucharest,
		Romania
		⁵ Academy of Technical Sciences of Romania,
		Bucharest, Romania
		(Environmental engineering)

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	Chicus 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)

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		Petronela- Daniela Rusu (Ostahie)
		"Gheorghe Asachi" Technical University of Iasi-
	CHARACTERIZATION OF LASER-	Romania,
	TEXTURED SURFACES – A REVIEW	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 Khdair, Eduard-Neculai Bumbu, Mihaita Horodinca "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 PROCESSES FOR AUTOMOTIVE APPLICATIONS	Ana Ghimp ¹Continental Automotive Romania (Industrial engineering)

Online Parallel Session 5.1: Wednesday, 14 May, 15.45-17.30

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	Andreea-Gabriela Gradinaru, Silvia Avasilcai
13.43-10.00	METAVERSE FOR BUSINESS	"Gheorghe Asachi" Technical University of lasi-







	MODEL INDIOVATION	Demonis Coulty of Industrial Design and Business
	MODEL INNOVATION	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 Sidorov¹, Svetlana Svistova², Tatiana Nikitina³ ¹"Alexandru Ioan Cuza" University of Iasi, Faculty of Economics and Business Administration, Iasi, Romania ²RTU MIREA – Russian Technological University, Department of higher mathematics No. 1, Institute of Artificial Intelligence, Moscow, 119454, Russia ³RTU 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, lasi, Romania (Engineering and management)
17.00-17.15	BEYOND THE HUMAN RESOURCE MANAGEMENT RISK	Mihai-Doru Buliga, Ion Verzea "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 Desing and Business Management, lasi, Romania
		(Engineering and management)





Thursday, 15 May, 2025

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

Chairpersons: Prof.dr.GHEORGHE GRIGORAŞ, Prof.dr.DORINA-NICOLINA ISOPESCU

9.30-10.10	European Project Insights on Energy	Prof.dr. DAN DORU MICU
	Transition and Decarbonization	Technical University of Cluj-Napoca, Romania
10.10-10.50	Conventional and Autonomous	
	Vehicular Traffic: Ameliorating	Prof.dr. CIPRIAN ALECSANDRU
	Operations, Safety and	Concordia University, Montreal, Canada
	Environmental Impacts	2.07
Link	https://meet.google.com/odh	-bfpt-mth
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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: Lecturer dr. Marius Telișcă 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 Telişcă, 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







		(Civil engineering and installations)
12.15-12.30		Otilia Pitulac
		"Gheorghe Asachi" Technical University of Iasi-
	SUSTAINABLE USE OF SOILS IN	Romania,
	AGRICULTURE	Faculty of Hydrotechnics, Geodesy, and
		Environmental Engineering, Iasi, Romania
		(Civil engineering and installations)
		Vasile Stavarachi, Mihail Luca
	WATER LOSSES IN SUPPLY	"Gheorghe Asachi" Technical University of lasi-
12.30-12.45	NETWORKS: ANALYSIS OF	Romania,
12.30-12.45	EVALUATION METHODS AND	Faculty of Hydrotechnics, Geodesy, and
	OPTIMIZATION STRATEGIES	Environmental Engineering, Iasi, Romania
	The second second	(Civil engineering and installations)
12.45-13.00	A 7000	<u>Veronica Muraru</u> , Florian Stătescu
	BÂRNOVA TERRITORIAL	"Gheorghe Asachi" Technical University of lasi-
	ADMINISTRATIVE UNIT, IASI COUNTY	Romania,
	-EVALUATION OF THE DYNAMICS OF	Faculty of Hydrotechnics, Geodesy, and
	BUILT-UP LAND	Environmental Engineering, Iasi, Romania
	A STATE OF THE STA	(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	Mihai-Alexandru Baciu, Gheorghe Grigoraș
	EXPLAINABLE CLUSTERING USED	"Gheorghe Asachi" Technical University of Iasi,
	IN THE CLASSIFICATION	Faculty of Electrical Engineering, Energetics and
	PROCESS OF THE MEDIUM	Applied Informatics, Iasi, Romania
	VOLTAGE FEEDERS	(Energy engineering)
		Nicolae-Cosmin Despa, Adi-Aurelian Gugiuman
	LEVERAGING ELECTRIC VEHICLE INTEGRATION FOR OPTIMIZING DISTRIBUTION NETWORKS	and Bogdan-Constantin Neagu
11.30-11.45		"Gheorghe Asachi" Technical University of Iasi,
11.50-11.45		Faculty of Electrical Engineering, Energetics and
		Applied Informatics, Iasi, Romania
		(Energy engineering)
		Elena-Mădălina Armenia, Mihai Gavrilaș
	THE INTEGRATION OF PROSUMERS	"Gheorghe Asachi" Technical University of Iasi,
11.45-12.00	INTO LOCAL ELECTRICITY	Faculty of Electrical Engineering, Energetics and
	MARKETS	Applied Informatics, Iasi, Romania
		(Energy engineering)
12.00-12.15	THE EUROPEAN ENERGY	Sergiu-Paul Popa, Marcel-Dumitru Istrate
12.00-12.15	TRANSITION: CURRENT CONTEXT	"Gheorghe Asachi" Technical University of Iasi,







	AND INDEPENDENCE	Faculty of Electrical Engineering, Energetics and
		Applied Informatics, Iasi, Romania
		(Energy engineering)
40.45.40.00	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,
12.15-12.30		Faculty of Electrical Engineering, Energetics and
		Applied Informatics, Iasi, Romania
		(Energy engineering)
		Alin-Ionuţ Pricop, Mihai Gavrilaş
	APPLYING PETRI NETS FOR	"Gheorghe Asachi" Technical University of Iasi,
12.30-12.45	CYBERATTACK ANALYSIS IN	Faculty of Electrical Engineering, Energetics and
	POWER SYSTEMS	Applied Informatics, Iasi, Romania
	20 100	(Energy engineering)
	HARMONIZING COST-EFFICIENCY	Sergiu-Paul Popa, Marcel-Dumitru Istrate, Răzvan
	AND RENEWABLE INTEGRATION IN NEARLY ZERO-ENERGY BUILDINGS: A COMPARATIVE AND PRACTICAL INSIGHT	Constantin Beniuşă
12.45-13.00		"Gheorghe Asachi" Technical University of Iasi,
12.45-13.00		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







12.00-12.15 TO DRIVE ORGANIZATIONAL SUSTAINABILITY: CHALLENGES AND OPPORTUNITIES COMPARATIVE ANALYSIS OF RCM AND FMEA IN THE CONTEXT OF ECO- MAINTENANCE SUSTAINABILITY AND CIRCULAR ECONOMY Herghiligiu "Gheorghe Asar (Engineering and "Gheorghe Asar (Engineering and (Engineeri	d management)
AND FMEA IN THE CONTEXT OF ECO- MAINTENANCE SUSTAINABILITY AND CIRCULAR ECONOMY THE INFLUENCE OF EMPLOYEE- "Gheorghe Asar Faculty of Industry (Engineering an Nicoleta-Andre Constantin Filip	a Pohontu-Dragomir, Ionut-Viorel hi" Technical University of lasi, crial Design and Business management)
THE INFLUENCE OF EMPLOYEE- Constantin Filip	ra Nica, Ion Verzea hi" Technical University of Iasi, rial Design and Business d management)
	hi" Technical University of lasi, rial Design and Business

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, Iaşi, Romania (Civil engineering and installations)
11.45-12.00	INTERFERENCE MANAGEMENT IN 5G AND BEYOND NETWORKS	<u>Cristina-Vasilica Tanasa</u> , Ion Bogdan "Gheorghe Asachi" Technical University of Iasi, Faculty of Electronics, Telecommunications and Information Technology, Iaşi, 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,







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







	IMPACT OF USING HEMP AND WOOL	Romania, Faculty of Civil Engineering and Building
	FIBERS IN A MORTAR MIX	Services, Iasi, Romania
		(Civil engineering and installations)
15.00-15.15	PERFORMANCE OF GREEN CONCRETE INCORPORATING MARBLE WASTE AND FIBER REINFORCEMENT	Tawfik Mowaffak, Rosca 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 lasi, Faculty of Civil Engineering and Building Services, lasi, 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 Pascal ¹ , 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







		(Industrial engineering)
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-INTEGER EXPONENTS AND THREE KEY VARIABLES	Stefan-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 Bordaş, 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







	INTERFERENCE ASSESSMENT IN	"Gheorghe Asachi" Technical University of Iasi,
	MAGNETIC RESONANCE SYSTEM	Faculty of Electrical Engineering, Energetics and
	DESIGN AND OPERATION	Applied Informatics, Iași, Romania
		(Electrical engineering)
	ELECTROMAGNETIC PERFORMANCE	Mihăiță-Emanuel Anton
	COMPARISON OF LOW-COST	"Gheorghe Asachi" Technical University of Iasi,
14.45-15.00	FERRITE AND RARE-EARTH	Romania, Faculty of Electrical Engineering, Energetics
	NEODYMIUM PM SYNCHRONOUS	and Applied Informatics, Iași, Romania
	MACHINES	(Electrical engineering)
	DESIGN OF A HIGH SPEED	Mihăiță-Emanuel Anton
15.00-15.15	DESIGN OF A HIGH-SPEED	"Gheorghe Asachi" Technical University of Iasi,
	PERMANENT MAGNET	Romania, Faculty of Electrical Engineering, Energetics
	SYNCHRONOUS MOTOR WITH A 9/8	and Applied Informatics, Iaşi, Romania
	STRUCTURE FOR ELECTRIC GO-KARTS	(Electrical engineering)
	400	
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

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







		² "Dunărea de Jos University of Galati", Faculty of
		Automation, Computers, Electrical and Electronics
		Engineering, Galati, Romania
		(Electronic engineering, telecommunications and
		information technology)
	Eduard Mihăilecu	
	TANADED EVIDENT MEDIA.	"Gheorghe Asachi" Technical University of Iasi-
15.00-15.15 A TAXONOMY OF SELF-DESCRIBING TRUST SIGNALS IN DIGITAL CONTENT	Romania, Faculty of Electronics, Telecommunications,	
	and Information Technology Iasi, Romania	
	TROST SIGNALS IN DIGITAL CONTENT	(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)
- 1		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,
14.15-14.30	ASSEMBLY STRATEGIES FOR THREADED FASTENERS	lasi, Romania ² Continetal Automotive Romania lasi, Romania ³ "Gheorghe Asachi" Technical University of lasi-Romania, Industrial Design and Business Management Faculty, lasi, 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,







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

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
	REVIEW OF MAGNESIUM ALLOYS	Mihaela-Titiana Petrovan
16.00-16.15	FOR BONE IMPLANTS –	"Gheorghe Asachi" Technical University of Iasi-
	BIODEGRADABILITY,	Romania, Faculty of Mechanical Engineering, lasi,
	BIOCOMPATIBILITY, AND	Romania
	MECHANICAL PROPERTIES	(Materials engineering)
	REVIEW OF MAGNESIUM ALLOYS	Gabriela Stan, Trifautanu Petru, Marius Vacaru Carnaru
	FOR BONE IMPLANTS –	"Gheorghe Asachi" Technical University of lasi-
16.15-16.30	BIODEGRADABILITY,	Romania, Faculty of Mechanical Engineering, lasi,
	BIOCOMPATIBILITY, AND	Romania
	MECHANICAL PROPERTIES	(Materials engineering)
		<u>Ioana-Ilinca Volocaru</u>
	APPLICATIONS IN OBTAINING	"Gheorghe Asachi" Technical University of Iasi-
16.30-16.45	SCAFFOLDS FROM BIOMATERIALS	Romania, Faculty of Mechanical Engineering, Iasi,
	FOR USE IN DENTAL MEDICINE	Romania
		(Materials engineering)
		<u>Ioana Ramona Grigoras, Valentin Popo</u> vici, Stefan
		Petrovan
16.45-17.00	STUDY OF CARBON CAPTURE IN	"Gheorghe Asachi" Technical University of Iasi-
10.45 17.00	INTERNAL COMBUSTION ENGINES	Romania, Faculty of Mechanical Engineering, lasi,
	-0.	Romania
		(Mechanical engineering)
	ATMOSPHERIC PLASMA SPRAYING	Anisoara Dascalu
	OF WEAR-RESISTANT COATINGS ON	"Gheorghe Asachi" Technical University of Iasi-
17.00-17.15	CARDAN JOINT TRUNNIONS:	Romania, Faculty of Mechanical Engineering, lasi,
	MATERIALS AND MORPHOLOGICAL	Romania
	EVALUATION	(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)







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)







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 Diaconu ¹ , 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 Crivoi ¹ , 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 Sandu ¹ , 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, <u>Ionut Popa</u> , <u>Mihail Co</u> jocari "Gheorghe Asachi" Technical <u>University</u> of Iasi, Faculty of Mechanical <u>Engineering</u> , <u>Iasi, Romania</u> (Mechanical engineering)
17.15-17.30	KINETIC RECOVERY OF FINGER JOINTS USING 3D PRINTING TECHNOLOGY AND INERTIAL SENSORS	Irina Duduca ¹ , Cezar Mucileanu ¹ , Mariana Rotariu ^{1,2} ¹ University of Medicine and Pharmacy "Grigore T. Popa" lasi, Faculty of Medical Bioengineering, lasi, Romania ² "Gheorghe Asachi" Technical University of lasi- Romania, Faculty of Mechanical Engineering, lasi, Romania (Mechanical engineering)







Online Parallel Session 5.3: Thursday, 15 May, 16.00-17.15

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

Chairperson: Assoc. Prof. dr. Sebastian Arădoaie

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	Matei-Constantin Moruz, 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	Andrei Diaconu "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	Martin Wyss "Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, Energetics and Applied Informatics, Iasi Romania (Electrical engineering)
17.00-17.15	GLARE ASSESSMENT IN LIGHTING ENGINEERING – LITERATURE REVIEW	Andrei-Aurelian Ianos, Catalin-Daniel Galatanu "Gheorghe Asachi" Technical University of Iasi, Faculty of Mechanical Engineering, Iasi, Romania engineering) (Mechanical





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	Prof. dr. SINAN MÜFTÜ Northeastern University, Boston, United
10.10 10.50	Composite Prepared by Cold Sprayed Deposition	States of America
Link	https://meet.google.com/pit-sewf-vhp	
	1 100	
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 lasi, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Romania; ² Tokyo Institute of Technology, 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 POLYETHILENE GLYCOL MIXTURES FOR HEAT TRANSFER APPLICATIONS	Micoleta Cojocariu "Gheorghe Asachi" Technical University of Iasi- Romania, Faculty of Materials Science and Engineering, Iasi, Romania







		(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

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	Stefan 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 Hobjâlă "Gheorghe Asachi" Technical University of lasi, Faculty of Machine Manufacturing and Industrial Management, lasi, Romania (Industrial engineering)
14.30-14.45	AN INNOVATIVE METHOD OF REPRESENTING THE DOUBLE ORTHOGONAL PROJECTION OF A LINE	Alexandru Ionuţ Irimia, Cristiana Grigoruţă, Gheorghe Nagîţ "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 Ionuţ Irimia, Vasile Ermolai, Gheorghe Nagîţ "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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May, 2026!