



UNIVERSITY OF CRAIOVA

**Faculty of Mechanics
Department of Engineering and Management
of Technological Systems**

**8th International Conference
ADVANCES
IN
ENGINEERING &
MANAGEMENT**



**ADEM 2025
Conference Program**



**ADVANCES
IN
ENGINEERING & MANAGEMENT**

ADEM 2025

**Organised by:
UNIVERSITY of CRAIOVA
Faculty of Mechanics**

Department of Engineering and Management of Technological Systems

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Tarniță, Daniela	University of Craiova, RO

Program of ADEM 2025



November 13, 2025

10⁰⁰ – 10³⁰	<u>Opening Ceremony</u>
10³⁰ – 13⁰⁰	<u>Keynote Speakers</u>
10³⁰ – 10⁵⁰	Angelika VOIT, Schiffer-Berufskolleg RHEIN, Germany
10⁵⁰ – 11¹⁰	Andrej DAVID, University of Žilina, Slovakia
11¹⁰ – 11³⁰	Damjan KLOBČAR, University of Ljubljana, Slovenia
11³⁰ – 11⁵⁰	Coffee break
11⁵⁰ – 12¹⁰	Ines ASCENSO PIRES DE FONSECA, I.S.T. University of Lisboa, Portugal
12¹⁰ – 12³⁰	Vlad BÎRLOGEANU, CAD WORKS, Craiova, Romania
13⁰⁰ – 14⁰⁰	LUNCH DUNĂREA ALBASTRĂ Restaurant
14⁰⁰ – 15⁰⁰	25 YEARS OF HIGHER EDUCATION IN ENGINEERING at Drobeta-Turnu Severin
15⁰⁰ – 19⁰⁰	ORAL PRESENTATIONS



ORAL PRESENTATIONS

November 13, 2025

T1. Advanced Materials and Technologies

Chairman: Sorin – Vasile SAVU, University of Craiova

Co-chairman: Iulian ȘTEFAN, University of Craiova

15 ⁰⁰ -15 ¹⁵	OPTIMIZED DESIGN TECHNIQUES FOR ANALOG IC	Petru-Alexandru ȘTEFĂNESCU, Dragoș DOBRESCU, Lidia DOBRESCU
15 ¹⁵ -15 ³⁰	EXPERIMENTAL ASSESSMENT OF ELBOW KINEMATICS AND MUSCLE ACTIVATION DURING ADL's USING WEARABLE SENSORS	Cristian CHIHAIA, Daniela TARNIȚĂ
15 ³⁰ -15 ⁴⁵	UNCONVENTIONAL MECHANICAL SYSTEMS USED IN SPECIAL VEHICLES PROPULSION FOR DIFFICULT ROAD TERRAIN	Cristian MIC, Simona (CIULU) FLORESCU, Cristian COPILUȘI
15 ⁴⁵ -16 ⁰⁰	VIRTUAL PROTOTYPING OF A MECHANICAL SYSTEM FOR HUMAN ARTIFICIAL VENTILATION SUPPORT	Simona (CIULU) FLORESCU, Cristian COPILUȘI, Nicolae DUMITRU
16 ⁰⁰ -16 ¹⁵	GENERAL CONSIDERATIONS FOR ENERGY SOURCES FOR DRYING	Marin BICĂ, Ludmila SASS, Adrian GIURA
16 ¹⁵ -16 ³⁰	LOW POWER THERMAL INSTALLATIONS FOR BURNING GASEOUS FUELS	Marin BICĂ, Ludmila SASS, Adrian GIURA
16 ³⁰ -16 ⁴⁵	DYNAMIC ANALYSIS IN MSC.ADAMS OF TWO PANTOGRAPH MECHANISMS FOR LOWER LIMB REHABILITATION EXOSKELETONS	Ionuț Daniel GEONEA, Alina ROMANESCU, Augustin CONSTANTINESCU, Andrei CORZANU
16 ⁴⁵ -17 ⁰⁰	RECOVERY AND RECYCLING OF DEFECTIVE BARIUM FERRITE SPECIMENS	Iulian ȘTEFAN, Constantin Gabriel BENGĂ, Bebe Adrian OLEI
17 ⁰⁰ – 17 ³⁰	Coffee break	
17 ³⁰ -17 ⁴⁵	PRELIMINARY RESEARCH REGARDING THE MICROWAVE HEATING ANALYSIS OF INCONEL 625 CRUCIBLE WITH W-TYPE FERRITE COATING	Marin Andretti CIUNGU, Sorin Vasile SAVU, Mihai CISMARU, Nicușor Alin SÎRBU, Andrei Dănuț SAVU
17 ⁴⁵ -18 ⁰⁰	SHOOT PEENING EFFECT ON THE PROPERTIES OF SINTERED STEELS	Claudiu NICOLICESCU, Victor-Horia NICOARĂ
18 ⁰⁰ -18 ¹⁵	OBTAINING OF COMPOSITE POWDERS USED FOR PRODUCING PERMANENT CERAMIC MAGNETS	Victor-Horia NICOARĂ, Claudiu NICOLICESCU
18 ¹⁵ -18 ³⁰	PRELIMINARY RESEARCH ON NON-CONTACT TEMPERATURE CONTROL USING INFRARED PYROMETER	Angelo Andrei MIDAN, Sorin Vasile SAVU
18 ³⁰ -18 ⁴⁵	NEW PERSPECTIVES TO EVALUATE THE QUALITY OF DENTAL DEFECTS AND THEIR RESTORATIONS BY MEANS OF ADVANCED TISSUE ENGINEERING TOOLS	Sima G., Ciurezu-Gherghie L.M., Teisanu C., Gîngu O., Mercuț V., Popescu S.M., Manolea H.O.
18 ⁴⁵ -19 ⁰⁰	CONSIDERATIONS ON THE USE OF UNCONVENTIONAL ROBOTS IN WELDING PROCESSES	Mihaela Cecilia FLORESCU, Ionel Dănuț SAVU, Bebe Adrian OLEI, Marius Cătălin CRIVEANU, Sorin Vasile SAVU, Robert FLORESCU



T2. Sustainable Transport and Environment

Chairman: Ionel – Dănuț SAVU University of Craiova

Co-chairman: Marius Cătălin CRIVEANU, University of Craiova

15 ⁰⁰ -15 ¹⁵	COUPLING A SYNTHETIC POWER INDICATOR WITH A TRAFFIC MICROSIMULATION SOFTWARE FOR DETERMINING THE INFLUENCE OF DRIVING STYLE ON EMISSIONS	Alexandru Constantin OPRICA, Lucian MATEI, Dragoș TUTUNEA, Laurențiu RACILĂ, Ilie DUMITRU
15 ¹⁵ -15 ³⁰	THE STUDY OF VIBRATION PRODUCED BY VARIABLE FORCES UPON A CAR PARKING ELEVATOR	Carmen Elisabeta RADU, Edward RĂȘCHITOR, George ADIR
15 ³⁰ -15 ⁴⁵	STRUCTURAL ANALYSIS OF SEVERAL MECHANISMS USED AS WINDSHIELD WIPER	Daniela ANTONESCU, Margareta STRIMBEANU, Ovidiu ANTONESCU, Carmen Elisabeta RADU, Paun ANTONESCU
15 ⁴⁵ -16 ⁰⁰	STUDY CONCERNING THE INFLUENCE OF NOISE ON THE HUMAN HEALTH IN THE INDUSTRIAL HALLS	Mihaela-Liana BOGDAN, Gheorghe Leonard Marius CIUREZU, Ionuț-Daniel GEONEA, Adrian-Gabriel BOGDAN
16 ⁰⁰ -16 ¹⁵	ELASTODYNAMIC ANALYSIS OF THE STEERING MECHANISM OF AN ELECTRIC VEHICLE	Nichita-Alexandru OZUNU, Nicolae DUMITRU, Ionuț Daniel GEONEA
16 ¹⁵ -16 ³⁰	USING LOOCV TECHNIQUE TO COMPLETE MISSING VALUES FROM AIR MONITORING DATA	Luminița GRECU
16 ³⁰ -16 ⁴⁵	STRATEGY AND ACTION PLAN FOR THE TRANSITION OF A SHIPYARD TO A SUSTAINABLE FABRICATION	Dorin STAN, Ionel-Dănuț SAVU, Mihaela Cecilia FLORESCU, Nicușor-Alin SÎRBU, Arianne-Maria SAVU
16 ⁴⁵ -17 ⁰⁰	RISKS EVALUATION DURING THE TRANSPORTATION OF SPARE PARTS NEEDED FOR THE AUTOMOTIVE INDUSTRY FOCUSING ON KIA SLOVAKIA	Andrej DAVID, Bebe-Adrian OLEI, Angelo Andrei MIDAN
17⁰⁰ – 17³⁰	Coffee break	
17 ³⁰ -17 ⁴⁵	CONSIDERATIONS REGARDING THE MANAGEMENT OF WASTE FROM SHIPS IN THE HARBOR OF DROBETA-TURNU SEVERIN	Ionel BALOȘIN, Constantin FLORESCU, Marius Cătălin CRIVEANU, Iulian ȘTEFAN
17 ⁴⁵ -18 ⁰⁰	NOISE POLLUTION IN DROBETA-TURNU SEVERIN: CASE STUDY AND NOISE REDUCTION PROPOSALS	Mihai DEMIAN, Gabriela DEMIAN
18 ⁰⁰ -18 ¹⁵	THE IMPACT OF NOISE POLLUTION ON THE HEALTH OF THE EUROPEAN POPULATION	Mariana CIOBANU, Ionela BUCȘE, Marius Cătălin CRIVEANU
18 ¹⁵ -18 ³⁰	THE INFLUENCE OF WEATHER CONDITIONS ON THE NAVIGATION PERFORMANCE OF INLAND WATERWAYS CONVOYS: CASE STUDY	Angelo Andrei MIDAN, Bebe-Adrian OLEI, Andrej DAVID
18 ³⁰ -18 ⁴⁵	CIRCULARITY OF CLOTHING FOR CHILDREN AND ADOLESCENTS IN MEHEDINȚI COUNTY – CASE STUDY	Olimpia GHERMEC, Ionela BUCȘE, Mariana CIOBANU, Cristian GHERMEC
18 ⁴⁵ -19 ⁰⁰	GENERAL CONSIDERATIONS ON NOISE POLLUTION IN DROBETA-TURNU SEVERIN HARBOR	Marius Cătălin CRIVEANU, Angelo Andrei MIDAN, Ionel BALOȘIN



T3. Management and Logistics

Chairman: Gabriel Constantin BENGĂ, University of Craiova

Co-chairman: Mihaela Cecilia FLORESCU, University of Craiova

15 ⁰⁰ -15 ¹⁵	PETRI NET FORMALISM IN SMART URBAN LOGISTICS	Daniela COMAN
15 ¹⁵ -15 ³⁰	NUCLEAR ENERGY MANAGEMENT, CURRENT CHALLENGES AND FUTURE PROSPECTS	Gabriela DEMIAN, Mihai DEMIAN
15 ³⁰ -15 ⁴⁵	ESTABLISHING A DEGREE OUTCOME PROFILE ALIGNED WITH LABOUR MARKET REQUIREMENTS IN LOGISTICS	Gabriel Constantin BENGĂ, Ines Ascenso PIRES, Barbara Perry GOUVEIA
15 ⁴⁵ -16 ⁰⁰	CONSTRAINED OPTIMIZATION FOR SUSTAINABLE LOGISTICS: A CASE STUDY WITH MULTI-MODAL TRANSPORTATION	Mihaela RACILĂ, Theodor OPRICA, Lucian MATEI, Ilie DUMITRU, Nicoleta GENCĂRAU, Alexandru OPRICA, Laurențiu RACILĂ
16 ⁰⁰ -16 ¹⁵	EVALUATION OF INLAND WATERWAY PORT OPERATIONS EFFICIENCY FOR LOGISTICS INTEGRATION: A CASE STUDY	Bebe-Adrian OLEI, Angelo Andrei MIDAN, Angelika VOIT, Andrej DAVID

GALA DINNER
November 13, 2025, 19.30
DUNĂREA ALBASTRĂ Restaurant

November 14, 2025

WORKSHOPS ON INTERNATIONAL ONGOING PROJECTS

10.00-10.30	Academic Network for a Green and Innovative Europe, acronym: ANGIE	Ionel – Dănuț SAVU
10.30-11.00	Transformative Learning in Inland Waterways Education with Simulators and Digital Innovations, acronym ARIELL	Gabriel Constantin BENGĂ
11.00-11.30	Synergistic Management and Advancement of Artificial intelligence in European Higher Education, acronym: SMARTIE	Sorin – Vasile SAVU
11 ³⁰ – 12 ⁰⁰	Coffee break	
12 ³⁰	Cruise on the Danube Gorges	

CLOSING CEREMONY
November 14, 2025