



ASMES 2024

ADVANCED STRUCTURES, MATERIALS AND ELECTRICAL SYSTEMS

2nd International Conference on Electrical and Power Engineering ICPE-CA

INNOVATION IN ELECTRICAL AND POWER ENGINEERING

1st International Exhibition

Tulcea, ROMANIA
9-12 May 2024

Hotel ESPLANADA

- PROGRAM -

Thursday, 9 May 2024	
15:00 - 16:00	Venue: ESPLANADA HOTEL, Tulcea, Romania ACCOMMODATION. PRELIMINARY INFORMATION. REGISTRATION OF PARTICIPANTS.
16:00 - 17:00	OPENING CEREMONY
17:00 - 19:00	Plenary Session : RENEWABLE ENERGIES AND ENERGY EFFICIENCY INVITED LECTURES
17:00 - 17:30	RENEWABLE ENERGY PRODUCTION IN ROMANIA - CURRENT SITUATION AND NEW CHALLENGES INVITED SPEAKER: NICOLAE OLARIU
17:30 - 18:00	PHOTOVOLTAIC SYSTEMS SUPPORTING CSRD REQUIREMENTS INVITED SPEAKER: PANU HAMARI
18:00 - 19:15	ORAL PRESENTATIONS
18:00 - 18:15	PHOTOVOLTAIC PANELS PERFORMANCE AND LIFETIME OPTIMIZATION BASED ON NONINVASIVE SOLUTIONS FOR FAULT DETECTION PAULA ANGHELIȚĂ, ALEXANDRU-IONEL CONSTANTIN, TIBERIU IOAN ȘERBAN
18:15 - 18:30	PV SOLAR SOLUTION AN ANDROID MOBILE APPLICATION FOR FAULT DETECTION C PHTOVOLTAIC MODULES BASED ON THERMAL IMAGES ALEXANDRU-IONEL CONSTANTIN, GABRIELA IOSIF, PAULA ANGHELIȚĂ, DORIAN MARIN, RAMONA-NICOLETA BANĂSEANU
18:30- 18:45	ENERGY EFFICIENCY IN THE CONCERNS OF ICPE ACTEL SPECIALISTS FOR TH DEVELOPMENT OF NEW SOLUTIONS AND PRODUCTS ION POTÂRNICHE, CRISTI MARIN, AUREL-IONUT CHIRILA
18:45 -19:00	PREVENTIVE MAINTENANCE OF A 4 kWp PHOTOVOLTAIC SYSTEM BASED ON THERMAL CAMERAS AND ITS PERFORMANCES EVALUATION DORIAN MARIN, ALEXANDRU-IONEL CONSTANTIN, PAULA ANGHELIȚĂ, RAMONA-NICOLETA BANĂSEANU
19:00 - 19:15	STATE-OF-THE-ART IN THE FIELD OF PHOTOVOLTAIC TECHNOLOGIES - A REVIEW DANIELA ADRIANA SIMA, PAULA ANGHELIȚĂ
19:15 - 20:00	POSTER SESION
20:00	WELCOME DINNER
Friday, 10 May 2024	
09:00 - 10:00	Plenary Session: SUSTAINABLE MOBILITY INVITED LECTURE
09:00 - 09:30	MEASUREMENTS AND MODELS FOR EMERGING POWER GRIDS INVITED SPEAKER: MIHAELA MARILENA ALBU
09:30 - 10:00	ORAL PRESENTATIONS
09:30-09:45	BIODEGRADABLE POLYMER COMPOSITE FOR STRUCTURAL APPLICATION FOR AUTOMOBILE INDUSTRY IOANA ION, ALINA RUCSANDRA CARAMITU, MIHAI MARIN, EDUARD MARIUS LUNGULESCU, VIRGIL MARINESCU, CRISTINA ANTOANELA BANCUI, CIPRIAN MIHAI MITU, ANDREI CUCOS, NICOLETA OANA NICULA

09:45 - 10:00	ELECTROMAGNETIC FIELDS GENERATED BY ELECTRIC VEHICLES AND POSSIBLE HEALTHS EFFECTS <u>MIRCEA POPESCU</u> , CRISTIAN MORARI, SANZIANA-OANA POPESCU	
10:00 - 10:45	POSTER SESSION	INTERNATIONAL EXHIBITION ON INNOVATION IN ELECTRICAL AND POWER ENGINEERING
10:45 - 11:00	COFFEE BREAK	
11:00 - 13:00	POSTER SESSION	INTERNATIONAL EXHIBITION ON INNOVATION IN ELECTRICAL AND POWER ENGINEERING
11:00 - 13:00	ROUND TABLE: ENERGY EFFICIENCY AND QUALITY OF ELECTRICITY FOR SUSTAINABLE DEVELOPMENT IN THE DANUBE DELTA REGION	
13:00 - 14:00	LUNCH	
14:00 - 16:15	Plenary Session: ELECTRICAL SYSTEMS INVITED LECTURE	
14:00 - 14:30	2D TRANSITION METAL DICALCOGENIDE SEMICONDUCTORS FOR PHOTOVOLTAIC APPLICATIONS NIKITA SIMINEL, ALEXANDRU MICU, <u>LEONID KULYUK</u> INVITED SPEAKER: <u>LEONID KULYUK</u>	
14:30 - 16:15	ORAL PRESENTATION	
14:30 - 14:45	OPTIMIZING ENERGY PERFORMANCE: ADVANCED OIL FILTRATION AND TREATMENT SYSTEMS IN ELECTRIC TRANSFORMERS <u>DAN GABRIEL RADU</u> , VALENTIN NÄVRÄPESCU	
14:45 - 15:00	OPTIMIZATION SCHEDULING OF INTEGRATED ENERGY SYSTEM FOR AGRICULTURAL PARK CONSIDERING UNCERTAINTY OF ENERGY AND LOADS <u>TONG XING</u> , DECHANG YANG	
15:00 - 15:15	THERMOELECTRIC COOLING SYSTEM AND THERMAL CONTROL OF AN ENCLOSURE WITH PELTIER ELEMENTS <u>GEORGE DUMITRU</u> , DAN ENACHE, ION DOBRIN, MIHAI GUTU, CONSTANTIN DUMITRU	
15:15 - 15:30	STUDY ON THE EFFICIENCY AND PERFORMANCE OF A SUPERCONDUCTING HTS CABLE FOR HIGH DC CURRENTS TRANFER WITH NO LOSSES <u>DAN ENACHE</u> , GEORGE DUMITRU, ION DOBRIN, MIHAI GUTU	
15:30 - 15:45	HIGH TEMPERATURE SUPERCONDUCTOR APPLICATIONS IN ELECTRICAL ENGINEERING DEVELOPED IN ICPE-CA ION DOBRIN, <u>DAN ENACHE</u> , GEORGE DUMITRU	
15:45 - 16:00	FINITE ELEMENT ANALYSIS AND DIAGNOSIS OF A BROKEN BAR FAULT IN A SQUIREL-CAGE INDUCTION MOTOR <u>ALEXANDRU-IONEL CONSTANTIN</u> , EMIL TUDOR, DORIAN MARIN, VIRGILIU FIRETEANU	
16:00 - 16:15	REVIEW OF SURGE PROTECTION METHODS USED FOR ELECTRICAL EQUIPMENT <u>VICTOR STOICA</u> , LUCIAN PÎSLARU-DĂNESCU	
16.15-16.30	COFFEE BREAK	
16.30-18.30	Plenary session: ADVANCED AND SMART MATERIALS INVITED LECTURE	

16:00 - 17:00	<p>ROD-COIL BLOCK COPOLYMER, FULLERENE WATER-PROCESSABLE NANOPARTICLES: SYNTHESIS, CHARACTERIZATION AND APPLICATIONS <u>ANNA MARIA FERRETTI</u>, FRANCESCA VILLAFIORITA-MONTELEONE, STEFANIA ZAPPIA INVITED SPEAKER: ANNA MARIA FERRETTI</p>	
17:00 - 18:30	<p>ORAL PRESENTATIONS</p>	
17:00 - 17:15	<p>INVESTIGATING MOLECULAR DYNAMICS OF HYDRONIUM ION MOBILITY IN TASK SPECIFIC DEEP EUTECTIC SOLVENTS SUPPORTED GRAPHENE OXIDE BASED PROTON EXCHANGE MEMBRANES <u>MIRAT KARIBAYEV</u>, KAIRAT ABDRAKHMANOV, NURLAN ALMAS</p>	
17:15 - 17:30	<p>PERFORMANCE OF ZINC OXIDE-VANADIUM PENTOXIDE VARISTORS IN MEDIUM VOLTAGE SURGE ARRESTERS <u>MAGDALENA VALENTINA LUNGU</u>, ALINA CARAMITU, MIHAI MARIN, DELIA PĂTROI, VIRGIL MARINESCU, CIPRIAN MANEA, PETRIȘOR GODEANU, ALEXANDRA BARBU</p>	
17:30 - 17:45	<p>3D CVD GRAPHENE FOR ENERGY-RELATED APPLICATIONS <u>CRISTINA BANCIU</u>, ADELA BARA, IULIAN IORDACHE, ELENA CHITANU, DELIA PATROI, GABRIELA SBARCEA, VIRGIL MARINESCU, MARIUS LUNGULESCU, IOANA ION, LUCIA MONICA VECA, FLORIN NASTASE, ANCA IONELA ISTRATE</p>	
17:45 - 18:00	<p>DEPOSITION AND CHARACTERIZATION OF ALUMINIUM DOPED ZNO <u>ELENA CHIȚANU</u></p>	
18:00 - 18:15	<p>CoxCrFeNiTi HIGH ENTROPY ALLOYS MAGNETRON SPUTTERING COATINGS <u>CIPRIAN ALEXANDRU MANEA</u>, LAURA ELENA GEAMBAZU, DORINEL TĂLPEANU, VIRGIL MARINESCU, GABRIELA BEATRICE SBĂRCEA, DELIA PĂTROI, MAGDALENA VALENTINA LUNGU, MARIANA LUCACI, RADU MIHAIL UDREA</p>	
18:15 - 18:30	<p>THE INFLUENCE OF THE PROCESSING METHODS FOR OBTAINING OF CoCrFeAlNi_{2.1} - EHEA ALLOYS ON THE CORROSION BEHAVIOR IN SALINE AQUEOUS ENVIRONMENTS <u>MARIANA LUCACI</u>, MIHAI NICOLAE IORDOC, VIRGIL MARINESCU, MAGDALENA VALENTINA LUNGU, EUGEN MANTA</p>	
18:30 - 19:30	<p>POSTER SESSION</p>	<p>INTERNATIONAL EXHIBITION ON INNOVATION IN ELECTRICAL AND POWER ENGINEERING</p>
20:00	<p>OFFICIAL DINNER</p>	
<p>Saturday, 11 May 2024</p>		
09:00 - 10:30	<p>Plenary session: ENVIRONMENTAL ENGINEERING AND CIRCULAR ECONOMY</p>	
	<p>INVITED LECTURE</p>	
09:00 - 09:30	<p>THE ROLE OF LOCAL BASED RENEWABLE ENERGY SOURCES TO DECARBONISE DANUBE DELTA: WASTE2ENERGY INVITED SPEAKER: <u>DELIA DIMITRIU</u></p>	
09:30 - 10:30	<p>ORAL PRESENTATIONS</p>	

**ASMES
2024**

**2ND INTERNATIONAL CONFERENCE ON ELECTRICAL AND
POWER ENGINEERING**

May 9th-12th / Tulcea, Romania

09:30 - 09:45	COMPLEX SYSTEM FOR MONITORING ENVIRONMENTAL FACTORS AT THE GALATA PLATFORM IN THE BLACK SEA MĂDĂLIN SILION, <u>GEORGE SUCIU</u> , LUCIAN LUMINĂROIU, CRISTIAN BECEANU, CORNELIA ALEXANDRU, ȘTEFAN ȘTEFĂNESCU, MARIA-LAURA ROȘU, IOANA ȚĂRANU, LUCIAN NECULA, FANEL-VIOREL PANAITESCU, MARIANA PANAITESCU, IONUȚ VOICU, ANDREI-ALEXANDRU SCUPI, LIVIU-CONSTANTIN STAN, GABRIEL RAICU
09:45 - 10:00	TOWARDS THE CIRCULAR ECONOMY OF RARE EARTH ELEMENTS: APPLICATIONS AND RECYCLING <u>SABINA ANDREEA FIRONDA</u> , ANCA ELENA SOBETKII, ADELINA IONELA MATEI, MARIAN BURADA, RADU-ROBERT PITICESCU, ZARA CHERKEZOVA-ZHELEVA
10:00 - 10:15	POTENTIAL USE OF YEAST STRAINS IN REMOVING POLLUTANTS FROM WASTEWATERS NICOLETA OANA NICULA, <u>CARMEN MATEESCU</u> , EDUARD-MARIUS LUNGULESCU, VIRGIL MARINESCU
10:15 - 10:30	WETLANDS BIOMASS RECOVERY USING AI TOOLS TO SUPPORT THE CIRCULAR ECONOMY <u>CARMEN MATEESCU</u> , EMIL TUDOR, VLADIMIR TANASIEV, DANIELA BURUIANĂ
11:00 - 17:00	SOCIAL PROGRAMME (BOAT RIDE ON THE DANUBE)
17:30 - 18:30	AWARDING CEREMONY OF INTERNATIONAL EXHIBITION ON INNOVATION IN ELECTRICAL AND POWER ENGINEERING
18:30 - 19:00	CLOSING REMARKS
19:30	DINNER
Sunday, 12 May 2024	
10:00 - 11:00	DEPARTURE