

National Institute for Research-Development
in Chemistry and Petrochemistry - ICECHIM

NeXT-Chem VIII

TEHNOLOGII INOVATOARE TRANS-SECTORIALE

25-26 MAI 2026

The exploratory workshop

“NeXT-Chem
INNOVATIVE CROSS-
SECTORAL TECHNOLOGIES”
NeXT-Chem VIII

Splaiul Independenței 202, sect. 6, Bucharest



Event organized in collaboration with



Romanian Chemical Society



*Event organized under the High Patronage of the Technical
Sciences Academy of Romania.*



**Academia de Stiinte
Tehnice din Romania**

**Technical Sciences
Academy of Romania**

Media partner:



**Radio
România
Cultural**

All participants via Zoom platform are kindly requested to login with the full name and affiliation

Workshop program

Monday May 25th 2026

Zoom address for NeXT-Chem day 1 (10:00 – 17:15)

Zoom address and password will be provided to registered participants

09³⁰-
10⁰⁰ Registration of participants –
3rd floor lobby

10⁰⁰ **Opening ceremony**

Scientific contributions

Starting time	Authors	Title
10 ³⁰	<u>Venkata S. R. JAMPANI</u>	NANOSCALE BIODEGRADABLE POLYMERS FOR PACKAGING: NATURE-CENTERED MATERIALS DESIGN AND OPPORTUNITIES FOR CIRCULARITY
11 ⁰⁰	Cristiana RADULESCU, Radu Lucian OLTEANU, Ramona– Daniela PAVALOIU, Fawzia SHA`AT, <u>Mihaela NECHIFOR (TUDORACHE)</u>	DERMACOSMETIC CREAM BASED ON LIPOSOMES WITH GRAPE POMACE EXTRACTS FROM RED GRAPES
11 ¹⁵	<u>Vlad-Iulian CHELMUS</u> , Alina MIHALCEA, Roxana Gabriela ZGÂRIAN, Gratiela TIHAN, Camelia UNGUREANU	STIRRED-TANK BIOREACTOR SCREENING FOR β -CAROTENE BIOSYNTHESIS BY RHODOTORULA RUBRA ICCF 220

11 ³⁰	<u>Nicolae GRIGORE</u> , Ana Iulia ȘTEFAN, Maria Teodora ȘTEFAN, Maria-Adelina LAȚCU, Camelia UNGUREANU	FINITE ELEMENT-BASED ASSESSMENT OF STRESS DISTRIBUTION IN DENTAL IMPLANTS UNDER DIFFERENT OSSEOINTEGRATION CONDITIONS
11 ⁴⁵	<u>Oana-Adriana PETCUTA</u> , Maria BALAN, Simona M. COMAN	FROM GLYCEROL TO BIOFUEL ADDITIVES / VALUE-ADDED PRODUCTS: A CATALYTIC APPROACH
12 ⁰⁰	<u>Mihai BORDEIASU</u> , Joanna GOSCIANSKA, Simona M. COMAN	BIMETALLIC NITROGEN-DOPED CARBON NANOFRAWORKS AS EFFICIENT CATALYSTS FOR FURFURAL HYDROGENATION
12 ¹⁵	Cristiana RADULESCU, Radu Lucian OLTEANU, Ioana Daniela DULAMA, Ioan Alin BUCURICA, Toma GALAON, Raluca Maria STIRBESCU, Andreea Laura BANICA, <u>Brăduț Bogdan MINEA</u>	RAPID SCREENING METHOD FOR IMAZALIL AND THIABENDAZOLE IN CITRUS
12 ³⁰	<u>Madalina OPREA</u> , Andreea Madalina PANDELE, Adrian Ionut NICOARA, Iulian Vasile ANTONIAC, Stefan Ioan VOICU	ENGINEERING CALCIUM-BINDING POLYMERIC MEMBRANES VIA CROWN ETHER FUNCTIONALIZATION FOR IMPLANTOLOGY APPLICATIONS
12 ⁴⁵	<u>Anca-Teodora MORARU</u> , Irina IONESCU, Alina MIHALCEA, Iuliana CARAȘ, Ramona CARAGHEORGHEOPOL, Crina STĂVARU, Camelia UNGUREANU	CONTROLLED CELL LINES STOCK – AN IMPORTANT STEP FOR VACCINES DEVELOPMENT
13⁰⁰-13³⁰ – Break		
13 ⁰⁰	<u>Ana-Maria BUZATU</u> , Lucian-Gabriel ZAMFIR, Ioana-Cătălina GÎFU, Alin VINTILĂ, Mihaela CÂLȚEA, Mariana CONSTANTIN, Iuliana RĂUT, Mihaela DONI, Ana-Maria GURBAN, Cristina FIRINCĂ	INTEGRATED BIO-HYBRID SYSTEMS OF ALGAE-BACTERIA-HYDROGELS FOR ANTIBIOTICS DEGRADATION, RETENTION AND MONITORING IN AQUATIC RESOURCES
13 ¹⁵	<u>Valentin L. VIRGIL</u> , Simona NICA, Anamaria HANGANU, Cătălin MAXIM, Marius ANDRUH	DESIGN OF OPTICALLY ACTIVE COORDINATION COMPOUNDS USING ENANTIOPURE COMPARTIMENTAL SCHIFF-BASE LIGANDS: SYNTHESIS, CHARACTERIZATION AND OPTICAL PROPERTIES
13 ³⁰	<u>Ștefania CARAMARIN</u> , Gabriela-Florentina Ioniță, Laura-Mădălina Cursaru, Alexandru OKOS, Miruna-Adriana IOȚA, Adrian-Ionuț NICOARĂ, Adela BANCIU, Georgeta Voicu	BAGHDADITE AS A PROMISING CERAMIC FOR BONE TISSUE ENGINEERING: SYNTHESIS, BIOCOMPATIBILITY ASSESSMENT AND 3D PRINTING INTEGRATION

13 ⁴⁵	<u>Mihai RĂDUCĂ</u> , Iulia-Cristiana MUSCALU, Alexandru BUCUR, Gabriela IONITA, Sergiu SHOVA, Floriana TUNA, Marius ANDRUH	NITRONYL NITROXIDE DI- AND TRIRADICAL LIGANDS OBTAINED VIA SCHIFF CONDENSATION AND THEIR COMPLEXES
14 ⁰⁰	<u>Ana-Lorena NEAGU</u> , Ana-Mihaela GAVRILA, Iulia Elena NEBLEA, Sorin Viorel DOLANA, Ioana Catalina GIFU, Cristian-Andi NICOLAE, Hugues BRISSET, Armand FAHS, Celina DAMIAN, Horia IOVU, Tanta Verona IORDACHE	NEW INSIGHTS INTO ELECTROCHEMICAL SENSING OF LIPOPOLYSACCHARIDES BY BIOMIMETIC SENSORS MODIFIED WITH MOLECULARLY IMPRINTED POLYMERS
14 ¹⁵	<u>Cătălina-Diana UȘURELU</u> , Gabriela-Mădălina OPRICĂ, Adriana Nicoleta FRONE, Cristian Andi NICOLAE, Monica Florentina Raduly, Augusta Raluca GABOR, Mircea TEODORESCU, Denis Mihaela PANAITESCU	VALORIZATION OF LACTIC ACID-MODIFIED NANOCELLULOSE IN THE PREPARATION OF BIONANOCOMPOSITES
14 ³⁰	<u>Cristian Andrei SPINU</u> , Daniel O. T. A. MARTINS, Teodora MOCANU, Mihaela HILLEBRAND, Gabriela IONIȚĂ, Ghenadie NOVITCHI, Floriana TUNA, Jean-Pascal SUTTER, Marius ANDRUH	NITRONYL NITROXIDE STABLE RADICALS DERIVED FROM NITRO-O-VANILLIN AND BISPHENOL A AS LIGANDS TOWARDS 3D AND 4F METAL IONS
14 ⁴⁵	<u>Iulia Elena NEBLEA</u> , Ana-Lorena NEAGU, Tanța-Verona IORDACHE, Andrei SÂRBU, Sorin Viorel DOLANA, Bianca Elena STOICA, Ana-Mihaela GAVRILĂ	PRELIMINARY ASSESSMENT OF FUNCTIONAL MONOMER-COCAINE INTERACTIONS WHEN PREPARING MOLECULARLY IMPRINTED POLYMERS
15 ⁰⁰	<u>Ștefan DIMITRIU</u> , Mihai RĂDUCĂ, Victorița TECUCEANU, Marius ANDRUH	SYNTHESIS AND MAGNETIC PROPERTIES OF A FAMILY OF DINUCLEAR LANTHANIDE COMPLEXES DERIVED FROM 2-(PHTHALIMIDOMETHYL)-NITRONYL-NITROXIDE
15 ¹⁵	<u>Irina APOSTOL</u> , Narcis ANGHEL, Iuliana SPIRIDON	MATERIALS CONTAINING CARBON DOTS FOR IMPROVED NAPROXEN RELEASE
15 ³⁰	<u>Diana-Ioana EFTEMIE</u> , Sergiu SHOVA, Teodora MOCANU, Ingrid FREUZE, Marius ANDRUH	NOVEL STRATEGIES FOR THE SYNTHESIS OF 4f AND 4f-4f' COMPLEXES DERIVED FROM SCHIFF BASE LIGANDS
15 ⁴⁵	Florin-Aurel DINCĂ, <u>Alexandra Gabriela STANCU</u> , Maria RÂPĂ	PERSPECTIVES ON MICROPLASTICS FROM SPORTS ACTIVITIES
16 ⁰⁰	Radu Claudiu FIERĂSCU	<i>COARA PRINCIPLES – WHAT THEY ARE & HOW THEY APPLY FOR RESEARCH EVALUATION</i>
16 ³⁰	Bogdan Ștefan VASILE	TBA

Tuesday May 26th 2026

Zoom address for NeXT-Chem day 2 (10:00 – 15:00)

Zoom address and password will be provided to registered participants

Scientific contributions

Starting time	Authors	Title
10 ⁰⁰	Jelena DJOKIKJ	TBA
10 ³⁰	<u>Emilian GHIBU</u> , Florica Adriana JERCA, Valentin Victor JERCA	RATIONAL DESIGN OF POLY(2-ISOPROPENYL-2-OXAZOLINE) HYDROGELS FOR CONTROLLED DRUG LOADING AND DELIVERY
10 ⁴⁵	<u>Cosmin-Andrei ALEXE</u> , Carmen GAIDĂU, Monica-Victoria ILIȘ, Viorel CÎRCU	MULTIFUNCTIONAL LUMINESCENT-THERMORESPONSIVE FILMS COMBINING EUROPIUM COMPLEXES AND CHOLESTERIC LIQUID CRYSTALS
11 ⁰⁰	Cătălina ȘTEFAN, Rusândica STOICA, Raluca ȘUICĂ-BUNGHEZ, Raluca SENIN, Mihaela GANCIAROV, Luiza CAPRA, Georgeta IVAN	INFLUENCE OF ETHANOLIC SOLVENT CONCENTRATION ON BIOACTIVE COMPOUNDS EXTRACTION FROM <i>ALOE ARBORESCENS</i> LYOPHILIZED POWDER
11 ¹⁵	<u>Elena FILIPOIU</u> , Daria-Maria FLOREA, Andreea-Elena BELU, Maria BARBINTA-PATRASCU, Parascheva BARBINTA-PATRASCU, Diana-Mădălina GĂBOREANU, Georgiana-Alexandra GRIGORE, Cornelia NICHITA, Ioana-Raluca ȘUICĂ-BUNGHEZ, Adrian BOBICĂ, Suzana Ioana CALCAN, Mihaela SCURTU, Marcela-Elisabeta BARBINTA-PATRASCU	PHYTO-DERIVED METAL AND METAL OXIDE NANOPARTICLES FOR BIOMEDICAL AND ENVIRONMENTAL APPLICATIONS
11 ³⁰	<u>Laura-Nicoleta DRAGOMIR</u> , Georgeta VOICU, Andreia CUCURUZ, Ștefania STOLERIU, Cristina-Daniela GHIȚULICĂ, Adrian-Ionuț NICOARA, Florin IORDACHE	INFLUENCE OF Mg ²⁺ , Sr ²⁺ , AND Zn ²⁺ DOPANT IONS ON CALCIUM PHOSPHATE COMPOSITE SCAFFOLDS FOR BIOMEDICAL APPLICATIONS
11 ⁴⁵	Elnaz SMADYAROVA, Askar ZHAKSYLYK, Aigul MOLDAZLAMOVA	BIOLOGICAL DEGRADATION OF ARTIFACTS
12 ¹⁵	<u>Er Muhammed ERLIK</u> , Madiyar IDIRGALI, Assif Abbas SYED	PRODUCTION OF BIOGEL FROM WASTE BEEF FAT
12 ³⁰	<u>Victor M. DOBRILĂ</u> , Valentin L. VIRGIL, Anamaria HANGANU, Simona NICA, Cătălin MAXIM	CRYSTAL ENGINEERING OF 1,10 PHENANTHROLINE DERIVATIVES

12⁴⁵-13¹⁵ – Break

13 ¹⁵	Monica DINU (SEPADIN S.R.L.)	<i>SIMPLE ACCESS TO COMPLEX INNOVATION</i>
13 ⁴⁵	Grigore PSENOVSCHI	<i>TBA</i>
14 ¹⁵	Andrei SÂRBU	<i>EUCHEMS & SChR</i>

14³⁰

Symposium closing & award ceremony
