



THE 15TH EUROPHYSICAL CONFERENCE ON DEFECTS IN INSULATING MATERIALS



AND

**1ST EUROPEAN SCHOOL ON DEFECTS IN INSULATING MATERIALS
Timișoara, ROMANIA, 04-10 July 2026**

After the very successful EuroDIMs in Ghent,Belgium (2022), Bydgoszcz, Poland (2018), Kent, UK (2014), Pecs, Hungary (2010), Milan, Italy (2006), Wroclaw, Poland (2002), EuroDIM-15, will be held in Timisoara, Romania. Timisoara also called "Little Vienna" is a strong university center and in 2023 it held the title of the cultural capital of Europe. Timisoara has an international airport with at least 3 daily flights to Munich, Germany. There are also connections to Milan (Bergamo), Paris Beauvais, London Luton, Rome Fiumicino, and Brussels. The aim of the conference is to bring together researchers from university, industry, and government laboratories around the world to report on the latest advances studies of defects in insulating materials.

Topics will include all areas related to point and extended defects in bulk materials, thin films and nanostructures. Technological applications will be presented alongside fundamental measurements and theories. The main scientific areas include:

- Fundamental physical phenomena;
- Point and extended defects in wide band-gap systems;
- Defects at surfaces and interfaces;
- Thin films and low-dimensional systems;
- Nanocrystals, colloids and aggregates;
- Defects and material preparation technology;
- Defects modeling and computational methods;
- Radiation effects, radiation induced defects, colour centers;
- Luminescence spectroscopy of excitons, impurities, and defects, including using of synchrotron radiation;
- Electronic excitations, excited state dynamics, radiative and non-radiative relaxations;
- Scintillation, energy transfer and storage, carrier trapping phenomena;
- Laser active centers;
- Defect related non-linear optical phenomena;

- Phonons and defects, electron-phonon interactions;
- Defect diffusion, ionic relaxations, ionic transport;
- Technological applications including:
 - Radiological and radiometric imaging and detection (scintillators and dosimeters);
 - Optical devices and photonics, photorefractive electro-optics, optical fibres, lasers;
 - Materials for opto-electronics, photonics and micro-electronics;
 - Solid electrolytes, fuel cells, electrochemical sensors, fast ionic conductors;

EuroDIM-15 will provide a great opportunity to exchange ideas, allowing for fruitful discussions between industrial, academic, and scientific participants from diverse fields. The conference will include plenary, keynotes, invited, oral presentations, poster sessions, and industrial exhibits. Industry participants are invited to present open issues that will encourage participants to address these issues in the future.

Local organizing committee:

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Ph.D., Institute of Plasma
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Yuriy Zorenko (Poland)

Program of EuroDIM-15 conference

Sunday July 5 th	Monday July 6 th	Tuesday July 7 th	Wednesday July 8 th	Thursday July 9 th	Friday, July 10 th
ESDIM-1	8:30 – 10:00 Registration	8:30 – 10:00 Registration	8:00, 8:30, 9:00 – 19:00 Corvin Castle excursion (Lunch Eden by Werk)	8:30 – 10:00 Registration	9:00 – 9:50 1xPlenary session 3 (Aula Magna)
	09:30-10:00 Opening ceremony (Aula Magna)	09:00 – 11:30 3xPlenary session 2 (Aula Magna)		09:30 – 10:20 1xPlenary 10:20 – 11:30 2xKeynote 3 (Aula Magna)	09:50 – 10:00 Coffee break
	10:00 – 11:40 2xPlenary session 1 (Aula Magna)				10:00 – 10:35 1xKeynote 5 (Aula Magna)
	11:40 – 12:00 Coffee break	11:30 – 12:00 Coffee break		11:30 – 12:00 Coffee break	10:35 – 11:00 Closing ceremony (Aula Magna)
	12:00 – 13:10 2xKeynote 1 (Aula Magna)	12:00 – 13:10 2xKeynote 2 (Aula Magna)		12:00 – 13:10 2xKeynote 3 (Aula Magna)	
	13:15 – 14:50 Lunch (Vineri15)	13:15 – 14:50 Lunch (Vineri15)		13:15 – 14:50 Lunch (Vineri15)	
	15:00 – 16:40 Oral session 1 A01 – M2i+B2o A11 – G1i+D1i+D2o	15:00 – 16:40 Oral session 3 A01 – K1i+L1i+A1o+B1o A11 – D1o+E1o+G1o+H1o+C1o(#240)		15:00 – 16:20 Oral session 4 A01 – I1o+F2o+E1o	
	16:40 – 17:10 Coffee break	16:40 – 17:10 Coffee break	16:20 – 18:05 3xKeynote 4 (Aula Magna)		
16:00 – 20:00 Registration	17:10 – 19:00 Oral session 2 A01 – J2i+J1o+C2o A11 – G3i+G1o	17:10 – 19:00 Poster session In front of Aula Magna			
19:00 – 21:00 Welcome reception (Vineri15)	19:00 – 21:00 Dinner (Vineri15)	19:00 – 21:00 Dinner (Vineri15)	19:00 – 21:00 Dinner (La Sura, Dumbrava)	19:00 – 22:00 Social dinner (Recas winery)	

- Plenary session 50 min. (including 5 min. discussions) → Aula Magna
- Keynote session 35 min. (including 5 min. discussions) → Aula Magna
- Invited session 30 min. (including 5 min. discussions) → A01, A11
- Oral session 20 min. (including 5 min. discussions) → A01, A11

Meet our plenary lecturers of the EuroDIM-15 :

		Plenary	Title
1		Anatoli Popov , University of Latvia, Riga, Latvia	<i>Radiation defects in insulating materials: from early understanding to open challenges</i>
2		Rob Jackson , Keele University, UK	<i>Computer modelling of defects in insulating materials</i>
3		Mikhail Brik , University of Tartu, Tartu, Estonia	<i>First-principles and machine learning methods for description of substitutional defects in optical materials</i>
4		Wieslaw Strenk , Institute of Low Temperatures and Structure Research, Wroclaw Poland	<i>Modelling of laser-induced white emission of graphene</i>
5		Tomoyuki Yamamoto , Waseda University, Tokyo, Japan	<i>First principles calculations and machine learnings for the development of optical materials</i>

6		Martin Albrecht , Leibniz-Institut für Kristallzüchtung, Berlin, Germany	<i>Antisite defects in SrTiO_3: when off-stoichiometry turns disorder into function</i>
7		Matias Velazquez , CNRS-Grenoble INP-UGA, France	<i>Czochralski growth of large radiopure Li_2MoO_4 single crystals for heat-scintillation cryogenic bolometers</i>

* **Plenary lectures** are given in Plenary Sessions. They last 45 minutes + 5 minutes for discussion – **50 minutes in total.**

	Photo	Keynote speaker	Title
1		Daniel Vizman , West University of Timisoara, Romania	<i>Controlled growth and characterization of Tb/Tm-doped fluoride single crystals</i>
2		Maksym Buryi , Institute of Plasma Physics, The Czech Academy of Sciences, Czech Republic	<i>Coupling cesium lead bromide perovskite with organic or inorganic compounds for improved stability and luminescence properties</i>
3		Lengyel Krisztian , HUN-REN Wigner Research Centre for Physics Institute for Solid State Physics and Optics, Budapest, Hungary	<i>Intrinsic and extrinsic defects in LiNbO_3 nanocrystals</i>

4		Robert Tomala , Institute of Low Temperature and Structure Research, Poland	<i>Luminescent nanoparticles for white light generation</i>
5		Yuriy Zorenko , Kazimierz Wielki University, Poland	<i>Luminescence of defects and isoelectronic impurities in UV-emitting oxide scintillators under X-ray and synchrotron radiation excitation</i>
6		Virgīnija Vītola , University of Latvia, Latvia	<i>Laser-patterned direct-write afterglow coatings for road safety</i>
7		Marius Stef , West University of Timisoara, Romania	<i>Growth and characterization of rare-earth doped fluoride luminescent crystals</i>
8		Mario Valerio , Federal University of Sergipe, Brazil	<i>Crystal field–driven luminescent thermometry in Nd³⁺-doped yttrium oxyfluorides: linking structure and Stark level splitting</i>
9		Florentina Neatu , European Comission, Bruxelles, Belgium	<i>Title</i>

* **Keynote lectures:** 30 minutes + 5 minutes for discussion – **35 minutes in total.**

No.	Invited talk	Title
1	Aleksandr Lushchik, University of Tartu, Tartu, Estonia	<i>Characterization of oxygen-related Frenkel defects induced by energetic neutrons or ions in functional metal oxides</i>
2	Henk Vrielinck, Ghent University, Gent, Belgium	<i>Reading without erasing: A study of trapped charges in radiochromic and radio-photoluminescence phosphors</i>
3	Shelja Sharma, University of Latvia, Latvia	<i>Morphology-controlled Er-doped ZnO nanorods with enhanced NIR emission and defect modulation</i>
4	Inesh Kenzhina, Satbayev University, Almaty, Kazakhstan	<i>The role of structural defects caused by irradiation on the change in the properties of ceramic materials – promising materials for nuclear energy</i>
5	Irene Villa, University of Milano-Bicocca, Milano, Italy	<i>The Impact of structure and composition on fast-emitting lightweight hybrid scintillators</i>
6	Francesca Cova, University of Milano-Bicocca, Milano, Italy	<i>Role of localized electronic levels in scintillating materials for high-energy radiation detection</i>
7	Gheorghe Lucian, National Institute for Laser, Plasma and Radiation Physics, Magurele, Romania	<i>LGYSB:Nd crystal: Czochralski growth, optical properties, and NIR laser emission performances</i>
8	Silviu Polosan, National Institute of Materials Physics, Magurele, Romania	<i>Oxygen defects and ferroelectricity of BaFe₁₂O₁₉ hexaferrites</i>
9	Sergiu Vatavu, Moldova State University, Republic of Moldova	<i>Technology aspects of high-entropy oxides preparation by metalorganic aerosol deposition</i>
10	Simonpietro Agnello, University of Palermo, Italia	<i>2D MoS₂ from thermal stability to irradiation induced modifications</i>
11	Philippe Veber, West University of Timisoara, Romania	<i>SMART Growth: Artificial intelligence enhanced for sustainable growth of rare-earth materials based laser</i>
12	Hanna Bandarenka, Belarusian State University of Informatics and Radioelectronics	<i>Recent progress in optical characterization of silicon microchips</i>
13	Mamoru Kitaura, Yamagata University, Yamagata, Japan	<i>Impact of impurity doping on vacancy type defects in functional materials revealed by positron annihilation spectroscopy</i>

*** Invited lectures:** 25 minutes + 5 minutes for discussion – **30 minutes in total.**

Proceedings

Full-length papers will be refereed for publication in a special issue. The journal will be announced.

EuroDIM-15 and ESDIM fees:

Registration	Before 15 May 2026	Before 5 June 2026
Regular participant at EuroDIM-15 conference ⁽¹⁾	600 EUR	700 EUR
Student participant at ESDIM and EuroDIM-15 ⁽²⁾	700 EUR	800 EUR
Student participant at ESDIM only ⁽³⁾	200 EUR	300 EUR
Accompanying person ⁽⁴⁾	300 EUR	400 EUR

(1) “Regular participant” EuroDIM-15 fee includes: attendance to the conference, welcome reception; lunch; coffee breaks; conference dinner and excursion to the Corvin Castle with refreshments lunch close to the castle (on Thursday, 8th July 2026).

(2) Student participant at both ESDIM and EuroDIM fee includes: attendance to lectures, school materials and EuroDIM conference; six-nights accommodation in a student house double room (no breakfast, many opportunities all around), covering both the school and conference duration; welcome reception, lunches; coffee breaks, conference dinner and excursion to the Corvin Castle with refreshments lunch close to the castle (on Thursday, 8th July 2026).

(3) “Only school attendance” fee includes: attendance to lectures and school materials; lunches; coffee breaks; social dinner; the participants have to arrange accommodation on their own.

(4) The registration fee of *accompanying person* includes: welcome reception, conference dinner and excursion to the Corvin Castle with refreshments lunch close to the castle (on Thursday, 8th July 2026).

Important dates:

Deadline for abstract submission:	April 15 th , 2026
Notification of acceptance:	April 15 th , 2026
Program available:	around June 15 th , 2026
Deadline for early registration:	May 15 th , 2026
Deadline for regular registration:	June 5 th , 2026
Date of the ESDIM:	July 04-05, 2026
Date of the EuroDIM-15:	July 06-10, 2026
Deadline for submission of full paper:	February 28 th , 2027

Website: www.eurodim.ro

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Organized by West University of Timisoara and Romanian Physical Society

