

## PROGRAM

### MONDAY, 15 SEPTEMBER

9:50	OFFICIAL OPENING	
10:00 – 11:15	PLENARY SESSION 1 <i>Chairman: N. Nedyalkov</i>	Title of the lecture
10:00	TL-1 S. Reynolds	Optoelectronic properties of thin film Gallium Oxide for device applications
10:45	PR-1 P. Petrov	Materials and devices for Low-Grade Waste Heat Harvesting
11:15 – 11:35	COFFEE BREAK	
11:35 – 12:55	PLENARY SESSION 2 <i>Chairman: V. Marinova</i>	Title of the lecture
11:35	PR-2 K. Grochowska	Advanced MXene Integration in Titania Nanotube Electrodes: A Pathway to Superior Electrochemical Devices
12:05	PR-3 F. Sima	Tumor-on-chip systems fabricated by ultrafast laser processing
12:35	OP-1 B. Napoleonov	MoSe <sub>2</sub> nano layers synthesis and heterostructures design for practical applications
13:00	LUNCH	
16:00 – 16:50	PLENARY SESSION 3 <i>Chairman: F. Sima</i>	Title of the lecture
16:00	PR-4 N. Nedyalkov	Laser-fabricated micro- and nanostructures for sensor applications
16:30	OP-2 S. Marinov	Vertical carbon nanostructures deposited by microwave PECVD at low and atmospheric pressure
16:50 – 17:00	COFFEE BREAK	
17:00-19:00	POSTER SESSION A	Surfaces and thin films processing and analysis
19:30	WELCOME PARTY	

### TUESDAY, 16 SEPTEMBER

10:00 – 11:15	PLENARY SESSION 4 <i>Chairman: S. Reynolds</i>	Title of the lecture
10:00	TL-2 Z. Petrovic	Kinetic phenomena in weakly ionized plasmas
10:45	PR-5 J. Marjanović	Low-pressure discharges in fourth generation freons: Impacts and applications
11:15 – 11:35	COFFEE BREAK	

<b>11:35 – 12:55</b>	<b>PLENARY SESSION 5</b> <i>Chairman: R. Tomov</i>	<b>Title of the lecture</b>
<b>11:35</b>	<b>PR-6 V. Marinova</b>	<b>Integration of functional nanomaterials toward photonics &amp; optoelectronics</b>
<b>12:05</b>	<b>PR-7 P. Baroch</b>	<b>HiPIMS discharges: Principles, diagnostics, and thin film deposition strategies</b>
<b>12:35</b>	<b>OP-3 S. Lazarova</b>	<b>A novel cross-flow stabilized arc discharge for CO<sub>2</sub> dissociation at atmospheric pressure</b>
<b>13:00</b>	<b>LUNCH</b>	
<b>16:30 – 16:45</b>	<b>COFFEE BREAK</b>	
<b>16:45 – 19:00</b>	<b>POSTER SESSION B</b>	<b>Coatings for advanced applications. Thin films deposition.</b>

### **WEDNESDAY, 17 SEPTEMBER**

<b>10:00 – 11:15</b>	<b>PLENARY SESSION 6</b> <i>Chairman: Z. Petrovic</i>	<b>Title of the lecture</b>
<b>10:00</b>	<b>TL-3 R. Tomov</b>	<b>Primary and secondary Li ion batteries - status quo and future perspectives</b>
<b>10:45</b>	<b>PR-8 J. Kovačič</b>	<b>First measurements of ion temperature in the divertor of the WEST tokamak</b>
<b>11:15 – 11:35</b>	<b>COFFEE BREAK</b>	
<b>11:35 – 12:55</b>	<b>PLENARY SESSION 7</b> <i>Chairman: P. Baroch</i>	<b>Title of the lecture</b>
<b>11:35</b>	<b>PR-9 M. Dimitrova</b>	<b>Embedded-probe diagnostics for the COMPASS-U tokamak</b>
<b>12:05</b>	<b>PR-10 F. Brochard</b>	<b>Contributions of Artificial Intelligence to the Experimental Study of Plasma Edge Turbulence in a Fusion Plasma</b>
<b>12:35</b>	<b>OP-4 J. Cecrdle</b>	<b>Modelling of plasma induced liquid metal surface erosion during transient events</b>
<b>13:00</b>	<b>LUNCH</b>	
<b>16:00 – 16:30</b>	<b>PLENARY SESSION 8</b> <i>Chairman: V. Tonchev</i>	<b>Title of the lecture</b>
<b>16:00</b>	<b>PR-11 V. Boev</b>	<b>Hybrid ureasilicate matrix embedding semiconductor and metal nanoparticles: Preserving quantum confinement and localized surface plasmon resonance</b>
<b>16:30 – 16:45</b>	<b>COFFEE BREAK</b>	
<b>16:45 – 19:00</b>	<b>POSTER SESSION C</b>	<b>New materials. Plasma-surface interaction and plasma diagnostics. Green technologies. Modeling and computer simulation</b>

## **THURSDAY, 18 SEPTEMBER**

<b>10:00 – 11:15</b>	<b>PLENARY SESSION 9</b> <i>Chairman: P. Petrov</i>	<b>Title of the lecture</b>
<b>10:00</b>	<b>TL-4 L. Zajickova</b>	<b>Plasma enhanced chemical vapor deposition of bioactive films</b>
<b>10:45</b>	<b>PR-12 I. Ganachev</b>	<b>Similarity laws for the density, density gradient and absorbed power in surface-wave discharges</b>
<b>11:15 – 11:35</b>	<b>COFFEE BREAK</b>	
<b>11:35 – 12:55</b>	<b>PLENARY SESSION 10</b> <i>Chairman: L. Zajickova</i>	<b>Title of the lecture</b>
<b>11:35</b>	<b>PR-13 T. Gyergyek</b>	<b>PIC simulation of the plasma-wall transition in the presence of two populations of negatively charged particles</b>
<b>12:05</b>	<b>PR-14 M. Babij</b>	<b>Progress in the implementation of the MgB<sub>2</sub> superconductor in the form of joints and wires for high-field technologies</b>
<b>12:35</b>	<b>OP-5 I. Ivanov</b>	<b>Investigation of N-graphene/ceramic matrix composites obtained by plasma-enhanced CVD</b>
<b>13:00</b>	<b>LUNCH</b>	
<b>14:00</b>	<b>EXCURSION</b>	
<b>19:30</b>	<b>OFFICIAL DINNER</b>	

## **FRIDAY, 19 SEPTEMBER**

<b>10:00 – 11:00</b>	<b>PLENARY SESSION 11</b> <i>Chairman: T. Koutzarova</i>	<b>Title of the lecture</b>
<b>10:00</b>	<b>PR-15 V. Tonchev</b>	<b>Surface patterning by cellular automata: An overview</b>
<b>10:30</b>	<b>PR-16 B. Lopez</b>	<b>E-waste mixed plastic wastes treated by plasma chemical technology</b>
<b>11:00 – 11:20</b>	<b>COFFEE BREAK</b>	
<b>11:20 – 12:00</b>	<b>PLENARY SESSION 12</b> <i>Chairman: M. Dimitrova</i>	<b>Title of the lecture</b>
<b>11:20</b>	<b>PR-17 T. Koutzarova</b>	<b>Magnetic phase transitions in magneto-electric hexaferrites - Prospects for applications</b>
<b>11:50</b>	<b>CLOSING</b>	
<b>13:00</b>	<b>LUNCH</b>	