



## European Excellence in Nanotechnology (EXCELNANO)

### Forum Romanians in Micro- and Nanoelectronics

6-7 November, 2018, Romanian Academy, Bucharest, Romania

*A event dedicated to the Centenary of the Romanian State (1918-2018) and to the Romanian Presidency of the European Council (first semester, 2019)*

#### Forum I (6<sup>th</sup> of November, 2018), Aula Magna of the Romanian Academy

<b>9.00</b> Opening of the Forum <b>Acad.Dan DASCĂLU</b>	
<b>Session I A (9.10 a.m.-10.30 a.m.). Chair SORIN CRISTOLOVEANU</b>	
9:10-9:30	<b>IONUT RADU</b> , Parc Technologique des Fontaines, 38190 Bernin, France, <i>Material physics and technologies for substrate engineering to address challenges of semiconductor nanotechnologies</i> , Soitec.
9:30-9:50	<b>MIRCEA DUSA</b> , ASML Belgium, Kapeldreef 75, B-3001 Leuven, Belgium, <i>Moore's Law and Optical Lithography Drive of the Semiconductor Industry Progress</i> .
9:50-10:10	<b>FLORIN UDREA</b> , Cambridge University, Cambridge CB3 0FA, <i>Challenges in power semiconductor devices: technologies of the future</i> .
10:10-10:30	<b>VIOREL BANU</b> , D+T Microelectrónica A.I.E., Campus UAB, 080193 Bellaterra-Barcelona, Catalunya, Spain, <i>The wide band-gap semiconductors, a new trend of power semiconductor devices development</i> .
<b>Session I B (11.00 a.m.-12.40 p.m.). Chair ANDREAS WILD</b>	
11:00-11:20	<b>MARIUS NEAG</b> , Technical University, Cluj-Napoca, Romania, <i>Systematic and optimized design of analog ICs</i> .
11:20-11:40	<b>IOAN-LUCIAN PREJBEANU</b> , CEA, CNRS, INAC-SPINTEC, Grenoble, France, <i>Magnetoresistive random-access memory (MRAM) concepts for extended scalability and ultrafast switching</i> , Univ.Grenoble Alpes.
11:40-12:00	<b>ALEXANDRU MÜLLER</b> , IMT Bucharest, Romania, <i>Novel high performance sensors using SAW resonators constructed on GaN/Si and operating at GHz frequencies</i>
12:00-12:20	<b>ADRIAN IONESCU</b> , EPFL Laussane, Elveția, <i>Energy Efficient Electronics to Revolutionize Artificial Intelligence and its Applications</i> .
12:20-12:40	<b>ANA RUSU</b> , Royal Institute of Technology (KTH), Stockholm, Sweden, <i>Future Smart Connected Society Enabled by Electronics</i>
<b>12.30-14.00 Lunch break</b>	
<b>14:00 Official opening</b> of the event with <b>welcome addresses</b> . <b>Academician Ioan Dumitrache</b> , Secretary General, on behalf of the Presidium of the Romanian Academy and <b>Academician Nicolae Zamfir</b> , President of the Section of Physics of the Romanian Academy, on behalf of ELI (Extreme Light Infrastructure), Măgurele, Romania.	

**14.20 - 16:00 Round table on Strategic perspectives on Romanian micro-/nanoelectronics as Romania chairs the Council of the EU** attended by high-level representatives of companies active in Romania and other representative organisations. The debate will be moderated by Dr. Andreas Wild (former Executive Director of ENIAC/ECSEL, the European public-private partnership in nanoelectronics).

**Forum II (7<sup>th</sup> of November, 2018), Aula of the Library of the Romanian Academy**

<b>8.30 a.m. Chair Acad. Dan DASCĂLU</b>	
8:30-8:50	<b>MIHAI MIHAILA</b> , IMT Bucharest, Romania, <i>Microscopic origin of 1/f noise.</i>
8:50-9:10	<b>SORIN MELINTE</b> , Université catholique de Louvain, Belgium, Nanoarchitectonics with Si nanowires.
9:10-9:30	<b>MIRCEA DRAGOMAN</b> , IMT Bucharest, Romania, <i>Nanoelectronics at the atomic scale: computing, harvesting, networking.</i>
9:30-9:50	<b>SORIN CRISTOLOVEANU</b> , MINATEC, Grenoble, Franța, <i>The growing family of electrostatically-doped devices.</i>
9:50-10:10	<b>GHEORGHE BREZEANU</b> , University Politehnica of Bucharest, Romania, <i>Silicon Carbide for Sensing: a continuous challenge.</i>
10:10-10:30	<b>CORNEL COBIANU</b> , IMT Bucharest, Romania, <i>From thin films to nanosensor technology.</i>