

EDITORIAL

Encuentro de Superficies y Materiales Nanoestructurados - NANO 2022: An open window to the last news in nanotechnology applications

With more than two decades of existence, the “Encuentro de Superficies y Materiales Nanoestructurados” remains a national benchmark for the scientific and technological prowess of Argentina’s “Nano” community. The event began in 2001 at the National Atomic Energy Commission in Bariloche and developed into what it is today: on the one hand, a national gathering that brings together a wide range of disciplines to discuss and disseminate the most recent findings in nanoscience and nanotechnology; on the other hand, a place where friends and colleagues can talk freely and honestly about a wide range of topics related to research, management, transfer to industry, and education in this vibrant field of science and technology. The event took place in San Carlos de Bariloche until 2010. Following then, it was held in Córdoba (2012), Mar del Plata (2013), Bariloche (2014), Rosario (2015), Buenos Aires (2016), Bariloche (2017), La Plata (2018), Buenos Aires (2019), and Mar del Plata (virtual in 2021). The National University of Río Cuarto, along with participants from the CONICET-UNRC institutes IITEMA, IDAS, and INBIAS, organized NANO 2022 during August 9–11, 2022. The great supervision work of the coordinator of the meeting, Dr. María Molina and the efforts of teachers, researchers, and students belonging to the organizing committee were reflected in the wonderful group of representatives of the academic, scientific, and productive sectors gathered to discuss the challenges and advances in the different areas of Nanoscience and Nanotechnology. Various research fields, including self-assembly and synthesis of nanomaterials, micro and nanofabrication, surfaces, condensed matter physics, nano-bio interfaces and biological processes, and optical, electrical, and magnetic properties, were represented among the speakers at the meeting. In this issue, thanks to the organizing committee and the generosity of the outstanding speakers who attended, we have five papers from this event that provide a broad and interesting overview of what the meeting was and will continue to be for the entire country. These papers highlight the novelty, depth, rigor, and impact of the work being done by all the national institutes that are dedicated to this fascinating and transversal field of knowledge, as well as the sharing of experiences and challenges and the establishment of new cooperation programs and training opportunities for young professionals. In closing, I would like to invite you to keep taking part in this event in upcoming editions and to thoroughly enjoy these great and inspirational lectures.

Cristina Hoppe

Mar del Plata, October 2023

Bio



Cristina Hoppe

Was born in Buenos Aires, Argentina, in 1975. She graduated in Chemistry (2000) at the University of Mar del Plata, where she also received her

Ph.D. in Materials Science (2004) working on polymer dispersed liquid crystals (PDLC) under the supervision

of Prof. Roberto J. J. Williams (Institute of Materials Science and Technology, INTEMA, UNMDP/CONICET). In 2004 she was awarded a Postdoctoral Antorchas fellowship and she moved to the University of Santiago de Compostela (Nanotechnology and Magnetism group), Spain, where she worked with Prof. Arturo López Quintela in the synthesis and characterization of metal and oxide nanoparticles. After one year she was awarded a Marie Curie European Postdoctoral Fellowship (International Incoming Fellowship, 6th framework Programm) to work

in the arrangement of nanoparticles in polymer multiphasic systems. She returned to Argentina in December 2007.

She is currently working at INTEMA (Polímeros Nanoestructurados group) as staff researcher (Investigadora Principal de CONICET). She has leaded several research projects in the field of polymer materials and nanomaterials, including the Argentinian node of a four-year European mobility project in vitrimers (Project VIT, RISE call from the EU started on September 2021). She has been working

on the design of vitrimers, covering topics ranging from the design and chemistry of the networks to their rheological and technological properties related to self-healing, shape memory and recycling capacity. She has also participated as Argentina representative in international cooperation official missions to USA, Portugal, Italy, Mexico and South Africa in the framework of I+D cooperation agreements in Nanoscience and Nanotechnology. Her main research interests are related with the design and application of functional polymers and nanocomposites.