European Materials Research Society rewards work of Ikerbasque Research Professor Maurizio Prato

'E-MRS 5-Year Materials Impact Prize' awarded to Prato recognizes his contributions to the field of materials science

This is the highest award given by the E-MRS every five years to scientists who have made significant advances in the field

Donostia-San Sebastian. 10 July, 2023. CIC biomaGUNE's Ikerbasque Research Professor and AXA Professor Maurizio Prato has been awarded the prestigious "E-MRS 5-Year Materials Impact Prize" for his contributions to the field of materials science. This award, the highest of the European Materials Research Society (E-MRS), is given every five years to scientists who have made outstanding advances in the field. So Maurizio Prato is joining an exclusive group that has contributed significantly to the development of materials science.

The award ceremony took place in Strasbourg, France, within the framework of the 2023 Spring Conference, the main conference organized every year by the E-MRS, during which Prato was recognized for his research and its impact on materials science. The research professor expressed deep gratitude: "I believe that receiving important awards is the spur that drives us to multiply our research efforts. Our work is very important to us, and we carry it out very often at the expense of our personal lives; but when we receive an award of this significance, we feel that all the efforts we have made have been rewarded. It means it has been really worthwhile."

Throughout his career, Prato has constantly pushed the boundaries of scientific research, driving it forward with his innovative ideas and dedication. Prato's work has revolutionized several aspects of materials science in the field of nanotechnology and carbon-based materials in particular. His contributions include the development of new carbon nanotubes and their applications: "Our research group has been working for many years on functionalizing carbon nanoforms to make them useful in practical applications. Recently, we have expanded our research and are also working with other types of materials, such as perylene bisimides (a set of organic pigments). Among the most important things we have contributed to, we can certainly highlight the attempt to reconnect a broken connection in an injured spinal cord, or the study of artificial photosynthesis, the result of which could help in the current energy crisis."

During the ceremony Prato delivered a <u>lecture</u> on multifunctional hybrid interfaces for energy and medical applications, in which he described the progress made in two crucial fields: "Nerve reconnection in spinal cord injuries, where carbon nanotubes can act as active substrates for nerve growth, and the photoelectrocatalytic splitting of water for producing the so-called green hydrogen." The organizers of the event highlighted Prato's leadership, among other things, and defined him as an "outstanding orator and exceptional speaker". "The knowledge, perspective



and leadership of the speakers" have been "one of the highlights of the week-long conference," they said.

About the E-MRS

The European Materials Research Society (E-MRS), founded in 1983, currently has more than 4,000 members from industry, government, academia and research laboratories, who meet regularly to discuss the latest technological advances in functional materials. The E-MRS fosters the exchange of information between the scientific community, engineers and research managers on an interdisciplinary platform, and recognizes professional and technical excellence by promoting awards for achievements from student to senior scientist level. As an organization affiliated to the International Union of Materials Research Societies (IUMRS), the E-MRS enjoys and benefits from very close relationships with other materials research organizations in Europe and across the world.

About Maurizio Prato

A researcher since 1983 in the Department of Organic Chemistry of the University of Padua, Maurizio Prato was appointed associate lecturer in Organic Chemistry at the Faculty of Pharmacy of the University of Trieste in 1992, becoming a tenured lecturer in February 2000. Since 2015 he has been an Ikerbasque Research Professor and an AXA Professor at the CIC biomaGUNE cooperative research center. He received prestigious ERC grants in 2008 and 2020.

He was made a member of the following societies: the Accademia Nazionale dei Lincei in 2010, the European Academy of Sciences in 2013, the European Academy in 2015 and the Istituto Veneto di Scienze, Lettere ed Arti in 2018. In 2013 he was appointed honorary professor of the Jiao Tong University in Xi'an (China). He has done research at the following universities: Texas Tech University, Lubbock, USA (1980); University College Dublin, Ireland (1983); University of Yale, (1986-87); and University of California, Santa Barbara, (1991-92). He was visiting professor in the Departments of Chemistry at the École Normale Supérieure in Paris in 2001, the University of Namur (Belgium) in 2010, the University of Strasbourg in 2014, and the University of Mons (Belgium) in 2018 within the framework of a *Francqui Chair*. The University of Salento has recently conferred on him an honorary degree in "Medical Biotechnology and Nanobiotechnology". In 2021 Maurizio Prato was also accorded the NAI Fellow distinction by the National Academy of Inventors (NAI) for his contributions toward the advancement of science in various fields and in 2022 he was appointed foreign academician by the Royal Academy of Exact, Physical and Nature Sciences of Spain (RAC).

About CIC biomaGUNE

The Center for Cooperative Research in Biomaterials CIC biomaGUNE, member of the Basque Research and Technology Alliance (BRTA), conducts state-of-the-art research at the interface between Chemistry, Biology and Physics, devoting particular attention to studying the properties of biological nanostructures on a molecular scale and their biomedical applications. It was recognized in 2018 as a "María de Maeztu" Unit of Excellence for meeting requirements of



excellence, which are characterized by a high impact and level of competitiveness in its field of activity on the global scientific stage.

Photo captions:

Lecture: Maurizio Prato, CIC biomaGUNE's Ikerbasque Research Professor and AXA Professor, during his lecture at the E-MRS Spring 2023 Conference (source: E-MRS).

Award ceremony: Presentation of the award to Professor Maurizio Prato by E-MRS President Joan Ramón Morante (source: E-MRS).