

Luis Liz-Marzán joins the National Academy of Italy

Recognizing the career of CIC biomaGUNE's Ikerbasque Research Professor Luis Liz-Marzán, the Accademia Nazionale dei Lincei awards him the title of foreign academician

This nomination is in addition to the numerous awards distinguishing him as a world expert in the synthesis and application of nanoparticles

Donostia-San Sebastian (Basque Country). 11 November, 2024. The Ikerbasque Research Professor at CIC biomaGUNE Luis Liz-Marzán has been nominated foreign academician by the [Accademia Nazionale dei Lincei](#) (Italy) in the category of Physical, Mathematical and Natural Sciences at a ceremony held last Friday at the Academy's headquarters in Rome. After the solemn admission ceremony, Professor Liz-Marzán delivered a lecture in which he set out the main keys in his research work. Academy President Roberto Antonelli, for his part, expressed his "complete confidence" that Professor Liz-Marzán's contribution "will increase the scientific and cultural prestige of the Accademia dei Lincei". The Academy, founded in the 16th century, has a long tradition; during its early stages it had such prominent members as Galileo Galilei and boasts several Nobel laureates, both Italian and foreign.

Liz-Marzán said "it is an immense honor to have been selected to join such a prestigious institution. Although these awards are usually made in my name, we must not forget that the merit should be shared with an increasing number of young scientists who carry out excellent work, without which all this would be impossible. They have all contributed toward making our science recognized as a benchmark in the field".

This recognition endorses the extensive scientific career of Professor Liz-Marzán (head of the [BioNanoPlasmonics Laboratory](#) at CIC biomaGUNE, professor at the University of Vigo and lead researcher of CINBIO and the CIBER-BBN), whose recent [ERC Synergy Grant](#) (in addition to the two previous ERC Advanced Grants and two Proofs of Concept) signifies almost continuous funding from the European Research Council over the last 20 years.

Liz-Marzán is widely recognized internationally for his pioneering work in nanoscience, in particular in the synthesis and application of plasmonic nanoparticles. Much of his recent work has to do with the medical applications of nanoparticles, such as controlled drug delivery and early detection of disease. His interdisciplinary research may exert a real impact on our society.

Aitziber L. Cortajarena, Ikerbasque Research Professor and Scientific Director of CIC biomaGUNE, stressed that "his work is truly innovative. What stands out is his ability to modulate the synthesis of these nanomaterials with great precision, and therefore, their properties. He is able to bring plasmonic nanoparticles to applications, which would not be possible without the unprecedented

degree of control over nanosystems that his team achieves, thanks to their unique expertise in the field”.

By combining these capabilities with huge creativity, the team led by Professor Liz-Marzán has done pioneering work in important areas of biomedical applications as diverse as the identification of bacteria, the monitoring of fibers related to the progression of Parkinson's disease, the integration of nanoparticles into 3D models through bioprinting, and the development of cancer models to explore the mechanisms of the disease and the development of new therapies. Cortajarena went on to stress that “the ability he has to connect fundamental cutting-edge science with the development of solutions for major challenges in the field of biomedicine is a key factor in the success and impact of his research”.

About Luis Liz-Marzán

The Ikerbasque Research Professor Luis Liz-Marzán has been CIC biomaGUNE's scientific director and a visiting professor at various institutions across the world. He is one of the few European researchers to have been awarded two prestigious ERC Advanced Grants and an ERC Synergy Grant consecutively, as well as two Proof-of-Concept Grants (funded by the European Research Council). These European grants require proposing disruptive breakthroughs that are at the frontier of knowledge. Professor Liz-Marzán is a Fellow of the Royal Society of Chemistry (UK) and of the Optical Society of America (USA), a full member of the Spanish Royal Academy of Sciences, a corresponding member of the academies of sciences of Galicia and Granada, and also of the European Academy of Sciences, an international member of the US National Academy of Engineering and an honorary doctor of the University of Antwerp.

The numerous awards he has received include the Humboldt Research Award, the RSEQ Medal, the Blaise Pascal Medal in Materials Science, the Rey Jaime I Prize, the Rhodia Prize of the European Colloid and Interface Society, the Enrique Moles National Prize in Chemical Science and Technology; the Lilly Foundation Award for Biomedical Research; the French-Spanish "Miguel Catalán-Paul Sabatier" award of the French Chemical Society (SCF), the Portuguese-Spanish Lourenço-Madinaveitia Award of the Portuguese Chemical Society, and the Spanish-Italian Ciamician-Gonzalez Award of the Italian Chemical Society.

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 at the molecular scale, and their biomedical applications. It was recognized in 2018 as a “María de Maeztu” Unit of Excellence for meeting requirements of excellence, characterized by a high impact and degree of competitiveness in its field of activity on the global scientific stage.

Photo caption: Ceremonia de ingreso de Luis Liz Marzán en la Accademia Nazionale dei Lincei (Roma).

0V1A1204: Prof. Luis Liz Marzán and Prof. Carlo Doglioni (Vice President of the Accademia Nazionale dei Lincei and President of the Class of Physical Sciences).

0V1A1205: From left to right: Profesor Roberto Antonelli (President of the Accademia Nazionale dei Lincei), Prof. Luis Liz Marzán and Prof. Carlo Doglioni (Vice President of the Accademia Nazionale dei Lincei and President of the Class of Physical Sciences).