## **XIV. ENCOUNTERS**

28 November 2024 Eureka! Zientzia Museoa, Donostia / San Sebastián



**JEAN-PIERRE SAUVAGE** Université de Strasbourg

Jean Pierre Sauvage is a French chemist known for his work in molecular sciences and nanotechnology, with which he has succeeded in triggering and controlling the movement of molecules. Professor Sauvage's team devised the first molecular muscle and, together with a team of experimental researchers, created an object measuring eight nanometres that contracts and relaxes when it receives a signal, and which could be used, for example, as an articulated mini-robot. For the design and synthesis of molecular machines, he was awarded the Nobel Prize in Chemistry in 2016, together with J. Fraser Stoddart and Ben L. Feringa.

Before his research it was believed that artificial molecules could not be set in motion in a controlled fashion; that was until he turned them into dynamic systems with a great capacity for movement. It is an innovative concept: molecules that can behave like motors to carry information. The possibilities are numerous; these mini-robots can, for example, might be used in medicine to attack malignant cells when they are injected into the blood.

Jean-Pierre Sauvage was born in Paris. He was awarded his PhD at the Université Louis-Pasteur in Strasbourg in 1971. During this period his supervisor was the researcher Jean Marie Lehn, who would later go on to receive the Nobel Prize in Chemistry (1987). Sauvage has worked at the French National Centre for Scientific Research (CNRS), where he was its director of research from 1979 to 2009. Right now, he is also professor emeritus of the Université de Strasbourg.

He was made a member of the French Academy of Sciences on 24 November 1997. He is a Knight of the Legion of Honour; his awards include a Centenary Prize and Medal of the Royal Society of Chemistry (UK), the Pierre Süe Prize of the French Chemical Society and the Blaise Pascal Medal in Chemistry 2012 of the European Academy of Sciences. He also joined the US National Academy of Sciences as a foreign associate in April 2019.

## References of interest

Passion for Knowledge 2023 - Hitzaldia/Conferencia

## **Nobel Prize**

La elegancia de las moléculas (Jean-Pierre Sauvage, Plataforma 2022, ISBN 8419271314, 978841927310)

www.dipc.ehu.eus |info@topadipc.eu

