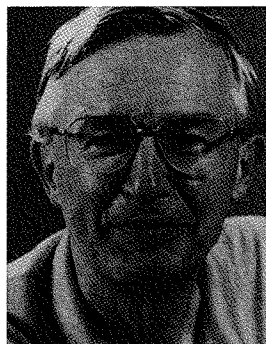


## Biographical Sketch for *Jean-Marie Lehn*

Jean-Marie Lehn was born in Rosheim, France in 1939.

In 1970 he became Professor of Chemistry at the Université Louis Pasteur in Strasbourg and since 1979 he is Professor at the Collège de France in Paris. In 1968 his research led to the fabrication of cage-like molecules that contain a cavity into which another chemical species of appropriate size and shape may be included, like a key fits into a lock. With this began his



work on the chemical basis of “molecular recognition” (i.e. the way in which a receptor molecule recognizes and selectively binds a substrate), which also plays a fundamental role in biological processes. For these studies Lehn received the Nobel Prize in Chemistry in 1987 with Cram and Pedersen.

Over the years his work led to the definition of a new field of chemistry, which he has proposed named “supramolecular chemistry” as it deals with the complex entities formed by the association of two or more chemical species held together by intermolecular forces, whereas molecular chemistry studies the features of the entities constructed from atoms linked by covalent bonds. His research broadened from molecular recognition towards supramolecular catalysis and transport processes. It also extended to the elaboration of molecular devices, towards supramolecular electronics and photonics. Thereafter the main line of development concerned the design of “programmed” systems that undergo self-organization by spontaneous assembly of suitable components into well-defined functional supramolecular architectures. More recently, the implementation of selection processes in addition to the design led to the development of a constitutional dynamic chemistry where chemical entities are able to adapt to internal or external stimuli.

Author of more than 700 scientific publications, Lehn is a member of many academies and institutions and has received numerous international honours and awards.