



Interview

In Profile: Jean-Marie Lehn, Professor of Chemistry, University of Strasbourg, and Co-Winner of the 1987 Nobel Prize for Chemistry



Professor Lehn obtained his Ph.D. from the University of Strasbourg in organic chemistry under the supervision of Guy Ourisson in 1963, which was followed by a postdoctoral year at Harvard University with Robert Burns Woodward. He then returned to the University of Strasbourg, where he became full professor in 1970. Lehn received the Nobel Prize for Chemistry in 1987, with Donald Cram and Charles Pedersen, for his work on molecular recognition, which developed into the field of supramolecular chemistry. When asked how it all started, Lehn comments, I was initially interested in the philosophy of knowledge. So when I became interested in science, I first wanted to understand the biological basis of brain processes. The propagation of nerve influx is linked to the transport of ions through membranes. which started me thinking about how to induce ion transport, and how to do it selectively. This led to the idea of making cryptands and ion cryptate, which was really the start."

The Professional Side

Who and what were the most influential factors leading you to a career in science?

Initially, I intended to study philosophy; however, one had to take at least one science course, and I ended up finding science more interesting.

What do you love about your job?

That I have total freedom to seek new knowledge. After all, we are getting paid for doing what we like (chuckles). And that you are always in contact with and confronted by young people.

What parts of your job could you do without? Administrative things, such as justifying research grants and answering referees.

What characteristics do you see as necessary for your position?

You have to be ready to respond to the challenges of the field, and to have no dogma. Molecules often don't do what you want, but this can be more interesting than your original idea! So you have to be onen to the unexpected.

Where do you look for ideas?

Reading, thinking about our data and their processing! I like general journals, because many new ideas come from making a connection between two things that have not been connected

Which trends in the scientific community please you, and which concern you?

Advances in communication have meant that there is much more information available. This is very good, but it becomes more difficult to detect signals in the noise, meaningful results in the sea of data.

What is your most satisfying achievement?

Contributing to the construction of a new paradigm and the resulting field—supramolecular chemistry.

What scientific discovery would you like to have been responsible for?

Many—general relativity, quantum mechanics, Lavoisier's laws, Mendeleef's Table, to name a

Is there anything you would, with hindsight, have done differently?

Possibly I might have stayed closer to biology, although of course biology is chemistry, in that it is based on molecules. So let's not talk about chemistry, let's talk about molecular science.

What is your most important scientific goal for the future?

To get closer and closer to more and more complex matter. How did inanimate matter become animate, how did thinking matter arise? You have to ask the big questions, it keeps you going.

The Personal Side

How do you spend your free time?

I play the piano, every day when I can. I go to the opera and to concerts. I like music, and art in general.

Where, in the world, is the best place you've been?

Venice and Prague are very beautiful, but I am happy to live in Strasbourg, it's a nice city, a good size, and quite bicultural, being French, with a strong German influence. This opens your mind to others, and makes you a citizen of the world, which a scientist should be anyway! And the University of Strasbourg is one of the best places to work.

What are you reading at the moment, and what is your book tip?

I like diversity, from Seneca to Boris Vian's L'Ecume des Jours. I also go for books that have a purpose, such as music and composers, history, philosophy, or civilizations.

What music do you listen to?

My favorite composers include Beethoven, Bartok, Bach, Berg (his operas). And many others beyond the letter B! I also like to "discover" composers and works that are not very well known, such as Jan Ladislav Dusek's piano sona-

The last film you saw?

I rarely see films, but among the most memorable are L'Année Dernière à Marienbad (Last Year at Marienbad) and Blow Up. These films raise questions about what is past and what is present, what is reality and what is imagination.

If you had not become a scientist, what would you have become?

A musician, or possibly a philosopher, but I am happy with my choice of science. It's constructive and objective—you are making things, whereas with philosophy you are thinking up things, with no way to cross-check.

Who is your most admired person/scientist?

Einstein. Both as a scientist and as a man.

What do you value in your friends?

Their diverse personalities. People are complex and rich.

What is your most important personal goal for the future?

To keep doing what I like as well as I can. To try to get society to appreciate the spirit of science though a broader, more balanced picture.

The picture shows a view of Strasbourg, les Ponts Couverts.

Jean-Marie Lehn was born in 1939 in Rosheim. a small town near Strasbourg, as the eldest of four sons. His father Pierre was originally a baker, but later became the organist of the city. Iehn now lives in Strasbourg, close enough to the center that he can walk to work. He has been married since 1965 to Sylvie Lederer, a mathematician. They have two sons, 34 and 31. One is a writer, the other a musicologist.