



Jean Rouxel (1935–1998)

When I first met Jean, I was a young postgraduate student looking for a host laboratory to carry out research within the framework of a Ph.D. I had visited other professors who had talked to me about their projects, but it was Jean's enthusiasm and original ideas that almost instantly prompted me to decide to work with and for him. I remember that, in little more than a quarter of an hour, he had jotted a few chemical reactions down onto a blackboard and some developments that should, according to his views, lead in no time to a bright and original thesis. At least in terms of time, Jean's prediction did not prove quite right, since it took me six years to achieve the program he had outlined so rapidly that day, but his indefatigable enthusiasm for science and his incredible optimism that everything will work quickly and according to plan was Jean's trademark throughout his life.

For a long time, Jean kept forgetting that developing an idea experimentally may take years while only a few minutes may be needed to think of one. Since he was a pure intellectual, he would constantly play with ideas and concepts, jumping from one prospective subject to another. He was instantly seduced by the novelty of the subjects he discovered during the numerous meetings he attended and participated in, and the abundant literature he used to read. This inner impulse to seduce and be seduced by new things was probably at the heart of his immense dedication to science and of his great charisma. To his coworkers, these signs appeared clearly as those of a great leader and ultimately, no matter how difficult it was at times, we followed him.

Some of the beliefs (truths?) that Jean discussed regularly were sometimes difficult to accept, especially for experimentalists. For instance, he would say that only ideas were important, considering that the introduction (idea, developments) and the conclusion (idea, prospects) were the only important and interesting parts of a Ph.D. thesis. Although this was said half-jokingly, for most of us struggling with difficult experiments and/or heavy equipment, and all too often confronting Murphy's laws, he seemed to be not quite correct. In fact, he was right in the sense that, although the technique is indeed of the utmost importance, it is the ideas that are at the forefront of scientific activity and development.

This of course reflects the pressing recommendation of leaders worldwide: Think! (Jean himself would constantly recall one of the fundamental intellectual processes of always asking the question 'Why?') In fact, he always tried to balance out the conception of ideas and the acquisition of new equipment leading to the harmonious development of both in his Institute.

Like most great men, Jean had an acute vision of future subjects and ideas to be developed in the field of inorganic solid state chemistry. In particular, he developed an early understanding of the importance of close links between physicists and chemists, and he set up a group of researchers devoted to theoretical chemistry in relation to relevant techniques such as EXAFS and EELS, to work together on problems raised by newly discovered compounds. The gap between his vision and that of the grassroot researchers was, at times and understandably, quite marked. This and his eagerness to see his new and bright ideas quickly developed resulted, quite naturally, in some impatience. Since science formed such a major part of his life, getting away from his passion was almost impossible for him. This probably explains why the concept of vacation (an institution in France) was practically foreign to him. By the end of April 1964, in his first year of research activity in Nantes, the students and coworkers of his laboratory had plans for a long bank holiday for the Labor Day Celebration. By mid-morning this 1st of May, somewhat idle, I went casually to the laboratory to check a few furnaces I had running. Jean was there, furious that no one had shown up. As everything was closed, and there were no experiments to run, he had me wash the laboratory windows all day. Several years later, Jean and I joked about this, and about his incredible impatience. For me, this experience was illustrative of the irrepressible inner force that would lead him forward at all times.

Jean was born in Malestroit near Vannes, a small village in Brittany, northwest of Nantes (France), of Breton parents. This explains why the Breton and Celt heritage meant so much to him and why he had acquired detailed knowledge of Breton history, customs and language; this was for him a passion almost as strong as that he had for chemistry. Before being elected Professor at the Collège de France, a very prestigious

French Institution, he had, according to tradition, to visit colleagues already belonging to this body before the vote. As a Breton, he was interviewed on some specific parts of French–Breton history by a historian and, as far as we know, he really impressed this Collège de France member by the extent and depth of his knowledge. It is moving to think that his love for his dear native country may have influenced this member in this vote, leading Jean to obtain the highest position in Solid State Chemistry in France, the other country he loved most after Brittany.

Jean was tremendously healthy, which helped him work 9–10 hours each day, six days a week, with incredible efficiency. However, he had recurrent headaches that had bothered him all his life. Nobody, not even he, really worried when these problems worsened a few weeks before his death, with the occurrence of some bouts of deep exhaustion he had not experienced before. He had a warning signal of the aneurysm rupture that was to take his life just one week before the fatal event: he experienced a brutal, although short, fainting when at a meeting near Paris, with a passing loss of his left eyesight. Not being a medical man, he ignored the warning, not even mentioning it to his family, and he continued to work as usual.

When the second and last attack took place, he realized its gravity, and told his wife. It was unfortunately too late to save his life. Several minutes after the attack, he lost consciousness and never recovered. With Yannick, his wife, Jean leaves five children: two sons, Tanguy and Erwan, and three daughters, Arzella, Souazic and Solen. They and we will miss him very much.

In a humorous passage, a famous French writer tells of the difference between God and human beings. This difference is simple, he writes: God, with no beginning and no end, should be referred to as (–) while man has to be referred to, Louis XV for instance as (1710–1774). For Jean, it was (1935–) when we discussed that book. It is now (1935–1998). The last figure is much too small and very difficult to accept. Yet, we know for sure that he wants us to follow unabated the route he outlined, continuing to decipher the complexity of the chemical bond, in the same demanding way he carried out his own research. Farewell Jean, you remain present in our hearts and minds through your achievements and your model which are recorded for ever in our scientific heritage.

Raymond Brec