Short Preface

Michel Che: an outstanding scientist with international influence on catalysis

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When I met Michel Che for the first time in the early 1990s, I was a solid-state chemist willing to discover the world of catalysis, to develop a better knowledge of the potential of Rare Earths in the area. His name was given to me as one of the most brilliant and original researchers in the field, and so I asked for a meeting in Jussieu. I was first surprised to get an appointment very quickly after my contact, and the best was yet to come with the meeting of such an extraordinary person. Not only he was of a wonderful kindness and attention, but his way of looking at catalysis and reactivity was really out of the box, bringing a real scientific view in our rather empirical way of looking at the phenomena. I immediately wanted to get him more involved with us, and there started a friendship of thirty years with Michel, resulting in extraordinary scientific exchanges, access of well-trained people to join our teams, but also having a lot of fun.

Michel has not been the man of one technique or one process, but he has had a global scientific contribution to catalysis, linking surface science and characterization to catalytic activity, and from this designing and synthesizing new heterogeneous catalysts. Michel has been a pioneer in looking at a catalyst, with a very original way of looking at surface reactivity, and a molecular approach of metal complexes,

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to study surface reactivity and interface phenomena at an unprecedented level, developing highly advanced characterization techniques as well.

His scientific contribution has been recognized by all the community, everywhere in the world, as one of the leaders of the discipline, bringing science at its best. In terms of application, Michel's investigations allowed understanding of the behavior of a number of catalysts, leading to significant improvements of several of them, with applications to automotive catalysis, oxidation of alkanes, acid catalysis, hydrogenation reactions, etc.

In the last ten years, we were linked by China! Michel was one of the first foreign scientists visiting China in the late seventies and he was a pure star in Asia, with an impressive recognition. When we created of our joint laboratory in Shanghai in 2011 gathering Solvay, CNRS, and five universities in France and China, he enthusiastically accepted to support us, creating and strengthening the links with our Chinese partners, while keeping an active participation to the scientific challenges. Michel, President of the Scientific Council, guided us to bring rapidly the laboratory at an extremely high level. Owing to this challenge, organized with a masters' hand, our laboratory made unbelievable fast progress and is now recognized as a key player in applied catalysis.

In addition to his scientific qualities, Michel was a delicious friend, respected for his behavior, always direct, but totally fair and honest, 100% reliable. Conversations with Michel were often scientific, but also about many other topics of everyday's life, always privileged moments, with always a lot of mutual respect and humility.

On our last meeting in December 2018, Michel elegantly passed the President position to Guy Bertrand, but remained very active in the scientific discussions, and brought again his wonderful sense of humor. We promised we would meet in Paris,

Michel is kindly asking a question at the First Solvay China Conference, November 01, 2017. At School of Life Science, Shanghai Tech University (https://www.e2p2l.com/en/news-and-events/solvay_china_conference_2017.html)

but a sad illness did not let us do. Michel is sadly missed, but his spirit remains so close to us.

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