Get to know the corrosion fighters

They have told us their story, how will yours be?

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Winner of the
Honorary Fellow of the EFC

Give us a little presentation of yours. What did you study?

I studied chemical engineering in France, at Toulouse (Institut du Génie Chimique). Then, I went to CEA-Cadarache (French Atomic Energy Commission, South of France Center, near Aix-en-Provence) where I investigated physic and chemical phenomena (corrosion, chemistry, and purification) in liquid sodium for my PhD that I received in1979 from the “Institut National Polytechnique” of Toulouse.

What is your job title? What does it consist of?

I am today (end of 2021) in a transition period before my (partial) retirement. I am “CEA Director of research” since 2008 and I moved as “scientific assistant” at the CEA corrosion Service last year, mainly involved by CEA internal committees and by corrosion expertise. I am also professor at INSTN (French National Institute for Nuclear Sciences and Technologies) where I organise or give courses at master and doctoral levels, but also for professional (technicians, engineers) who are generally starting in nuclear industry and need to have some knowledge on corrosion, in France or overseas.

How did you get here?

After my PhD, I stayed at CEA-Cadarache working on chemistry and corrosion in liquid sodium for fast breeder reactors which were starting in France (Phenix) or under construction (SUPER-PHENIX). In 1982, I moved to the CEA Laboratory of corrosion technological tests (LETC) at La Hague, near Cherbourg in Normandy, working on corrosion issues for Pressurized Water Reactors (PWRs) and corrosion in natural waters as PWRs are cooled with sea or river waters. After nearly 12 years in Normandy, I moved to Paris area (Fontenay-aux-Roses and then Saclay Centers) for more fundamental research on corrosion in the CEA-Laboratory on physic-chemistry and corrosion and after in the CEA-Laboratory of aqueous corrosion. Then, as “Expert Senior” and “Director of research”, I have been involved in various programs (internal, national, and international ones), organisations and committees, all mainly linked to corrosion.

Who has helped? Was networking important?
Corrosion is a multidisciplinary field: you need the help of your colleagues, and you need to help them. Exchanges are important internally and outside your laboratory. In that way, networking is a necessity. I had the pleasure to support the creation of the “Young EFC” when I was EFC President, as YEFC is a tremendous network for young professionals, which was missing when I was young…

What do you like most about your profession?... Is there something you don't like?
I like the various personalities and skills which are working in corrosion research and application. This variety is needed by corrosion sciences and technologies as it is a multidisciplinary field. Like in other scientific and technical areas, the promotion of researchers which is mainly based on publication in many laboratories, leads to some excesses which must be corrected to maintain the diversity in our corrosion units.

Something curious that has happened to you within your career and that you remember with a smile?
Many curious events occurred during the 40 years of my career. As they involved individuals and they are quite personal, social media are not the place to describe them. But around a glass of wine or of cider, we may have fun with these stories.

If you didn't dedicate yourself to this field, what would you have liked to be?
No idea.

Do you think this field needs more visibility?
Yes, of course. It is one of the reasons why I am involved in the WCO (World Corrosion Organization), the main objectives of which include rising awareness about corrosion and corrosion protection around the world. And it is what is done with the regular meetings in New York at the United Nations. I took this opportunity to thank a lot “Young EFC” for all the actions supported during the corrosion awareness day (24th of April, each year).

What do you think about the incorporation of new Technologies for corrosion detection? Are they necessary or could we live without them?
Our predecessors lived without these new technologies, so it is possible not to use them.
Nevertheless, my feeling is that these new technologies and particularly corrosion monitoring techniques coupled with Big Data management and Artificial Intelligence will revolutionize corrosion protection technologies. With these technologies, we are at the beginning of a new age regarding corrosion monitoring and protection.

How do you think a good corrosion professional should be?
I know very good professionals which are so different that I do not see a common character…

What do you mainly check in the CVs you receive?
How it fits with what I expected. Honesty and sincerity of the given information.

What is lacking in these applicants' CVs?
Nowadays, CVs are very well done, perhaps too good….

Could you say what it is and how you see the future of engineers/corrosion scientists? Any advice?
The protection of the environment leads to avoid pollution with metallic cations and so to control corrosion everywhere. The preservation of the raw materials is possible only if the corrosion of equipment and apparatus is minimized. The development of new technologies for green and renewable energies includes new coupling alloy-media…. With access to the interaction phenomena at the atomistic scale (observation and calculation), large progress in the knowledge of corrosion phenomena is going on…. With these issues and many others, the future of corrosion engineers is great.

TO END… COULD YOU TELL US…

- **A color**: the colour of the sea
- **A number:** 50 (the number of my native French department “Manche”)
- **A song**: too difficult to select only one
- **A hobby**: Walking the dog
- **A city**: Vancouver