C&EN Talks With

Armand Lattes

The French Chemical Society's outgoing president celebrates the group's 150th birthday

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JUST BEFORE DUSK on June 4, 1857, four chemists gathered in a café in the Latin Quarter of Paris. They were a motley crew. One worked in the dye industry, another was a graduate student. They wanted a place to talk shop, but no chemistry club existed. So they took matters into their own hands, and at 8:30 PM that evening the Chemical Society of Paris was formed.

This year the club, which evolved into the French Chemical Society (SFC), turns 150. Armand Lattes, an emeritus professor of chemistry at Paul Sabatier University, in Toulouse, and outgoing president of SFC, has been traveling Europe giving enthusiastic accounts of the society's rich history during this anniversary year.

Over the bustle of the smoke-filled café, the society's founding foursome discussed timely chemistry of that era, Lattes says. Minutes from the first séance indicate "a report on ozone," an update on the industrial fabrication of carbonate powder, and a description of platinum crystal research that had been recently published.

When the society began, Paris was teeming with great chemists, Lattes tells C&EN. There was Marcelin Berthelot, a forefather of organic synthesis; Charles-Adolphe Wurtz of the famous Wurtz carbon-carbon coupling; and Jean-Baptiste Dumas, who figured out how to measure atomic weight by using vapor densities.
Indeed, quintessential elements of French culture inspired great chemical breakthroughs during that epoch. Case in point: Louis Pasteur discovered the molecular basis for chirality after meticulously scrutinizing tartaric acid crystals from, yes, wine casks.

But it wasn't bigwigs like Pasteur or Berthelot who started SFC. Instead, a few unknown, enthusiastic chemists did. "In fact, half of its founding members were not even French but foreigners," Lattes points out. That first night, half the men talking chemistry over coffee were Italian, and by the time the club grew to a dozen, more than half the members were Russian, German, and Italian.

It didn't take long, however, for VIP chemists to join the club. Within two years, the French society had grown to more than 500 members. Chemical societies in fact were all the rage during the latter half of the 19th century. The Royal Society of Chemistry in London came first, followed by SFC and then counterparts in Germany, Russia, and the U.S.

As the 50th birthday of the society approached in 1907, the French chemical community seemed like it was on a roll. The year before, Frenchman Henri Moissan received the country's first Nobel Prize in Chemistry for his work on fluorine. Researchers such as Marie Curie, Paul Sabatier, and Victor Grignard, of reagent fame, were reporting results that would garner them future Nobel Prizes. Surely there was reason to celebrate.

All this was motivation perhaps for the opulent golden anniversary celebrations held at the castle of Versailles in 1907. But not all society members were content. In 1908, the physical chemists split off to form their own society, the first secession of many throughout the 20th century. Nowadays about a dozen separate chemistry associations remain—for food, medicinal, and photochemistry, to name a few.

Despite the fractioning, SFC remains the largest French chemical society, with a current membership of about 4,000. In the 20th century, its members weathered world and Algerian wars, a new constitution, and the ebb and flow of science funding. Throughout this time, the society also inherited some unusual bequests, including a series of caves with prehistoric paintings near Les Eyzies-de-Tayac that were willed to the organization in 1930 by stereochemist Joseph Achille Le Bel.

THE COUNTRY also produced some excellent science in the 20th century, says Lattes, citing Jean-Marie Lehn's supramolecular chemistry, Yves Chauvin's study of metathesis reactions, and Pierre Potier's development of the anticancer drugs Navelbine and Taxotère.

As it is elsewhere, the chemical enterprise in France is facing a decline of public support, which started as early as World War I, Lattes says. "During the war, many French soldiers were exposed to toxic gases. Almost everybody knows a veteran who has suffered."

French society sees chemistry as a source of nonnatural products, a major faux pas for a population that fundamentally favors food made from simple, natural ingredients, Lattes notes. And then there are, of course, "the transgressions of some chemicals in the environment" that also tilt public opinion.

Lattes would like to see the country regain the momentum and excitement for chemistry that existed when SFC was founded. As a counterpoint to the field's somewhat negative reputation, he's tried to show the fundamental importance of chemistry to human well-being.
and ecological restoration by writing a fictional dystopia about what would happen if all the chemists in the world quit, which was published in *Canadian Chemical News*. This creative writing exemplifies Lattes' opinion that changing public opinion about chemistry might be catalyzed by rebranding science as a form of "technical culture," on par with music and the arts.

Regardless of how one wishes to bolster the image of France's 15,000 chemists, the goal would be more easily achieved if there were a unified voice for French chemistry, says Lattes. Although the physical chemists' society re-merged with SFC in the 1990s, one of Lattes' aims as SFC president was to reunite all the splinter groups. During his tenure, he created an alliance among many of the different societies that he hopes will be strengthened by his replacement, who was yet to be named as C&EN went to press.

Like the sentiment of SFC's four founders who sought a collegial community in a smoky café so many years ago, Lattes believes that for chemists in France, "It is better to be together than apart."