

[K10A.2]
French history of the ceramic membranes
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During the thirty years of post-war economic growth in France, intense efforts were made to develop independent military and civilian nuclear facilities under the responsibility of the French nuclear agency, the Commissariat à l'Energie Atomique. For uranium enrichment, the chosen process was gaseous diffusion through ceramic barriers.

At the beginning of the 1980's, when the enrichment plants were set-up, opportunities were then offered for continuing academic research and for industrial valorisation of ceramic membrane know-how in other fields of applications.

Concerning the academic research, the leading group was directed by Professor Louis Cot at the National Graduate School of Chemistry in Montpellier. The group growth gave rise to the creation of a laboratory fully dedicated to the membrane materials and processes from 1994 and to the European Membrane Institute of Montpellier in 2000.

At the same time, industrial activities enabled the emergence of several key companies at the international level in the field of ceramic membrane manufacturing and of their integration in filtration devices: CTI - Orelis Environnement, Pall Exekia, Tami Industries, Imeca Process.

The presentation will detail the different stages and the main actors of this French history of the ceramic membranes, from the pioneer age to now.