



PRESS RELEASE

Subatech, a laboratory under the auspices of the CNRS national research center, the University of Nantes and IMT Atlantique, and TRISKEM INTERNATIONAL, have the pleasure of announcing the launch of their TESMARAC joint research laboratory (LabCom) with the support of the French National Research Agency (ANR).

The use of very selective resins for the separation of radionuclides from various matrices is of high importance in the fields of nuclear medicine, environmental protection, the electro-nuclear cycle and associated industrial processes and as well as in the management of Technologically Enhanced Naturally Occurring Radioactive Materials. In addition to the nuclear safety authorities', key players in these areas have expressed high interest in the development of new resins and applications.

The TESMARAC joint research laboratory aims to meet these needs by developing new selective resins and support materials and by conducting research into new separation and pre-concentration methods with existing support materials for trace-level DTM (difficult-to-measure) radioisotopes separation and analysis in complex media.

Innovation will be a key feature of the TESMARAC LabCom thanks to the combined knowledge and know-how of Subatech, the project leader with expertise in radiochemistry and nuclear metrology and of TRISKEM INTERNATIONAL, specialists in highly selective resin development and production.

The innovative approach will be boosted by a partnership with the ModES (Modeling and Spectroscopy) team belonging to the CEISAM (Chemistry and Interdisciplinarity, Synthesis, Analysis and Modeling) research laboratory at the University of Nantes, which has developed new in-silico approaches with molecular modeling tools.

The TESMARAC LabCom will focus primarily on:

- (i) Radioactive waste classification and management
- (ii) Waste material recycling
- (iii) Assessment of the impact of radioactivity on human beings
- (iv) Radionuclide production for medical purposes (diagnosis and therapeutic uses)

The joint laboratory will enable the research units to focus their cutting-edge knowledge on major societal issues and to leverage their expertise in industrial innovation projects, while pursuing their theoretical research interests.

It will also allow TRISKEM INTERNATIONAL to generate synergies and innovation by combining its applied research with more "bottom up" molecular recognition approaches.

The development and sales of new products and processes will have a direct impact on the growth of the business and the sustainability of the joint laboratory.

The LabCom TESMARAC is funded up to €350K by the French National Research Agency (ANR).

Michaela Langer, TRISKEM INTERNATIONAL President, says: *“We are delighted with the launch of the joint TESMARAC laboratory. We have been partners with Subatech for some time and this project is therefore a natural follow-up. Subatech has already amply demonstrated its capacity in many R&D projects, so this will enable us to leverage the experience gained in the areas where we are both involved. The geographical proximity of Subatech’s laboratories and TRISKEM’s premises will facilitate the implementation of the TESMARAC LabCom by enabling us to pool our technical facilities and to consolidate the already strong cooperation between our R&D teams. The project is a showcase example of how innovation can thrive in our part of north-west France. “*

Gines Martinez, Director of Subatech (CNRS Unit UMR 6457, IMT Atlantique, University of Nantes) says: *“The Subatech laboratory welcomes the launch of our first joint laboratory, the TESMARAC LabCom, with TRISKEM INTERNATIONAL, the Rennes-based hi-tech company, with the support of the French National Research Agency. TESMERAC will allow us to transfer the results of the research we have undertaken at SubaTech over a period of many years, in particular in the radiochemistry team, which has focused part of its research effort on the management and recycling of nuclear waste and radionuclides in the environment. I would like to stress the relevance and forward-looking ideas of the project that the Subatech and TRISKEM teams have designed, under the direction of Gilles MONTAVON and Stephen HAPPEL. I’m convinced that TESMARAC is headed for success and a great future in the years to come.”*

About TRISKEM INTERNATIONAL: Known for its expertise in separation chemistry, TRISKEM INTERNATIONAL focuses on the development of cutting-edge, high-quality technology solutions, at both laboratory and semi-industrial levels.

Both in France and worldwide, the company provides solutions to complex problems in the fields of analytical chemistry and radiochemistry, nuclear medicine, decommissioning, hydrometallurgy and many other areas requiring highly selective solutions.

About Subatech: SUBATECH, the SUBAtomic and Associated TECHnologies laboratory, is a French joint research unit (UMR 6457) under the aegis of three institutions: the Institut Mines-Télécom via its [IMT Atlantique](#) engineering institute, [the University of Nantes](#) and the [CNRS](#). Its principal administrative affiliation is with the Institut National de Physique Nucléaire et de Physique des Particules ([IN2P3](#)) and its secondary affiliation with the Institut National de Chimie.

Subatech’s research activities are conducted in partnership with leading international scientific laboratories and focus on a number of fields, including nuclear physics, hadronic physics, particle physics and astroparticles as well as radio-chemistry. Subatech engages in fundamental and applied research in the fields of energy, health, and the environment. Its expertise in all the technologies associated with these fields is key to the success of its lab projects.

About the LabCom joint laboratory: In order to reinforce France’s cutting-edge industries and competitiveness, the French National Research Agency (ANR) supports cooperation and knowledge creation and sharing between university research laboratories and small or medium-sized enterprises. The academic and industrial partners set up a joint research laboratory (LabCom) responsible for projects from their inception to the marketing of the project outcomes. LabComs are co-founded and supported by the [ANR, alongside the academic research units](#) to ensure their sustainability.