

## Deriving the most benefit

*For more than 35 years, I have been working for Framatome – Fuel Division, first in design activities and then in Research and Development programs. In this context, I had the opportunity to work with STUDSVIK – Sweden.*

In particular during the period 2009 – 2016, we have conducted several campaigns of post-irradiation examinations and ramp testing for the licensing of Framatome new fuels (Cr<sub>2</sub>O<sub>3</sub>-doped UO<sub>2</sub> fuel and GAIA fuel). As project leader I had continuously the opportunity to appreciate the professionalism of STUDSVIK collaborators from the purchasing process, the completion of examinations or testing, transport coordination up to the final reporting. All along these steps, STUDSVIK has implemented a very good customer-supplier relationship with regular progress information or meetings

Moreover, at several times STUDSVIK has developed a highly flexible approach by adjusting some examinations during their realization in order to derive the most benefit from them and sometimes beyond what was initially planned. Independent of these particular examples, Framatome in the past often considered STUDSVIK' expertise to examine its products, and to acquire behavioral data with the highest quality standards.

I can also testify that STUDSVIK shows responsiveness and flexibility within the international program SCIP in which Framatome is involved. Here, STUDSVIK carries on tests and develops experimental means rather innovative. In this international environment where participants may have contradictory needs, STUDSVIK is proposing to conciliate all that. Meetings, technical exchanges are held at high level and always with a worthwhile touch of conviviality.

For all these reasons I'm most pleased to recommend STUDSVIK for its expertise, technical and management skills in nuclear fuel analyses.

**Christine DELAFOY**

Fellow Expert  
Framatome SAS



### Facts about Post Irradiation Examination

The non-destructive tests include fission gas release, rod internal pressure, length measurement, visual inspections, Eddy Current (EC) oxide thickness measurement, profilometry as well as gamma scanning and burnup determination.

The destructive tests include Light Optical Microscopy (LOM), Scanning Electron Microscopy (SEM), Transmission Electron Microscopy (TEM), Ring Tensile Testing (RTT), Axial Tensile Testing (ATT) and Hot Vacuum Extraction (HVE) hydrogen measurements.

