

RAPHAEL, a European Project



Launching of the European Project RAPHAEL: to integrate R&D effort for supporting VHTR development

FRAMATOME ANP coordinates the ReActor for Process heat, Hydrogen And Electricity generation (RAPHAEL) project, launched on 15th of April, 2005. This 20 M€ Integrated Project, supported by Euratom in its 6th

Framework Programme, groups 33 of Europe's major nuclear engineering companies, fuel manufacturers, utilities, research organisations, universities, and project management professionals. Furthermore, cooperation is organised with GIF, with Russia and with the OECD-NEA.

RAPHAEL aims at developing the HTR/VHTR technologies in the fields of fuel, materials, components, reactor physics, nuclear safety, and waste disposal. Moreover it includes also a task of overall system integration, in order to satisfy R&D requirements corresponding to actual design needs. To achieve such ambitious objectives, the RAPHAEL project will:

- Provide elements for the verification and validation of the computer tools and models,
- Assess the behaviour and performance of fuel and materials in normal and accident conditions for a normal operating temperature up to 1000°C,
- Analyse the behaviour of spent fuel in disposal conditions,
- Develop innovative technologies for system components, exploring in particular the interfaces with hydrogen production or process heat exploitation,
- Elaborate an acceptable nuclear safety approach,
- Integrate all results in order to provide preliminary assessments of concepts of VHTR plants, coupled with hydrogen production processes,
- Promote the HTR/VHTR technology as a major option for securing future sustainable energy supply in Europe, and organise educational actions to promote careers in the field.

The work is divided into 8 sub-projects, for Core Physics, Fuel Technology, Back-end of the Fuel cycle, Materials, Components development, Safety, System Integration and Project Management.

RAPHAEL is due to deliver its final results by mid-2009. Meanwhile, visit the project at www.raphael-project.org

FRAMATOME ANP SAS	FRANCE
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Belgonucleaire	BELGIUM
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ENEA	ITALY

Dominique Hittner and Vincent Chauvet (1)

(1) Vincent Chauvet is the Consultancy Group for STEP as Project Management Support of RAPHAEL



■ Press Briefing

The European Commission (EC) organised a large presentation of the R&D projects of the 6th Framework Programme in Brussels on November 14th and 15th, "Communicating European Research" (CER). About 250 projects (mainly non nuclear) presented their activities in stands. Only 9 of these projects were selected for a press briefing, and from them, 2 were nuclear, ITER and RAPHAEL, the V/HTR project coordinated by FRAMATOME ANP. The RAPHAEL press briefing was reported in the CER journal. This new open encouragement to RAPHAEL is a significant change of the EC attitude of hidden and light support to nuclear energy and shows the new positive image of V/HTR in the Commission.

Dominique Hittner

Welcome to Edgar

BREAKING NEWS

- As from December 1st, 2005, Edgar Bogusch is in charge of the coordination of the European Commission Project RAPHAEL, replacing Giovanni Bruna. Edgar Bogusch located at Framatome ANP GmbH - RGR in Erlangen is also the Managing Director of HTR GmbH appointed by Framatome ANP GmbH. Long-term experience with projects of the European Commission from his activities as Administration Manager of the EFET Grouping for the ITER project will be of benefit for RAPHAEL.

contact: edgar.bogusch@framatome-anp.com
Phone: +49 (9131) 18-95314

