



## CAlytic membrane REactors based on New mAterials for C1-C4 valorization

CARENA is a large-scale integrating project funded by the EC

### Interview with Caroline Tardivat– Saint Gobain, France.



*Dr. Caroline Tardivat received her PhD in Materials Science in 1998 at the University Paris VI. Since then, she has been working for Saint-Gobain, on different R&D projects and in different locations. She is now head of a joined CNRS-Saint-Gobain research unit, located in one of the Saint-Gobain R&D centers (Cavaillon, France); the team research topics focus on functional ceramic materials, with tailored microstructure and/or conductivity.*

*What made you opt for a career as a researcher? How would you define your job?*

Because **passion is the main driving force** for a researcher !

I am in charge of a joined academic-industrial laboratory : Our mission is to perform scientific studies, on subjects which are of interest for Saint-Gobain. We develop innovative materials or concepts and test their feasibility or benefit in application.

*We'd like to catch a glimpse of your daily activities. What is an average day (or week) for you?*

An average day includes very diverse activities : technical topics remain the core of my activity, however management, reporting, financial and IP skills are also required.

*The CARENA project has been designed with a strong emphasis on multidisciplinary approach. What progress can be expected if chemists work in closer relation with other disciplines?*

This is probably a very strong factor of success for the project. Chemistry alone is not sufficient to solve today's challenges : in real industrial conditions, chemistry is nothing without chemical engineering, fluid dynamics, materials science, physics...

*“multidisciplinary approach is probably a very strong factor of success for the project”*





## CAtalytic membrane REactors based on New mAterials for C1-C4 valorization

CARENA is a large-scale integrating project funded by the EC

*CARENA brings together Research labs and industry. How do you view research-industry collaboration within the framework of the project?*

The CARENA consortium is built in a very complementary way : each partner brings in a specific skill, specific experience. **We experience very fruitful interactions with our partners**, in the framework of this project.

**“The involvement of industrial end-users with experience in the field and in competitive technologies is also a clear advantage”**

*What is the added-value of an EU project such as CARENA compared with other partnerships on the same topic you may be involved in?*

The diversity of disciplines is a clear added value. The involvement of industrial end-users with experience in the field and in competitive technologies is also a clear advantage, **as it allows keeping a realistic view on the solutions we propose.**

### CARENA in brief

Starting date: 1st June 2011  
Project duration: 2011 – 2015  
Number of partners: 19  
Coordinator: Arend de Groot, ECN, the Netherlands  
Programme: FP7-NMP-2010-LARGE- 4  
Project Reference: GA 263007



*Last but not least, let's zoom out on broader themes. Sustainable development and environment issues are key concerns nowadays. How does membrane chemistry fit in the pattern? Would you say chemistry is going through major changes?*

In order to address the predicted future global demands, and given the shortening of mineral feedstocks, **the use of alternative raw materials for chemistry will be unavoidable.** Chemists are learning to play with new building block molecules; chemical processes will need to be adapted too, and membranes may play a role.

**Thank you Caroline for answering my questions, and all the best for CARENA and the other projects you are involved in.**

*Interviewed by Laurence Bosch*

