



## Science@ifpen

Written on 01 December 2014



15 minutes of reading



News

Fundamental Research

Renewable energies

Biofuels and e-fuels

Bio-based chemistry

Responsible oil and gas

Fuels

Petrochemicals

### Special issue: Young Researchers Innovative Fuel Production



To address the major new environmental, economic and social challenges facing

the world today, we, as scientists, have a key role to play through the production and use of increasingly advanced knowledge and solutions. Our job is an exciting but demanding one, combining intellectual curiosity, lifelong learning and an open-minded approach, built around method and rigor.

A research scientist's career starts with a **PhD thesis**: a training experience through research, which, at IFPEN, **combines world-class exploratory research with a view to concrete applications**. The acquisition of knowledge is essential at this stage – going beyond the main scientific domain in question — in order to encourage creative links between different fields and to pave the way for the future career. It is also an opportunity to unleash initiative, since the doctoral student remains the central player of his research.

This issue, which is dedicated to our young — doctoral and post-doctoral — researchers, illustrates the quality of their contributions to IFPEN's research activity, in the field of innovative fuels production.

We hope that you enjoy this issue,

**Hélène Olivier-Bourbigou**, Catalysis and Separation Division, 2014 Scientific Woman of the Year  
— Irène Joliot-Curie prize

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## Summary:

- **Molecular grafts** revive catalysts
  - Optimum siting of **future biofuel facilities**
  - The multiple facets of **amorphous aluminosilicates** (ASAs)
  - The **right catalyst** layers go under the microscope
  - Processes go to **Monte Carlo**
  - Towards the in **silico formulation of fuels?**
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