

Written on 01 May 2013 15 minutes of reading

News

Fundamental Research

Electrified Mobility

IC powertrains



Transport is a fast-evolving sector: a race to improve efficiency, diversification towards **alternative fuels** and the demand for **partially electrified or all-electric systems** are the current driving forces for innovation.

Thanks to the expertise of its researchers and their capacity to tackle new challenges, in collaboration with world-acclaimed academic and leading industry partners, IFPEN is an internationally recognized player in today's transport sector. The global system approach adopted by IFPEN is based on the

development and use of simulation tools, including **large-eddy simulation (LES)** methods.

A recent bibliometric study reveals that IFPEN is the world leader in the field of LES applied to engines. These tools are combined with cutting-edge experimental methods, without ever losing sight of the industrial objectives.

This issue outlines a few significant examples of the work carried out by IFPEN.

We hope that you enjoy it.

Stéphane Henriot, Director of the Energy Applications Techniques Division

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Summary:

- **Combustion** jumps the gun
- Diluting to consume less
- **Electric vehicle motors**: things are heating up!
- **Catalytic converters**: a poisoning model
- Towards **inoxidizable fuels**
- **ENC**: strenght in numbers

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