



MATERIALS FOR TRANSPORT

Innovating materials
and processes for transport



INSTITUT
CARNOT
Chimie Balard Cirimat



Our research contributes to gains in energy efficiency through the development of new materials and innovative fabrication processes. Both approaches allow to reduce the weight and complexity of assemblies and provide improved durability and materials protection. Power electronics is another research focus.



RESEARCH SKILLS AND AREAS

- ▶ Resistant metallic structures
- ▶ Ageing of polymer-based materials
- ▶ Composite hybrid materials with a polymer matrix
- ▶ Brazing materials for power electronics
- ▶ Substitution of heavy metals in electronics
- ▶ Charged conducting resins
- ▶ Transparent conductors
- ▶ Passive components
- ▶ Components and connecting elements for electronics
- ▶ Alloys of structural metals
- ▶ Materials for aircraft turbines and energy production
- ▶ Pollution control of automobile emissions

TARGETED INDUSTRIES

Automotive industry
Aeronautics
Defence
Energy
Environment
Railway



SERVICES WE OFFER

Patents/Licenses • Studies and
Engineering • Technology Platforms •
Advising • Technical Services



INDUSTRIAL INNOVATIONS AND PROJECTS

- ▶ Various technological partnerships
- ▶ Cu-Fe-zeolite catalysts for the ammonia SCR process used in terrestrial vehicles

OUR PARTNERS

Peugeot • IFPEN •
Renault • Safran •
Airbus • Snecma • Thales
• Messier-Bugatti-Dowty
• Liebherr

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