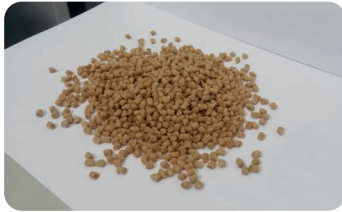


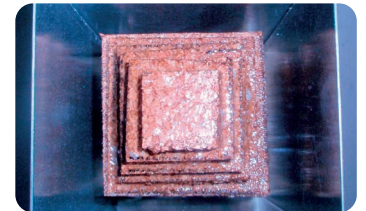


- ▶ Lower environmental impact
- ▶ Reduced material cost
- ▶ Materials from renewable resources
- ▶ Potential use of local resources
- ▶ Valorisation of waste and side streams
- ▶ Use of recycled materials
- ▶ Contribution to circular economy
- ▶ Similar mechanical performances
- ▶ High value-added real natural aesthetic

## INNOVATIONS BY CTAG



New formulations of biobased composites suitable for injection moulding.



## New aesthetics based on natural resources



## MATERIALS INNOVATION

- ▶ 17 patents & 2 pending
- ▶ 20 collaborative projects
  - ▶ 10 EU projects  
H2020, 7FP, Interreg SUDOE & POCTEP
  - ▶ 10 as coordinators
- ▶ 30 customer R&I projects
- ▶ International Collaborations:
  - ▶ 9 automotive OEMs
  - ▶ 18 TIER1
  - ▶ EU excellence research institutes
  - ▶ SMEs with intensive research capacities
- ▶ Synergy with in-house technological capacities
  - ▶ CAE design: structural linear/non-linear analysis, topology optimization
  - ▶ Virtual simulation: crashworthiness, fluid determination, kinematics, process simulation
  - ▶ Physical validation: climatic, vibro-acoustics, fatigue, materials, engine, electronics and ergonomics
- ▶ Deep knowledge of the analysis and application of automotive regulations and standards as well as of the development of new testing strategies for new materials



## LATEST PROJECTS



New biocomposites from renewable resources with improved thermal and fire resistance for manufacturing a truck interior part with high quality surface finishing  
FP7-SME-2013 | [www.naturtruck.eu](http://www.naturtruck.eu)



Virtual platform to promote the use of eco-friendly materials in the automotive sector based on renewable resources  
INTERREG IVA POCTEP | [www.greenmotionproject.com](http://www.greenmotionproject.com)



New biocomposites based on thicket and other forest wastes used as plastic reinforcements for automotive components  
Regional



Research in new biomass-based composites from renewable resources with improved properties for vehicle parts moulding  
7FP-NMP-2009 | [www.ecoplastproject.com](http://www.ecoplastproject.com)



Development of new biodegradable materials from Euro-region natural resources for their application in the car making industry  
INTERREG IIIA