

MATERIALS SCIENCE AND TECHNOLOGY

PNRR - Innovative Materials and Lightweighting for Sustainable Mobility

Funded By	MINISTERO DELL'UNIVERSITA' E DELLA RICERCA [P.iva/CF:97429780584] Politecnico di TORINO [P.iva/CF:00518460019]
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Context of the research activity	<p>The research activities will be carried out in the frame of the project Centro Nazionale per la Mobilità Sostenibile – CNMS in order to consolidate the use of advanced lightweight materials or the application of the principles of lightweight design for reducing part mass, and consequently aircraft and vehicle fuel consumptions and emissions while maintaining high safety standards and high performances.</p> <p>Progetto finanziato nell'ambito del PNRR - CUP E13C22000980001 Spoke 11 Centro Nazionale per la Mobilità Sostenibile – CNMS</p>
Objectives	<p>The research activities will be focused on the development of innovative materials for structural components lightweighting, ensuring high standards of safety, reliability, durability and reduced environmental impact. In particular the research will be focused on the optimization of new compositions of light alloys and the tuning of process parameters, studying their influence on microstructures and mechanical performances in view of the lightweight design in the field of mobility.</p>
Skills and competencies for the development of the activity	<p>Candidates should have a solid engineering background and strong motivation to learn through advanced research.</p> <p>Expertise in materials science, advanced processes and technologies, mechanical behavior and characterization of metallic materials is a plus.</p> <p>Problem solving ability and practical attitude for the design of additive manufacturing parts is also appreciated.</p>