

Politecnico di Milano

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 POLITECNICO DI MILANO



Machine and Vehicle Design:

Master Thesis presentation

POLITECNICO DI MILANO, ITALY
DIPARTIMENTO DI MECCANICA





Topic: Self-Sensing recycled composite material

TITLE: Recycled, self-sensing composite material for battery pack

RESEARCH ACTIVITIES: Within a PRIN project the student will get involved in a cutting-edge project on studying and developing a new carbon-fiber, epoxy-resin recycled composite, doped with a piezoelectric powder for self-sensing purposes. A design for a battery pack shall also be delivered.

METHODOLOGY: experimental and numerical.

DURATION: 6-9 months

CONTACTS:

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POSSIBLE COLLABORATIONS:

DAER, PoliMi

DIN, UniBo (Bologna)



Microindentation technique

TITLE: *Characterization of mechanical properties of materials by means of microindentation technique*

RESEARCH ACTIVITIES:

1. Investigation on microindentation technique combined with reverse engineering to acquire mechanical properties of material
2. Identification of test cases in order to compare results with consolidated approaches

METHODOLOGY: Analytical - Numerical – experimental

DURATION: 9 months

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POSSIBLE COLLABORATIONS:

University of Columbia (USA)

