



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Progetto GreenDISC



Giovedì 19 marzo 2026, alle ore 16:30
Aula H, Dipartimento Scienze Chimiche

Prof. Andrea Porcheddu

☛ GREET Lab – Green Research on Enabling Ecotechnologies for Transition
Dipartimento di Scienze Chimiche e Geologiche, Università degli Studi di Cagliari
(porcheddu@unica.it)

terrà il seminario:

Turning Impact into Innovation: Mechano-chemistry for Greener, Scalable Synthesis

ABSTRACT

Mechanochemistry is evolving from a niche technique into a credible platform for green synthesis and process intensification. This talk will outline how controlled mechanical activation, via ball milling and resonant acoustic mixing, enables practical organic transformations under solvent minimised conditions, often simplifying work up while improving efficiency and robustness. Emphasis will be placed on the design principles that govern reliable performance, including mixing, rheology, interfacial reactivity, and the judicious use of benign liquid additives when required. Selected case studies from recent work will illustrate how mechanochemical routes can accelerate key bond forming steps, enable concise and telescoped sequences, and translate from discovery experiments to reproducible, higher throughput protocols. Sustainability will be discussed using measurable criteria, auxiliary inputs, waste generation, operational simplicity, and energy demand, so that greenness is supported by data rather than assertion.

La presenza della S. V. sarà molto gradita

Prof.ssa Giulia Licini

Prof. Stefano Mammi
Direttore Dipartimento Scienze Chimiche