

MATERIALS SCIENCE AND TECHNOLOGY

Ateneo - Design bio-based photocurable ceramic slurry for 3D printing

Funded By	Politecnico di TORINO [P.iva/CF:00518460019]
Supervisor	SMEACETTO FEDERICO - federico.smeacetto@polito.it
Contact	SANGERMANO MARCO - marco.sangermano@polito.it SALVO MILENA - milena.salvo@polito.it
Context of the research activity	Ceramic slurry, 3D printing, photocurable binders, glass particles
Objectives	In the frame of sustainable material production, it is intended to Design ceramic slurry exploiting bio-based photocurable binders so to use them in 3D printing of ceramic structures. The reactivity of the slurry will be evaluated towards UV-Curing in order to find suitable photocurable formulations for DLP 3D printing. The printed structures will be pirolized to achieve ceramic 3D-printed structures.
Skills and competencies for the development of the activity	Ceramic, glass and polymer science and technology