

Università degli Studi di Padova

FunGLASS- Centre for functional and surface-functionalized glasses

The scope of the project is the upgrade of existing Centre of excellence for ceramics, glass, and cement, to an internationally recognized Centre for functional and surface-functionalized glasses. The new Centre will be specialized to cutting edge research in the area of glasses with special functional properties (luminescence, electric), and to functionalization of conventional glasses with the aim of modification of their properties, and adding new functionalities. These would comprise reflection, and anti-reflection coatings for solar energy production and optoelectronic applications, increase of glass strength, enhancing the corrosion and leaching resistance of commercially produced glasses, self cleaning/antibacterial coatings of glasses for medical applications, including modification/enhancement of bioactivity. The research topics would include also utilization of waste materials for production of glasses and glass-ceramic materials with high added value. The project will be aimed at establishment of the Centre as a joint venture of all participating institutions, creation and formalizing the coordination and management structures, upgrading the research infrastructure, expansion of personal capacity of the existing center to the level facilitating achievement of the critical mass for R&D activities, with special attention paid to hiring high quality researchers and engineers from abroad, in order to create creative international environment, and formation of close ties with regional and European glass industries for efficient knowledge transfer.

UNIPD Team Leader: Enrico Bernardo

Department: Industrial Engineering

Coordinator: Trenčianska Univerzita Alexandra Dubčeka v Trenčíne- TNUAD (Slovakia)

Other Participants:

Friedrich- Alexander Universität Erlangen Nürnberg- FAU (Germany)

Friedrich Schiller Universität Jena (Germany)

Agencia Estatal Consejo Superior de Investigationes Cientificas (Spain)

University of Padova (Italy)

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Find out more: https://cordis.europa.eu/project/rcn/197110_en.html