SupERB - Research Project Fact Sheet

Title of Project	Novel integrated approach for seismic and energy upgrading of existing buildings - completed
Project Acronym	SupERB
Funding Program	The Research Promotion Foundation Programmes for Research, Technological Development and Innovation "Restart 2016-2020".
Project Identifier	Smart Growth, Integrated Projects
Total Budget	1146921 €
Starting – Ending Date	12/2018-11/2021
Consortium	1. Cyprus University of Technology, Coordinator (CY) 2. University of Cyprus (CY) 3. Frederick Research Center (CY) 4. Tsircon Co. Ltd (CY) 5. Geoinvest Ltd (CY) 6. AuDeSy Ltd (CY) 7. Limassol Municipality (CY) 8. Technical Services on Construction Products, Ministry of Interior (CY) 9. Energy Service, Ministry of Energy, Commerce, Industry and Tourism (CY) 10. Cyprus Scientific and Technical Chamber ETEK (CY) 11. Department of Civil Engineering, University of Patras (GR)
Project Objectives	General: The objectives of the Project entitled "Novel integrated approach for Seismic and EneRgy upgrading of existing Buildings" (SupERB) are to a) integrate innovative materials and determine techniques enabling the simultaneous upgrading of both seismic resistance and energy efficiency of existing buildings, b) evaluate these techniques by testing both small and full-scale specimens, and c) propose a holistic and novel methodology for the optimum upgrading of existing buildings for seismic resistance and energy efficiency, taking into account economic, technical, geo-location, durability and environmental factors.
Work Packages	1. WP1 Project Coordination 2. WP2 Dissemination of results 3. WP3 Investigation of mechanical and thermal properties of available materials 4. WP4 Establishment of criteria for target performance level 5. WP5 Laboratory-based design and testing of the PCM related upgrading system 6. WP6 Testing of the upgrading system for seismic and energy performance evaluation 7. WP7 Optimisation tool and upgrading methodology development 8. WP8 Application study 9. WP9 Software development and methodology guidelines
External References	https://doi.org/10.1016/j.conbuildmat.2022.129984 https://doi.org/10.1016/j.dib.2020.106599