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Ceramics for a circular Economy



Recycling and innovation are the keywords of Centro Ceramico, a University Consortium with headquarters in Bologna and Sassuolo



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entro Ceramico has worked for more than forty years to support research in the ceramics industry, a key sector for the local economy (90% of Italian tile production is concentrated in the Sassuolo District - Emilia-Romagna Region). With the University of Bologna and Confindustria Ceramica as main partners, the Consortium deals with research and technological tests for the Companies of the sector - with its laboratories in Bologna and in Sassuolo - and cooperates with European and international research institutions for projects concerning ceramics in all their forms: from building to refractory bricks, through to sanitaryware and the artistic ceramics. European projects play an important role in this versatile activity.

"We participate in several projects every year - explained Director Maria Chiara Bignozzi, Associate Professor of Materials Science and Technology at DICAM, University of Bologna - often working with companies in the Sassuolo District, that are key partners for our researches". Currently, the European activities of Centro Ceramico include two Life Projects. The first of them, "SILIFE", regards worker safety and aims to reduce the health hazards caused by respirable

crystalline silica deriving from quartz, which is used in many industrial productions, from rubber to foundry. The project set and achieved the scope of reducing its toxicity.

The second one, "CERSUDS", uses in-stock ceramic tiles to install drainage flooring (for cycle paths and/or pedestrian paths). The project involves also the Municipality of Fiorano Modenese, who will host a reproduction of the demonstrator in a school area. "It is an important project, because it is based on the circular economy concept - Bignozzi added - which is a key issue for us". Still on the subject of recycling, Centro Ceramico recently completed two European projects: H2020 "REMEB" Project, which produced ceramic membranes from waste materials, and

"WINCER" Project, which led to the production of porcelain stoneware tiles containing 85% of recycled materials also from other industrial sectors. ■



SILIFE PROJECT: PROTOTYPE DEVICE TO PRODUCE QUARTZ DUST BY USING COATING AGENTS



CERSUDS PROJECT: DEMONSTRATOR - INSTALLATION OF CERAMIC MODULES