Professor António Curado from the Polytechnic Institute of Viana do Castelo (IPVC), Portugal visited the Department of Environmental Engineering from May 16 to May 20, 2022 through the Erasmus+ Teaching Mobility Program. His main field of research is energy efficiency, indoor air quality, and sustainability. On May 20th 2022 he presented to staff and students of the Department of Environmental Engineering his research work on:

ENERGY EFFICIENCY, THERMAL COMFORT AND INDOOR AIR QUALITY IN SOUTHWESTERN EUROPE

This work provides a state-of-the-art strategy for recommending passive retrofitting of social housing buildings based on a thermal comfort assessment that is achieved by implementing adaptive models based on experimental in situ measurements.

His research contributes significantly to the upgrading of the well-being of social housing neighborhoods where people generally don't have access to heating or cooling systems. The proposed passive retrofitting strategies, even though they may lead to some initial investment, in a short period of time costs are reduced by increasing energy efficiency.

The most relevant publications of this work are the following:

Curado, V. P. de Freitas (2019). "Influence of Thermal Insulation of Facades on the Performance of Retrofitted Social Housing Buildings in Southern European Countries", Journal Sustainable Cities and Society, Volume 48, 1015134. URL: https://doi.org/10.1016/j.scs.2019.101534

J.M.P.Q. Delgado, Nuno M.M. Ramos, Ricardo Almeida, Maria Lurdes Simoes, Pedro Pereira, António Curado, Sara Soares, Silvia Fraga (2018). "Indoor hygrothermal conditions and quality of life in social housing: A comparison between two neighbourhoods", Journal Sustainable Cities and Society, Volume 38. pp. 80-90. URL: https://doi.org/10.1016/j.scs.2017.12.016