



## **UPC-UWM Joint Workshop**An example of interuniversity cooperation

Date: Wednesday, September 14th, 2022

Place: Face to face: EPSEB (Room 0.4), UPC, Dr. Marañón, 44-50, 08028, Barcelona

Online: Google Meet link will be distributed to the interested people

## **PROGRAMME**

09:45 Opening and Introduction

**PhD Carles Serrat**, Dept. of Mathematics, Barcelona School of Building Construction, Universitat Politècnica de Catalunya-BarcelonaTECH, Barcelona, Catalonia, Spain

09:50 Thermal comfort in energy-efficient buildings. Application of renewable energy sources in HVAC systems of Polish climatic conditions

**Dr. Eng. Aldona Skotnicka-Siepsiak**, Dept. of Building Engineering, Institute of Geodesy and Civil Engineering, Faculty of Geoengineering, University of Warmia and Mazury in Olsztyn, Poland

10:10 Laser scanning and reverse engineering of historic buildings

**Dr. Eng. Joanna Pawłowicz** and **Dr. Eng. Aldona Skotnicka-Siepsiak**, Dept. of Building Engineering, Institute of Geodesy and Civil Engineering, Faculty of Geoengineering, University of Warmia and Mazury in Olsztyn, Poland

10:30 Optical Flow Method for Measuring Deformation of Structure

**Dr. Eng. Marcin Bujko**, Department of Building Engineering, Institute of Geodesy and Civil Engineering, Faculty of Geoengineering, University of Warmia and Mazury in Olsztyn, Poland

10:50 Models and foundations of precise satellite positioning

**Dr. hab. Eng. Sławomir Cellmer**, Dept. of Geodesy, Institute of Geodesy and Civil Engineering, Faculty of Geoengineering, University of Warmia and Mazury in Olsztyn, Poland

11:10 Machine learning algorithms in the classification analysis based on satellite imagery

**Dr. Eng. Michal Bednarczyk**, Department of Geodesy, Institute of Geodesy and Civil Engineering, Faculty of Geoengineering, University of Warmia and Mazury in Olsztyn, Poland

11:30 Coffee Break

12:00 So far cooperation between UWM and UPC in the context of joint research projects

**Dr. Eng. Jacek Rapinski**, Director of the Institute of Geodesy and Civil Engineering, Faculty od Geoengineering, University of Warmia and Mazury in Olsztyn, Poland

12:15 The Innoglobo program and research in existing buildings functionality

**PhD Carles Serrat** and **Verónica Royano**. Dept. of Mathematics and Dept. of Architectural Technology, Barcelona School of Building Construction, Universitat Politècnica de Catalunya-BarcelonaTECH, Barcelona, Catalonia, Spain

12:30 ERASMUS+ program and academic cooperation prospects

**Dr. Eng. Marcin Bujko**, Department of Building Engineering, Institute of Geodesy and Civil Engineering, Faculty of Geoengineering, University of Warmia and Mazury in Olsztyn, Poland

12:45 Experiencing EPSEB with an Erasmus

**PhD Laia Haurie**, Dept. of Architectural Technology and Assistant director of International Relations and head of studies for master's degrees Barcelona School of Building Construction, Universitat Politècnica de Catalunya-BarcelonaTECH, Barcelona, Catalonia, Spain

13:00 Closing

**PhD Carles Serrat**, Dept. of Mathematics, Barcelona School of Building Construction, Universitat Politècnica de Catalunya-BarcelonaTECH, Barcelona, Catalonia, Spain