# RESEARCH AND DEVELOPMENT OF SENSITIVE ROBOTIC SYSTEMS COOPERATING WITH HUMANS IN 3D PRINTING AIMS R2P2 PROJECT WITH A BUDGET OF 19,5 MILLION CZK

Universities from four countries met in a project funded by the European Horizon 2020 program. As part of the R2P2 project, an initial meeting of partners was held this week at CxI.

“The project focuses on human-machine interaction. Its basic pillars are robotics in industrial production, physiotherapeutic and rehabilitation robotic systems, and so-called additive technologies, ie 3D printing, This is mainly used as a technological procedure for creating smart prosthetic devices that are tailored to users,“ says Aleš Richter , the principal investigator of the project.

The guarantor of 3D printing is Jiří Šafka from the Rapid Prototyping Laboratory. Sensitive robotics is handled by Jan Koprnický from the Faculty of Mechatronics, Informatics and Interdisciplinary Studies. We hosted the initial meeting of the project this week at the Institute for Nanomaterials, Advanced Technologies and Innovation (CxI). It was attended by representatives of all partner universities: the French Institute of National Polytechnique de Toulouse (INPT) and the University of Toulouse III - Paul Sabatier (UPS), the Spanish Mondragon Goi Eskola Politeknikoa Jose Maria Arizmendiarrieta, S.Coop (MGEP), and the Danish Aalborg Universitet (AAU).

UPS partners specialize in lighting systems in robotics and they deal, for example, with the effects of lighting technology on humans. INPT specializes in sensor systems in robotics. Danish and Spanish colleagues also work in the field of robotic systems.We will work with these partners on the R2P2 project over the next three years. On the Czech side, scientists from CxI and the Faculty of Mechatronics, Informatics and Interdisciplinary Studies will participate in the project under the auspices of TUL.“The project aims are joint international conferences and exchange of scientists and doctoral students in excellent pillars,” says Professor Richter.

With a total of € 80 billion in funding for projects under this program, Horizon 2020 is the EU's main instrument for promoting science, research and innovation in 2014-2020. It is therefore one of the most important EU programs.

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