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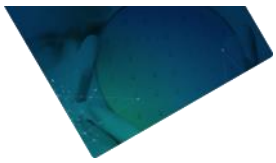


Project SR4SB wins 2022 EURIPIDES^2 Innovation Award with its multi-functional robotic device for smarter biotechnological processing

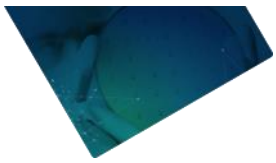
Paris, 25 November 2022- SR4SB (Sensing Robotics for Smarter Biotechnology), a project within the EUREKA Cluster EURIPIDES^2 managed by Industry Association AENEAS, was today presented with the 2022 EURIPIDES^2 Innovation Award at the EFECS2022 event.

The project was chosen for its innovative work on smart electronics that can be applied to biotechnological processes. Biotechnology is increasingly important in delivering breakthrough products and technologies in crucial areas including food and agriculture, energy, manufacturing, and the discovery of novel drugs and treatments. The technologies developed in SR4SB are particularly applicable to the production of monoclonal antibodies. These are used in the treatment of many debilitating and life-threatening diseases, including cancers.

Today, drug companies and academic researchers make use of robots in mixing liquid biomaterials to run a variety of assays. However, challenges remain in handling and processing these liquids because the quantities available are so small, typically measured in microliters. The SR4SB project aimed to address this challenge.

The SR4SB partners developed a multi-functional robotic device equipped with sensors to actuate a wide range of biotechnological processes for more accurate performance, observation, and control of the biotechnological process. The sensing technology is based on a set of 96-well plates (which contain the material for processing) for the downstream development of antibodies. Processing is monitored using various printed sensors directly integrated into the well plates or multichannel reservoirs for different purposes [conductivity, pH, height]. The information is then sent to the robotic device. This is designed to make the purification process 'technologically holistic' via in-process controls, chromatography techniques, and high-throughput downstream [purification] processes using smart electronics.

Initially developed for the processing of monoclonal antibodies, the SR4SB technology has the potential to be extended to wider groups of cell lines and proteins. As such, it could bring major benefits for smarter biotechnology worldwide. Ms. Zeynep Zülfiye Yıldırım Keleş, from Turgut Pharmaceuticals, accepted the award on behalf of the four project partners, which included companies and research organizations from Portugal and Turkey.



About EURIPIDES²

EURIPIDES² is a EUREKA Cluster promoting the generation of innovative, industry-driven, pre-competitive R&D projects in the area of Smart Electronic Systems. Guided by the Electronic Components & Systems (ECS) Strategic Research and Innovation Agenda (SRIA), EURIPIDES² is the innovation hub for smart sensors, smart power modules, electronic hardware platforms, and more generally electronic product integration and embedded systems for automotive, aeronautics and space, security, medical electronics, smart everywhere (cities, home, wearable), and industrial electronics. EURIPIDES² facilitates access to national funding in Europe and beyond. As a EUREKA Cluster, the network is open to participants worldwide. Euripides² is managed by the Industry Association AENEAS

More on EURIPIDES²: https://www.euripides-eureka.eu
More on AENEAS: https://aeneas-office.org

About SR4SB

SR4SB is an RD&I project consortium involving 4 partners. The project partners are Turgut Pharmaceuticals (Project Leader), BeyonDevices, CeNTI, and Robotek Otomasyon Technolojileri. The project was co-funded by the Scientific and Technological Research Council of Türkiye (TÜBİTAK) with 1509-International Industry R&D Projects Support Program (Project No: 9170058). This work was developed in the scope of DOSEA Portuguese project (n. 33664), which was co-financed by Portugal 2020, under the Operational Program for Competitiveness and Internationalization (COMPETE 2020) through the European Regional Development Fund (ERDF).