VolkswagenStiftung

ProLAB - Project Laboratory Across Borders

Initiative: Kurswechsel – Forschungsneuland zwischen den Lebenswissenschaften und Natur- oder Technikwissenschaften

Ausschreibung: Qualifizierungskonzepte

Bewilligung: 16.03.2020

Laufzeit: 4 Jahre

Projekt-Website: https://www.tu-braunschweig.de/prolab

Cross-disciplinary research provides the solution to major social and scientific challenges of the future. This project is motivated by the establishment of a self-reliant Project House "ProLAB" at TU Braunschweig, which will offer joint labs and offices. Young researchers with different scientific backgrounds will jointly work on temporary projects at the interface of engineering, natural and life science with the major goal to combine the home discipline with a solid understanding of the complementary research fields. ProLAB will start with scientists from electrical engineering and life sciences to investigate the generation and storage of electrical power using biological systems and bioelectrical devices for sensing applications. Students at ProLAB will have the opportunity of a joint PhD thesis across faculty borders with individual graduations in their home faculties. To broaden the internal knowledge, international experts will support an educational program. Further, a telepresence robot will be used to expand research at ProLAB by (inter)national lectures.

Projektbeteiligte

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Open Access-Publikationen

Bacteria detection in a Kretschmann geometry flow cell at a plasmon-enhanced interface with spectroscopic ellipsometer
Construction and Application of a Plasmid-Based Signal Peptide Library for Improved Secretion of Recombinant Proteins with Priestia megaterium
Functionalization of an Extended-Gate Field-Effect Transistor (EGFET) for Bacteria Detection