

Summary of projects from shortlisted EuroTeQ Collider teams at TalTech participating at the EuroTeQathon.

Challenge - Creation of setup for enabling bio-tribo-corrosion testing

Team name - Bio-Tribo-Corrosion

Summary of the project

This project aims to improve the reliability, safety, and lifespan of biocompatible implants, such as hip and knee joints, by developing a comprehensive bio-tribo-corrosion test setup. The setup simulates the combined biological, tribological, and corrosive environments in the human body, addressing the limitations of current testing methods and reducing premature implant failures. It benefits patients, healthcare providers, and the environment by extending implant lifespans, reducing medical waste, and conserving resources, aligning with SDGs related to health, responsible consumption, and innovation.