RhoTech

RhoTech - New Strategy for Hydrogen Production by Purple Bacteria using Fruit- and Milk-Wastes

Institute for Applied Biotechnology (IAB)

Project leader	Prof. Dr. Hartmut Grammel
Researcher	Beryl Cancro, Andreas Witt
Financing	Bundesministerium für Wirtschaft und Energie
Program	7. Energieforschungsprogramm "Innovationen für die Energiewende"-Förderbereich 3.7 "Energetische Nutzung biogener Rest- und Abfallstoffe
Partners	Institut für Biomaterialien und biomolekulare Systeme (IBBS), Abt. Bioenergetik, Universität Stuttgart Fraunhofer-Institut für Produktionstechnik und Automatisierung IPA, Stuttgart KE-Technologie GmbH, Stuttgart
Duration	01.01.2020 – 31.12.2022
Project description	The project should demonstrate the potential of the purple bacterium *Rhodospirillum rubrum* for large-scale hydrogen production using fruit- and milk-wastes as substrates. This novel process ("dark photosynthesis") does not require light, is cheap to run, and readily up-scalable. Parallel to hydrogen production, the "dark photosynthetic" metabolic regime can be utilized for the simultaneous production of high-value industrial products, e.g. terpenoids. The "dark photosynthesis" process still allows the possible use of a low energy illumination for further enhancement of hydrogen production efficiency. It is intended that the project should be an important contributor to a future hydrogen economy and also circular bioeconomy in Germany. The future market potential of the "dark photosynthetic" process will be analyzed by a systematic study of the integration of the process into various energy sector scenarios.

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PROJEKT	RhoTech
ANSPRECHPARTNER/IN	Prof. Dr. Hartmut Grammel

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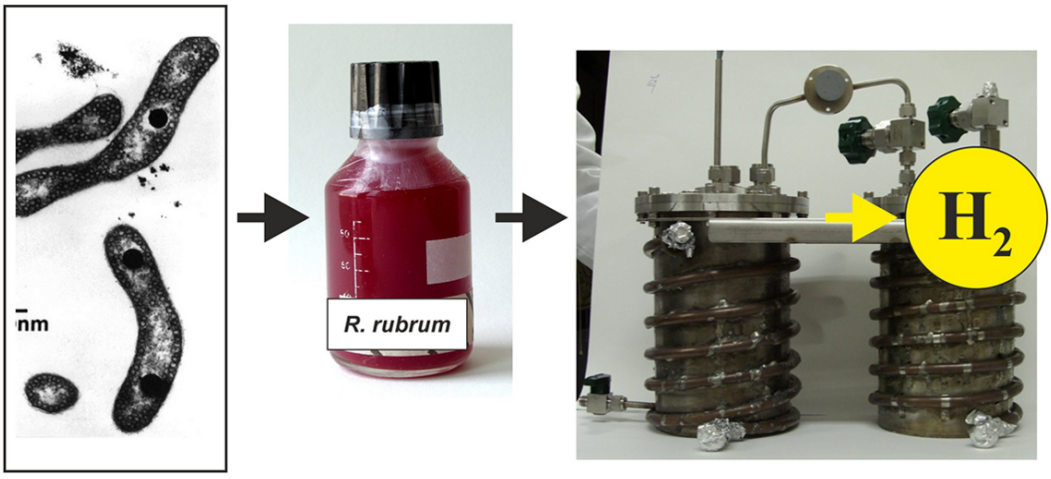

https://www.energetische-biomassenutzung.de/en/projects-partners/details/project/show/Project/rhotech-637/

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