THE AIM
Increasing competitiveness of renewable-based production processes via increasing raw material and energy efficiency.

THE AIM
Decreasing CAPEX & OPEX via developing cost-effective technologies for fermentative production and downstream processing.

MORE INFORMATION
PRODIAS webpage
http://spire2030.eu/prodias
Framework Horizon 2020
http://ec.europa.eu/programmes/horizon2020

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ONE PROJEKT
ONE TEAM
ONE GOAL

THE CHALLENGE
Cost-competitive integration of renewable raw materials into industrial value chains.
SUCCESS FACTOR: CONSORTIUM PHILOSOPHY

Dedicated to innovation
Multi-beneficiary work-packages combining talents, creativity, expertise, and application orientation.
Trust & cooperation
Transparent and open communication to overcome technical, organizational, and cultural hurdles.
One project – one goal
Mindset focused collective success valuing individual contribution.

CHEMISTRY LOVES SEPARATION

PRODIAS partners pushed the limits of concentrating enzymes to above 40% D.S. without measurable activity loss. Thinking “hybrid”: the combination of freeze concentration and ultrafiltration led to a cost-effective novel concentration system.

Mother and son
Scalable test centrifuge “Explorer” and a commercial-size equivalent.

THINK OUT OF THE BOX

PRODIAS successfully developed an efficient apparatus & software combination allowing for efficient adsorption / desorption process. Result: high purification efficiency from particles containing feed stream.

Bench-top scale-up
Novel EBA-SMB system enables for bench-top scale-up.

PUSHING THE LIMITS

PRODIAS partners pushed the limit of concentrating enzymes to above 40% D.S. without measurable activity loss. Thinking “hybrid”: the combination of freeze concentration and ultrafiltration led to a cost-effective novel concentration system.

PRODIAS framework enabled a 25% performance increase in a commercial fermentation process thus saving resources and energy in DSP.

Successful transfer
Intensity process implemented in commercial production.

PROCESS UNDERSTANDING IS KEY

PRODIAS teamwork enabled a 25% performance increase in a commercial fermentation process thus saving resources and energy in DSP.

SUCCESS STORY

Starting in 2015, PRODIAS so far developed 4 demonstrator units (TRL 7) and 6 implemented research standards (TRL 4). Academics partners working on ground-breaking methods to predict physicochemical behavior of unknown mixtures.
Numerous ideas were born based on PRODIAS findings – exciting work for 2018 and beyond.