Circular lignin materials from well-defined functional building blocks

Fact Sheet

Project Information

CIRCULIG

Grant agreement ID: 101075487

Funded under
European Research Council (ERC)

DOI
10.3030/101075487

Total cost
€ 1 500 000,00

EU contribution
€ 1 500 000,00

Start date
1 March 2023

End date
29 February 2028

Coordinated by
STOCKHOLMS UNIVERSITET
Sweden

Project description

Turning waste lignin into valuable products

Lignin is a naturally occurring material which gives trees structural support and helps them build resistance to biochemical degradation. The forest industry currently burns the majority of lignin in their energy and chemical recovery processes. Funded by the European Research Council, the CIRCULIG project aims to use lignin as a building block for materials that can be recycled, thereby extending the life cycle of forest products. Researchers will investigate new synthesis and assembly approaches to overcome obstacles to lignin use, focusing on improving solvent stability and functionality of lignin nanoparticles, and generating lignin fibres incorporating inorganic and metal nanoparticles. CIRCULIG will open new frontiers for sustainable lignin-based materials that can be recycled, which combine functionality and design.
Fields of science

natural sciences > earth and related environmental sciences > environmental sciences
natural sciences > chemical sciences > catalysis
engineering and technology > nanotechnology > nano-materials

Programme(s)

HORIZON.1.1 - European Research Council (ERC) - MAIN PROGRAMME

Topic(s)

ERC-2022-STG - ERC STARTING GRANTS

Call for proposal

ERC-2022-STG

See other projects for this call

Funding Scheme

ERC - Support for frontier research (ERC)

Coordinator

STOCKHOLMS UNIVERSITET

Net EU contribution

€ 1 500 000,00

Address

Universitetsvagen 10
10691 Stockholm
Sweden

Region

Östra Sverige > Stockholm > Stockholms län
Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 0,00

EC signature date 8 December 2022
Last update: 16 December 2022

Permalink: https://cordis.europa.eu/project/id/101075487

European Union, 2023