

# Innovative Synthesis in Continuous-Flow Processes for Sustainable Chemical Production (SYNFLOW)

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## Research Areas



Basic Research

## At a Glance

- Status: **Completed Consortium**
- Year Launched: **2013**
- Initiating Organization: **European Commission Seventh Framework Programme (FP7)**
- Initiator Type: **Government**
- Location: **Europe**

## Abstract

The vision of the Innovative Synthesis in Continuous-Flow Processes for Sustainable Chemical Production (SYNFLOW) project is to shift the paradigm from batch-wise, large-volume processes comprising many separate unit operations to highly integrated and yet flexible catalytic continuous-flow processing. This will be achieved by a unique integrative approach combining molecular understanding of synthesis and catalysis with engineering science in process design and plant concepts.

## Mission

The SYNFLOW approach integrates SYNthetic methodologies for catalytic molecular transformations with FLOW chemistry in continuously operated reactor systems. In order to overcome the limitations of the traditional linear work flow for the development of medium- to small-scale processes, SYNFLOW will take a conceptually new approach based on an integrative design of molecular catalysts, their synthetic application, and the reaction engineering concepts. This new paradigm will be developed and demonstrated on the basis of selected industrial case studies to provide a well-defined basis for its

generic application.

## Consortium History

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Sept. 1, 2010: Project started

## Structure & Governance

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The SYNFLOW project is organized into eight Work Packages. Chemists and engineers work together to develop continuous catalytic processes in an integrated, more efficient process design approach.

## Financing

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The research leading to these results has received funding from the European Commission's Seventh Framework Programme (FP7/2007-2013) under grant agreement no. 246461.

## Links/Social Media Feed

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Homepage

<http://www.synflow.eu/>

Twitter

[@synflow\\_project](https://twitter.com/synflow_project)

## Points of Contact

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RWTH Aachen University

## Sponsors & Partners

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