



ECOSYNTH
CHEMICAL CONTRACT RESEARCH



*Clean chemistry
for advanced green chemistry challenges*

Dr. Jean-Baptiste Joos, COO
EcoSynth NV

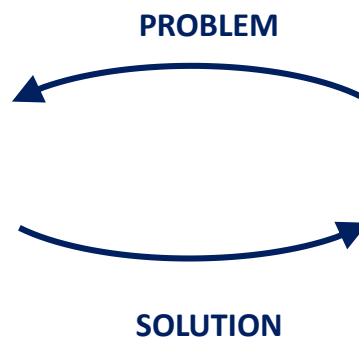
Pitch Perfect and boost the European Bio-economy

Brussels Airport, Belgium
November 7th, 2018

Chemical Contract Research



Contract research



Industry
*Chemistry, Pharma,
Energy, Food, ...*

CORE BUSINESS

NEW MOLECULE DEVELOPMENT

- *Organic molecules*
- *Up to kg scale*
- *All industries and applications*

PROCESS DEVELOPMENT

- *Side stream value adding*
- *Industrial process intensification*
- ***Biomass feedstock***

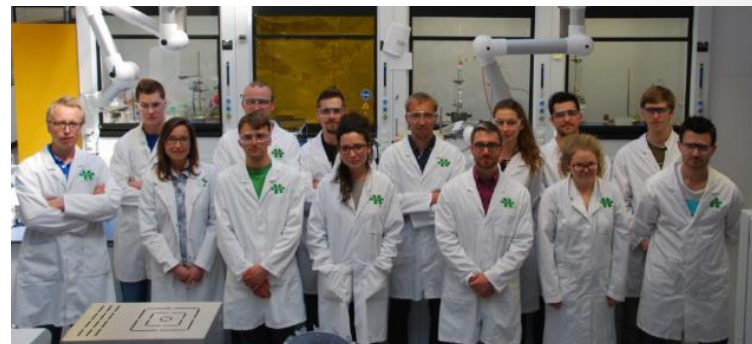
PRODUCT STABILITY

- *Pharma, food, chemistry*
- *Oxidation, photodegradation, hydrolysis, ...*

Resources

SKILLED SCIENTIFIC STAFF

19 PEOPLE: PHD'S IN CHEMISTRY, PHARMACY, BIO-ENGINEERING
CHEMICAL ENGINEERS, MASTERS AND BACHELORS IN CHEMISTRY



STATE OF THE ART LABORATORY

INSTALLED 2017
DEINZE, BELGIUM



SCIENTIFIC INSTRUMENTS

LITERATURE

SCIFINDER

SYNTHESIS

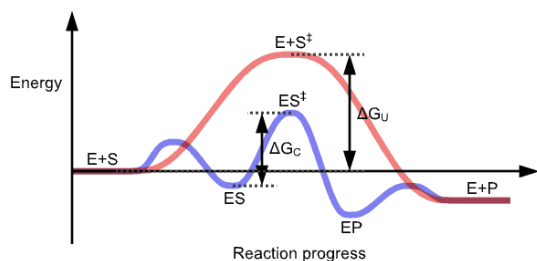
Batch 5L reactor, pressure reactor, ozone
Flow Automated module, photochemistry
(incl. innovative HANU flow reactor),
electrochemistry, hydrogenator, gas/liquid
interface

ANALYSIS & PURIFICATION

Chromatography UPLC, HPLC, GC, prep flash
Detection MS, UV, ELSD, FID
Spectrometer IR, UV-Vis, EPR, NMR *remote*
Wet analysis

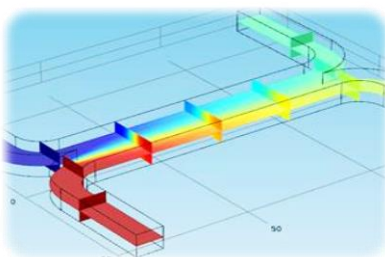
Expertise

CATALYSIS



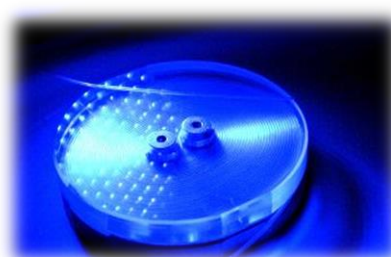
Higher selectivity
WO2011157645A2

FLOW CHEMISTRY



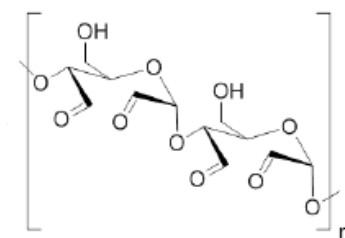
Safety and efficiency
Shorter time to market

PHOTOCHEMISTRY



Unexplored chemical space
Shorter synthetic route

BIOBASED CHEMISTRY



dialdehyde starch

Chemical modification
of biomaterial

CASES

NEW BUILDING BLOCKS FROM PHOTOCHEMISTRY OF RENEWABLES

GREEN OXIDATION METHODOLOGIES DEVELOPED FOR APPLICATION ON BIO-BASED COMPOUNDS

USE OF OZONE FOR TARGETED AND CONTROLLED MODIFICATION OF SUITABLE BIO-SUBSTRATES

Collaboration possibilities

CONTRACT WORK

Quotation ad hoc

Deliverables timely, as agreed

Flexible project adjustments in course

IP clear agreements on transfer

Subcontracting in funded, subsidized projects

PARTNERING

Projects as partner, on scope with research interests and expertise

Experience regional, national, international (European, e.g. Marie Curie)

SME status interesting funding benefits



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