

CATALYTIC CONVERSION OF BIOMASS INTO TRANSPORTATION FUELS

M.Sc. (Chem.)
Audrey Hernoux



audrey.hernoux@chydenius.fi



AIM OF THE RESEARCH

Development of novel, chemical (catalytic) reaction pathways for the production of butanol and higher bioalcohols.

MAIN FIELDS OF THE RESEARCH

- Evaluation of former and novel procedures for chemical production of butanol
 - Chemical degradation of biomass to obtain intermediate product(s)
 - Chemical steps to transform the intermediate product(s) to end product(s)
- Development and optimization of catalytic reactions for the production of butanol and higher alcohols
 - Catalyst synthesis and characterization
 - Alcohol(s) synthesis over heterogeneous catalyzed reactions
- Sustainability analysis and evaluation of atom economy of the new processes



The research will be carried out at the Oulu University (Kokkola University Consortium Chydenius), supervised by prof. Ulla Lassi

A Joint Degree with prof. J-M Leveque,
Universite de Savoie, France

UNIVERSITY of OULU
OULUN YLIOPISTO



JYVÄSKYLÄN YLIOPISTO
KOKKOLAN YLIOPISTOKESKUS
CHYDENIUS