

SusChem 2017 Brokerage Event

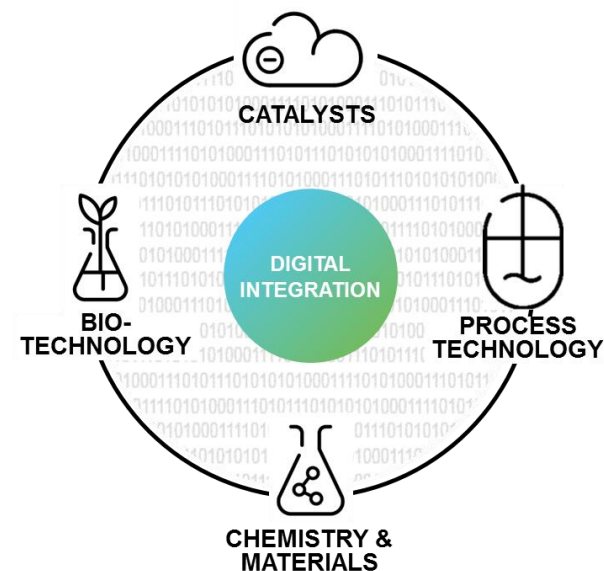
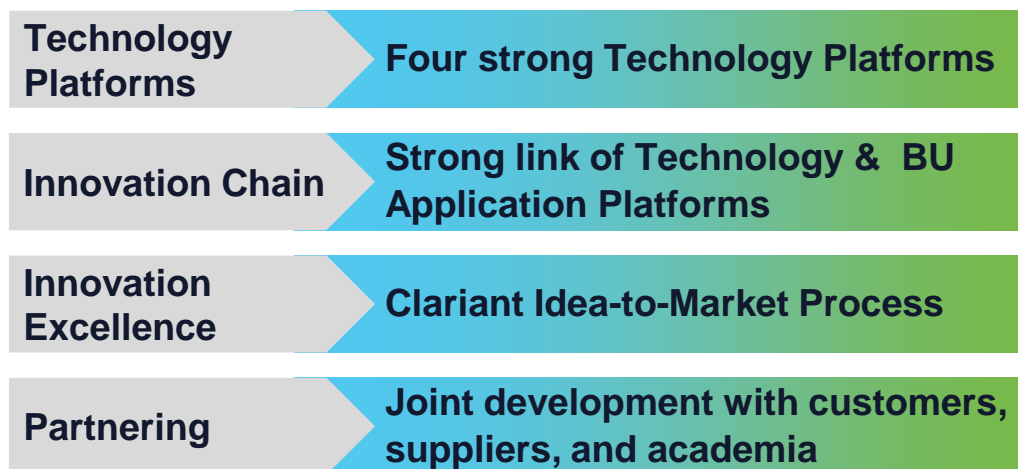
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Processing of Material Feedstock using Plasma

CE-SPIRE-02-2018: Processing of material feedstock using non-conventional energy sources (IA)

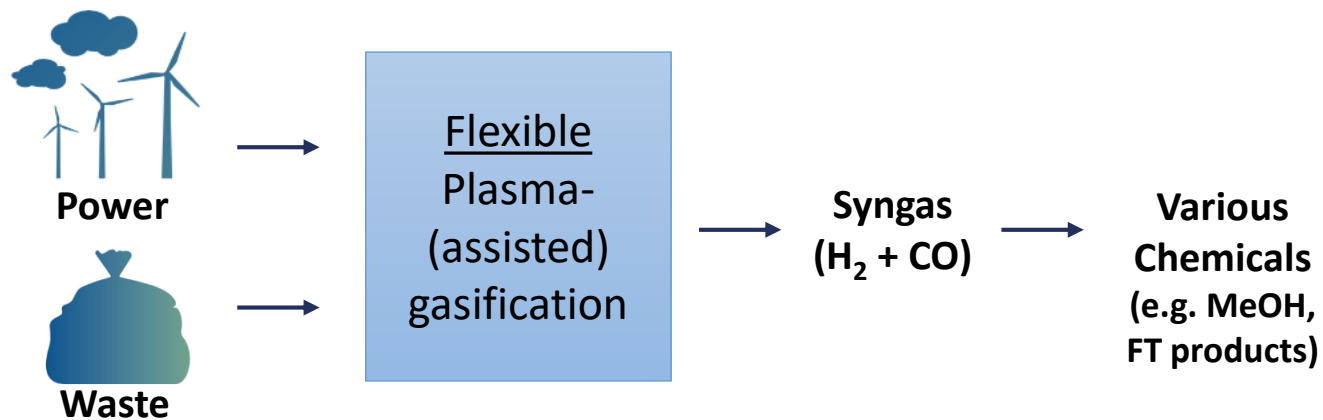
CLARIANT - A GLOBALLY LEADING SPECIALTY CHEMICALS COMPANY

- Clariant in Europe (2016): > 7500 employees, ~ 2 billion CHF sales (34 % of global)
- Sustainability as strategic pillar and strong focus on innovation through R&D and system solutions, tailor-made for customer needs and markets



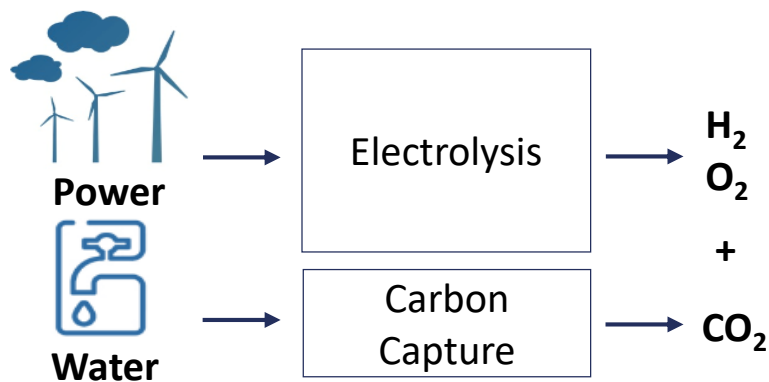
PLASMA GASIFICATION AS KEY TECHNOLOGY FOR WASTE VALORIZATION

- Demonstration of a waste-to-value concept using plasma gasification technology (small-scale, modular, decentralized)
- Utilization of renewable energies and valorization of waste streams via a highly flexible and tolerant process
- Alternative to common Power-to-X approaches through direct syngas production as ideal platform for value-added chemicals



EXPECTED IMPACT OF OUR PROJECT PROPOSAL

- Strongly related to CE-SPIRE-02-2018: Processing of material feedstock using non-conventional energy sources (IA)
- Efficient use of fluctuating renewable energies by a robust process based on plasma technology
- Industrial realization of Circular Economy and Zero Discharge concepts
- Attractive downstream opportunities via high quality syngas



Plasma gasification as an alternative to PtX concepts based on electrolysis

- waste valorization possible
- no CO_2 supply necessary

WE ARE LOOKING FOR PARTNERS

KNOWN PARTNER

Name/Profile

Role in the project

Clariant

Technology end user (waste utilization)

Downstream expertise and catalyst supplier

Demonstration in industrial environment

PARTNER SEARCH

Institute/University

Project Coordination

Additional end user

Application for other waste streams

Plasma experts

Expertise in plasma physics and operation

Plant designer/manufacturer

Design and layout of demonstration plant

Equipment provider

Plasma technology & process control

Others disciplines

Process systems engineering, economics, etc.

Contact details for project idea

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Christian Dreiser



Stefan Brand