Scuola Politecnica e delle Scienze di Base
Università degli Studi di Napoli Federico II

Dipartimento di Ingegneria Chimica, dei Materiali e della Produzione Industriale
Università degli Studi di Napoli Federico II

Istituto di Ricerche sulla Combustione
Consiglio Nazionale delle Ricerche

Smart Power System – Distretto Alta Tecnologia sull'Energia della Regione Campania

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Sezione Libri Antichi della Biblioteca di Ingegneria "Ferdinando Gasparini"
Collegio di Ingegneria – Piazzale Tecchio 80, Napoli

26 luglio 2017, ore 11:30

Prof. Dr.-Ing. Thomas Kolb

Karlsruher Institut für Technologie (KIT)
Engler-Bunte-Institut, Chemische Energieträger – Brennstofftechnologie, EBI ceb
Institut für Technische Chemie, Vergasungstechnologie, ITC vgt

The bioliq®-BtL-process line: from basic research to pilot plant operation

Synthetic compounds from biomass (also referred to as BTL, biomass to liquids) may contribute to biofuel and biochemical production to a considerable extent. To overcome the logistical hurdles connected with the industrial use of large quantities of biomass, the de-central-centralized Bioliq® concept has been developed. It is based on a regional pretreatment of biomass for energy densification by fast pyrolysis. The intermediate referred to as biosyncrude allows for economic long-range transportation. Collected from a number of those plants, the biosyncrude is converted into synthesis gas, which is cleaned, conditioned, and further converted to fuels or chemicals in an industrial plant complex of reasonable size. The Bioliq® process chain will be surveyed with a focus on the R&D pathway from basic research to pilot plant operation and a glimpse of its economics and feasibility.