abowe
Implementing Advanced Concepts for Biological Utilization of Waste

Pilot A, Novel Biorefinery in Poland

- Testing site: ZGO Gac Ltd (Zaklad Gospodarowania Odpadami Sp. z o.o.)
- Primary waste to feed in: potato waste from a chip factory near Gac.
- Target product 2,3 Butanediol -> plastics, synthetic rubber, anti-icing agents, cosmetics, textiles…
- Also separately collected biowaste added to the process.
- Responsible person: Assistant Professor Emilia den Boer, Wroclaw University of Technology
- Bioprocess expert: Adjunct Professor Elias Hakalehto, Finnoflag Oy
- Downstream processing: Engineer Tim Freidank and Professor Thorsten Ahrens, Ostfalia University of Applied Sciences, Germany

Output from testing period in Poland and Introductory seminar in Wroclaw

Introductory Seminar was held in Wroclaw on 2.7.2014. There were also presented results from the two-month testing period of Pilot A.
The production of 2,3-butanediol and some other organic compounds were at high levels. This was remarkable achievement by the Polish-Finnish co-operation. In fact, Finnoflag biorefinery method has now been producing successful yields both in Finland and now in Poland by the Polish group led by Assistant Professor Emilia den Boer from Wroclaw University of Technology.
The director of the testing site ZGO Gac Ltd Andrzej Sobolak gave fine presentation on the construction of their new waste treatment plant.
Moreover, Professor Ryszard Szpadt from Wroclaw University of Technology gave lecture describing the potential biomasses in the Lower Silesia region which turned out to contain huge potentials of bioenergy production.

The 2,3-butanediol Downstream processes have been studied in co-operation with Ostfalia University of Applied Sciences (Eng. Tim Freidank and Professor Thorsten Ahrens).
Researcher Tuomas Huopana from University of Eastern Finland was characterizing the joint uses of biomass sources in biochemical and biogas production.
Adjunct Professor Elias Hakalehto introduced potential applications of Finnoflag technology of various fields, including microbiological purification of brown coal for environmental friendly combustion.
All news with respect to ABOWE tests and potential future applications have produced very potential indications.

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