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报告人简介:

分别在德国雷根斯堡、柏林和法国巴黎学习物理和化学工程后，Udo Mühlbauer 在 1998 年在伍德伊文达菲瑟有限公司- 当时仍是卡尔菲瑟工业公司，开始他的职业生涯作为研发工程师。从第一天他便介入 UIF 的



PLAneo®工艺开发。Udo 进行在实验室的第一次试验、设计和操作伍德伊文达菲瑟的聚乳酸小型工厂并对设计和建造伍德伊文达菲瑟的工业规模聚乳酸试验工厂有重大影响，也是该厂的经理。作为聚乳酸产品经理，他负责伍德伊文达菲瑟 PLAneo®工艺的所有技术事项。他是 UIF 聚乳酸技术几项专利的共同创作者。UIF 第一个 PLA 项目，他深度参与设计和工程管理以及作为现场开车经理。

Udo Mühlbauer

Profile of the Author:

After his studies of Physics and Chemical Engineering in Regensburg, Berlin and Paris, Udo Mühlbauer began his career at Uhde Inventa-Fischer as R&D engineer in 1998 – at that time still Karl Fischer Industrieanlagenbau. From the first day he was involved in the development of UIF's PLAneo® process. Udo conducted the first experiments in the lab, designed and ran Uhde Inventa-Fischer's PLA miniplant and had a significant influence on the design and construction of Uhde Inventa-Fischer's industrial scale PLA pilot plant, whose manager he is. As the PLA Product Manager he is responsible for all technological aspects of Uhde Inventa-Fischer's PLAneo® process. He is joint inventor of several patents on UIF's PLA technology.

He is deeply involved in the design and engineering of UIF's first PLA plant and he is the start-up manager of this plant.

伍德伊文达菲瑟的技术用以生产聚乳酸和其他生物聚合物

摘要: 伍德伊文达菲瑟(简称 UIF)是一家思维超前及不断创新的工程设计公司。核心竞争力就是设计和建造出最先进的聚合工厂生产聚酯，聚酰胺还有聚乳酸(PLA)。

UIF 提供可持续技术，都是集合工程专家，聚酯聚合物专有技术专家和在全世界广泛工业应用的实践经验。

在我司成熟工艺生产商品化聚合物的基础上， UIF 已经开发出新技术作为生物基和/或生物可降解聚合物的生产，如 PBS（一种从丁二酸和丁二醇合成的脂肪族聚酯）PBAT 或 PEF（基于 2,5 呋喃二羧酸有着优异性能的聚酯）。

我司已研发一套为聚乳酸(PLA)生产的全新工艺。研发已包含 UIF 对缩聚反应器和开环聚合的设备的长久经验。

生产生物聚合物的所有工艺的试验工厂都已准备好。

此次演讲聚焦上述各方面。它将包括：

工艺技术的细节

UIF 专有设备的亮点

UIF 试验工厂的范围和作用

生物聚合物的性能和质量

Uhde Inventa Fischer's Technologies to Produce PLA and Other Biopolymers

Abstract: Uhde Inventa-Fischer (UIF) is a forward-thinking, innovative engineering company. The core competence is the design and construction of state-of-the-art polymerisation plants to produce polyesters and polyamides as well as polylactide (PLA).

UIF offers sustainable technologies that combine engineering expertise, specialist know-how of polymers and applied experience in a wide range of industrial

applications worldwide.

On the basis of our proven processes to produce commodity polymers UIF has developed new technologies for the production of biobased and/or biodegradable polymers, as for example PBS, an aliphatic polyester synthesised from succinic acid and butanediol, PBAT or PEF, a polyester with outstanding properties, based on 2,5-furan dicarboxylic acid.

A complete new process has been developed for the production of Polylactic Acid (PLA). Incorporated in the development was UIF's long-term experience with equipment for polycondensation reactions and ring-opening polymerizations.

For all processes to produce biopolymers pilot plants are available.

The presentation focuses on the above mentioned aspects. It will include:

Details of the process technology

Highlights of the UIF's proprietary equipment

Scope and purpose of the pilot plants

Properties and qualities of the biopolymers