

李雅娟

报告人简介:

李雅娟，山西省人大代表，山西金晖集团副总裁、金晖兆隆高新科技股份有限公司董事长。

2012年金晖兆隆成立以来，李雅娟女士负责金晖兆隆生物降解聚酯项目整体运营工作。经过几年的时间，金晖兆隆已发展成中国生物降解塑料行业领先企业之一，成为全球生物降解塑料的推动者。同时，金晖兆隆为创造更清洁、更健康的环境做出突出贡献。



Janice Li

Profile of the Author:

Janice Li, representative of Shanxi Provincial People's Congress, Vice President of Shanxi Jinhui Group, Chairman of JinHui ZhaoLong High Tech Co., Ltd.

Since the founding of JinHui ZhaoLong in 2012, Ms. Janice Li has been in charge JinHui ZhaoLong's overall operations. After several years, JinHui ZhaoLong has become one of the leading enterprises in China's biodegradable plastics industry and a promoter of biodegradable plastics usage worldwide. JinHui ZhaoLong has been making outstanding contributions of creating a cleaner and healthier environment.

生物降解化学纤维

摘要:2017 年全球化学纤维的使用总量已经超过了 5000 万吨。合成纤维在纺织、服装、医疗、包装、建筑、军事等等领域都得到了广泛的应用，但与此同时大量废弃的化学纤维由于难以回收利用且无法降解，正在对人类的生存环境造成了不可估量的污染。

金晖兆隆高新科技股份有限公司成立于 2012 年，项目总规划年产生物降解塑料 100,000 吨，现已形成年产 20,000 吨爱柯沃得®生物降解聚酯原料，10,000 吨爱柯维尔®生物降解聚酯改性材料。金晖兆隆作为中国生物降解塑料的领军企业之一，认为生物降解材料 PBAT（聚对苯二甲酸-己二酸丁二醇酯）在化学合成纤维应用领域有很大的潜力，因 PBAT 分子链中含有大量脂肪链使其可能具有与氨纶相当的弹性，同时 PBAT 分子链中大量亚甲基在纺丝牵伸过程中的自结晶可以显著提高丝线的强度与耐老化性。

金晖兆隆高新科技股份有限公司在 PBAT 纺丝方向做了大量研究，并取得了技术上的突破，成功使用以 PBAT 为主的生物降解合金材料通过熔融纺丝加工得到预取向（POY）生物降解纤维，并完成后续处理得到全拉伸（FDY）生物降解纤维。目前在 6 喷丝板样机完成中试实验，1500 转、2000 转 2500 转速度下 36f/72f POY 丝线纤度稳定，基本可实现单饼卷绕 10kg 丝线不断丝，强力全拉伸处理后强力接近 4CN/dtex，正在积极将研发成果转变为工业化生产。

金晖兆隆将继续以“致力绿色产业发展，呵护自然造福人类”为使命，为全球环保事业做出自己最大的贡献，让子孙后代生活在更加绿色的世界里。

Biodegradable Chemical Fiber

Abstract: The total amount of chemical fiber consumed has exceeded 50 million tons globally in 2017. Synthetic fibers have been widely used in textile, clothing, medical, packaging, construction and military areas. But at the same time, due to the disability in recycling and degradation property, discarded chemical fibers are causing immeasurable pollution to human living environment.

Jinhui Zhaolong High Technology Co.,Ltd was established in 2012. The total planned annual biodegradable plastic capacity is 100,000 tons. Currently, the production capacity has reached 20,000 tons/yr for Ecoworld® biodegradable polymer raw materials and 10,000 tons/yr for Ecowill® biodegradable polymer compound materials. As one of the leading companies in biodegradable plastics in China, Jinhui Zhaolong believes that the biodegradable material PBAT (butyleneadipate-co-terephthalate) has great potential in the application of chemical synthetic fiber. Due to a large amount of aliphatic chain contained in molecular chain, PBAT might possess the equivalent elasticity as spandex, meanwhile the self-crystallization of a good deal of methylene groups in the PBAT molecular chain during the spinning drawing process can significantly improve the strength and aging resistance of the yarn.

Jinhui Zhaolong High Technology Co.,Ltd has done large amount of research focused on PBAT spinning. Technical breakthrough has been made with the biodegradable alloy material, which based on PBAT, successfully used to obtain partially oriented yarn (POY) biodegradable fiber by melt spinning and fully drawn yarn (FDY) biodegradable fibers by completing the subsequent treatment. At present, the pilot has been completed tested in the 6 spinneret die head. The denier of 36f/72f POY is stable at 1500 rpm,2000 rpm and 2500 rpm. 10kg yarn can be winded in single spin round without breakage, and the strength even can reach 4CN/dtex after full stretch processing. Current research and development results were positively transforming into industrial production.

“Committing to the Development in Green Industry, Caring for Nature& Benefitting Mankind” is the mission of JinHui ZhaoLong. We will continue contributing to global environmental protection and creating a greener world for future generations.