

2022.09.08

Nippon Paper Industries Co., Ltd.

Mitsui Chemicals, Inc.

Nippon Paper and Mitsui Chemicals Partner to Develop Biocomposite

Nippon Paper Industries Co., Ltd. (Tokyo: 3863; President: NOZAWA Toru) and Mitsui Chemicals, Inc. (Tokyo: 4183; President & CEO: HASHIMOTO Osamu) are set to partner in the development of a new biocomposite with a high content of cellulose powder, a woody biomass material.

The two companies intend to develop products and bring them to market at the earliest possible opportunity, with plans to expand into a wide range of fields - including daily necessities, containers, building materials, household appliances and auto parts. Aimed at bringing to market a new biocomposite that offers a high level of industrial stability in terms of both quality and supply, the tie-up will see the partners tap into their stable materials supply chains and leverage the advanced materials manufacturing and development technologies they have cultivated over many years.



Cellulose powder



The new biocomposite

- **The new biocomposite**

With cellulose powder - a woody biomass material - as its principal ingredient, this new composite will have the same moldability as plastic. Further, the composite's use of woody biomass as its main constituent will help to cut greenhouse gas emissions by minimizing the use of fossil-fuel-derived virgin material when compared to ordinary petrochemical resins. This will in turn assist in achieving a zero-carbon society.

- **Nippon Paper's role and strengths**

Nippon Paper has cultivated cellulose powder manufacturing technology and used it to develop a biocomposite with outstanding moldability. Nippon Paper now intends to provide Mitsui Chemicals with a stable supply of high-quality cellulose powder by taking advantage of its powder manufacturing technology, which is in turn underpinned by a diverse array of pulp manufacturing technologies. Under the slogan "Shaping the future with trees," Nippon Paper aims to continue contributing to better living and cultural progress.

- **Mitsui Chemicals' role and strengths**

Mitsui Chemicals aims to combine cellulose powder from Nippon Paper with the compounding technologies cultivated by the Mitsui Chemicals Group to develop a new strong, readily workable biocomposite with a high cellulose powder content. Plans are to tap into the existing sales network for Mitsui Chemicals' own compound resins and use this to offer samples to customers. Mitsui Chemicals will seek to provide solutions to various social challenges generated by accelerating environmental changes, and aims through this to meet its target of achieving carbon neutrality by 2050.

Contacts for inquiries about this project

Public Relations Office, Nippon Paper Industries Co., Ltd.

Tel: +81-3-6665-1016

Corporate Communications Division, Mitsui Chemicals Inc.

Tel: +81-3-6253-2100

Web form https://form.mitsuichemicals.com/corporate/cc_pr_csr_en

Inquiries about cellulose powder for use in biocomposites

Biomass Material Sales Promotion Department, Nippon Paper Industries Co., Ltd.

Tel: +81-3-6665-1020

Inquiries about the new biocomposite

Composite Materials Business Development Division, Mobility Solutions Business Sector, Mitsui Chemicals, Inc.

Tel: +81-3-6253-3534