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PRESS RELEASE

**Lamiflex and BGreen Technologies
announced the winners of the Lamiflex Challenge #BioTopics22**

Ponte Nossa and Bergamo – Lamiflex, leader in the production of key components in composite material for a wide range of sectors, and BGreen Technologies, an innovative start-up active in the industrial biotech sector, announced the winners of the Lamiflex Challenge for the second edition of BioTopics, at Kilometro Rosso in Bergamo.

BioTopics, in its second edition, was a share and divulgation path concerning the themes of biotechnology, sustainability and circular bio-economy, where professionals, companies and universities have the chance to share experiences and projects in the name of sustainability with the public, providing new knowledge, inspiration and unexpected insights.

The Lamiflex Challenge was created as a BGreen Technologies project in partnership with Digix and the Association of Italian Biotechnologists, with the aim of giving students and experts in the field the opportunity to get involved and work on-hands on an innovative solution concerning a sustainability theme that belong to a concrete business context.

The request of Lamiflex was based on the opportunity of making use of bio-composites in order to transform some traditional company processes into more sustainable models. In particular, finding a valid replacement of the current tertiary packaging in traditional material, used for international shipment, with bio-composite materials of high technological value and which would allow for reducing the overall carbon footprint in the logistic chain.

“Bio-composites present high performances in terms of mechanical properties, several processing benefits, are light-weighted materials and have renewability, affordability, eco-compatibility, recyclability and degradability properties. It’s precisely thanks to these properties – said Giacomo Ghilardi, Chief Operating Officer of BGreen Technologies- that they have increasingly attracted the attention of the packaging industry, in particular, in all the applications in which conventional composites have to face issues and limitations, mainly concerning the economic and environmental aspects. The project presented by the challenge winners brings benefits and additional properties, which are useful for achieving the goals of sustainability, to which Lamiflex aims and provides further development insights for the use of these innovative materials.”

Sara Fernanda Orsini, Ph.D. student in Science and Nanotechnology of Materials at the Bicocca University, Carlo Esposito and Antonio Lanzillotti, both master’s degree students of the Industrial Biotechnologies course at the Bicocca University in Milan, are the three members of the winning team, called “BioNext”.

The presented project involved the development of a new packaging concept based on the use of innovative materials such as a bio-based plastic (PLA), a thermoplastic polymer increasingly used to replace traditional plastic, and lignin, which can be found in the production process waste and, so, with a special focus on circularity.

“The research process concerning the material was for us extremely interesting, but the possibility of facing the criticalities that come from the real implementation of what was learned at the theoretical level and the company real production needs was even more educational. We are really satisfied with the achievement and have contributed to a research project in cooperation with a local company and experts in the field”, told Carlo Esposito.

The project was not limited to the choice of materials but also involved the design and planning phases, with the conception of interlocking alveolate panels: they allow for the reduction of the quantity and therefore also the total

weight of materials used in the production of the panels themselves; the panels are thought to be combined in different sizes depending on the necessities, further reducing, by doing so, the environmental impact of the panels' transport.

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Note to editors:

Lamiflex Spa

Lamiflex®, headquartered in Ponte Nossa (Bergamo), is a leading company in the production of components in composite material for a wide range of sectors, including textile machinery, aerospace, medical and industrial, and applications such as Special Rollers and Tubes in CFRP for flexographic printing machines, for the converting, paper, packaging industry and many more. Part of the IteMa Group since 2017, Lamiflex® offers the widest range of in-house technologies available on the market – among them, Solvent Impregnation, Filament Winding, Pultrusion & Pullwinding, Wrapping, Progressive and Multi-chamber Press, Autoclave, RTM and Low-Pressure Moulding Compound. Thanks to over forty-five years of manufacturing composite materials expertise, an entirely dedicated to the design of customized solutions, based on the specific needs of the customer, R&D team and the guarantee of the highest quality standards, Lamiflex® is the perfect partner to make Customers' dream composite product come true. For further information, visit <http://www.lamiflex.it/>

BGreen Technologies S.r.l.:

BGreen Technologies is an innovative start-up based within Kilometro Rosso in Bergamo. From its foundation, which took place at the end of 2019, it is engaged in industrial biotechnologies, with the aim of integrating processes and microbial products in different industrial contexts, providing sustainable alternatives in comparison with the current situation. In addition to the microalgal study, aimed at integrating in different markets, among them, the cosmetic, pharmaceutical, nutraceutical, fodder and bioplastic, the BGT activity also focuses on the study of filamentous fungi. In particular, at the end of 2021, BGT started the study of these microorganisms for the synthesis of fungal pigments, to be used to replace the petrol-based counterparts in sectors, such as the textile, food and cosmetic ones. BGT is also involved with the scientific consultancy concerning industrial biotechnologies and green chemistry; lastly, it cooperates with the IRIS Consortium in Bologna as technical partner in the fields of sustainability and LCA studies. For further information, visit <https://bgreen.tech>

Digix S.r.l.:

Digix is a consulting firm which mainly works in the Italian market, with the aim of supporting the companies in facing the challenges posed by the digital transformation. Its name means Digital Experience, which resumes its value proposition, which is to provide a complete digital experience, which goes from the strategic consulting to the implementation of digital solutions, which allow the customer to be agile and to improve the business. For further information, visit <https://digixteam.com/>