



Progress beyond

Leonardo and Solvay launch joint research lab for thermoplastic composites

- The broader adoption of thermoplastic composites in aerospace - namely for primary structures - is requiring the development of new materials and new manufacturing processes so as to reach the needed higher performance and manufacturing efficiency
- By creating the “Joint Research Virtual Lab”, Leonardo and Solvay decided to tackle this challenge by joining efforts and bringing to the table the complementary skills and expertise of the two Companies
- The bulk of the activities will be carried out in Leonardo’s plant in Grottaglie (Taranto, Italy), and in Solvay’s Material Science and Application Center (MSAC) in Brussels
- According to Roberto Cingolani, Leonardo’s Chief Technology & Innovation Officer: *“This collaboration with Solvay is a significant step in research on advanced materials, which are part of the R&D programs to be developed by the Leonardo Labs. The research on advanced materials will enable improved performance and products’ security to boost a circular and efficient production system”*
- Nicolas Cudré-Mauroux, Solvay Chief Technology & Innovation Officer highlighted the importance of addressing the material development and its processing technologies with an holistic approach because *“increasing the manufacturing speed is as important as achieving the required performance”*. Solvay is committed to developing high performance lightweight materials key to a more sustainable aviation industry

Rome, 2 February 2021 – Leonardo and Solvay announced the launch of a joint research lab dedicated to the development of novel composite materials and production processes critical for the future of the aerospace industry. This collaboration represents an important milestone in enabling a step-change in composite part manufacture and in reducing environmental impacts.

The Leonardo Solvay Joint Lab will focus on thermoplastic “engineered materials” and in particular on welding and automatic lamination (in-situ consolidation) of complex and large aerospace structures with the goal of maximising product properties, increasing part production efficiency and extending the product life cycle. The focus is on thermoplastic composites as they offer unique benefits to users such as lightweighting for more fuel efficient aircraft and they do not require autoclave for part consolidation thus enabling the development of much more sustainable production lines. Leonardo and Solvay believe that this agreement will be the foundation for further platform collaboration on short and mid-term applications in aerospace and beyond.

“This collaboration with Solvay is a significant step in research on advanced materials, which are part of the R&D programs to be developed by the Leonardo Labs.” underlines **Roberto Cingolani, Leonardo’s Chief Technology and Innovation Officer**. *The research area, central to Leonardo, is a key factor of competitiveness, and it will make it possible to improve the performance and safety of our products, to expand its potential, with a direct return on the environmental impact and consumption of resources, boosting a circular and efficient production system”*.

*“This collaboration is in line with the strategy of Solvay to strengthen our leadership position as supplier of innovative composite materials for aerospace and other markets” added **Nicolas Cudre-Mauroux, Solvay Chief Technology and Innovation Officer.** “We believe that the partnership with Leonardo will boost our ability to develop breakthrough thermoplastic composite solutions and substantially increase their adoption in aerospace, contributing to reducing fuel consumption and CO₂ emissions”, he concluded.*

The *Leonardo Solvay Joint Lab* will be based at the Leonardo Lab in Grottaglie (Taranto) and at Solvay’s MSAC - Material Science Application Center in Brussels. In addition, the joint laboratory will have access to both companies’ internal infrastructures and collaborations with institutions, research centers and universities, in Italy and abroad, with a view to open innovation.

Leonardo, a global high-technology company, is among the top ten world players in Aerospace, Defence and Security and Italy’s main industrial company. Organized into five business divisions, Leonardo has a significant industrial presence in Italy, the United Kingdom, Poland and the USA, where it also operates through subsidiaries such as Leonardo DRS (defense electronics), and joint ventures and partnerships: ATR, MBDA, Telespazio, Thales Alenia Space and Avio. Leonardo competes in the most important international markets by leveraging its areas of technological and product leadership (Helicopters, Aircraft, Aerostructures, Electronics, Cyber Security and Space). Listed on the Milan Stock Exchange (LDO), in 2019 Leonardo recorded consolidated revenues of €13.8 billion and invested €1.5 billion in Research and Development. The Group has been part of the Dow Jones Sustainability Index (DJSI) since 2010 and is named as sustainability global leader in the Aerospace & Defence sector for the second year in a row of DJSI in 2020.

Learn more at www.leonardocompany.com

Leonardo Press Office

leonardopressoffice@leonardocompany.com

Ph.: +39 06 32473313

Twitter: @Leonardo_live

Linkedin: @Leonardo

Instagram: @leonardo_company

Solvay is a science company whose technologies bring benefits to many aspects of daily life. With more than 24,100 employees in 64 countries, Solvay bonds people, ideas and elements to reinvent progress. The Group seeks to create sustainable shared value for all, notably through its Solvay One Planet plan crafted around three pillars: protecting the climate, preserving resources and fostering better life. The Group’s innovative solutions contribute to safer, cleaner, and more sustainable products found in homes, food and consumer goods, planes, cars, batteries, smart devices, health care applications, water and air purification systems. Founded in 1863, Solvay today ranks among the world’s top three companies for the vast majority of its activities and delivered net sales of €10.2 billion in 2019. Solvay is listed on Euronext Brussels (SOLB) and Paris and in the United States, where its shares (SOLVY) are traded through a Level I ADR program. Learn more at www.solvay.com.

Claire Michel

+44 7 977 53 04 10

claire.michel@solvay.com

Nathalie van Ypersele

+32 478 20 10 62

nathalie.vanypersele@solvay.com

Brian Carroll

+32 471 70 54 72

brian.carroll@solvay.com

Peter Boelaert

+32 479 309 159

peter.boelaert@solvay.com