## INTERNATIONAL WORKSHOP

Design and Manufacturing of Advanced Composite Structures for Automated Production

# Skolkovo Innovation center, Hypercube

#### **ORGANIZERS**

The Skoltech Center for Advanced Structures, Processes and Engineered Materials (ASPEM)

### Skoltech

Skolkovo Institute of Science and Technology

#### **PARTICIPANTS:**

- Producers of automated hardware providers
- Software vendors with 3D modeling, simulation and design tools
- Developers of integrated cad, cam software tools
- Material vendors of automated manufacturing
- Technical universities and research institutions
- Enterprises of composite materials and structures
- Leading industrial companies from aerospace, shipbuilding, transportation, construction, and manufacturing industries: United Aviation Corporation, HC Composite, the Shipbuilding and Shiprepair Technology Center, United Rocket and Space Corporation

The purpose of the workshop is to reflect on the state of the art in automated manufacturing of composites, recognise future challenges and opportunities, and identify major directions for the scientific community to move forward in a coherent and expedient manner.

The workshop will focus on essential ingredients of automated manufacturing; namely, hardware, software, and material technologies for production of composite parts and their assemblies.

The Skoltech Center for Advanced Structures, Processes and Engineered Materials (ASPEM) pursues a mission to develop a holistic approach to product development via integrated materials, design and manufacturing of advanced composites for Aeronautical, Space, Automotive, and Infrastructure applications. ASPEM is envisioned to have 7 Research Laboratories one of which is the Automated Manufacturing with full laboratory facilities that are to be used for research as well as providing services for industry. The workshop will help form a roadmap for the growth of the ASPEM laboratories, in particular the Automated Manufacturing laboratory.

The Skoltech Centers for Research, Education and Innovation (CREI) are the key building blocks in the effort to develop a world-class graduate university that combines education, research and innovation seamlessly, complements the existing research and educational system in Russia and develops a gateway between Russia and the rest of the world. Importantly, CREIs will build capacity of all kinds at Skoltech, and will be designed to have broad impact on Russia.

