Laboratory Name: Turkish Additive Manufacturing Technologies Research Laboratory

Company: GE Aviation

Laboratory Manager: Onur Önder

Laboratory Manager Short Biography:

As the manager of Turkish Additive Research Laboratory at GE Marmara Technology Center, Onur completed his undergraduate and postgraduate studies on Metallurgy and Materials Engineering department in the Middle East Technical University. He completed his Welding Engineering studies in METU Welding Technologies and Non-Destructive Inspection Center. He started his professional career in 2005 and he took office as consultant and inspector in various local and foreign projects in 2005-2009, and in this period, he provided consultancy services in connection with R&D projects and European Union Projects for SMEs. He worked as materials and process engineer in TUSAS- Turk Havacılık ve Uzay Sanayi A.S. In this position, he took a role in the initial design, detailed design and development stages of the New Generation Primary Training Airplane (HURKUS) development program, carried out works in connection with the development of non-destructive inspection and welding technologies. After his employment in TAI, he worked as lead engineer for welding and Joining in General Electric Marmara Technology Center and Six Sigma Black Belt and manager of Repair Development Center, respectively.

He worked in numerous projects in connection with advanced technology joining methods and additive manufacturing. Some of the important projects are repair of the jet engine compressor components with laser welding method, development of the next generation laser process methods, identification and validation of welding parameters for jet engine components manufactured with electron beam welding and building tip geometry with additive manufacturing method in order to repair of gas turbine components.

Research Area: Additive Manufacturing Design & Technology Maturation