Vijay Soni

Vijay Soni is working with GE HealthCare Technology & Innovation Center (GE HTIC), Niskayuna NY, USA as a Lead Engineer (since 2021). Vijay Soni is responsible for developing the cutting-edge cryogenic systems and novel technological concepts of cryogenic cooling techniques. He is associated with different research projects in GE HealthCare namely superconducting generator for wind turbine, aircraft cryogenics for superconducting motor propulsion using HTS with NASA-CHEETA program, C13 polarizer SpinLab system, ultra-wide bore MRI magnets, and ultra-high field MRI magnets. Vijay Soni is serving as a member of the independent advisory board of NASA University Leadership Initiative, IZEA (Integrated Zero Emission Aviation) using a robust hybrid architecture. Vijay Soni also serves as a technical editor for Magnet Technology and Applied Superconductivity Conference special issue of IEEE Transaction of Applied Superconductivity. He has performed peer-review service for different journals and research. Vijay Soni has been associated with several patents and publications as a primary author or co-author on different topics in Cryogenic Engineering, vacuum technology and applied superconductivity. Before joining GE HealthCare, Vijay Soni worked as a Research Scientist at Cryogenics & Applied Superconductivity Group, Inter University Accelerator Center (IUAC), New Delhi, India (2016-2021) where he was associated with IMRI program for the development of 1.5 T MRI system in India. Vijay Soni has received his master's degree (M.Tech.) in Cryogenics & Vacuum Technology from NIT Rourkela, India in 2015. He has submitted his PhD work, analysis of quench and quench induced mechanical stresses of 1.5 T MRI system in cryogenics & applied superconductivity at department of mechanical engineering, JCBUST, Faridabad, India. His area of specialization are cryogenic cooling techniques of large-scale superconducting magnets, all electric aircraft cryogenics, liquid hydrogen storage & transfer, cryocoolers, cryogenic heat exchanger, heat pipe, cryogenic heat transfer, superconducting magnet systems, and vacuum technology.