



Center	Center for Carbon Materials
Job Title	Post-Doctoral Fellow (Nanocarbons Characterization Scientist)
Job Description	The Center for Carbon Materials at KFUPM is seeking a highly motivated and skilled Nanocarbons and Characterization Scientist to join our research team. The successful candidate will play a pivotal role in the synthesis, analysis, evaluation, and interpretation of nanocarbon-based materials, supporting innovation in energy storage, nanocarbon composites, and advanced manufacturing applications. The scientist will work closely with interdisciplinary teams to develop and apply state-of-the-art characterization techniques to understand material properties at the nanoscale while ensuring safe handling of nanomaterials.
Job Responsibility	• Conduct advanced characterization of nanocarbon materials (e.g., carbon nanotubes, graphene, fullerenes) using techniques such as Raman spectroscopy, XRD, FTIR, TGA SEM, TEM and AFM • Develop and optimize new or existing analytical methods for structural, electronic, and surface property assessments • Analyze and interpret experimental data to derive meaningful insights into material behavior and performance • Collaborate with R&D teams to support the design and improvement of nanocarbon-based products and processes • Maintain detailed and accurate records of experiments, data, and findings in accordance with laboratory standards • Prepare technical reports, presentations, and contribute to scientific publications or patent applications • Ensure safe laboratory practices and compliance with all health, safety, and environmental regulations • Stay updated on emerging characterization technologies and industry trends in nanomaterials.
Qualification	• Ph.D in Materials Science, Chemistry, Physics, Nanotechnology, or a related field • Minimum of 3–5 years of relevant experience in nanomaterials characterization in an industrial or academic research setting • Hands-on experience with advanced analytical instrumentation (TGA, Raman, FTIR, XRD, etc.). Experience in SEM, TEM, AFM is preferred • Strong background in carbon-based nanomaterials and their applications.



Center	Center for Carbon Materials
Job Title	Post-Doctoral Fellow (Carbon Fiber Characterization and Testing Scientist)
Job Description	The Center for Carbon Materials at KFUPM is seeking a Carbon Fiber Characterization and Testing Scientist to lead and support the analytical evaluation of carbon fiber materials across the entire value chain—from fiber processing to composite integration and end-use performance. The successful candidate will play a key role in generating high-quality material data to inform product development, process optimization, and quality assurance. This role requires a deep understanding of data statistics along with knowledge related to structural and functional properties of carbon fibers and their behavior in various applications.
Job Responsibility	• Perform detailed physicochemical and mechanical characterization of carbon fiber materials across the manufacturing process (precursor, stabilized, carbonized, and surface-treated fibers). • Utilize advanced analytical tools such as SEM, TEM, FTIR, Raman spectroscopy, XRD, XPS, TGA, DSC, and tensile testing to evaluate fiber microstructure, composition, and performance. • Design and execute mechanical testing for carbon fiber composites (e.g., tensile strength, single fiber carbon fiber pull-out test) to evaluate fiber and composite performance. • Analyze and interpret test data to support material qualification, failure analysis, and process improvement initiatives. • Collaborate with process engineers and product developers to troubleshoot inconsistencies and optimize fiber quality. • Maintain comprehensive and traceable records of test data, procedures, and findings. • Prepare technical reports, presentations, and contribute to internal documentation, patents, or scientific publications. • Ensure all testing and characterization activities comply with international standards (e.g., ASTM, ISO) and internal quality procedures.
Qualification	• Ph.D in Materials Science, Polymer Science, Chemistry, or a related field. • Minimum of 3–5 years of relevant experience in carbon fiber or composite materials characterization and testing. • Demonstrated experience in industrial R&D or production support environments is preferred. • Strong background in carbon fiber production processes and testing standards • Hands-on expertise with analytical instrumentation (SEM, TEM, FTIR, XRD, Raman, XPS, TGA, DSC, mechanical testers)