Carson Meredith

Professor, Chemical and Biomolecular Engineering at Georgia Tech College of Engineering Atlanta, GA, US

Carson Meredith is an expert in researching the surfaces and interfaces of advanced materials.

Biography

Dr. Meredith's group researches the surfaces and interfaces of advanced materials. Their work aims to apply fundamentals of polymer, surface and colloid science to find new ways to engineer materials useful to society and industry. In particular, projects emphasize the utilization of renewable components, sustainable processing, and bioinspired designs in adhesives, composites, foams and coatings, among others. He works closely with the Georgia Tech Renewable Bioproducts Institute. There are three primary thrust areas: 1) utilization of renewably-sourced materials (such as cellulose and chitin nanofibers) in high-strength nanocomposites, coatings and barrier materials; 2) design and development of more sustainable surfactant-free foaming processes that can be applied in oil recovery, oil spill cleanup and chemical separations (in collaboration with Sven Behrens, ChBE) and 3) discovery of the principles of adhesion and wetting used by natural particles like pollen and fungal spores, and their application in adhesives, composites and sensors. Dr. Meredith is the J. Carl Pirkle Sr. Faculty Fellow and the Associate Chair for Graduate Studies.

Areas of Expertise

Biotechnology, Energy and Sustainability, Materials and Nanotechnology

Education

University of Texas - Austin Ph.D.

Georgia Institute Technology B.S.

Please click here to view the full profile.

This profile was created by Expertfile.