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Shah is Associate Professor in Materials Science and Design at the University of Cambridge's Department of Architecture, and co-leads the Centre for Natural Material Innovation (CNMI). Understanding the relationships between materials, society, technology, history and nature, Shah's research aims to design and innovate with natural materials by exploring low-energy methods of manufacture, improving structural performance, introducing multifunctionalities, translating across disciplines and application sectors. A megawatt wind turbine with a wooden tower and flax biocomposite blades. An affordable ankle-foot disability orthosis from recycled plastic waste. An off-grid low-energy house constructed from industrial hemp materials. A room-temperature processing method for silk-like textile fibres. A green policy that weaves agroforestry and construction in a circular bioeconomy approach enabling aggressive decarbonisation. These are examples of how Shah's research and design at the CNMI imagines the replacement of anthropogenic materials with bio-based materials, such as engineered timber, bamboo, natural fibres and their composites. Shah has been awarded over £16million in total research project activity. Shah's work is published in over 70 peer-reviewed journal papers, has attracted numerous awards such as the International Quadrant Award 2015 and the JEC Asia 2013 Innovation Award, has been exhibited at the Cambridge Botanic Garden Walking Trail 2023, Dutch Design Week 2021, London Design Biennale 2021 and 2023, and Royal Society Summer Science Exhibition 2019, and regularly appears in international media such as on BBC, Reuters, Guardian, Dezeen, and Telegraph.