

Professor Zeinab A. Osman obtained her B.Sc. and M.Sc. degrees from University of Khartoum and her PhD from University of Lorraine (former Nancy 1), France in Science and Industrial Technologies and Postdoc in polymers at School of Chemistry, Wits University, South Africa. She joined the staff of the Institute of Engineering Research and Materials Technology, the National Center for Research in 1994 to date. She is the principal investigator in biocomposite materials and her interests focuses on producing 100% green composites. Therefore part of her research work encompasses formulation of natural adhesives based tannins, to be used as natural matrices in the manufacturing of biocomposites and understanding the interrelationship between the panels' properties and process parameters in order to develop models that can be used to predict these relationships. She trained a numbers of MSc and PhD students in Sudan and also participating in supervisory committees at University Putra, Malaysia and University Pau and Lorraine, France. She published a numbers of papers in reputable international journals. One approach that she choose to improve is the overall properties of the produced panels is to study the thermal properties of the individual component and their chemical interaction; fibers and the matrices. Therefore my work has encompassed 3 areas related to composites:1) cost effective pre-treatment of fibers., 2) their thermal behavior, 3) their interaction with the matrices. Much of her research work is collaborative in nature, being conducted with different national and international research groups of scientists. Her role in these collaborative projects typically relies on her expertise in the area of pre-treatment of fibers and formulation of natural polymers and the chemical interaction of these materials during their processing. Her research work is also including the interaction of the fibers and the thermoplastic matrices in order to cope with the needs of the global market in producing the biodegradable composites to be used as prosthetic materials adapted to the conditions of Sudan. She also co-chaired Women in Science and technology subgroup, under AERAP, EU.