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# The Influence of Chemical Treatment on the Mechanical Behaviour of hair Fibre-Reinforced Composites

Prashant Srivastava<sup>a,\*</sup>, Chetan Kumar Garg<sup>b</sup>, Shishir Sinha<sup>c</sup>

<sup>a</sup>Center of Excellence in Disaster Mitigation & Management (CoEDMM), Indian Institute of Technology Roorkee, Roorkee-247667, India.

<sup>b</sup>Department of Chemical Engineering, Indian Institute of Technology Roorkee, Roorkee-247667, India.

<sup>c</sup>Department of Chemical Engineering & CoEDMM, Indian Institute of Technology Roorkee, Roorkee-247667, India

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## Abstract

Hair is discarded material for our societies and easily found in municipal waste as polluted materials. And large volume is occupied by hair fiber in dumps/waste streams due to slow degradation. So the best way is to develop the approach for utilization the waste material as resources or raw materials. Polymer composites are very common and light weighted material to use everywhere with different reinforced materials. This research work has been investigated the mechanical properties of hair fiber reinforced composites. These reinforced composites are shown the effect of fiber loading and fiber ratios on HDPE polymer reinforced composites in terms of the mechanical behaviour of composites, and compared the effect of treated and untreated fiber on reinforced polymer composites. Water absorption and FTIR analysis are also done for the study of reinforced polymer composites. These types of fiber reinforced polymer composites are very useful for our society to utilize the waste materials as resources.

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\* Corresponding author.

E-mail address: [prashant97iitr@gmail.com](mailto:prashant97iitr@gmail.com)