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Topic: A machine intelligence Approach to Identify the Quality of Natural Rubber Latex

ABSTRACT. Natural rubber latex is readily obtained from many parts of South East Asia and as a renewable resource. It is widely used to make many common household and industrial products. Unfortunately, as its quality is not consistent due to a variety of reasons there is a need to be able to measure its quality. A common measure of its quality is the mechanical stability, which is defined as the time at the first onset of flocculation when the latex is subjected to physical stress. Currently, the assessment is performed manually by trained personnel, closely adhering to the specifications defined by the ISO35 standard mechanical stability test that is widely adopted by the rubber industry. Nevertheless, there is some level of subjectivity involved as the test heavily depends on the human eyesight as well as the technician's experience. In this presentation we will share some of the results from a machine intelligence approach to determine the quality of natural rubber latex. Experimental results demonstrated that the proposed approach was able to provide good accuracies in identifying the quality of natural rubber latex.