Title: Studies on Combustion of Polymeric Fuel with Secondary Air Injection


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Abstract: Mixed propulsion system is a novel concept of propulsion and has therefore been a subject matter of renewed studies in recent times. This concept has brought out new problems which do not find ready answers in the conventional technology of air-breathing propulsion systems. Therefore, it was proposed to undertake experimental studies related to the design and development of a scaled down version of a mixed propulsion system in collaboration with the Defence Research and Development Laboratory, Hyderabad. As part of these studies, a test facility was built for carrying out tests on related combustor systems with simulation of inlet conditions. The test facility consisted of a single axis (horizontal) thrust stand capable of measuring thrusts up to 300 kgf along with the associated instrumentation.