

# **Fluorescence Imaging Behind a Scramjet Combustor**

**Tristan Vanyai, Anand Veeraragavan and Timothy J. McIntyre**

Centre for Hypersonics, The University of Queensland, QLD 4072, AUSTRALIA  
t.vanyai@uq.edu.au

## **ABSTRACT**

The distribution of OH radicals has been visualised within a hypersonic shock tunnel. Unexpected fluorescence was observed in the flow that passed around a supersonic combustor model. This fluorescence was independent of model fuelling configuration, but was dependent on oxygen being present in the test gas. The authors believe the mostly likely cause of this fluorescence is due to OH radicals being produced within the high temperature facility nozzle supply region.