

8th International Conference on Hydrogen Safety (ICHS2019), Adelaide, Australia,  
24-26 September 2019

Challenges in hydrogen RCS' stakeholder engagement in South Africa

North, Brian C; Langmi, Henrietta W and Swartbooi, AM

**Abstract**

There is a great deal of knowledge and experience on the safe handling of hydrogen, and the safe operation and management of hydrogen systems in South Africa. This knowledge and experience mostly sits within large gas supply companies and other large producers and consumers of hydrogen. However, there appears to be less experience, leading to a level of discomfort, within regulatory bodies such as provincial and municipal fire departments and the national standards association. This, compounded by a national policy of disallowing gas cylinders indoors, has resulted in delays, and indeed stalling, in the process of obtaining permission to operate laboratories such as those of the national hydrogen programme, HySA. In an effort to break this impasse, two workshops were organised by HySA. The first was held at the CSIR's facilities in Pretoria in October 2016. The second was held at the campus of the University of the Western Cape, in Cape Town, in May 2018. Four international experts and local experts in hydrogen regulations, codes, standards and safety addressed the 50-strong South African audiences via 5-way videoconferencing. This proved to be a very powerful tool to educate the audience, and in particular the Tshwane (Pretoria) and Western Cape Fire Departments, on the real issues, risks and safety of hydrogen. The paper describes the South African Hydrogen RCS landscape, the organisation and running of the workshops, and the outputs achieved.