IMPLATS PROVIDES A BOOST FOR SOUTH AFRICA’S R&D HYDROGEN AND FUEL CELL PROGRAMME

The Department of Science and Technology (DST) has announced its partnership with Implats, the world’s second largest Platinum producer, to utilize and build local skills in the development of hydrogen and fuel cell products. The department established three Centres of Competence under HySA, which are hosted by the country’s leading Universities and Science Councils. The HySA Strategy is being implemented in the context of the DST’s various innovation strategies, the Department of Mineral Resources’ (DMR) minerals beneficiation strategy and the Department of Energy’s (DoE) integrated resource plan and the Department of Trade and Industry’s (DTI) industrial development strategies.

The collaboration between DST and Implats is intended to attain some of the objectives of the HySA Strategy. The HySA Centres of Competence have made progress in securing partnerships with the international and local private sectors which will enable HySA to penetrate the global fuel cell market. In this regard, Implats will initially co-fund to the value of R6 million, over a three year cycle, a niche project within the portfolio of HySA Systems based at the University of the Western Cape (UWC) who are engaged in Systems Integration and Technology Validation. The project involves using South African raw materials to explore novel on-board hydrogen storage devices that will be used for utility vehicles such as forklifts that will be tested in the Implats’ environment.

Minister Derek Hanekom of the Department of Science and Technology said “We are delighted to announce our partnership with Implats as this demonstrates government and private sector commitment to establishing a Hydrogen Economy that will create jobs and stimulate economic growth”.

The Director-General of the Department of Science and Technology, Dr Phil Mjwara, said “This development fits into the Department of Science and Technology National Hydrogen and Fuel Cells Research, Development and Innovation Strategy approved by the Cabinet in 2007”. Dr Mjwara further added “The private sector funding of the HySA initiative further demonstrates the government’s commitment to work with the private sector in its quest to build a knowledge-based economy”.

Professor Bruno G. Pollet, lead Investigator and Director of HySA Systems Competence Centre at the University of the Western Cape said ‘We are starting to take the necessary steps to gear up towards a hydrogen and fuel cell infrastructure, so it is essential now, that we begin to develop a supply chain of businesses which can generate jobs and growth in these new technologies. Hydrogen-powered utility vehicles will help to create new working partnerships and to bring about a sense of cohesion among those already working in the industry’.
Terence Goodlace, the CEO of Implats explains that long term global growth can only be sustained on the foundations of resource availability and technological evolution. Precious metals in particular will be prized to sustain this shift in growth patterns. The global patterns of change are mirrored in the rate of change of conditions attached to the license to operate within South Africa. Implats recognises the need for beneficiation as a mechanism for generating additional value from a national resource.

Vinay Somera, the Implats Group Executive – Market Strategy & Development believes that the ‘Hydrogen Economy’ offers an unrivalled opportunity whereby the goals of all players are aligned to the extent that industry and government can pool their efforts towards a common vision. HySA is an innovative approach to accelerating the evolution of the Hydrogen Economy by combining technological research with skills development and job creation. As a forward-looking company, we see value emerging from the goals of this initiative and are prepared to work closely with the various government arms, including the DST and DMR, in supporting the goals of HySA going forward. Apart from financial support, Implats can also add significant value by close interaction with government at the steering committee/advisory levels and the commercial drive/acumen that we bring to the table as a large corporate.

Abdullah Khan, who will be overseeing the project for Implats, adds that Platinum Group Metals (PGMs) used in hydrogen and fuel cells are technology enabling. The project with HySA Systems has the potential to expedite the development of a knowledge economy and to beneficiate PGMs locally, and highlights the much needed cooperation required to develop a roadmap towards building a local fuel cell manufacturing industry.
Notes to Editors

[1] In a bid to increase the country’s research in Hydrogen and Fuel Cell Technologies (HFCT) and create job opportunities as well as IPR, the Department of Science and Technology (DST) developed the National Hydrogen and Fuel Cells Research, Development and Innovation Strategy (Hydrogen South Africa, acronym HySA), a 15-year Programme approved by the Cabinet in May 2007. DST has significantly invested in the HySA Programme.

[2] The department established three Competence Centres to execute research and development work, with the main aim to achieve a 25% share of the global hydrogen and fuel cell market using novel platinum group metal (PGM) catalysts, components and systems, since South Africa has more than 75% of the world's known platinum group metal reserves.

[3] The University of the Western Cape (UWC) is host to the Hydrogen Systems Integration and the Technology Validation (HySA Systems) Centre of Competence based at the South African Institute for Advanced Materials Chemistry (SAIAMC). UWC has recently appointed a world renowned expert in this field, Professor Bruno G. Pollet FRSC, as the Director of HySA Systems Competence Centre.