



Some more information to occupy your Mindspace and to keep you up to date on the doings of the Alliance.

- Contact has been made with Carol Howe of CSIRO who is currently working for UNESCO-IHE on the **SWITCH** (Sustainable Urban Water Management) project. This is a five year project funded by the European Union aiming at a paradigm shift in Integrated Urban Water Management. A consortium of 32 organisations from 13 countries is involved in this initiative. Carol has promised to provide a synopsis and some ideas for GRA involvement to the Nerve Centre.
 - The **African Development Bank** has launched a new Department entirely dedicated to Water and Sanitation issues on the African Continent. The Nerve Centre will check on the possibilities that this opens for the Alliance.
 - Dr Gerard van Oortmerssen of the TNO has a team of young people looking into the feasibility of the **Low Cost Networking project** and they have started working on a pilot in Zambia, in conjunction with an organisation by the name of Linknet. A team has gone to Zambia to make an in-situ visit to the proposed village that will be provided with internet access. This project will serve as learning for the possible roll out to many more rural areas. TNO are very keen to have other GRA members involved in this project.
- A web-based work space for use by this and other project teams will be provided by Fraunhofer and linked through the password protected pages of the GRA website.
- A draft concept for a study on the **impact of climate change** on sub-Saharan Africa, prepared by Mr Rob Hounsome of CSIR South Africa has been circulated to the energy group, the water group and the champions to gauge interest in pursuing this initiative. Four members
- have to date registered their interest to collaborate in this work.
- **Dr Anil Gupta of India** will be coming to South Africa during September. The visit is being organised by the GRA Nerve Centre and sponsored by the South African Department of Science and Technology and the World Bank. Dr Gupta will meet with government officials; CSIR and other researchers will visit an innovation project in KwaZulu Natal and have in-depth discussions with the National Advisory Council on Innovation.
 - **Dr Uwe Lommatzsch of the Fraunhofer Institute** for Manufacturing Engineering and Applied Materials Research has accepted the invitation to serve on The Research Advisory Panel of CSIR's Materials Science and Manufacturing unit and will attend the first meeting of this panel during September 2006.
 - Some of the world's top minds in science and technology will gather in South Africa in September for the **second International Science, Innovation and Technology Exhibition (Insite)**, a showcase of cutting edge technologies aimed at improving the growing climate of innovation.
- Hosted by the Department of Science and Technology Insite will be held at the Sandton Convention Centre in Johannesburg and is set to attract experts from more than 30 countries. Running alongside the exhibition will be a number of high-level events, including a conference, briefings and functions, and the prestigious Tobias lecture. The theme of Insite 2006 will be the role of science, technology and innovation in driving economic growth and development.

We need your assistance in keeping up to date with news snippets and the Nerve Centre would appreciate any news, comments or ideas that you would like to send our way. Send to:
rbiesenbach@theinnovationhub.com
cmalan@theinnovationhub.com

- **Clinical Validation of Tanzanian Herbal Mixture**
The Botanical Verification Work has now done and we are awaiting the report on the findings. Draft agreements are currently being prepared for the various parties, including the National Institute for Medical Research in Tanzania, to start collaborating. The next steps in this pilot project include the photochemical fingerprinting and formulation work.

Some recent achievements by our members and associates

- Battelle and the National Laboratories that it manages or co-manages won 17 R&D 100 awards in this year's edition of the 'Oscars of Innovation'. R&D Magazine presents the awards annually to honour the year's most significant scientific and technological innovations.
- SIRIM-Berhad received 10 awards at the 17th International Invention, Innovation, Industrial Design and Technology Exhibition which was held in Kuala Lumpur recently. Three gold awards were received together with four silver and three bronze.
- The Tanga Aids Working Group – the group working closely with the GRA in the domain of Indigenous Knowledge have been selected for a Red Ribbon Award by UNDP out of 571 nominations from communities demonstrating outstanding leadership in response to HIV/AIDS.
- A team of scientists from CSIRO and the Nano Tech Institute of the University of Texas has won the 2006 NanoVic Prize for Innovation in Nanotechnology for its work on the development of carbon nanotube yarns and transparent sheets.

Research snippets from our Members

All the members of the GRA are involved in groundbreaking world class research and development work. Presented here are just a few highlights from press releases to help us all to know a little more about each other.

VTT and industry develop emission-free energy technology

VTT of Finland is developing technology that will allow fuels, including coal to be utilised more efficiently in energy production, even without emitting any carbon dioxide. VTT is currently studying, in co-operation with Foster Wheeler, the phenomena relating to oxygen combustion, with the objective of demonstrating oxygen combustion technology in the size of 30-50 mega watts around 2010. This technology has major significance for climate change, since about one third of carbon dioxide emissions caused by humans come from fossil fuels in energy production.

Fighting fungal growth with silver (Fraunhofer Gesellschaft)

Nanoparticles of silver in wall paint prevent the formation of moulds inside buildings and the growth of algae on outside walls. Trapped in the paint, the silver acts against fungi and bacteria like a contact poison. The effect is due to tiny quantities of silver ions released by the nanosilver. If these come into contact with the unwanted micro organisms, they immediately attack on several fronts. They block enzymes that transport nutrients, destroy structure-forming proteins, bond with genetic material and interfere with bio-chemical processes of cell wall synthesis. This paint will be of particular importance for hospitals and clinics.

Battelle expands its Biomedical Research Centre

With the addition of 54,000 square feet of research laboratory and office space the Battelle Biomedical Research Centre is one of the largest, private, biomedical laboratories in the USA. Researchers and scientists at this Centre perform vital work including testing new vaccines, therapeutics, and antidotes supporting a variety of government biological defence programmes and pharmaceutical company product development. The expanded facility will allow staff to provide both more support and improved capabilities for major US and international programmes.

CSIRO – 80th Anniversary

CSIRO, Australia's national science agency is one of the largest and most diverse research agencies in the world. Historically CSIRO has : produced polymer banknotes, controlled pest species, helped design the first influenza drug, transmitted images of man's first moon walk and built Australia's first programmable digital computer. CSIRO continues to meet today's challenges by providing innovative solutions, including: creating new medical diagnostic tools, improving food standards, developing new metal processing techniques, researching clean affordable energy options, designing systems to better predict ocean conditions and combating dryland salinity.