

Technological innovations for the water sector

The National Science and Technology Forum (NSTF) facilitated exchanges and solution driven deliberations around the issue of the *critical skills shortage* in the water sector. While some speakers mapped the landscape, others described the kinds of skills that will be required in future.

Mariana Purnell of Agbiz Grain attended the Forum and found three exceptional presentations that highlighted some of the latest research and development for the water sector.

Normally water purification takes place by means of costly interventions such as physical, biological and chemical processes or electromagnetic radiation. Now there is a most exciting and promising technological innovation which requires absolutely no external energy. This process enables water purification by means of [photocatalytic methods](#) using nanotechnology. Dr Endre Horváth of Switzerland discussed the potential of new nanotech filters that require no chemicals and no electricity.

Prof Albert van Niekerk discussed the evolution of the technology business incubator. Of major importance is his proposal for [desalination](#) which provides not only water, but also extracts minerals from the water which yields by far a greater economic return than the purified water, which is just considered a by-product.

Dr Kevin Winter spoke about a [WATER HUB](#) project that is being established on an old Waste Water Treatment site in Franschhoek. The aim is to illustrate novel ways of providing and protecting water sources, as well as informing and educating communities. The WATER HUB will also have a strong focus on driving economic development that will enable people to prosper.

All the presentations at the NSTF Discussion Forum Skills Drought in the Water sector can be viewed at <http://www.nstf.org.za/discussion-forum/september-discussion-forum/>