



■ Professor Emile van Zyl working in his laboratory.

BIOFUELS RESEARCH GETS R10m BOOST

Research to unlock South Africa's potential of becoming a significant producer of renewable bioenergy has received a major boost with the awarding of the Senior Chair of Energy Research (CoER): Bio-fuels and other clean alternative fuels to Professor Emile van Zyl and his team at Stellenbosch University.

It is one of the first three chairs of energy research to be awarded to leading academics at South African tertiary institutions as part of the recent initiative by the South African National Energy Research Institute (SANERI) which will invest R2 million per year over the next five years in this initiative.

The other two research chairs were the Associated CoER: Bio-fuels and other clean alternative fuels to Prof Sanette Marx (North-West University) and the CoER: Clean Coal Technologies to Prof Rosemary Falcon (University of the Witwatersrand). This is the sec-

ond SANERI award to Stellenbosch University. The SANERI funded Postgraduate Programme in Renewable and Sustainable Energy Studies was launched in 2006, with its hub at Stellenbosch University.

The CoER is a joint venture between members of the Department of Microbiology as well as the Department of Chemical Engineering (Dr Harro von Blottnitz) at the University of Cape Town.

"By joining forces between institutions, we can combine a core group of researchers with expertise in bio-ethanol, biodiesel as well as clean alternative fuels," says Professor Van Zyl. He is a world recognised research leader in the production of enzymes by recombinant Baker's yeast that hydrolyse plant material and convert the released sugars to bio-ethanol.

The core team of researchers specialise in the use of yeast biotechnology to develop

new production strains, process development on laboratory scale and process modelling. They will also work together with some of the world's leading experts in the field, such as Professor Lee Lynd of Dartmouth College (USA), who is also a Professor Extraordinary at Stellenbosch University.

Through the Biofuels Research Programme (BRP), the CoER will drive postgraduate training and research in biofuels and clean alternative fuels at both Stellenbosch University and the University of Cape Town to ensure strong and much-needed local skills development in the field of biofuels and alternative fuel sources.

Trained scientists and bio engineers are crucial if this country wants to provide appropriate production technologies suitable for local conditions to convert our valuable agricultural resources into sources of biofuels.

