



CHALLENGES OF THE
BIOECONOMY

MESSAGES
 FROM THE 2017 CAETS
CONVOCAATION

presented by Felix Reinders

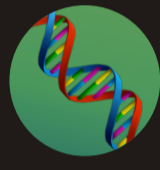
29 August 2018 | 17h00 for 17h30 | Reitz Hall, Engineering Campus, University of Stellenbosch

The urgent need for the sustainable use of natural resources and the notable advances in the field of biology have paved the way for the expansion of a bio-based economy. The bioeconomy addresses the use of renewable biological resources and their conversion into products, ranging from food and feed to other bio-based products and bio-energy. It demands innovative techniques for the production, processing, storage, consumption, recycling and disposal of natural resources. Thus, bioeconomy brings together the various sectors of the economy that are related to biological resources (agriculture, forestry, fisheries, food, bio-based chemicals & materials and bio-energy). The presentation will touch on:



THE FUTURE OF FOOD – issues relating to the successful and reliable production of sufficient, nutritious food for meeting the future needs of communities locally and world-wide.

GENETIC ENGINEERING – development of the historic, natural genetic modification of plants and animals to meet the needs of and enable the growth of ancient civilizations in a new era of genetic engineering that extends this process beyond single traits of species to “rewire” complex metabolic, sensorial and developmental circuits of species, and even the engineering of new genes.



THE BLUE BIOECONOMY – increasing the sustainable utilisation of the oceans and inland waters to make a significant contribution to food security for a growing global population.

ENERGY – world-wide responses to climate change include deep and widespread changes in the energy sector, including the rapid expansion of electricity production from naturally occurring sun and wind, and increasing interest in the energy potential of biomass.



This lecture is open to the public, and will be followed by light refreshments (courtesy of the South African Academy of Engineering - SAAE)

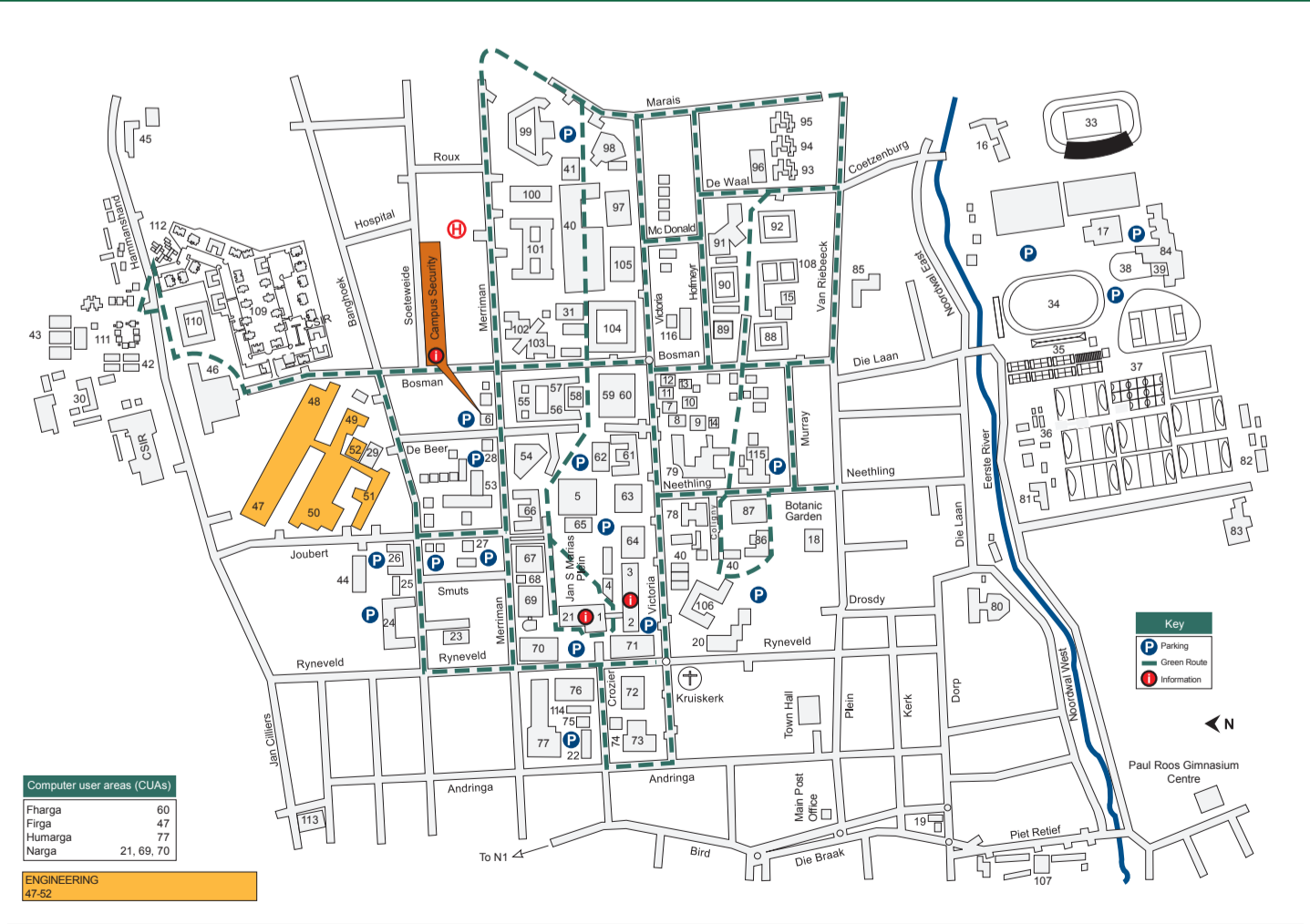
Please RSVP (for catering purposes) to Ms Heleen Duffey by 21 August 2018 at office@saae.co.za

Presented with the support of Stellenbosch University and NSTF/proSET:



Felix Reinders PrEng SAAE was a member of the SAAE delegation to the CAETS meetings in Madrid, Spain, in November 2017. He is the President of the International Commission on Irrigation & Drainage (ICID) and manages the Irrigation & Drainage Engineering Division at the Agricultural Research Council’s Institute for Agricultural Engineering in Pretoria. He is a Past President of the SA Institute of Agricultural Engineers (SAIAE) and of the SA Irrigation Institute (SABI).

Directions to the Reitz Hall, Engineering Campus, University of Stellenbosch:



Computer user areas (CUAs)	
Fharga	60
Firga	47
Humarga	77
Narga	21, 69, 70

ENGINEERING
47-52

The Faculty of Engineering is situated on the corner of Banghoek and Joubert Streets in Stellenbosch. Parking is available in front of our cafeteria, The Chalkboard. Approximate GPS coordinates are 33°55'46.8"S 18°51'55.1"E.

The entrance to the parking area is in Banghoek Road (entrance 5). This is the first entrance on your left from Joubert Street’s side. The booms open up at the latest 17:00, so no codes will be necessary for entry.

Please enter the Faculty through Chalkboard and turn left to “exit” through the glass doors on the far side.

This will bring you to the front of the Reitz Hall.