In a moment of great honour for South Africa and local irrigation and engineering, Felix Reinders was appointed as President of the International Commission on Irrigation and Drainage (ICID) in October 2017, at the World Trade Centre in Mexico City, Mexico.

This is the first time that a South African and a son of SADC (Southern African Development Community) has been appointed as president of ICID, the highly influential international 67-year-network of drainage and irrigation professionals, with members from over 76 countries around the world.

New Delhi-headquartered ICID – for those not in the know - is a bit like the UN of the irrigation, drainage and water world.

Felix Reinders, who is based at the Agricultural Research Council (ARC) in Pretoria, will enjoy a three year tenure as ICID President. The ARC, the Department of Agriculture, Forestry and Fisheries, the Department of Water and Sanitation are founder members with SABI a honorary founder member of the South African National Committee on irrigation and Drainage (SANCID).

Felix will travel to many countries with Canada his first official engagement as ICID President for its 69th ICID, IEC and Regional Conference.

Felix, a professional engineer who completed his studies in 1979, has dedicated his considerable energies and talents to wisely and tirelessly serving the irrigation and drainage sector over the years. Also Secretary-Treasurer of SABI and an Honorary Member of SABI (there are only 7 Honorary Members). It was during August this year in Stellenbosch at SABI’s bi-annual Congress that SABI bestowed Honorary Membership on Felix, who has been a SABI council member since 1982 and was 14th President of SABI from 2000 to 2001, receiving his Gold medal in 2005.

Felix has made a huge and multi-dimensional contribution to the sector of irrigation and drainage engineering.

A true role model
In agricultural engineering

Felix Reinders completed his engineering degree at the University of Pretoria in 1979 and started working at the then Department of Agriculture’s Directorate of Irrigation Engineering.

“I have a passion for Agricultural Engineering and specialise in Water resources management and Irrigation engineering at the ARC-Institute for Agricultural Engineering,” says Felix.

A highly productive and multi-talented engineer, Felix’s notable achievements include:

- Research of an infiltrometer to size centre pivots, which received international recognition.
- Main author of the Water Conservation and Demand Strategy for Agriculture as an outflow of the New Water Act of South Africa.
- Formulation and compiling of the National Sub-surface drainage design manual for the Department of Agriculture of South Africa
- Developed and implemented a mobile irrigation laboratory to determine the efficiency of irrigation systems in the field.

- Author of many scientific papers, chapters in books and articles, especially in the irrigation field.
- Organiser of various International and National Symposiums and Congresses.
- Training of students on an international (UNESCO) and national basis (universities)
- Developed a new water use efficiency framework for South Africa.
- Developed two manuals of drip irrigation (Designers- and Farmer manual)
- Developed guidelines for Drainage in South Africa.
- Serve on various national and international committees.
- Successfully mentoring young engineers and technicians to enter the engineering market.
- Presenter on various scientific Irrigation engineering topics at Congresses.

What advice does Felix, a leader in agricultural engineering, give to youngsters today looking to careers in irrigation or agricultural engineering?

He says the irrigation sector offers various opportunities - and the industry in South Africa is recognised globally for its innovation and creativity in technology.

Felix says: “As in the world, the South African water sector faces many challenges, such as the growth of the population, the need to grow the economy and the threat of global climate change. These are all opportunities for students considering a career in irrigation.

“Choosing a career is one of the most important decisions one will ever make. A career is not merely a way to earn a living; it is also a way to reach one’s full potential. One needs to be committed and to constantly develop the skills one will need to advance.”
Felix is passionate about the work of ICID, and tells SABI magazine: “It is indeed a huge honour and responsibility to be the President of ICID.”

During the Congress, in addition to addressing these two questions, a symposium on Global review on institutional reform in the irrigation sector for sustainable agricultural water management - including Water User Associations governmental international organisation, headquartered in New Delhi, India.

“The Commission is dedicated to enhancing the worldwide supply of food and fibre for all people by improving water and land management and the productivity of irrigated and drained lands through appropriate management of water, environment and application of irrigation, drainage and flood management techniques. The activities of the Commission are pursued in accordance with the ICID Constitution and By-Laws,” says Felix.

Sustainable irrigated agriculture

ICID aims to achieve sustainable irrigated agriculture through integrated water resources development and management. The ICID network has grown to 76 countries all over the world and represents 95% of irrigated agriculture in the world.

Felix is taking the reigns of ICID as the Commission launches its Vision 2030 Road Map.

ICID’s Vision 2030 Road Map’s main drive, says Felix, is towards “a water secure world free of poverty and hunger”. How does Felix envisage that during his Presidency he will help to accelerate this vital Vision?

“For me, the best way of moving progress forwards on the Vision is our work together on the national committees and working groups of ICID towards sustainable agriculture water management through inter-disciplinary approaches to economically viable, socially acceptable and environmentally sound irrigation, drainage and flood management,” comments Felix. Looking back home at South Africa, Felix urges everyone to think about the goals in the Action Plan of ICID’s Vision 2030.

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<th>Goals</th>
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<tr>
<td>Enable higher crop productivity with less water and energy</td>
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<td>Be a catalyst for change in policies and practices</td>
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<td>Facilitate exchange of information, knowledge and technology</td>
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<td>Enable cross disciplinary and inter-sectoral engagement</td>
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<td>Encourage research &amp; support development of tools to extend innovation into field practices</td>
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<td>Facilitate capacity development</td>
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Africa, what areas does Felix feel are notable in terms of irrigation and agriculture at present?

Firstly, says Felix, it is important to acknowledge that “in South Africa, sustainable access to adequate water supplies for agriculture is largely constrained by natural limitations imposed by rainfall, which is variable, erratic, spatially uneven and temporally distributed, as well as our limited stored surface water availability. These circumstances are compounded by rainfall seasonality and high inter- and intra-seasonal variability. Nearly 91% of the country is arid, semi-arid or dry sub-humid.”

Felix emphasises that irrigation has a very important role to play in boosting society and empowerment in South Africa: “Irrigation is a response to the call for the sector to increase its contribution to agricultural production thus ensuring food security, poverty alleviation and job creation.”

Looking internationally at trends, Felix says that irrigation – which is as old as civilisation – will also change with progress – and massively. But as water is a limited resource, efforts will continue to focus on water productivity in all its forms to ensure less poverty and food insecurity in our world.

Felix elaborates: “Challenges for irrigation in the distant future look apparent, with extraordinary changes on a scale comparable to that of the electronics revolution unfolding. We may not be able to predict exactly how irrigated agriculture will change by 2030, but the prospects of increased water availability for agricultural production is not possible.

“Agricultural research, technologies and development should therefore be focused on water productivity, water conservation, water use efficiency and the better use of precipitation – so-called more crop per drop – to reduce food insecurity, poverty and the vulnerability of the agricultural sector to production risk and uncertainty.”

Felix is looking very much forward to the responsibilities and duties of his ICID Presidency. He thrives on committees and organisational teamwork, and the collegial spirit and productivity of working together with fellow professionals from various locales towards sustainable agricultural and water management.

He says: “ICID is, indeed, a family of irrigation and drainage specialists from all over the world, supported by governments. For me the joy of ICID is in that we work together as national committees towards sustainable agriculture water management through inter-disciplinary approaches to economically viable, socially acceptable and environmentally sound irrigation, drainage and flood management.”

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Felix and his wife Rika are in fact passionate gardeners, and grow their own vegetables. They also constructed a greenhouse at home, with automated micro and drip irrigation, where their beautiful orchids are also grown.

“When our grandchildren come to visit – our ninth grandchild is to be born in 2018 – Oupa (Granddad) Felix loves to show them the created rainbow amongst the sprinklers in his garden,” says Felix proudly.

It seems very apt that Felix is representing the Rainbow Nation at the international level of ICID President.

All at SABI magazine wish him Congratulations and Godspeed on his mission.