



International Workshop on “Nonconventional Irrigation in High Value Agriculture – Application of Modern Technologies”

At
24th ICID International Congress / 73rd IEC Meeting
4th October 2022, Adelaide Convention Centre, South Australia

FIRST ANNOUNCEMENT AND CALL FOR ABSTRACTS

This Workshop is being organised by the Working Group on Use of Non-conventional Water Resources for Irrigation (WG-NCWRI), under the auspices of the International Commission for Irrigation and Drainage (ICID) in conjunction with the Irrigation Australia Limited (IAL).

Background

According to the World Economic Forum, water quantity and quality has been identified as the biggest threat facing the planet over the next few decades. Due to climate change water is expected to become increasingly scarce. Freshwater is critical to everyone on this planet, whether for personal use, growing crops and manufacturing products. At the same time, there is a large volume of nonconventional water being generated on daily basis, which can only grow with increasing urbanisation. Nonconventional water includes, treated sewage water, drainage water, non-fresh water (i.e., with relatively high salt, nutrient and organic matter content) and reuse of those waters for high value agriculture. The FAO and UNEP/WHO all have published guidelines for the safe use of wastewater in agriculture. Mathematical modelling of irrigation with nonconventional water plays an important role and can provide useful insights in the acceptance of nonconventional irrigation water for greenfield development.

High-value horticultural crops, including fruits, vegetables, flowers, aromatic plants and herbs, are key components of agricultural development and economic progress in many developing countries. In developed countries, the horticulture industry contributes significantly to the prosperity of people living in rural and regional areas. In 2019-2020 the horticulture sector in Australia exceeded \$15 billion in production value and employed over 60,000 people.

This workshop is focused on using nonconventional water more efficiently in high value agriculture to achieve a closed loop future for water. So, there is a greater need for resiliency, efficiency, and smart management. There are already numerous in-situ sensors and remote sensing are in use in orchards for efficient water, salt and nutrient management. Precision horticulture is more about managing orchards for uniform growth and production year after year where smart technology is or will be playing ever increasing role when it comes to making the industry sustainable with minimum or zero footprints.

Objective

This Workshop will bring together experts from all over the world to share information, experience, and views on the applications of modern technologies in nonconventional water irrigated high value agriculture.

Workshop Themes

- (a) Fundamental/Applied science of nonconventional water irrigation and drainage
- (b) Application of sensors and remote sensing in high value horticulture

- (c) Numerical modelling for better decision making of using nonconventional water in orchards
- (d) Environmental, economic, social, and cultural aspects of nonconventional irrigation
- (e) Gender equity in high value horticulture irrigated with nonconventional water

Workshop Committee

- **Dr Tapas K Biswas (Workshop Chair)**, Commonwealth Scientific & Industrial Research Organisation & Australian National University, Vice-Chair of the WG-NCWRI (ICID), Australia
- **Dianne Davidson**, Chair- SA Murraylands and Riverland Landscape Board, Australia
- **Dr Wenyong Wu**, Chair of the WG-NCWRI (ICID), Beijing, China
- **Dr Willem F. Vlotman**, Co-Author Modern Land Drainage 2020, retd I&D consultant, Australia
- **Peter Hayes**, Wine Sector Strategist and ICID Board member, Australia
- **Bryan Ward**, CEO, Irrigation Australia Ltd and Chair, 24th ICID International Congress, Australia
- **Peter Buss**, Director, Sentek Sensor Technologies, Adelaide, Australia
- **Michael Cutting**, Team Leader – Sustainable Water Use, Murraylands & Riverland Landscape Board, Murray Bridge, Australia
- **Er. BA Chivate**, Director (Technical), ICID Central Office, New Delhi, India

Registration and travel information are available at: www.icid2022.com.au/icid-home

Name (Mr/Ms/Dr):

Position:

Organisation:

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Full Address:

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City:

Postal Code:

Country

Tel.:

E-mail:

Please tick the boxes below:

- I would like to attend the workshop
- I would like to present a paper
- I would like to present a poster
- Title of paper:

The abstract / paper should show examples of application and address the workshop title's key words.

E-mail these details and a 400-word abstract (as a WORD file) not later than **30th June 2022** to Er. B. A. Chivate at bachivate@icid.org and icid@icid.org (ICID Central Office) with a copy (cc) to Dr Tapas Biswas at tapas.biswas@anu.edu.au

****Acceptance of the abstract will be notified by 31 July 2022****

