

PREFACE: WISA 2014 – Water Innovations

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This special edition of *Water SA* includes manuscripts of some of the presentations at the Biennial Conference and Exhibition of the Water Institute of Southern Africa (WISA), held during May 2014 at Mbombela Stadium, Nelspruit, Mpumalanga.

Ever since the first WISA conference in Durban in 1985, biennial WISA conferences have been an important event in the calendar for water professionals in South Africa. Some of the biennial conferences of WISA occasionally became regional or international conferences, depending on the availability of resources and topical need for enhancement of interaction with water professionals from other countries. International conferences have become more frequent because of rapid development in this field needing greater interaction among professionals (scientists, engineers, suppliers of equipments, social scientists and communicators). Despite the surge in conferences held on topics related to water, in South Africa, full text of the papers presented at these conferences has rarely been brought out as peer-reviewed journal papers. The usual practice for these events is to publish an abstract/synopsis book at the time of the conference.

The organisers of WISA 2014 decided to publish papers presented at the conference, in full, as a special edition of the journal *Water SA*. Publication of full papers based on presentations at conferences/workshops has multiple advantages. For the authors, the quality of work may considerably improve through the seriousness of discussions with peers during the conference. For referees, it becomes easier to review the papers as referees are generally drawn from among the experts attending the conference. To provide equal opportunity to all authors of the invited and proffered papers of WISA 2014, an announcement on the special edition was included in the conference circulars right from the start. Submission of a full paper

was compulsory for authors of oral presentations but for poster authors it was optional and the decision was left to authors. A total of 147 papers were presented at the conference (attended by approx. 1 800 delegates), and 74 authors chose to submit full manuscripts for publication in *Water SA*. From the manuscripts received, 15 completed the review process and met the norms and the rigour of publication review in time for publication in this special edition. In this regard, special appreciation is due to the reviewers who contributed so much effort to this special edition. A further 34 papers were identified as having publication potential but requiring revision, and so could not be accommodated in this special edition. It is hoped that these authors will revise and resubmit their manuscripts to *Water SA* or elsewhere.

The topics covered in this special edition range widely: analysis of surface water, South Africa's first proficiency testing scheme for organochlorine pesticides, mine-water treatment using grasses and freeze crystallisation, the impact of swimming pools on domestic water demand, laboratory determination of flame retardants, removal of nutrients in digestion of waste-activated sludge, sanitation in informal settlements, treatment of source-separated urine, emergency response plans for community water systems, rural groundwater quality, the water footprint of a platinum mine, and the carbon footprint of wastewater treatment. In short, the topics summarise some of the key issues facing the water sector of South Africa – but many more, such as integrated resource management, water conservation and demand management, and climate change, are not addressed in this special edition and authors should feel encouraged to write up and communicate their work on these topics.

It is hoped that this *Water SA* special edition will be of great use to water professionals worldwide.