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Foreword

Foreword to the Special Issue on the International Conference on Water: From Pollution to Purification

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Access to pure and clean water is one of the most important short-term sustainability goals adopted by the United Nations in 2015 (Stafford-Smith 2014; Bhore 2016; Schneider et al. 2019). This goal is furnished with the vision for ensuring access to affordable drinking water and water resources, and to implement sewage treatment facilities for all human beings on our planet. By 2030, the UN envisages to reach 'water for all' which includes global access to drinking water, hygiene sanitation technologies and efficient technologies for water recycling and reuse (Wilderer 2005; Foster 2018; Pakbeen 2018). These ambitious goals require globally coordinated political, social, scientific and technological solutions (Schneider et al. 2019; Foster 2018; Pakbeen 2018; Nowotny et al. 2018). The international scientific community recognises the challenges associated with the global implementation of the UN's sustainability goal.

A wide array of pollutants from nutrients to emerging contaminants is affecting the quality of global water resources, and thus water pollution and treatment technologies are two important areas of environmental research. Advances in sophisticated analytical instrumentation in recent years have enabled the detection of trace amounts of pesticides, pharmaceutical products, heavy metals and other emerging pollutants in water bodies. A wide variety of water treatment technologies is also being developed. However, a technology that is both economically viable and highly efficient for treating all the chemical water contaminants is still to be achieved. Indeed, it is really a paradox that there is a cry for ever cheaper water purification technologies at the same time that a high price is being paid to tackle waterborne diseases.

To address the environmental issues regarding global water accessibility, provision of high-quality drinking water, developing suitable technologies for clean sewage treatment and water reuse technologies, the Mahatma-Gandhi University (MGU), School for Environmental Sciences, organised the 'International Conference on Water – From Pollution to Purification' (ICW-2018) in December 2018. The aim of the conference was to provide a discussion forum for Indian and international scientists, regulators and engineers to coordinate with international efforts to reach the UN-sustainability goal 'Clean Water and Sanitation'. The conference was one of many Indian contributions to the overall UN-Sustainability strategies, and featured knowledge-exchange fora and discussion groups. A series of plenary lectures highlighted major international challenges and achievements in water research, while relevant thematic sessions with invited lectures provided in-depth scientific knowledge on specific topics. To motivate early-carreer scientists to join this emerging research field, a dedicated 'young investigators' session was also included in the program.

The conference was attended by about 220 participants. There were 3 plenary talks, 37 invited talks and 81 poster presentations at the conference. In addition, 24 short talks were also included where many of the young researchers could present their latest results on water-related research. The entire deliberations of the conference made for a real feast for researchers working on various aspects of water, right from pollution to remediation. Participants were encouraged to submit a manuscript to *Environmental Chemistry* based on their conference presentation, resulting in the diversified topics of water research included in this special issue. The subject content of these reports demonstrates the many new protocols and methodologies currently being investigated to solve water pollution as a whole.

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Conflicts of interest

The authors declare no conflicts of interest.

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