Preface

Laura María Isabel López

Center for Research and Technology of Leather (CITEC-INTI Leather),
Camino Centenario y 506,
(1897) M. B. Gonnet, Argentina
Email: llopez@unaj.edu.ar

Biographical notes: Laura María Isabel López holds a PhD in Biochemical Sciences. She is an Independent Researcher in the National Research Council (CONICET) and Professor at National University Arturo Jaurteche, Argentina. Her research interests focus on isolation and biochemical and structural characterisation of plant proteases and their biotechnological applications in the leather industry for the development of processes aimed at minimising the environmental impact of tanneries. She teaches several postgraduate courses and has published more than 45 papers in international peer-reviewed journals and three book chapters, and has directed several research projects and PhD students.

Human activity generates changes in the environment that must be minimised to achieve sustainability on our planet. In this context, it is necessary to promote interdisciplinary meetings to efficiently solve environmental problems, generating a range of possibilities that add alternatives to develop eco-friendly analysis and processes according to each region's territorial needs.

The Special Issue 'Environment and Sustainable Development: A Multidisciplinary Approach' includes several studies dedicated to exploring ways to apply solutions in the analysis and treatment of modified environments, selected from the IV National Conference of Environmental Science and Technology. The Conference was organised by the Argentine Society of Environmental Science and Technology and the National University Arturo Jauretche, Argentine (2–5 December, 2019).

Several studies in this special issue report methods of liquid effluent treatments. To remove dyes from textile industries effluents, a new and effective treatment is described employing cyclodextrins (cyclic molecules of natural origin derived from starch) immobilised on a support to the formation of non-toxic and eco-compatible cyclodextrin-Sepharose polymers. Kaolinite impregnated with Fe(III) is described as a novel adsorbent material with promising characteristics for removing arsenic from contaminated waters through a system of easy operation, low cost, and great versatility. The removal of an agrochemical widely used in the post-harvest treatment of stone fruits is reported using a composite whose matrix allows the bentonite to maintain its adsorbent capacity without reducing the bed's porosity; the operation can be carried out in fixed-bed columns minimising packing variables. Bioremediation through microalgae and macroalgae sampled in the Limay river (Neuquén-Argentina) is reported as a wastewater treatment system. Algae could be used as a link point between wastewater depuration and the

Copyright © 2020 Inderscience Enterprises Ltd.

anaerobic co-digestion process, constituting an attractive self-sustaining system from the energy-environmental perspective.

Finally, a methodology capable of detecting the areas of emission of air pollutants is included, visualising in real time, or in diagnostic mode, the potential areas of emission and their significance. The proposed methodology is intuitive, easy to interpret, and offers quick visual results to interpret the contamination levels of any site under study.

I hope that this special issue will be of interest and provide some tools that can be used to solve common environmental problems. I wish to thank *Int. J. Environment and Health* for giving *s*upport for this project and Professor Marcelo E. Conti for the careful attention given throughout the production process.