## Preface

The 4<sup>th</sup> International IUPAC Conference on Green Chemistry (ICGC-4) was held in Foz do Iguaçu, Brazil, 25–29 August 2012, under the auspices of IUPAC and the Brazilian Chemical Society (SBQ), with the theme "Exchanging experiences towards a sustainable society taking care of natural resources in their socio-economic development". It is important to understand the historical context of ICGC-4 as part of a series that started in 2006 in Dresden, Germany. As observed by Prof. Tundo, the Chair of the first ICGC, green chemistry is "innovative because it is not necessarily connected to profits, it involves fundamental aspects and does not aim automatically at an industrial process. There is a great need to create a new type of chemistry focused on a new production system and utilization of chemical derivatives, in order to prepare the younger generation to reach a greener future." ICGC-2 occurred in 2008 aboard the ship "Alexander Radishev" travelling from Moscow to St. Petersburg, Russia, and was centered around a number of fundamental and applied topics on green chemistry. ICGC-3 was held in Ottawa, Canada, 2010, with the theme "The Road to Greener Industry". Bringing together academia and industry to exchange ideas about green chemistry was the purpose of the meeting.

ICGC-4 also included all areas and sectors of chemistry worldwide (academia, industry, government, and chemistry societies) and focused on broad topics such as benign synthesis/process, green chemistry for energy/production, chemicals from renewable resources, green engineering, education in green chemistry, and engineering and policy. It attracted around 600 participants from 4 continents, especially young researchers. The event included 10 plenary lectures and 15 invited talks conducted by the most prominent chemists from all over the world in this field, 4 short courses, 15 parallel sessions with 4 oral presentations each, 3 technical parallel sessions, 4 roundtables, 2 poster sessions, and a book release (Capes at Rio+20).

The organizers of ICGC-4 would like to thank the great number of sponsors who generously supported the event and the members of all committees for their immense contributions. Special thanks are extended in particular to Profs. Pietro Tundo and Buxing Han for their outstanding efforts, as well as Profs. Patricia Vazquez, Liliana Mammino, Arlene Corrêa, Vitor Ferreira, and Fernando Galembeck, all of whom contributed to the remarkable success of ICGC-4 (for more details, see www.ufscar.br/icgc4).

The nine papers in this issue of *Pure and Applied Chemistry* are mostly contributions from plenary speakers and represent some of the topics discussed in the event. The tradition and involvement with such a fundamental and innovative field will continue in 2014 with ICGC-5, which will be held in Durban, South Africa.

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