



Preface of the special issue dedicated to selected semigroup papers from the Conference on Theoretical and Computational Algebra 2023

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The Conference on Theoretical and Computational Algebra 2023 (TCA 2023) was held in Pocinho, a village in the Douro valley, Portugal, in July 2023. It was organized by the Center for Mathematics and Applications (NOVA Math) & Department of Mathematics, NOVA School of Science and Technology, NOVA University of Lisbon. The conference attracted more than 80 researchers, mainly from Europe, but also from Australia, Brazil, Canada, and the USA.

The talks at TCA 2023 covered a wide variety of topics in algebra and algebraic applications of automated reasoning. Many of the contributed talks were in semigroup theory, and this led the four editors of ‘Semigroup Forum’ who were present at the conference to the idea of having a special issue of ‘Semigroup Forum’ with selected papers from TCA 2023. This idea was announced at the closing of the conference; the information about the special issue was also posted on the conference website.

The present issue contains 11 of the papers submitted in response to the aforementioned call. Each of these papers underwent the usual refereeing procedure and was edited by one of the guest editors (the authors of the present preface). A few further

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papers submitted to the special issue are still under review; those that are eventually accepted for publication will appear in later issues of the journal. We are very much indebted to the referees of the special issue for their hard work.

TCA 2023 featured a special event in honor of Dr Gracinda M. S. Gomes, Professor at the University of Lisbon, on the occasion of her retirement. Over her career, Professor Gomes made a significant contribution to semigroup theory through both her personal achievements in science and the creation of an internationally acclaimed semigroup school in Portugal. Since her PhD studies at the University of St Andrews under the prominent algebraist John M. Howie, Professor Gomes has been instrumental in establishing and maintaining long-term fruitful cooperation between semigroup theorists in Portugal and the UK. This cooperation is evident in the present special issue, in which 10 of the 11 articles have either UK or Portuguese authors and which, in our opinion, constitutes another tribute to Professor Gomes.

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