Preface

This volume contains the proceedings of SOS 2005, the Second Workshop on Structural Operational Semantics, held on 10th July 2005 in Lisbon, Portugal, as a satellite event of ICALP’05, the 32nd International Colloquium on Automata, Languages and Programming.

Structural operational semantics (SOS) provides a framework for giving operational semantics to programming and specification languages. A growing number of programming languages from commercial and academic spheres have been given usable semantic descriptions by means of structural operational semantics. Because of its intuitive appeal and flexibility, structural operational semantics has found considerable application in the study of the semantics of concurrent processes. Moreover, it is becoming a viable alternative to denotational semantics in the static analysis of programs, and in proving compiler correctness.

Recently, structural operational semantics has been successfully applied as a formal tool to establish results that hold for classes of process description languages. This has allowed for the generalization of well-known results in the field of process algebra, and for the development of a meta-theory for process calculi based on the realization that many of the results in this field only depend upon general semantic properties of language constructs.

The SOS Workshop series aims at being a forum for researchers, students and practitioners interested in new developments, and directions for future investigation, in the field of structural operational semantics. One of the specific goals of the series is to establish synergies between the concurrency and programming language communities working on the theory and practice of SOS. Moreover, it aims at widening the knowledge of SOS among postgraduate students and young researchers.

The First SOS Workshop was held in August 2004 as a satellite event of CONCUR 2004, the Fifteenth International Conference on Concurrency The-
ory, and marked the publication of two special volumes (60-61) of the *Journal of Logic and Algebraic Programming* devoted to SOS. The proceedings of SOS 2004 appeared as ENTCS Volume 128, issue 1.

The programme committee of SOS 2005 consisted of:

- Luca Aceto (BRICS, Aalborg, DK)
- Wan Fokkink (Amsterdam, NL)
- Rob van Glabbeek (NICTA, AU)
- Matthew Hennessy (Sussex, UK)
- Ralf Lämmel (CWI, NL)
- Peter Mosses (Swansea, UK, co-chair)
- David Sands (Chalmers, SE)
- Alex Simpson (Edinburgh, UK)
- Simone Tini (Insubria, IT)
- Irek Ulidowski (Leicester, UK, co-chair)
- Erik de Vink (Eindhoven, NL)

The submitted papers were refereed by the programme committee and by several outside referees, whose help is gratefully acknowledged. Seven papers were accepted out of 18 submissions, and preliminary versions were handed out at the workshop. The final versions of the papers for these proceedings were prepared after the workshop. It is planned to publish extended versions of selected papers in a special issue of a journal.

The invited speakers at SOS 2005 were Jan Friso Groote (Eindhoven University of Technology, NL) and José Meseguer (University of Illinois at Urbana-Champaign, USA). We are particularly grateful to them and their co-authors for the papers that they have written for these proceedings.

We are grateful to ENTCS for their continuing support, in particular to Mike Mislove, Managing Editor of the ENTCS series. This is the first time that an SOS Workshop has been organized as satellite event of ICALP, and we are very grateful to the ICALP’05 organizers for taking care of the local organization. Support from Swansea University and the University of Leicester is also gratefully acknowledged.

*Peter Mosses*

*Irek Ulidowski*

*Swansea, 24 November 2005*