On behalf of the Steering and Technical Program Committees, we take great pleasure in welcoming you at ACSD’06 in Turku, Finland.

ACSD’06 is the 6th edition of the conference. It first started as a bi-annual meeting, but the importance of the topics addressed quickly showed the importance of having a yearly event. ACSD gathers both academic and industrial participants, and focuses on theory and practical experience for designing tomorrow’s complex concurrent hardware and software systems. The extent of the topics contributes to cross-fertilization, as shown by the session titles: Asynchronous and Synchronous Systems, Scheduling, Timed Systems, Algorithms, Stochastic Models, Model-Checking, Systems on Chips, Algebraic Approaches, and Semantics. This allows for setting up and comparing different design and analysis methods. Applying new techniques on industrial case studies is also of utmost importance, so as to evaluate their efficiency, scalability, and the type of systems they are best suited for.

For this 6th conference, 45 papers were submitted from 21 different countries. Each paper was reviewed by four members of the Program Committee, and 23 were accepted for presentation at the conference. As for the previous editions of the conference, the “EasyChair” web system was used, easing the work of the Program Committee members by providing access to reviews and comments. Hence, we are grateful to Dr. Andrei Voronkov who develops and maintains the tool. The excellent job of the committee members and the reviewers ensure a high-quality program in a convenient setting.

In addition to those selected, two invited papers by Dr. Nicolas Halbwachs and Prof. Axel Jantsch are included in these proceedings. We thank them for accepting the invitation. This year, ACSD is co-located with ATPN (International Conference on Application and Theory of Petri Nets). The conferences run in parallel and share their invited talks. Hence, we will have the pleasure of listening to invited talks by Prof. Ralph-Johan Back, Prof. Javier Campos, Dr. Ekkart Kindler, and Dr. Jianli Xu. This organization of common and parallel sessions has been made possible through good cooperation with the ATPN Program Committee chairs Susanna Donatelli and P. S. Thiagarajan.

We are also grateful to IEEE publishing services, especially Randall Bilof, and to the sponsors: the Academy of Finland, Nokia Foundation, Cadence, Department of Information Technology and Center for Reliable Software Technology at Åbo Akademi University, and Turku Center for Computer Science, without which it would not have been possible to hold the conference under such good conditions.

We wish you the best for this conference and hope the talks and the proceedings will be most valuable in your future research.

Johan Lilius
General Chair

Kees Goossens and Laure Petrucci
Program Committee Co-Chairs
Conference Organizers

Johan Lilius, **General Chair**
Tiina Haanila, Finances and Local Arrangements
Jerker Björkqvist, Tool Exhibition
Lionel Morel, Web Pages
Robert Gyllenberg, Technical Support
Xinrong Zhou, Workshops

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Referees

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Manuel Bernardo Barbosa
Frank Burns
Arindam Chakrabarti
Jean-Lou Desbarbieux
Raymond Devillers
Martin Drozda
Claude Dutheillet
Emmanuelle Encrenaz
Rob Esser
João M. Fernandes
Jörn Freiheit
Guy Gallasch
Arkadeb Ghosal
Tobias Hain
Bing Han
Keijo Heljanko
Grzegorz Herman
Anna Ingolfsdottir
Jens Bæk Jørgensen
Ridha Khedri
John Knudsen
Leonid Kof
Maciej Koutny
Simon Kramer

Joseph Kuehn
Miroslaw Kurkowsk
Lin Liu
Thierry Massart
Lionel Morel
Alix Munier-Kordon
Mogens Nielsen
Artur Niewiadomski
Sergio Oliveira
Christian Pfaller
Agata Polrola
Vinayak Prabhu
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