

# Preface

Welcome to Linz and the 19<sup>th</sup> IEEE International Conference on Automated Software Engineering. This year the conference is held for the third time in Europe and we are fortunate to have it in Austria. We hope you will also take the time to enjoy the diverse landscape, numerous sights, and excellent tourist facilities Austria has to offer.

The Automated Software Engineering conference is the major conference for theory and practice concerned with automating the software development process. Formerly known as Knowledge-Based Software Engineering (KBSE), the conference expanded in 1997 to encourage worldwide participation and to reach out to other scientific communities concerned with the automation aspects of formal methods, software process, human-computer interaction, requirements engineering, reverse engineering, testing, verification and validation, while still including an active artificial intelligence and knowledge-based research focus. The conference has evolved into an international meeting place to share ideas on the foundations, techniques, tools and application of automated software engineering technology. At ASE, experts with different backgrounds in software practice and theory present and discuss promising results of their research and experience. Traditional topics at ASE include both automatic systems and systems that support and cooperate with people, as well as models of software and software engineering activities.

The paper evaluation this year was very thorough and highly selective. The Program Committee chose 25 full technical papers from 183 submissions for presentation at the conference. Each paper was peer reviewed by three members of the Program Committee. The Program Committee has selected another 26 papers for inclusion as short papers in the proceedings. These papers represent work that the Program Committee feels is interesting and novel but not mature enough to warrant a full ASE paper at this stage. Previous ASE conferences have shown that some of the most interesting and entertaining topics are discussed in the less informal and highly interactive poster sessions.

In addition to the technical papers the conference offers a doctoral symposium, tool demonstrations, and tutorials. Several workshops are co-located with ASE 2004: The 3<sup>rd</sup> Workshop on Cooperative Support for Distributed Software Engineering Processes (CSSE '04), The 4<sup>th</sup> Workshop on Formal Approaches to Testing of Software (FATES'04), The 9<sup>th</sup> Workshop on Formal Methods for Industrial Critical Systems (FMICS'04), The First Workshop on Specification and Automated Processing of Security Requirements (SAPS'04), The 4<sup>th</sup> Workshop on Software Engineering and Middleware (SEM '04), and The 2<sup>nd</sup> Workshop on Intelligent Technologies for Software Engineering (WITSE'04).

It has been both a privilege and a pleasure to serve as general and program committee chairs. Our warmest thanks go to the many individuals and organizations that have helped with this year's conference. We are very grateful to the Austrian Computer Society (OCG), the IEEE Computer Society and the ACM Special Interest Groups on Software Engineering (SIGSOFT) and Artificial Intelligence (SIGART) for their sponsorship and organizational help.

Siemens Corporate Technology, GRZ IT Center Linz, RACON Software GmbH Linz, Johannes Kepler Universität Linz, Microsoft Austria, Land Oberösterreich, and Stadt Linz also provided support and contributions. The Steering Committee, the Organizing Committee, and the Program Committee did a marvellous job. We would also like to thank a large number of additional reviewers who are acknowledged in the Proceedings. Many thanks to all the people explicitly mentioned in the following pages and to all the invisible volunteers that worked hard at making ASE 2004 a success. Finally, we want to thank the authors, the presenters and the participants and invite them all to fully enjoy ASE 2004, Linz and Austria.

**Paul Grünbacher**  
**ASE 2004 General Chair**

**Virginie Wiels**  
**Kurt Stirewalt**  
**ASE 2004 Program Chairs**