

## Preface

This volume constitutes the proceedings of the tenth European Conference on Object-Oriented Programming, ECOOP96, in Linz, Austria, July 8-12 1996.

ECOOP was created in 1987 to structure object-oriented activities taking place in European countries by providing a European forum for theorists and practitioners interested in object-oriented programming. For a decade, ECOOP has established itself as an academic conference with a very high quality standard. In the same time, ECOOP has mainly contributed to the dissemination of object-oriented technology in the software industry. The ECOOP tradition is to move the conference location each year from one country to another. Previous ECOOP conferences were held in Paris (France-87), Oslo (Norway-88), Nottingham (England-89), Ottawa (Canada-90 jointly with OOPSLA), Geneva (Switzerland-91), Utrecht (the Netherlands-92), Kaiserslautern (Germany-93), Bologna (Italy-94) and Åarhus (Denmark-95).

ECOOP97 will be held in Jyväskylä (Finland) next year.

The ECOOP96 programme committee had the hard task of selecting 21 papers out of 173 submissions coming from all over the world. The selection of papers was carried out during a two-day meeting in Nantes. The only selection criteria were the quality and originality of the papers themselves. The papers published in these proceedings are of high quality and reflect the most advanced issues in the field of object-oriented programming. These papers cover a wide range of topics including applications, programming languages, implementation, specification, distribution, databases, and design.

Apart from the presentation of the selected papers, the technical conference also welcomes Adele Goldberg and François Bancilhon as two keynote speakers. ECOOP96 offers also 2 panels, 15 workshops, 17 tutorials, demonstrations, posters, and exhibits.

The success of such an international conference is due to the dedication of the members of various committees. We thank the authors for submitting such a large number of papers, and the reviewers and the program committee members for reviewing and selecting the papers contained herein. We thank I. Guyon for organizing the program committee and the student helpers: P. Mulet, F. Rivard and T. Ledoux. Special thanks to G. Kappel the organizing chair and to all other members of the Executive Committee and all local organizers.

AITO has continued to provide an essential support to the conference. The committee members also wish to thank their employers and sponsors for support of these conference activities. Finally, we thank the attendees and hope that you enjoy the conference and the proceedings.

April 1996

P. Cointe  
ECOOP96 Programme Chair

## Organization

ECOOP'96 is organized by the Institute of Computer Science of the Johannes Kepler University of Linz under the auspices of AITO (Association Internationale pour les Technologies Objets).

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## Referees

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Rainer Lischka	Paolo Mancarella	Knut Manske
Hidehiko Masuhara	Satoshi Matsuoka	Rui Oliveira
Salvatore Orlando	Susanna Pelagatti	Stefan Rausch-Schott
Chrislain Razafimahefa	Siegfried Reich	Werner Retschitzegger
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Marco Vanneschi	Mark Vermeer	Jan Vitek
Roland Wagner	Stéphane Wehrli	Rene Wenzel Schmidt

## Cooperating Institutions of ECOOP'96

ACM/SIGPLAN (Association of Computing Machinery - Special Interest Group in Programming Languages)  
 IEEE Computer Society  
 AFCET (French Computer Society)  
 GI (Gesellschaft für Informatik)  
 SI (Schweizer Informatiker Gesellschaft)  
 OCG (Österreichische Computergesellschaft)  
 ÖGI (Österreichische Gesellschaft für Informatik)  
 ADV (Arbeitsgemeinschaft für Datenverarbeitung)  
 TMG (Upper-Austria Technology and Marketing Corporation)

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