Foreword

With this publication of the lectures presented at the conference in Reichenau in November 2004, the German National Committee of ICOMOS is for the first time dedicating one of its journals solely to the problems of climate stabilization and building physics. This reflects our recognition of the fact that, from both an economic and a conservation point of view, the general public is no longer going to be able to afford short intervals between restoration interventions on historic buildings and artistic monuments, as had become common in the post-war period. It is becoming clear that the sustainability of preservation treatments must be increasingly understood as a central theme of our time, not least because of the issue of limited resources. Sustainability, however, can only be achieved if the problems of building physics are given the attention they deserve.

The overwhelming interest shown in the Reichenau conference with more than 200 participants confirmed the appropriateness of the theme. ICOMOS Germany welcomed guests from Austria, Croatia, Hungary, Italy, Liechtenstein, Luxembourg and Switzerland, as well as from almost all the German Länder. Through publication of the lectures we hope to reach not only those whose registration for the conference could not be accepted because of the meeting facilities' limited capacities but also all our partners in preservation who will be carrying out various types of interventions on historic buildings over the next years and will thus be confronted in diverse ways with the potential conflicts which are treated here.

In many places indoor climatic problems and stress factors in the field of building physics – as a result of changes in use, excessive use or inappropriate repair plans – have an adverse effect on the durability of preservation work. Our most significant historic and artistic monuments, the World Heritage sites, are not infrequently affected by such undesirable developments because these buildings generally have to withstand a particularly high number of visitors. One such World Heritage site, where current problems with extreme moisture are tied to a great increase in tourism, is Oberzell on the island of Reichenau, which therefore seemed particularly appropriate for the location of the conference.

An interdisciplinary approach was deliberately chosen: in recent years restorers, preservationists, building physics experts, materials researchers and microbiologists, working on a wide range of objects of various types, have developed methods for investigation and control which promise appropriate and effective handling of the problems outlined above. Case studies from historic building and art preservation projects as well as from the field of archaeology are discussed. Based on outstanding examples from Austria, Cambodia, China, Croatia,

Denmark, Egypt, France, Germany, Italy, Switzerland and Turkey, a representative selection of research results is summarized and presented. The primary concern here is not solutions, which anyway have to be worked out individually for every project, but rather exemplary methodological approaches, investigative and visualization possibilities, difficult interpretations of measurements, current (often unpublished) results of research projects, and above all a broad awareness of the problems. Insofar as concrete solutions are described, definitive importance is attached to a plurality of possibilities which take the conditions of a specific location into account. These solutions range from the information pavilion near the church in Oberzell to the much stricter measures to curb visitation, in combination with a climatic "sluice", used in the Arena Chapel in Padua.

The conference lectures (except for the contribution by Jürgen Pursche) are reproduced here in their entirety, with the addition of footnotes and bibliographies. The evening lecture by Matthias Exner, "The Ottonian Wall Paintings in Reichenau. Aspects of their Chronology," is being published simultaneously in the Zeitschrift des Deutschen Vereins für Kunstwissenschaft (vol. 58, 2004).

The conference on the island of Reichenau was not the first ICOMOS meeting in Baden-Württemberg, but it was the first to be organized jointly with the State Historic Preservation Office there (now the Landesamt für Denkmalpflege in the Regierungspräsidium in Stuttgart). Tribute should be paid here to the outstanding efforts that the State Historic Preservation Office invested over the last two decades in the study, stabilization and preventive protection of St. George in Oberzell. Such work is only possible as long as a strong specialized office is equipped with the necessary resources and authority to ensure that its recommendations and directives are sufficiently binding.

The president of the State Historic Preservation Office, Prof. Dr. Dieter Planck, and his colleagues deserve my sincere thanks for their efficient organization and execution of the conference. I would also like to thank the community of Reichenau, represented by Mayor Volker Steffens, here for the hospitable accommodations and for the organization of the evening reception for the conference participants. Thanks are due to ICO-MOS members Dr. Dörthe Jakobs, Stuttgart, and Dr. Matthias Exner, Munich, for the idea for the conference and its professional and organizational realization as well as for the editing of the lectures. A special word of gratitude also goes to the Federal Commissioner for Culture and Media and to the Landesamt für Denkmalpflege in the Regierungspräsidium in Stuttgart; without their subsidies of the printing costs it would not have been possible to publish these conference proceedings.

Michael Petzet