Contents

Foreword by the publishers

A great location for ‘one’ small subject

With the establishment of a postgraduate course in heritage conservation at the University of Bamberg (Otto Friedrich University Bamberg) in 1982, Bamberg was the first and initially the only place in Germany to offer this subject as a proper, university-based training opportunity. It was not until the 1990s and later that others with training courses of more or less similar descriptions followed this example. From the very beginning, the close ties with the federal state offices for the preservation of historical monuments, learning by doing and the statement on current heritage discourses were key features of the heritage sciences at the University of Bamberg, and contributed significantly to their success.

In order to represent adequately the diverse issues associated with heritage conservation, the range of subjects covered by the heritage conservation study programme was expanded accordingly in 1986 with the appointment of a Professorship in Building Research and Building History and, in 2000, with the establishment of a Professorship in Restoration Science. In order to focus on issues relating to building research, a dendrochronological laboratory was set up. And a digital tool for object documentation in restoration science was procured for the first time – this too is unique to the German university education landscape of today. Furthermore, the close connection to art history, the archaeological disciplines, as well as the establishment at a university with a focus on the humanities, can generally be seen as a unique selling point for a heritage conservation study programme that is usually associated with architecture and design courses elsewhere. The link to the engineering sciences was established at the University of Bamberg as far back as in 1998 when it merged with Coburg University of Applied Sciences and Arts. This integration, within a special technical context, was finally reinforced once again in 2000 through the merger of the disciplines into the joint Institute of Archaeology, Heritage Sciences and Art History.

Despite the early development of its own profile in the field of historical monuments, it has always succeeded in reacting to current requirements in an appropriate and far-sighted manner. With the conversion of the postgraduate study programme into a consecutive Master of Arts in 2002, the University of Bamberg was again the first institution to adapt its teaching of heritage conservation to the Bologna Process. Finally, the rapid technological developments have meanwhile led to the emergence of a stand-alone subject, which the University of Bamberg, in close cooperation with Coburg University of Applied Sciences and Arts, has recognised by creating a Master of Science in "Heritage Technologies” which has been a useful addition to the existing Master of Arts since 2017. As a result of this high level of involvement stretching back several decades, the University of Bamberg has now become an internationally-recognised quality label in the field of heritage sciences.

This pioneering role in academic heritage conservation is reflected, among other things, in the numerous national and international achievements in education, research and application. These include standard works on the theory and practice of heritage conservation, exemplary large inventories, networking with organisations, associations and initiatives, the co-initiation and implementation of inter-university graduate colleges and, of course, the large number of around 1000 well-trained graduates in what is, mind you, a 'small' subject. Today, these graduates hold key positions in institutional monument preservation in various federal states and European countries; are now themselves university lecturers involved in heritage

conservation courses, or have established themselves as freelance building researchers in restoration companies or in architect firms with a focus on construction work on existing buildings. Furthermore, a fruitful correlation exists between this image of heritage conservation at the University of Bamberg and the City of Bamberg, as an ideal location for issues relating to historical monuments. One of the departments of the Bavarian State Office for the Preservation of Monuments is situated here in Seehof Castle, and an extraordinary number of companies in the area of building survey, building research, building restoration, material analysis and the planning of architectural monuments are based here. And the civic community here became involved in the conservation of its historical monuments as far back as in the late 1960s. Furthermore, exactly 25 years ago today, UNESCO honoured the outstanding universal value of Bamberg's Old Town by including it on the World Heritage List.

Against this background, it seems well-nigh a logical consequence that the university's management has, since 2012, promoted as a main focus the expansion of the heritage sciences at this particular institute, and with both the creation of the Master of Science in 2017 and upon the approval by the responsible ministry in 2016, was able to establish a Centre for Heritage Conservation Studies *and*Technologies. The Free State of Bavaria initially granted funding for this undertaking, for a limited period of five years. And the formal founding act officially came into effect in March 2016. Therewith a new building for the monument disciplines, which were previously distributed across the entire city, was established; although it was not set up in a new building, according to subject group, but in the restored former factory building and the adjacent manufacturer's mansion of the company Rupp + Hubrach. The building's ceremonial opening and, thus, the moving into or rather the amalgamation of the Centre for Heritage Conservation Studies and Technologies, as well as the four heritage chairs or heritage professorships, including the associated laboratories, took place on December 4, 2017. Owing to the considerable success that the Centre for Heritage Conservation Studies and Technologies (KDWT) had been enjoying two years after its foundation, and because of the recognition that such an institution for heritage conservation had gained with regard to its uniqueness and national and international significance, the Bavarian Cabinet decided to provide the research institute with long-term funding by way of the provision of eight permanent appointments with effect from July 2018.

The Centre for Heritage Conservation Studies and Technologies is headed by a centre council, whose activities are monitored by an assigned advisory board. A spokesperson elected by the centre council represents the KDWT externally. According to the statute, the centre's core tasks consist of the expansion of knowledge transfer and technology transfer to non-university research institutions and to business and trade; the expansion of technical competence through the extension of the transfer programmes and the supplementing of the range of courses; the support in terms of content and technical equipment for research, teaching, transfer and service, as well as the internationalisation of research. In order to consider the scientific differentiation of heritage sciences and heritage technologies adequately, the KDWT is divided into four separate departments, each representing their respective subfield with exceptional, sound technical experience and expertise in teaching, research and, above all, real-world scenarios. In this sense, the department, *Monument Preservation/Heritage Conservation,* enhances the image of heritage conservation culturally and in terms of art history by profiling key elements in the areas of the theory and history of monument preservation, monument sociology as well as the cultural theory of architectural monuments. The department, *Digital Monument Technologies/Digital Technologies in Heritage Conservation,* ensures the centre's capacity for innovation through the expansion of digital recording, archiving, analysis, monitoring, simulation, and planning processes. The department, *Building Research,*

Building History and Building Preservation, contributes to the close connection to the material evidence, with the appropriate building documentation, building technology analysis, building construction analysis and historico-cultural analysis, as well as the building preservation. Finally, the department, *Restoration Science,* is dedicated to historical material sciences, to the applied conservation sciences with a science and technology orientation, and to digital 3D methods, as well as to non-contact and non-destructive material testing, and the digital microanalysis of material science and natural science backgrounds of the heritage sciences at the KDWT. And the associated *Laboratory for Dendrochronology and Structural Analysis*explores the history of building construction using scientific dating methods.

This publication attempts to do justice to the breadth of the spectrum of disciplines, which represents the characteristic quality of the institution and its unique selling point, by devoting a main chapter to each of the four departments, and by providing each with its own profile focus. The attachment of richly illustrated individual depictions of the projects and plans is intended to explain to the reader the respective department's targeted activity, in a manner that can be generally understood. A fifth main section then follows in which the diverse services, in relation to transfer, networking and publication activities and with which the staff have jointly ensured the KDWT's visibility both nationally and internationally, have been compiled in the form of lists. At the very end, an organisation chart provides information on the structure of the centre team. Short C.V.s introduce the contributors of this publication. By means of this approach, the publishers hope to provide a clear picture of the institute's activities between 2016 and 2018.