Foreword

Using the opportunity given under the SOCRATES-MINERVA EU funded project "SEEArchWeb - South Eastern Europe Archaeology Web: An Interactive Web-based Presentation of Southeastern European Archaeology," managed by the multimedia lab, Department of Informatics, Aristotle University of Thessaloniki, a consortium of prestigious European institutes focused on the implementation of state-of-the art e-learning strategies for the subject domain of archaeology.

The last few decades have witnessed the rapid growth and development of information and communication technology (ICT). Due to the application of the new technologies in learning and teaching, e-learning has emerged as a highly effective teaching tool. E-learning is not simply about transfer of know-how to a particular field of studies, such as archaeology. It is about enhancing the teaching-learning process, and therefore requires an in-depth understanding of it.

Archaeology is a multifaceted discipline. Its learning curriculum encompasses a wide range of subject/period themes and methodological and theoretical approaches, as well as practical experience in the field. A map of core competencies is needed to transform these perspectives into a well-geared carrier of instructional events using educational technology. These include, among others, the usage of virtual reality environments, databases acting as excavation repositories, geographical information systems, and animated reconstructions.

How can an archaeologist use these diverse tools in a constructive manner? How can an instructor in archaeology use integrated packages that deliver teaching without becoming a computer scientist? How can a junior archaeologist take advantage of computer-based training and alter his cognitive paradigm? All these and other relevant issues are addressed in the chapters that follow, with the aim of enhancing the existing learning styles.

The motivation for preparing this concise handbook with introductory and interrelated subjects was given by the 1st SEEArchWeb Conference, "*E-learning and Computer Applications in Archaeology*," that was organised in Thessaloniki on September 29-30, 2006. The new ideas presented in the conference appear in this collective volume, an opus from the SEEArchWeb experience.

I offer my congratulations to the scholars involved in this consortium, and I hope that this is only the beginning of a fruitful scientific process that will promote the practice and the teaching of archaeology.

Professor Ioannis A. Tsoukalas Secretary General for Research and Technology Ministry of Development, Greece **Ioannis Tsoukalas** is currently the secretary general for research and technology of the Greek government. He was born in Thessaloniki in 1941. He has studied physics in the Aristotle University of Thessaloniki. He has received his PhD in solid state physics from the same university. He has committed post graduate studies in the UK (Liverpool University), Germany (Braunschweig Polytechnic University), France (Grenoble) and USA (MIT). He has published more than 100 papers and articles in books, highly ranked journals, newspapers and international conferences. He has lectured in various universities as visiting professor (England, France, Germany, USA, and Japan), and was head of the Department of Physics (1984-1989) and of the Department of Informatics (1990-1997). He has directed or participated as a member in various committees, boards and research projects, which include, among others, the EU funded project VALUE (1990-1993), "Information Society SA" (2001-2004), the Data Protection Authority in Greece (2003-2004), and the Senate of the Aristotle University in Thessaloniki (1984-1997, 2003-2004). He has served as first coordinator of the EU funded multinational project "SEEArchWeb – South Eastern Europe Archaeology Web" (2003-2004).