### Radoslav Pavlov

**Peter Stanchev** 

**Editors** 

# Digital Preservation and Presentation of Cultural and Scientific Heritage

### **International Conference**

Veliko Tarnovo, Bulgaria 11 – 14 September, 2011

## **Proceedings**

Institute of Mathematics and Informatics – BAS, Sofia, 2011

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#### **Preface**

The main aim of the 1<sup>st</sup> International Conference: Digital Preservation and Presentation of Cultural and Scientific Heritage (DiPP2011) is to bring together as many interested institutions/parties as possible working on the digitization, recording, documenting, archiving, presenting, protecting and managing World Cultural and Scientific Heritage in order to share their advanced thoughts, know-how and experience. The main focus is on environments providing open access to digitized heritage. Public and specialized libraries, museums, galleries, archives, community centers, research institutions and universities are expected to gain and exchange knowledge, skills, and expertise from the event.

The conference is organized by the *Institute of Mathematics and Informatics, Bulgarian Academy of Sciences* and the *St. Cyril and St. Methodius University of Veliko Tarnovo*. The event is supported by Regional Museum of History of Veliko Tarnovo), Institute for Ethnology and Folklore Studies with Ethnographic Museum, Bulgarian Academy of Sciences, Public Library "P. R. Slaveykov" of Veliko Tarnovo, Architectural Ethnographic Complex "Etar" (Gabrovo), Institute for Historical Studies, Bulgarian Academy of Sciences, Vassil Levski National Military University (Veliko Tarnovo), Union of Scientists in Bulgaria, Institute of Information and Communication Technologies, Bulgarian Academy of Sciences, etc.

The papers discuss current trends and achievement in the field of digital preservation and presentation of cultural and scientific heritage.

P.L.Stanchev paper reviews some of the standards, connected with multimedia and their metadata.

The paper by Z. Márkus and B. Wagner presents the GUIDE@HAND project, a digital GPS-based audio guide maintaining needs of the cultural tourism in Hungary.

The paper by R. Pavlov, D. Paneva-Marinova and G. Simeonov presents a survey of the existing services provided by the digital libraries and repositories on mathematics of the content provider partners in the EuDML project.

The paper by A. Holl and G. Makara presents the Hungarian National Scientific Bibliography project: the MTMT.

The paper by D. Paneva-Marinova, K. Rangochev and M. Goynov describes the process of business modeling of the application architecture of the Bulgarian folklore artery, aiding requirements analysis, application design and its software implementation.

The paper by J. Dochkova-Todorova, M. Todorova and D. Valcheva presents a socially-oriented website of the Bulgarian folklore heritage for the needs of the non-formal learning and cultural tourism.

The paper by L. Peycheva and N. Kirov discusses the main results of an ongoing project aimed at the development of technologies for digitization of Bulgarian folk music and building a heterogeneous digital library with Bulgarian folk songs presented with their music, notes and text.

Experimental researches of one of the eldest bells in Ukraine, are considered in the paper of V. Didkovsky, Sv. Lunyova, V. Zaets and T. Trifonov.

The paper by K. Sapozhnikova and R. Taymano presents a relationship between some hidden parameters of acoustic signals and expected emotional response to them.

The paper by G. Bogdanova, T. Todorov and Nikolay Noev presents the digital repository of fnformation and knowledge about valuable bells located in Bulgarian churches and monasteries, the fund "BellKnow".

The paper by M. Goynov, D. Paneva-Marinova and M. Dimitrova presents the Encyclopaedia Slavica Sanctorum environment, its architecture, functional specification, application modeling process and software implementation. The paper also presents the integration between the Encyclopaedia Slavica Sanctorum and the Bulgarian Iconographical Digital Library.

The paper by G. Bogdanova, V. Atanasova and T. Todorov investigates the digitalization and the security issues of the Bulgarian and Indian cultural artefacts in multimedia archive.

The paper by K. Ivanova, I. Mitov, P. L. Stanchev, M. Dobreva, K. Vanhoof and B. Depaire discusses the applying of associative classifier PGN for digitised cultural heritage resource discovery.

The paper by P. Cotofrei, C. Künzi and K. Stoffel introduces the main concepts of a project under development concerning the analysis process of a scene containing a large number of objects, represented as unstructured point clouds.

The paper by L. Dimitrova, R. Dutsova and R. Panova tries to present how information technologies as tools for the creation of digital bilingual dictionaries can help the preservation of natural languages.

L. Dimitrova's paper reviews multilingual language resources for Bulgarian, developed in the frame of some international projects: the first-ever annotated Bulgarian MTE digital lexical resources, Bulgarian-Polish corpus, Bulgarian-Slovak parallel and aligned corpus, and Bulgarian-Polish-Lithuanian corpus.

The paper by E. Rusinova and G. Nazarska focuses on digitization of literary heritage in the Bulgarian libraries, facing problems and challenges.

The paper by G. Simeonov and P.L. Stanchev reviews the current situation regarding open access, institutional repositories and journals in Bulgaria, focusing on e-publications and related research content available in digital format on the web.

A. Krandeva and S. Emiryan present the access to the music archives of the Bulgarian National Radio.

Five abstracts, written by the teams of G. Bogdanova, T. Todorov and N. Noev; K. Ivanova and K. Zdravkov; G. Bogdanova, Sv. Stefanov, T. Todorov, J. Shterev, N. Noev; D. Paneva-Marinova, R. Pavlov, and P. Stanchev, are included. They show several national and international projects and best practices on digitization, recording, documenting, archiving, presenting, protecting and managing world cultural and scientific heritage.

Veliko Tarnovo, 12<sup>th</sup> of September, 2011

Radoslav Pavlov Peter Stanchev Editors

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