

Preface

The International Conference on Asian Digital Libraries (ICADL) is an annual international forum that provides opportunities for researchers and experts to meet and exchange research results, innovative ideas and state-of-the-art developments in the digital libraries of their respective countries. Building on the success of the first five ICADL conferences, the 6th ICADL conference in Kuala Lumpur, Malaysia aimed to further strengthen the collaboration and strategic alliance between the different researchers and experts from the Asia-Pacific Region in the field of digital libraries.

The theme of the conference, “Digital Libraries: Technology and Management of Indigenous Knowledge for Global Access,” reflects the shared belief of the organizers that success in the development and implementation of digital libraries in the k-economy is based on four key areas: the technologies that are employed to create a user-friendly environment, organization, interaction, navigation, and access to content; a knowledge management approach that ensures all types of knowledge (explicit, tacit and implicit) are included; indigenous content, which implies the creation of suitable and specific content to meet the needs of the indigenous community; and global access, which implies that content should be made available across time and space, and also implies that the content should be flexible enough to meet global needs.

The ICADL 2003 began with an opening ceremony and a keynote address. The conference also included 4 tutorials covering: knowledge management systems; the management of indigenous knowledge; Semantic Web metadata; and an overview of digital libraries. There were 6 invited talks and 68 research paper presentations in 18 parallel sessions. These sessions covered discussions on topics such as Information Retrieval Techniques, Digital Libraries Services, Information Retrieval in Asian Languages, Multimedia Digital Libraries, a Digital Library for Community Building, Special Purpose Digital Libraries, Data Mining in Digital Libraries, Building and Using Digital Libraries, Metadata Issues, a Human Computer Interface, Knowledge Management, the Development of Contents, Digital Library Infrastructures, Standards and Conventions, E-Learning and Mobile Learning, Cryptography and Compression, Intellectual Property Rights and Copyright, Data and Communication Protocols, Privacy and Security, Biometrics and Security, Human Resources and Training, Machine Architecture and Organization, and Data Storage and Retrieval. In conjunction with ICADL 2003, the Library and Information Science Education in Asia Seminar (LISEA) was held as a postconference program immediately following the conference.

Despite the fact that the Iraq war and SARS (Severe Acute Respiratory Syndrome) affected world travel, ICADL 2003 still managed to record a good total of 136 papers, with a breakdown of 97 full papers, 36 short papers and 3 poster presentations. The conference had the collaboration of a 69-member program committee composed of well-known digital library experts and researchers from

Pacific Asia, USA and Europe. The large program committee meant that the ICADL managed to reach out to more participants and thus ensured good-quality paper submissions. The reviewing of papers was carried out by reviewers chosen from among the Program Committee members. The reviewing process was managed using the Collaborative Conference Management System (CoMan-Sys) developed by MIMOS Berhad in collaboration with the Department of Information Science, Faculty of Technology and Information Science, Universiti Kebangsaan Malaysia. Forty-five full papers, 23 short papers and 15 poster presentations were finally selected. The increase in the final number of poster presentations was due to the fact that some of the short papers were recommended by the program committee to be accepted as poster presentations.

On behalf of the Organizing and Program Committees of ICADL 2003, we thank all authors for their submissions and camera-ready copies of papers, and all participants for their active participation in the conference. We also acknowledge the sponsors, program committee members, conference support committees, and individuals who gave their continuous help and support in making the conference a success. We fervently hope that the conference will continue to grow from strength to strength as it travels to different host countries in Asia, and will continue to provide a stimulating and enriching platform for innovative ideas, to enable us to design and develop digital libraries that will transcend cultures, races, beliefs and religions to create world citizens who are knowledgeable, tolerant, and understanding, in order to create a world that is harmonious and peaceful for everyone for a long time to come.

November 2003

Tengku Mohd Tengku Sembok (Malaysia)
Halimah Badioze Zaman (Malaysia)
Hsinchun Chen (USA)
Shalini R. Urs (India)
Sung Hyon Myaeng (Korea)

Conference Organization

The 6th International Conference on Asian Digital Libraries (ICADL 2003) was organized by the Perpustakaan Negara Malaysia (PNM) in collaboration with the Department of Information Science, Faculty of Information Science and Technology, Universiti Kebangsaan Malaysia (UKM), the Malaysian Institute of Micro-electronic Systems (MIMOS), Multimedia Development Corporation (MDC), and Persatuan Pustakawan Malaysia (PPM).

Honorary General Chair

Chief Secretary, Education Ministry

Advisors

Multimedia Development Corporation (MDC)

General Chair

Dato' Zawiyah Baba (Director-General, National Library of Malaysia)

Program Co-chairs

Tengku Mohd Tengku Sembok (Universiti Kebangsaan Malaysia, Malaysia)

Halimah Badioze Zaman (Universiti Kebangsaan Malaysia, Malaysia)

Hsinchun Chen (University of Arizona, USA)

Shalini Urs (University of Mysore, India)

Sung Hyon Myaeng (Information and Communication University, Korea)

Program Committee

Asia Pacific

Shahrul Azman Mohd Noah (UKM, Malaysia)
Zawiyah Mohd Yusof (UKM, Malaysia)
Juhana Salim (UKM, Malaysia)
Norhayati Abdul Mukti (UKM, Malaysia)
Nazlena Mohamad Ali (UKM, Malaysia)
Aidanismah Yahya (UKM, Malaysia)
Fatimah Ahmad (UPM, Malaysia)
Ahmad Bakeri Abu Bakar (UIA, Malaysia)
Diljit Singh (UM, Malaysia)
Zainab Awang Ngah (UM, Malaysia)
Zaharin Yusoff (USM, Malaysia)
Zulkhairi Mohd Dahalin (UUM, Malaysia)
Peter Charles Woods (MMU, Malaysia)
Zainab Abu Bakar (UiTM, Malaysia)
Raja Abdullah Raja Yaakob (UiTM, Malaysia)
Hwee-Hwa Pang (LIT, Singapore)
Abdus Sattar Chaudhry (NTU, Singapore)
Suliman Hawamdeh (NTU, Singapore)
Schubert Foo (NTU, Singapore)
Min Yen Kan (National University of Singapore)
Ian Witten (Waikato University, New Zealand)
Liddy Nevile (Univ. of Melbourne, Australia)
Li-zhu Zhou (Tsinghua University, China)
Jianzhong Li (Harbin Inst. of Technology, China)
Jianzhong Wu (Shanghai Library, China)
Christopher C. Yang (CUHK, Hong Kong SAR)
Wai Lam (CUHK, Hong Kong SAR)
Jerome Yen (CUHK, Hong Kong SAR)
Vilas Wuwongse (AIT, Thailand)
Shigeo Sugimoto (ULIS, Japan)
Soon J. Hyun (Information Communication University, Korea)
Key-Sun Choi (KAIST, Korea)
Chao-chen Chen (National Taiwan Normal University, Taiwan)
Hsueh-hua Chen (NTU, Taiwan)
San-Yih Hwang (NSYSU, Taiwan)
Jieh Hsiang (National Taiwan University, Taiwan)
K.S. Raghavan (University of Madras, India)
T.B. Rajashekhar (Indian Institute of Science, India)
S. Sadagopan (Indian Institute of Information Technology, India)

N. Balakrishnan (Indian Institute of Science, India)
N.V. Sathyanarayana (Informatics India, Bangalore)
S. Ramani (HP Labs India, Bangalore)

Europe

Ingeborg Solvberg (Norwegian University of Science and Technology, Norway)
Norbert Fuhr (University of Duisburg, Germany)
Thomas Baker (Fraunhofer-Gesellschaft (FhG), Germany)
Jose Borbinha (National Library of Portugal, Portugal)
Andreas Rauber (Vienna University of Technology, Austria)
Carol Peters (Italian National Research Council, Italy)
Marc Nanard (LIRMM, France)
Traugott Koch (Lund University Libraries, Sweden)
Erich Neuhold (Darmstadt Univ. of Technology, Germany)
Donatella Castelli (Italian National Research Council, Italy)
Jian Yang (Tilburg University, Netherlands)
Ann Blandford (University College London, UK)
Fabio Crestani (University of Strathclyde, UK)

USA

Christine Borgman (UCLA, USA)
Jim French (Univ. of Virginia, USA)
Edie Rasmussen (Univ. of Pittsburg, USA)
Richard K. Furuta (Texas A&M, USA)
Gary Marchionini (Univ. of North Carolina, USA)
Robert Allen (Univ. of Maryland, USA)
Jerome Yen (Arizona State Univ., USA)
Ching-chih Chen (Simmons College, USA)
Judith Klavans (Columbia University, USA)
Marcia Lei Zeng (Kent State University, USA)
Don Kraft (Louisiana State University, USA)
Edward Fox (Virginia Tech, USA)
Javed Mostafa (Indiana University, USA)
Mirek Riedewald (Cornell University, USA)

X Organization

Sponsorship Committee

Putri Saniah Megat Abdul Rahman (Persatuan Pustakawan Malaysia)

Workshop Committee

Shahrul Azman Mohd Noah (Universiti Kebangsaan Malaysia)
Nazlena Mohamad Ali (Universiti Kebangsaan Malaysia)

Publicity

Nazlena Mohamad Ali (Universiti Kebangsaan Malaysia)
Aidanismah Yahya (Universiti Kebangsaan Malaysia)

Collaborative Conference Management System Technical Team (CoManSys)

Zaleha Abd. Rahim (MIMOS)
Luke Jing Yuan (MIMOS)
Eng Ngah Looi (MIMOS)
Suit Wai Yeng (MIMOS)

Publication

Abdullah Kadir Bacha (Multimedia Development Corporation)
Mastura Mohamad (Multimedia Development Corporation)

Conference Package

Kamariah Abdul Hamid (Universiti Putra Malaysia)

Social and Hospitality

Siti Zakiah Aman (Persatuan Pustakawan Malaysia)

Exhibition

Hasbullah Atan (Persatuan Pustakawan Malaysia)

Treasurer

Chin Loy Jyoong (Persatuan Pustakawan Malaysia)

Secretary

Saonah Shairi (Perpustakaan Negara Malaysia)

Local Arrangements Committee

Joint Chairman

Tengku Mohd. Tengku Sembok (Universiti Kebangsaan Malaysia)
Halimah Badioze Zaman (Universiti Kebangsaan Malaysia)

Members

Shahrul Azman Mohd. Noah (Universiti Kebangsaan Malaysia)
Nazlena Mohamad Ali (Universiti Kebangsaan Malaysia)
Aidanismah Yahya (Universiti Kebangsaan Malaysia)
Norhayati Abd. Mukti (Universiti Kebangsaan Malaysia)
Zawiyah Mohd. Yusof (Universiti Kebangsaan Malaysia)
Juhana Salim (Universiti Kebangsaan Malaysia)
Ahmad Bakeri Abu Bakar (Universiti Islam Antarabangsa)
Fatimah Ahmad (Universiti Putra Malaysia)
Zaleha Abd. Rahim (MIMOS Berhad)
Mastura Mohamad (Multimedia Development Corporation)
Raja Abdullah Raja Yaakob (Universiti Teknologi MARA)
Zainab Abu Bakar (Universiti Teknologi MARA)
Zamri Mohamed (Universiti Teknologi Malaysia)
Zainab Awang Ngah (Universiti Malaya)
Diljit Singh (Universiti Malaya)

Organizing Institutions

The 6th International Conference on Asian Digital Libraries (ICADL 2003) wishes to thank the following organizations for their support:

Perpustakaan Negara Malaysia (PNM)
Universiti Kebangsaan Malaysia (UKM)
Malaysian Institute of Microelectronic Systems (MIMOS)
Multimedia Development Corporation (MDC)
Persatuan Pustakawan Malaysia (PPM)

LISEA Committee

Zainab Awang Ngah
Nor Edzan Haji Nasir
Abrizah Abdullah
Noor Harun Abdul Karim
Hasnah Abdul Rahim
Halimah Badioze Zaman
Elizabeth Logan
Abdus Sattar Chaudhry
Sajjad ur Rehman
Ross Harvey
Diljit Singh