

# Scientific Program of PNC 2004

**October 19 (Tuesday), 09:00-09:45, Room 1**  
**Opening Ceremony**

**Chaired by: Ovid J.L. TZENG, Vice-President of Academia Sinica, Taiwan / Chair of Pacific Neighborhood Consortium**

09:00-09:30

Welcome Remarks:

Ts'ui-jung LIU, Vice- President of Academia Sinica, Taiwan

James H.Y. TAI, Director General of Department of Humanities and Social Sciences, National Science Council, Taiwan

Tony FERGUSON, Chair of Pacific Rim Digital Library Alliance

Lewis LANCASTER, President of University of the West/ Electronic Cultural Atlas Initiative

**October 19 (Tuesday), 09:45-10:45, Room 1**  
**Session: Digital Library 1**

**Chaired by: Tony FERGUSON, Hong Kong University**

09:45-10:05

***The Emerging Context of the Digital Library – e-Asia II***

Robert FELSING, University of Oregon

10:05-10:25

***The USC Digital Archive: Past, Present and Future***

Lynn O'LEARY, Timothy STANTON, Jewel WARD  
University of South California

10:25-10:45

***Korean Digital Materials***

Joy KIM, University of South California

**October 19 (Tuesday), 09:45-10:45, Room 2**

**Session: GIS 1**

**Chaired by: Ruth MOSTERN, University of California, Merced**

09:45-10:05

***Applications and Prospects of Historical GIS in Digital Archive***

I-Chun FAN, Piling PAI, Hsiung-Ming LIAO

Academia Sinica, Taiwan

10:05-10:25

***Time Map on Historical Maritime Exchanges between Vietnam, Thailand, and Japan***

Mamoru SHIBAYAMA, Kyoto University

Atsushi KAJIYAMA, Venkatesh RAGHAVAN, Osaka City University

10:25-10:45

***Integrating Digital Resources in Space and Time: GIS in the Arts and Humanities***

Paul S. ELL, Centre for Data Digitisation and Analysis, Queen's University, Belfast

**October 19 (Tuesday), 11:00-12:40, Room 1**

**Session: Digital Library 2**

**Chaired by: Assunta PISANI, Stanford University**

11:00-11:25

***California Explores the Ocean Digital Library Initiative***

Luc DECLERCK, University of California, San Diego Libraries

11:25-11:50

***Digital Projects of the National University of Singapore Libraries***

Sylvia YAP, National University of Singapore

11:50-12:15

***Current East Asia Digital Resource Center at SDSC***

Jim CHENG, UCSD Libraries

12:15-12:40

***SNU Digital Library Special Collections Digitization and Digital Preservation of e-Kyujanggak Royal Library Collections***

Nam-jin HUH, Young-aie KIM, Seoul National University Library

**October 19 (Tuesday), 11:00-12:40, Room 2**

**Session: GIS 2**

**Chaired by: I-Chun FAN, IHP, Academia Sinica, Taiwan**

11:00-11:20

***Using Spatial Analysis with Historical GIS: Problems and Opportunities***

Ian N GREGORY, Centre for Data Digitisation and Analysis, Queen's University, Belfast

11:20-11:40

***Design of Visualization for Historical Statistic Datasets***

Chun-Lin KUO, Keio-GSEC Rekisow Project, Keio University, Tokyo

Makoto HANASHIMA, Institute for Areal Studies, Foundation (IAS), Tokyo

Kenichi TOMOBE, KEIO University, Tokyo

**\*PAPER**

11:40-12:00

***Animations Online: Extending the OGC Web Map Server Specifications***

Ian JOHNSON, Archaeological Computing Laboratory, Spatial Science Innovation Unit, University of Sydney

12:00-12:20

***Community GIS Over the Web: A Categorization and Analysis***

Tyng-Ruey CHUANG, Andrea Wei-Ching HUANG

Institute of Information Science, Academia Sinica, Taiwan

12:20-12:40

***GIS-Based Approach for Participatory Indigenous Mapping***

Bor-Wen TSAI, Changyi CHANG, Tsujen DING, Chunchiang LIN

National Taiwan University

**October 19 (Tuesday), 14:00-15:50, Room 1**  
**Session: Digital Library 3**

**Chaired by: Tony FERGUSON, Hong Kong University**

14:00-14:35

*East Asian Digital Library Developments in UC Berkeley*

Peter ZHOU, Tom LEONARD

University of California, Berkeley

14:35-15:10

*Moving Toward a Virtualized Digital Library: On the Digital Content Services of the National Central Library*

Hsiao-Ming YU, Shu-Fen LIN, Mei-Jane SUN, Li-Ling CHEN, Huei-Chin SUNG, Cheng-Ruei CHEN

Information Division of the National Central Library

15:10-15:45

*Digitalizing the Heritage Archives in National Taiwan University Library*

Chiung-min TSAI, National Taiwan University Library, Taipei

Jieh HSIANG, Department of Computer Science and Information Engineering, National Taiwan University Library

**October 19 (Tuesday), 14:00-15:50, Room 2**  
**Session: ECAI Plenary**

**Chaired by: Lew LANCASTER, University of California, Berkeley**

14:00-14:25

*ECAI-Where Are We? Accomplishments and Challenges*

Jeanette ZERNEKE, University of California, Berkeley

14:25-14:50

*Recent Developments in TimeMap and the TimeMap Open Source Consortium*

Ian JOHNSON, University of Sydney

14:50-15:15

***Gazetteers and Maps to Improve Library Catalogs***

Michael K. BUCKLAND, University of California, Berkeley

15:15-15:40

***The Religious Atlas of China and the Himalayas: Digital Gazetteer Design for Cultural Atlas Development***

Ruth MOSTERN, University of California, Merced

**October 19 (Tuesday), 16:20-18:00, Room 1**

**Session: Digital Museum**

**Chaired by: Paritta Chalernpow KOANANTAKOOL, Maha Chakri Sirindhorn  
Anthropology Centre(SAC)**

16:20-16:45

***Unified Knowledge-based Content Management for the Digital Archives  
Project of National Museum of Natural Science, Taiwan***

Tienyu HSU, Department of Information, National Museum of Natural Science

16:45-17:10

***Innovative Value-added Applications of Digitized Art Content at the National  
Palace Museum, Taipei***

Chi-Fang CHANG, Shu-Chen TSUI, Chienchih CHEN, Jewel LIN  
Information Management Center, National Place Museum

17:10-17:35

***The Digital Development of the National Museum of History***

Andrea Ming-Chu LEE, National Museum of History

17:35-18:00

***Digital Museum as An Outreaching and Marketing Tool: A Case Study of  
“Digital Museum of Peinan Site and Peinan Culture Project” of National  
Museum of Prehistory”***

Chian-Jin YEH, Research and Collection Division, National Museum of  
Prehistory, Taitung

**October 19 (Tuesday), 16:20-18:00, Room 2**  
**Session: Cultural Atlas Resource Development**

**Chaired by: Ruth MOSTERN, University of California, Merced**

16:20-16:40

***Taiwan Buddhist Digital Archive and the Rare Books Cataloging in Dublin Core***

Aming TU, The Chung Hwa Institute of Buddhist Studies & Chinese Buddhist Electronic Text Association

16:40-17:00

***Digital Research Collection Supporting Scholarship in American-Philippine Relations at the Turn of the Twentieth Century***

Carla Q. MONTORI, University of Michigan

17:00-17:20

***Historical Atlas of Brazilian Cities. The Capitals Cities***

Francisco da COSTA, Federal University of Brazil

17:20-17:40

***Towards an Integrated Monitoring System for Angkor: Applications of GIS, Remote Sensing and TimeMap for Managing World Heritage Sites***

Damian EVANS, University of Sydney

17:40-18:00

***Integration Scientific Data in Distributed Information System of Russian Academy of Sciences***

A.N. BEZDUSHNY, M.V. KULAGIN, V.A. SEREBRIAKOV

Center for Scientific Telecommunications and Information Technologies of Russian Academy of Sciences

**October 20 (Wednesday), 09:15-10:00, Room 1**  
**Session: Keynote Speech**

**Chaired by: Ovid J.L. Tzeng, Academia Sinica, Taiwan**

09:15-10:00

***A Duet of Ancient Artifacts with Modern Technology at the National Palace Museum***

Shou-chien SHIH, National Palace Museum, Taiwan

**October 20 (Wednesday), 10:20-12:00, Room 1**  
**Session: Electronic Theses and Dissertations**

**Chaired by: Jieh HSIANG, National Taiwan University**

10:20-10:50

*Current Developments in UK e-theses*  
Neil BEAGRIE, British Library/JISC

10:50-11:10

*The Electronic Theses and Dissertations Services of National Taiwan University*  
Jieh HSIANG, National Taiwan University

11:10-11:20

*eThesys: Histories and Lessons*  
Sanyih HWANG, Shing-Han WANG, Shiou-Wen SUN  
National Sun Yat-sen University

11:20-11:40

*The Electronic Thesis and Dissertation System at the National Central Library: Its Present and Future*  
Hsiao-Ming YU, Li Yuan CHEN, Hsiao-Chi HSU  
National Central Library

11:40-12:00

*The Current Situation and Future Development of ETD Consortium in Taiwan*  
Arthur CHEN, Academia Sinica Computing Centre, Taiwan

**October 20 (Wednesday), 10:20-12:00, Room 2**  
**Session: e-Learning**

**Chaired by: Kim-joan CHEN, Ministry of Education, Taiwan**

10:20-10:40

*The Next Generation of e-Learning – Challenges and Opportunities in Australia and Globally*  
Darren ROSSITER, Griffith University

10:40-11:00

*E-Learning Development in Higher Education in Taiwan*  
Kim-Joan CHEN, Ministry of Education, Taiwan

11:00-11:20

***The National Central Library and E-Learning***

Bau-Mei CHENG, National Central Library, Taiwan

11:20-11:40

***A Social Construction of Technology (SCOT) Model of the Failure of Web-based Distance Delivery Programs in Traditional Universities***

John LEHMAN, University of Alaska Fairbanks

11:40-12:00

***From Education to e-Learning : An Union Catalog Service of Learning Resources in Taiwan***

Jan-Ming HO, National Science Council

Pei-Xian KUO, Jyun-Jie YAN, Institute of Information Science, Academia Sinica, Taiwan

**October 20 (Wednesday), 12:30-14:00, Lecture Hall**

**Session: Demo 1**

12:30-13:00

Chiung-min TSAI, National Taiwan University

13:00-13:30

Chi-Fang CHANG, Chiu-Ping WANG, National Palace Museum

13:30-14:00

National Central Library, Taiwan

**October 20 (Wednesday), 14:00-15:30, Room 1**

**Session: Metadata**

**Chaired by: Michael BUCKLAND, University of California, Berkeley**

14:00-14:30

***A Review on Metadata Development in National Archives Program in Taiwan***

Arthur CHEN, Academia Sinica Computing Centre, Taiwan

14:30-15:00

***Towards Data Discovery, Reuse And Integration: Standard for Ecological Metadata***

Jian-Hui LI, Yanfei HOU, Lianglin HU

Computer Network Information Center, Chinese Academy of Sciences, China



15:00-15:30

***A Tool for Metadata Management***

Shih LIN, Academia Sinica Computing Centre, Taiwan

**October 20 (Wednesday), 14:00-15:30, Room 2**

**Session: Cultural Atlases as Learning Resources**

**Chaired by: Ian GREGORY, University of Portsmouth**

14:00-14:20

***ECAI in the Classroom***

Lewis LANCASTER, University of California, Berkeley

14:20-14:40

***Visualising British and Irish Census Data in the Classroom: A SECOS Database***

Paul S. ELL, Centre for Data Digitisation and Analysis, Queens University, Belfast

14:40-15:00

***ECAI in the Classroom: The Relationship Between Resources and Teaching***

Jeanette ZERNEKE, University of California, Berkeley

15:00-15:20

***Preliminary Thoughts on Spatial Information in the Humanities and Social Science Classroom***

Ruth MOSTERN, University of California, Merced

**October 20 (Wednesday), 14:00-15:30, Room 3**

**Session: Culture Heritage**

**Chaired by: Ts'ui Jung LIU, Academia Sinica, Taiwan**

14:00-14:20

***Anthropology and Cultural Heritage for Community Museums in Thailand***

Paritta ChalermPow KOANANTAKOOL, Maha Chakri Sirindhorn Anthropology Centre (SAC)

14:20-14:40

***From Commons to Communications***

Inghai PAN, Academia Sinica, Taiwan

14:40-15:00

***Cultural Heritage of Betel Nut Chewing in Hainan and Taiwan: An Electronic Dissertation Prototype***

Christian ANDERSON, Anthropology Department, University of Southern California

15:00-15:20

***Boudhnath Stupa and Its Environs: A Vatican of Tibetan Buddhism in Nepal***

Min Bahadur SHAKYA, Nagarjuna Institute, A Center for Buddhist Studies

**October 21 (Thursday), 09:00-10:30, Room 1**

**Session: e-Resource**

**Chaired by: Curtis HARDYCK, University of California, Berkeley**

9:00-9:30

***E-Journal Initiatives at the Chinese University of Hong Kong***

Rita WONG, The Chinese University of Hong Kong

9:30-10:00

***A Database of Documents and Bibliographies for Social Sciences in Northeast Asia (NEARDB)***

Masatoshi ISHIKAWA, Department of Electrical Engineering and Computer Science, Osaka Prefectural College of Technology

Toshihiko KISHI, Osamu INOUE, Department of Policy Studies, the University of Shimane

10:00-10:30

***e-Resources Development for South-East-Asia***

i-Group Inc.

**October 21 (Thursday), 09:00-10:30, Room 2**

**Session: Biodiversity 1**

**Chaired by: Kwang-Tsao SHAO, Institute of Zoology, Academia Sinica, Taiwan**

09:00-09:30

***Conserving Biodiversity through the Internet: the Fish Example***

Eli AGBAYANI, WorldFish Center Philippine Office

09:30-10:00

***Taiwan Biodiversity Information Facility Project: Developing Information Infrastructure and Integrating Databases***

Jr-Chuan HUANG, Kwang-Tsao SHAO, Ching-I PENG, Research Center for Biodiversity, Academia Sinica, Taiwan

Hsin-Hui WU, Kun-Chi LAI, Eric YEN, Computing Centre, Academia Sinica, Taiwan

10:00-10:30

***The Taiwan Malacofauna Database : Biodiversity, Website and Humanity***

Wen-Lung WU, Institute of Zoology and Research Center for Biodiversity, Academia Sinica, Taiwan

Wen-Cheng CHANG, Hen-Wei LIN, Wen-Shuo CHANG, Institute of Zoology, Academia Sinica, Taiwan

Shih-Jye JIAN, Chi-Yung CHEN, Research Center for Biodiversity, Academia Sinica, Taiwan

Yen-Chen LEE, Institute of Life Sciences, National Taiwan Normal University

**October 21 (Thursday), 09:00-10:30, Room 3**

**Session: e-Science & Grid**

**Chaired by: Simon C. LIN, Computing Centre, Academia Sinica, Taiwan**

9:00-9:20

***The EGEE Grid Infrastructure Project: First Experience and Future Plans***

Fabrizio GAGLIARDI, CERN

9:20-9:40

***Using Data Grids to Manage Distributed Data***

Reagan MOORE, San Diego Supercomputer Center

9:40-10:00

***e-Science Activities in CAS and Scientific Data Grid***

Kai NAN, Computer Network Information Center, Chinese Academy of Sciences

10:00-10:20

***Content Management Infrastructure for e-Science***

Eric YEN, Computing Centre, Academia Sinica, Taiwan

**October 21 (Thursday), 10:45-12:30, Room 1**  
**Session: Digital Archive 1**

**Chaired by: C.C. HSIEH, Academia Sinica, Taiwan**

10:45-11:05

***National Digital Archives Program of Taiwan***

Der-Tsai LEE, Institute of Information Science, Academia Sinica, Taiwan

11:05-11:30

***Digital Archive with Information Grid: Development in Thailand***

Thaweesak KOANANTAKOOL,

National Electronics and Computer Technology Center (NECTEC)

National Science and Technology Development Agency (NSTDA)

11:30-11:55

***The JISC Continuing Access and Digital Preservation Strategy***

Neil BEAGRIE, British Library/JISC

11:55-12:20

***Metadata and Retrieval for Digital Archives***

Ray LARSON, School of Information Management and Systems, University of California, Berkeley

**October 21 (Thursday), 10:45-12:30, Room 2**  
**Session: Biodiversity 2**

**Chaired by: Ching-I PENG, Institute of Botany, Academia Sinica, Taiwan**

10:45-11:20

***Increasing Usability of Biodiversity Databases through Semantic Enrichment***

Klaus RIEDE, Alexander Koenig Research Institute and Museum of Zoology

11:20-11:55

***Building a Web Services Based Information System in Long Term Ecological Research Network, Taiwan***

Chau-Chin LIN, Hen Biau KING, Taiwan Forestry Research Institute

11:55-12:30

***An e-Book Approach to Ecological Knowledge from Biodiversity Stakeholders: Fishers, Hunters, Trappers, Traders, Consumers, and Scientists***

Alan POTKIN, Digital Conservation Facility, Laos (DCFL)

**October 21 (Thursday), 12:30-14:00, Lecture Hall**

**Session: Demo 2**

12:30-13:15

Reagan MOORE, San Diego Supercomputer Center, UCSD

13:15-14:00

*The Buddhist Digital Text and the Reader*

Aming TU, Library and Information Center

Bhikkhu Huimin, Yen-jen OYANG, Buddhist Informatics Program, The Chung Hwa Institute of Buddhist Studies, and Chinese Buddhist Electronic Text Association

**October 21 (Thursday), 14:00-15:50, Room 1**

**Session: National Palace Museum Plenary**

**Chaired by: James Quo-Ping LIN, National Palace Museum**

14:00-14:20

*Digitization of the Rare Books and Archival Materials in the National Palace Museum*

Cheng-yun LIU, Department of Rare Books and Historical Documents

14:20-14:40

*The Digitization of Antiquities Project*

Alan C. CHEUNG, Pang-yen CHENG, Digital Archives Project of Antiquities, National Palace Museum

Mei-li YANG, Department of Antiquities, National Palace Museum

14:40-15:00

*Towards A Museum Without Walls — Introduction of NPM E-Learning Courses on Bronze*

Hsiu-ling HUANG, National Palace Museum

15:00-15:20

*An Overview of Digitization Projects in National Palace Museum*

James Quo-Ping LIN, Director, Information Management Center, National Palace Museum

**October 21 (Thursday), 14:00-15:50, Room 2**  
**Session: Digital Archive 2**

**Chaired by: C.C. HSIEH, Academia Sinica, Taiwan**

14:00-14:25

***OCR for Japanese Classical Documents - Segmentation of Cursive Characters***

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Shoichiro HARA, National Institute of Japanese Literature

14:25-14:50

***JHTI (Japanese Historical Text Initiative): A Design and Implementation of the Full Text Coordinated Retrieval System of Japanese Historical Resources Using XML***

Ikuo OKETANI, Osaka International University

Delmer BROWAN, Yuko OKUBO, University of California, Berkeley

14:50-15:15

***Description for Restoring Process of "Shoso-in Monjo" Using the XML/XSLT***

Makoto GOTO, Graduate School of Literature, Osaka City University

Mamoru SHIBAYAMA, Kyoto University

15:15-15:40

***Buddhist Digital Archive and Its Knowledge Structure – Mani Jewels Reflecting in the Indra Net***

Aming TU, The Chung Hwa Institute of Buddhist Studies

Huimin BHIKKHU, Yen-jen OYANG, Buddhist Informatics Program, The Chung Hwa Institute of Buddhist Studies, and Chinese Buddhist Electronic Text Association

**October 21 (Thursday), 14:00-15:50, Room 3**  
**Session: Electronic Atlas Projects**

**Chaired by: Ian GREGORY, University of Portsmouth**

14:00-14:20

***Basic Figures on the Web: Atlas of the Metropolitan Area of Guadalajara***

Edith Rosario Jiménez HUERTA, Heriberto Cruz SOLIS,

Jesús Rábago ANAYA, Maria de la Luz AYALA

Universidad de Guadalajara

14:20-14:40

***Political Centers and Cultural Regions in Early Mediaeval North India***

Alexander A. STOLYAROV, Russian Academy of Sciences, Moscow

14:40-15:00

***Memorable Landscapes: A Digital Historical Atlas of an American College, 1837-1980***

Robert M. SCHWARTZ, Mount Holyoke College

15:20-15:40

***Language Mapping: Lan-Yu (Taiwan) and the Batanes of the Philippines***

David BLUNDELL, National Chengchi University

Michael K. BUCKLAND, University of California, Berkeley, USA

**October 21 (Thursday), 16:00-17:00, Room 1**

**Closing Ceremony**

**Chair: Simon C. LIN, Pacific Neighborhood Consortium/ Academia Sinica Computing Centre, Taiwan**