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Wi-Fi access

Account: cute
Password: cute2015

Contacts

Alex YaNing Yen, China University of Technology, Taiwan
Mobile: +886 935201883／Email: alexyen@cute.edu.tw

Kuo-Hua Weng, China University of Technology, Taiwan
Mobile: +886 955222412／Email: ghwong@cute.edu.tw

Hung-Ming Cheng, China University of Technology, Taiwan
Mobile: +886 930678371／Email: hungmc@cute.edu.tw
WELCOME to Taipei

For a long time, CIPA has been making great efforts integrating technology with cultural heritage conservation. The education and dissemination of acquired knowledge is also its major concern. CIPA holds an International symposium every two years presenting the latest scientific research and providing a forum for specialists in conservation and technology to communicate and exchange their ideas.

After examining the properties inscribed on the World Heritage list and those on past tentative lists, CIPA identified problems with imbalanced representation of territories and themes. Thus, The World Heritage List: Filling the Gaps - an Action Plan for the Future was published in 2004. It particularly addresses the importance of diversity that mankind as a whole needs, and how the diversity can bear witness to the cultural heritage that exists in the course of human history. It is also hoped that the imbalanced representation on the World Heritage List can be resolved. In the era of globalization, the development of digitization instruments and methods should closely correspond with the evolution of the concept in cultural heritage conservation and the application of technology. Yet with restriction of the territorial extension, cultural differences and instrumental limitation, there have been gaps between the application of digitization instruments and conservation concepts. In view of this, a platform set up for continuous communication and integration is eminently required.

For all the reasons mentioned above, the theme for 2015 CIPA Symposium titled “Filling the Gaps—Towards a Globalization Era,” while taking into consideration the trend of globalization, emphasizes how CIPA can exercise its influence on the combination of digitization technology and conservation concepts by way of understanding different historical backgrounds, their related cultures, heritage types and conservation principles. It is our hope that the purpose of cultural heritage conservation can be further strengthened by sharing research findings in fields such as knowledge and conceptual structure, operations, integration, future directions, and so forth. The 2015 CIPA Biannual International Symposium is the second one held in Asia. It is profoundly significant to have the opportunity to hold such an event in Taiwan, the Heart of Asia, where multi-cultural exchanges will take place and a wide range of technologies will be presented in the globalization era. We cordially invite all of you here, specialists and researchers in heritage conservation, to participate in this symposium and to exuberantly share the research findings in the field of your interest.

Alex Ya-Ning Yen, CIPA2015 Symposium Chair
LOCAL ORGANIZING COMMITTEE

- **Chair:**
  Alex Ya-Ning Yen, China University of Technology, Taiwan

- **Symposium Secretaries:**
  Kuo-Hua Weng, China University of Technology, Taiwan
  Hung-Ming Cheng, China University of Technology, Taiwan
  Ken Pong, China University of Technology, Taiwan
  Chih-Te Kan, China University of Technology, Taiwan
  Pei-Wen Lee, China University of Technology, Taiwan
  Shao-Hua Tsai, China University of Technology, Taiwan

INTERNATIONAL SCIENTIFIC COMMITTEE

- **Chair:**
  Feng-Tyan Lin, Asia University, Taiwan

- **Members:**
  1. Alex Ya-Ning Yen
  2. Ahmet Turer
  3. Abdullah Hallawa
  4. Ana Almagro Vidal
  5. Andras Patay-Horvath
  6. Andreas Georgopoulos
  7. An-Rong Dang
  8. Bor-Wen Tsai
  9. Catreena Hamarneh
  10. Charalabos Ioannidis
  11. Chiali Lu
  12. Chiung-Min Tsai
  13. Christian Ouiimet
  14. Cliff Ogleby
  15. Dave Cowley
  16. David Andrews
  17. David Gregory
  18. David J. Bodenhamer
  19. David Myers
  20. Dimitrios Skarlatos
  21. Douglas Pritchard
  22. Edmund Lee
  23. Fabio Remondino
  24. Fuan Tsai
  25. Fulvio Rinaudo
  26. Gabriele Fangi
  27. Geert Verhoeven
  28. Grazia Tucci
  29. Helene Macher
  30. I-Chieh Lee
  31. I-Chun Fan
  32. Jack U. Jeng
  33. Jari Okkonen
  34. Jonathan S. Bell
  35. Jong Hyun Lim
  36. Jose Alberto Alonso-Campanero
  37. José Luis Lerma
  38. Jose Manuel Valle Melon
  39. Kenneth Silver
  40. Klaus Hanke
  41. Koenraad Van Balen
  42. Lie Zhang
  43. Marco Scaioni
  44. Marie-Anne Mittet
  45. Mario Santana
  46. Marinos Ioannides
  47. Markus Torma
  48. Masafumi Nakagawa
  49. Mathieu Koehl
  50. Meltem Vatan Kaptan
  51. Michael Doneus
  52. Ming-Daw Su
  53. Minna Sliver
  54. Nikos Grammalidis
  55. Oscar Aldred
  56. Panagiotis Petridis
  57. Pao-Nan Chou
  58. Peter Waldhaeusl
  59. Pierre Charbonnier
  60. Pierre Grussenmeyer
  61. Pierre Smars
  62. Rand Eppich
  63. Raphaëlle Héno
  64. Rémi Wei-Chou Wang
  65. Rohit Jigyasu
  66. Shang-Chia Chiou
  67. Stephen Fai
  68. Stratos Stylianidis
  69. Su-Fen Yen
  70. Tania Landes
  71. Tee-Ann Teo
  72. Tein-Chi Huang
  73. Tsung-Juang Wang
  74. Victor Lopez-Menchero
  75. Xinyue Ye
  76. Yao-Ru Chen
  77. Yuan-Ming Huang
  78. Zhenjiang Shen
AGENDA

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<td>Closing Ceremony</td>
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CODES for SESSIONS

A. Data Acquisition and Recording Techniques
- A-1 laser scanning and 3D imaging
- A-2 Mobile Mapping Applications
- A-3 Photogrammetric recording with 3D cameras
- A-4 Underwater cultural heritage

B. Platform, data-based and application
- B-1 GIS tools and applications
- B-2 Web-based application
- B-3 Portals and Digital Libraries
- B-4 Digital Heritage Inventories

C. Digital processing and modeling
- C-1 Post processing
- C-2 Digital 3D modeling
- C-3 Modeling methods for architecture and archaeology

D. Application
- D-1 Remote sensing techniques for archaeological protection
- D-2 Applications of BIM-HBIM
- D-3 Disaster prevention and monitoring
- D-4 Technologies aimed at preventive maintenance and monitoring of sites

E. Special session and Case studies
- E-1 Cultural heritage conservation on globalization and localization
- E-2 Multi-cooperation for cultural heritage conservation
- E-3 Cross border for cultural heritage conservation
- E-4 Integration, conservation on tangible and intangible cultural heritage
- E-5 Intangible Cultural Heritage capture and documentation
- E-6 Island cultural heritage
- E-7 Museum and exhibition technology
- E-8 Museum and landscape

F. Education and Training
- F-1 Teaching and learning
- F-2 Communication
- F-3 Serious Games

G. Cultural Heritage as Collateral Damage in Conflicts
- G-1 Cultural Heritage as Collateral Damage in Conflicts
SUMMARY of the program

Tutorial & Workshop I: Marie Curie ITN-DCH Workshop (Room 107)
1 September 09:00–16:30
Host: ITN-DCH under European Union under the FP7 PEOPLE research framework
Topic: Emerging Technologies for Cultural Heritage Preservation
Presenter/Lecturer:
- Marinos Ioannides / Chair of the Digital Heritage lab of the Cyprus University of Technology (Cyprus)
- Andreas Georgopoulos / President of CIPA and Professor, Laboratory of Photogrammetry, National Technical University of Athens (Greece)
- Dieter Fritsch / Head of the Institute for Photogrammetry at the University of Stuttgart (Germany)
- Chance Coughenour / Marie Curie ITN DCH/University of Stuttgart (Germany)
- Martin Schaich / Executive Director, ArcTron 3D, Altenthann (Germany)
- Roko Zamic / Professor of Faculty of Civil and Geodetic Engineering at University of Ljubljana (Slovenia)
- Vlatka Rajcic / Professor of Faculty of Civil Engineering at University of Zagreb (Croatia)
- Feng-Tyan Lin / Chair Professor of Department of Digital Media Design, Asia University (Taiwan)

Tutorial & Workshop III: Arches Workshop (Room 104)
30 August 10:00–15:00
Host: Getty Conservation Institute and World Monuments Fund
Topic: Heritage Inventory & Management System
Presenter/Lecturer:
- Yiannis Avramides / Program Associate, World Monuments Fund (USA)
- Alison Dalgity / Senior Project Manager, Getty Conservation Institute (USA)
- David Myers / Senior Project Specialist, Getty Conservation Institute (USA)
- Dennis Wuthrich / Chief Executive Officer, Farallon Geographics, Inc. (USA)
- Adam Cox / Independent Consultant
- Boi-Wen Tsai / Associate Professor of Department of Geography at National Taiwan University and Director of Taiwan Geographic Information Society (Taiwan)

Tutorial & Workshop IV: CIPA Tutorial (Room 103)
30 August 10:00–16:00
Host: CIPA
Topic: Dense image matching for 3D reconstruction
Presenter/Lecturer:
- Fabio Remondino / Head of the 3D Optical Metrology research unit at Bruno Kessler Foundation (FBK Trento, Italy)
- Fuan Tsai / Associate Professor, Center for Space and Remote Sensing Research, National Central University (Taiwan)
**30 August 12:30–17:00**

**Tutorial & Workshop V: Dadaochen Workshop** (Dadaochen Historical District)

Host: Department of Urban Development, Taipei City Government

Topic: Historical district, recording and conservation

Presenter/Lecturer:
- Tung-Ming Lee, Assistant Professor of Department of Interior Design at China University of Technology (Taiwan)
- Vicki Wong, Executive Secretary of Institute for Historical Resources Management and Chief Officer of Urban Regeneration Station 44, Taipei City (Taiwan)
- Yi Chiu, Chairman of Shih-Le Culture Co., Ltd. (Taiwan)

**1 September 09:30–12:00**

**Tutorial & Workshop VI: Disaster Mitigation Workshop** (Room 903)

Host: China University of Technology

Topic: Preventive Conservation and Risk Management of Cultural Heritage

Presenter/Lecturer:
- Koenraad Van Balen, Director, Centre for Conservation at K.U.Leuven (Belgium)
- Rohit Jigyasu, President, ICOMOS International Committee on Risk Preparedness and Professor of the Research Centre for Disaster Mitigation of Urban Cultural Heritage at Ritsumeikan University, Kyoto, Japan (India)
- Alex Ya-Ning Yen, Associate Professor of Department of Architecture and Director of Center for Cultural Sites Rehabilitation and Development at China University of Technology (Taiwan)

**3 September 09:00–12:00**

**Tutorial & Workshop VII: Workshop for High School Students** (Room 909)

Host: Bureau of Cultural Heritage, Ministry of Cultural China University of Technology

Topic: Digital Applications in Cultural Heritage Conservation

Presenter/Lecturer:
- Ana Almagro Vidal, Fundación Montemadrid (Spain)
- Roko Zamic, Professor of Faculty of Civil and Geodetic Engineering at University of Ljubljana (Slovenia)
- Wun-Bin Yang, Lecturer of Department of Interior Design at China University of Technology (Taiwan)
- Jack Chen, Research Associate of Center for Cultural Sites Rehabilitation and Development at China University of Technology (Taiwan)

**Sunday, 30 August 2015**

**Main Venue**: Ke Chih Building, China University of Technology

(No. 56, Sec. 3, Xinglong Rd., Wunshan District, Taipei City 116, Taiwan – MRT Wanfang Hospital Station)

**08:30 – 17:00** Registration

Venue: The lobby of 1st Floor, Ke Chih Building, China University of Technology

**14:00 – 20:00** **EB Meeting** (Room 903)

Venue: 9F, Ke Chih Building, China University of Technology
Monday, 31 August 2015  Day 1

Main Venue: Ke Chih Building, China University of Technology
(No. 56, Sec. 3, Xinglong Rd., Wunshan District, Taipei City 116, Taiwan – MRT Wanfang Hospital Station)

08:30 – 17:00 Registration (The lobby of 1st Floor)
09:00 – 12:00 EB Meeting (Room 107)
14:00 – 17:30 Opening Ceremony (Room 909)
  ● Opening Remarks
    by CIPA 2015 Symposium Chair, Minister of Culture, President of China University of Technology, President of CIPA
  ● Taipei Declaration on the Integrated Documentation Management of Cultural Heritage
  ● Financial Support Grants Award
  ● Lecture: Peter Waldhäusl / Honorary President of CIPA
    Scott Lee / Director of Operations, CyArk
  ● Break
  ● PLENARY 1
    Keynote 1: Gustavo Araoz / President of ICOMOS
    Keynote 2: Bonnie Burnham /
       President and CEO of World Monuments Fund
    Keynote 3: Fabio Remondino / Vice President of CIPA and ISPRS-Technical Commission V President
  ● Group Photos
17:30 – 18:30 Welcome Cocktail (The lobby of 9th Floor)
        Host by China University of Technology

Tuesday, 1 September 2015  Day 2

Main Venue: Ke Chih Building, China University of Technology
(No. 56, Sec. 3, Xinglong Rd., Wunshan District, Taipei City 116, Taiwan – MRT Wanfang Hospital Station)

08:30 – 18:00 Exhibition (The lobby of 1st Floor)
08:30 – 09:00 Technical Report 1 (Room 101)
  ● ArcTron 3D Ltd., Germany
09:00 – 10:00 PLENARY 2 (Room 101)
  Keynote 4: Chao-Ching Fu / Distinguished Professor of Department of Architecture at National Cheng Kung University
  Keynote 5: Stephen Fai / Director, Carleton Immersive Media Studio (CIMS) at Carleton University
10:00 – 10:30 Coffee break

10:30 – 12:00 Oral Sessions (Room 101 – 104) — details on pp. 19-20

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<td>10:30 – 12:00</td>
<td>A-1: Laser scanning and 3D imaging</td>
<td>Room 101</td>
<td>Mario Santana</td>
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<td>A-2: Mobile Mapping Applications</td>
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<td>José Luis Lerma</td>
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<td>A-3: Photogrammetric recording with 3D cameras</td>
<td>Room 103</td>
<td>Rémi Wei-Chou Wang</td>
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<td>10:30 – 12:00</td>
<td>E-1: Cultural heritage conservation on globalization and localization</td>
<td>Room 104</td>
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<td>D-1: Remote sensing techniques for archaeological protection</td>
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<td>D-4: Technologies aimed at preventive maintenance and monitoring of sites</td>
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12:00 – 13:30 Lunch & Coffee

13:00 – 13:30 Technical Report 2 (Room 101)

- Taiwan Instrument Co., Ltd., Taiwan

13:30 – 14:15 Poster Session 1 (The lobby of 1st Floor) — details on pp. 20-23

14:15 – 16:05 Oral Sessions (Room 101 – 104) — details on pp. 23-25

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<tr>
<td>14:15 – 16:05</td>
<td>A-1: Laser scanning and 3D imaging</td>
<td>Room 101</td>
<td>Pierre Grussenmeyer</td>
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<td>G-1: Cultural Heritages as Collateral Damage in Conflicts</td>
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<td>14:15 – 16:05</td>
<td>B-1: GIS tools and applications</td>
<td>Room 102</td>
<td>I-Chun Fan</td>
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<td>B-3: Portals and Digital Libraries</td>
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<td>14:15 – 15:45</td>
<td>D-3: Disaster prevention and monitoring</td>
<td>Room 103</td>
<td>Koenraad Van Balen</td>
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<td>B-2: Web-based application</td>
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<td>B-4: Digital Heritage Inventories</td>
<td>Room 104</td>
<td>David Myers</td>
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16:05 – 17:30 Transfer

17:30 – 18:30 Reception

Host by the Mayor of Taipei City
Venue: Guangfu Auditorium, Zhongshan Hall
(No.98, Yenping S. Rd., Taipei, Taiwan, 100, R.O.C. – Exit 5 of MRT Ximen Station)
Wednesday, 2 September 2015  Day 3

08:30 – 17:30  **Technical Excursion**

Route A: Taipei City Monuments (on foot)
Route B: Tamsui to Jinguashi (by bus)
Route C: Jinguashi to Tamsui (by bus)

19:30 – 21:30  **EB Dinner**

Thursday, 3 September 2015  Day 4

Main Venue: Ke Chih Building, China University of Technology

(No. 56, Sec. 3, Xinglong Rd., Wunshan District, Taipei City 116, Taiwan – MRT Wanfang Hospital Station)

08:30 – 18:00  **Exhibition**  (The lobby of 1st Floor)

08:30 – 09:00  **Technical Report 3**  (Room 101)

- Interactive Digital Technologies Inc. (IDT), Taiwan
- AICON 3D Systems GmbH, Germany

09:00 – 10:00  **PLENARY 3**  (Room 101)

Keynote 6: Cheng-hwa Tsang / Distinguished Research Fellow, Institute of History and Philology, Academia Sinica

Keynote 7: Markus Reindel / Paleoclimate Team Director for the Commission for Archaeology of Non-European Cultures, German Archaeological Institute

10:00 – 10:30  **Coffee break**

10:30 – 12:00  **Oral Sessions**  (Room 101 – 104)  — details on pp. 25-27

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<td><strong>F-2: Communication</strong></td>
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<td>Gabriele Fangi</td>
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<td><strong>F-3: Serious Games</strong></td>
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<tr>
<td>10:30 – 11:45</td>
<td><strong>B-2: Web-based application</strong></td>
<td>Room 102</td>
<td>An-Rong Dang</td>
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<tr>
<td>10:30 – 12:00</td>
<td><strong>C-1: Post processing</strong></td>
<td>Room 103</td>
<td>Fabio Remondino</td>
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<td><strong>C-2: Digital 3D modeling</strong></td>
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<tr>
<td>10:30 – 12:00</td>
<td><strong>E-1: Cultural heritage conservation on globalization and localization</strong></td>
<td>Room 104</td>
<td>Peter Waldhäusl</td>
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<td><strong>E-7: Museum and exhibition technology</strong></td>
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12:00 – 13:30  **Lunch & Coffee**

13:30 – 14:15  **Poster Session 2**  (The lobby of 1st Floor)  — details on pp. 20-23
14:15 – 15:45 **Oral Sessions** （Room 101 – 104）— details on pp. 27-28

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<td><strong>B-2</strong>: Web-based application</td>
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<td><strong>B-4</strong>: Digital Heritage Inventories</td>
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<td>14:15 – 15:10</td>
<td><strong>D-4</strong>: Technologies aimed at preventive maintenance and monitoring of sites</td>
<td>Room 102</td>
<td>Pierre Smars</td>
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<td>14:15 – 15:45</td>
<td><strong>C-2</strong>: Digital 3D modeling</td>
<td>Room 103</td>
<td>Klaus Hanke</td>
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<td><strong>C-3</strong>: Modeling methods for architecture and archaeology</td>
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<td><strong>E-3</strong>: Cross border for cultural heritage conservation</td>
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<tr>
<td>14:15 – 15:30</td>
<td><strong>E-1</strong>: Cultural heritage conservation on globalization and localization</td>
<td>Room 104</td>
<td>Tsung-Juang Wang</td>
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<td><strong>F-1</strong>: Teaching and learning</td>
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15:45 – 16:30 **Coffee Break**

16:30 – 17:00 **Technical Report 4** （Room 101）
- ReTHID Co., Ltd., China

17:00 – 19:00 **Transfer**

19:00 – 21:30 **Gala Dinner**
Venue: The Ballroom (3rd Floor), Regent Taipei (No. 3, Lane 39, Sec. 2, Zhongshan N. Rd., Taipei City 104, Taiwan, R.O.C. – Exit 3 of MRT Zhong Shan station)

**Friday, 4 September 2015**

Main Venue: Ke Chih Building, China University of Technology (No. 56, Sec. 3, Xinglong Rd., Wunshan District, Taipei City 116, Taiwan – MRT Wanfang Hospital Station)

08:30 – 18:00 **Exhibition** （The lobby of 1st Floor）

08:30 – 09:00 **Technical Report 5** （Room 101）
- Control Signal Co., Ltd., Taiwan
- Arch Wood Protection, Inc., Malaysia
09:00 – 10:00 **PLENARY 4** (Room 101)

Keynote 8: Martin Schaich／Executive Director, Archaeologist and 3D Surveying Specialist for Heritage Documentation & Photogrammetry, ArcTron 3D Ltd.

Keynote 9: Rob Davies／Advisor of the ITN-DCH Marie Curie project

10:00 – 10:30 **Coffee break**

10:30 – 12:00 **Oral Sessions**（Room 101 – 104）— details on pp. 28-29

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<td>10:30 – 11:45</td>
<td>E-2: Multi-cooperation for cultural heritage conservation</td>
<td>Room 101</td>
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<td>10:30 – 11:45</td>
<td>E-4: Integration, conservation on tangible and intangible cultural heritage</td>
<td>Room 102</td>
<td>Ana Almagro Vidal</td>
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<tr>
<td>10:30 – 11:25</td>
<td>E-7: Museum and exhibition technology</td>
<td>Room 103</td>
<td>Su-Fen Yen</td>
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<tr>
<td>10:30 – 12:00</td>
<td>D-2: Applications of BIM-HBIM</td>
<td>Room 104</td>
<td>Stephen Fai</td>
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12:00 – 13:30 **Lunch & Coffee**

13:30 – 15:00 **Oral Sessions**（Room 102 – 104）— details on pp. 30

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<tr>
<td>13:30 – 15:00</td>
<td>E-4: Integration, conservation on tangible and intangible cultural heritage</td>
<td>Room 102</td>
<td>Stratos Stylianidis</td>
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<td>E-6: Island cultural heritage</td>
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<td>13:30 – 14:25</td>
<td>E-5: Intangible Cultural Heritage capture and documentation</td>
<td>Room 103</td>
<td>Nikos Grammalidis</td>
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<td>E-7: Museum and exhibition technology</td>
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<tr>
<td>13:30 – 15:00</td>
<td>C-3: Modeling methods for architecture and archaeology</td>
<td>Room 104</td>
<td>Andreas Georgopoulos</td>
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15:00 –16:00 **Closing Ceremony**（Room 101）

- Closing Remarks by President of CIPA
- Best Paper Award and Best Poster Award
- CIPA Taipei Declaration
- Conclusion Report of CIPA 2015

16:00 – 17:00 **Closing Cocktail**（The lobby of 1st Floor）
Keynote Speakers

The CIPA2015 Symposium is a unique opportunity to listen to international key figures in the Cultural Heritage documentation and conservation fields.

Monday, 31 August 2015 (Opening Ceremony, PLENARY 1) 15:45 – 17:15

- Mr. Gustavo Araoz, President of ICOMOS, will give a keynote about “Documentation: the Essential Foundation for Good Conservation”.

- Ms. Bonnie Burnham, President and CEO of World Monuments Fund.

- Mr. Fabio Remondino, Vice President of CIPA and ISPRS-Technical Commission V President, will give a keynote about “ISPRS and CIPA — Technology and Cultural Heritage”.

Tuesday, 1 September 2015 (PLENARY 2) 09:00 – 10:00

- Mr. Chao-Ching Fu, Distinguished Professor of Department of Architecture at National Cheng Kung University, will make a speech on “Reflections on Recommendation on the Historic Urban Landscape and Florence Declaration: An Inquiry into the Landscape Approach to Cultural Heritage in Taiwan in New Era.” His speech will comprises two parts, a review of the preservation and the conservation of linear and areal cultural heritage in Taiwan, and a discussion about how the concept of “landscape” in Recommendation on the Historic Urban Landscape and Florence Declaration could be transformed into a landscape approach for preserving and conserving historic streets, districts, towns, and cities as well as cultural landscape in Taiwan.

- Mr. Stephen Fai, Director of Carleton Immersive Media Studio (CIMS) at Carleton University, will make a lecture discussing the recent work of his research group — the Carleton Immersive Media Studio — in the design and development of digital workflows for heritage conservation. This work considers technologies for digitization, building information modeling, performance simulation, and digitally assisted fabrication and how they might be integrated into more traditional, craft based architectural projects.
Thursday, 3 September 2015 (PLENARY 3) 09:00 – 10:00

- Mr. Cheng-hwa Tsang, Distinguished Research Fellow, Institute of History and Philology in Academia Sinica, will make a speech titled as “Archaeological Heritage Management in Taiwan: Retrospect and Prospect.” In Taiwan, archaeological heritage management started from the period of Japanese occupation in 1930s. However, the construction of the national administration and legislation concerning archaeology appeared only after 1980s. At present, archaeological heritage has become one of the main heritage categories in the Cultural Heritage Preservation Law. In this paper he will give a brief introduction of Taiwan’s archaeological heritage and the history of the developmental process of the archaeological heritage management. Finally he will discuss some current issues in the management of archaeological heritage in Taiwan.

- Mr. Markus Reindel, Team Director at the Americas Department of the Commission for Archaeology of Non-European Cultures, German Archaeological Institute (DAI), Bonn. This presentation comprises some examples of research projects with components of remote sensing and 3D modelling from Peru and Honduras, including work on the geoglyphs of the Nasca culture, documentation of settlements, agricultural terraces, petroglyphs and ceramic objects, as well as examples from the Maya site of Copan, where they are building a web-based 3D-GIS in a cooperative approach together with computer scientists and geomatic specialists.

Friday, 4 September 2015 (PLENARY 4) 09:00 – 10:00

- Mr. Martin Schaich, Executive Director, Archaeologist and 3D Surveying Specialist for Heritage Documentation & Photogrammetry, ArcTron 3D Ltd., will make a lecture about “Vianden Castle 3D – ‘Mission completed’!?”, which combines 3D-technologies for documentation, research, visualization and multidimensional presentation. (http://www.arctron.de/en/gallery/galerie_archiv/2015/vianden/)

- Mr. Rob Davies, Advisor of the ITN-DCH Marie Curie project, will contribute with “Digital heritage – and what to do with it.” The presentation will summarise developments to date in the creation of the Europeana platform, which now indexes and provides access to over 36 million items of digital heritage. It will go on to review the potential for re-use of this content and the technological and legal issues which remain to be addressed. Finally, it will speculate on the possibilities of beneficial linkages between the “quality-assured” content sourced from cultural institutions and the huge body of images and information created in social media environments.
TUTORIALS & WORKSHOPS Program

Tutorial & Workshop I: Marie Curie ITN-DCH Workshop 1 September 2015

Venue: Room 107

Host: ITN-DCH under European Union under the FP7 PEOPLE research framework

Topic: Application of Digital Technology in Cultural Heritage Conservation

Presenter / Lecturer:
- Marinos Ioannides / Chair of the Digital Heritage lab of the Cyprus University of Technology (Cyprus)
- Andreas Georgopoulos / President of CIPA and Professor, Laboratory of Photogrammetry, National Technical University of Athens (Greece)
- Dieter Fritsch / Head of the Institute for Photogrammetry at the University of Stuttgart (Germany)
- Chance Coughenour / Marie Curie ITN DCH/University of Stuttgart (Germany)
- Martin Schaich / Executive Director, ArcTron 3D, Altenthann (Germany)
- Roko Zamic / Professor of Faculty of Civil and Geodetic Engineering at University of Ljubljana (Slovenia)
- Vlatka Rajcic / Professor of Faculty of Civil Engineering at University of Zagreb (Croatia)
- Feng-Tyan Lin / Chair Professor of Department of Digital Media Design, Asia University (Taiwan)

Information:

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:00 – 09:05</td>
<td>Welcome Address, Opening by Alex YEN, CIPA2015 Symposium Chair</td>
</tr>
</tbody>
</table>
| 09:05 – 09:35 | **Structure-from-Motion and SURE Dense Image Matching – The Perfect Love for Cultural Heritage Preservation**  
Dieter FRITSCH, University of Stuttgart, Germany |
| 09:35 – 10:00 | **The Project Mosul – Reconstructing Lost Cultural Heritage**  
Chance COUGHENOUR, Marie Curie ITN DCH/University of Stuttgart, Germany |
| 10:00 – 10:30 | **The Marie Curie ITN-DCH Project – The Power of Interdisciplinary Training**  
Marinos IOANNIDES, Cyprus University of Technology, Cyprus |
| 10:30 – 11:00 | Coffee Break |
| 11:00 – 11:30 | **Modern Photogrammetry Methods for Cultural Heritage Preservation**  
Andreas GEORGOPOULOUS, Nat. Technical University of Athens, Greece |
| 11:30 – 12:00 | **asPECT3D – SFM-Photogrammetry and 3D Information System - an Introduction**  
Martin SCHAICH, ArcTron 3D, Altenthann, Germany |
| 12:00 – 12:30 | **Intervention Decision Making Based on EU Cultural Heritage Identity Card**  
Roko ZARNIC & Vlatka RAJCIC, University of Ljubljana, Slovenia/University of Zagreb, Croatia |
| 12:30 – 14:00 | Lunch |
| 14:00 – 16:00 | Afternoon Demonstrations:  
- **Photogrammetry**: PhotoScan/Agisoft, VisualSFM, bundler, PMVS, SURE, Android3D DPI 7 Imager  
- Workshop aSPECT3D (ArcTron3D)  
- **Laser Scanning**: FARO Scene, Leica Cyclone, Trimble SketchUp, SketchUp Pro  
- **3D / 4D Modelling**: Autodesk 3ds max, Unity, Digital Globes  
- **Embedded Technologies**: Augmented Reality, Virtual Reality  
- **Materials Testing** |
Tutorial & Workshop III: Arches Workshop  30 August 2015

— **Venue:** Room 104
— **Host:** Getty Conservation Institute and World Monuments Fund
— **Title:** Heritage Inventory and Management System
— **Topic:** Information Session on Version 3.0 of the Arches Heritage Inventory and Management System

— **Presenter / Lecturer:**
  - Yiannis Avramides / Program Associate, World Monuments Fund (USA)
  - Alison Dalgity / Senior Project Manager, Getty Conservation Institute (USA)
  - David Myers / Senior Project Specialist, Getty Conservation Institute (USA)
  - Dennis Wuthrich / Chief Executive Officer, Farallon Geographics, Inc. (USA)
  - Adam Cox / Independent Consultant
  - Boi-Wen Tsai / Associate Professor of Department of Geography at National Taiwan University and Director of Taiwan Geographic Information Society (Taiwan)

— **Information:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>10:00</td>
<td><strong>Introduction</strong></td>
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<tr>
<td></td>
<td>1. Introduction to the Getty Conservation Institute and World Monuments Fund</td>
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<td>2. Main goals of the Arches project</td>
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<td>3. Session aims and format</td>
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<td><strong>Project Background and Aims</strong></td>
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<td></td>
<td>1. Challenges of heritage data management</td>
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<td>2. Opportunities of new technologies</td>
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<td></td>
<td>3. Our approach to development</td>
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<td>4. Design principles</td>
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<td>5. What Arches is / What Arches is not</td>
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<td>6. Current implementations</td>
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<td></td>
<td><strong>Why Arches?</strong></td>
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<td>1. How Arches benefits heritage information management</td>
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<td>2. Geospatial representations of cultural resources</td>
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<td>3. Semantic technology (interoperability and sustainability)</td>
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<td>4. Reference data and the Arches Reference Data Manager (RDM)</td>
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<td><strong>Demo of Arches-HIP</strong></td>
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<td>1. The Heritage Inventory Package (HIP)</td>
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<td>2. Managing resources</td>
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<td>3. Data entry patterns</td>
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<td>4. Geospatial data and data processing</td>
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<td>5. Relationships between resources</td>
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<td>6. Audits</td>
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<td>7. Managing concepts with the RDM</td>
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<td>8. Search and discovery</td>
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<td>9. Data export</td>
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<tr>
<td>12:30</td>
<td><strong>Q&amp;A</strong></td>
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<tr>
<td>13:30</td>
<td><strong>How to Deploy Arches</strong></td>
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<tr>
<td></td>
<td>1. Introduction to the process of deployment</td>
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<td>2. Overview of data modeling</td>
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<td>3. Mapping data to Arches (ETL)</td>
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<td></td>
<td>4. System configuration requirements and options</td>
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<tr>
<td></td>
<td>5. Hosting considerations and options</td>
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<td>6. Examples</td>
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### System Customization
1. Introduction to customization
2. System components and architecture
3. How to customize the user interface
4. How to customize graphs
5. How to customize data entry forms
6. How to customize reports
7. Skills required
8. Examples

| Break / Q&A |

### The Arches Community
1. Community resources
2. System documentation
3. How to participate

### Roadmap
1. Software development under an open source model
2. Roadmap items

| 15:00 | End |

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### Tutorial & Workshop IV: CIPA Tutorial 30 August 2015

- **Venue:** Room 103
- **Host:** CIPA
- **Title:** Dense image matching for 3D reconstruction
- **Topic:** Theory and practice in dense 3D reconstruction (point cloud) from image datasets

- **Presenter / Lecturer:**
  - Fabio Remondino / Head of the 3D Optical Metrology research unit at Bruno Kessler Foundation (FBK Trento, Italy)
  - Fuan Tsai / Associate Professor, Center for Space and Remote Sensing Research, National Central University (Taiwan)

- **Information:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Topics</th>
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<tbody>
<tr>
<td>10:00</td>
<td>3D recording techniques</td>
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<tr>
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<td>Image-based approach</td>
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<td></td>
<td>Photogrammetric pipeline</td>
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<td>Examples and demos</td>
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<td>Dense Image Matching history</td>
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<td></td>
<td>Dense Image Matching methods and algorithms</td>
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<tr>
<td>12:30 – 13:30</td>
<td>Lunch</td>
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<tr>
<td></td>
<td>Evaluation of matching methods and accuracy analysis</td>
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<td>Examples and demos</td>
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<td>Exercises</td>
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<td>Conclusions</td>
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<tr>
<td>16:00</td>
<td>End</td>
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</tbody>
</table>
Tutorial & Workshop V: Dadaochen Workshop

Venue: URS44 Dadaochen History House
(No. 44, Sec. 1, Dihua St., Datong Dist., Taipei City 103, Taiwan, R.O.C. –
Exit 3 of MRT Beimen station)

Host: Department of Urban Development, Taipei City Government

Topic: Historical district, recording and conservation

Presenter / Lecturer:
- Tung-Ming Lee／Assistant Professor of Department of Interior Design at China University of Technology (Taiwan)
- Vicki Wong／Executive Secretary of Institute for Historical Resources Management and Chief Officer of Urban Regeneration Station 44, Taipei City (Taiwan)
- Yi Chiu／Chairman of Shih-Le Culture Co., Ltd. (Taiwan)

Information:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>12:30 – 13:00</td>
<td>All assemble at URS44 Dadaochen History House</td>
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<tr>
<td>13:00 – 13:10</td>
<td>Event Instruction &amp; Group Division</td>
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<tr>
<td></td>
<td>Tung-Ming Lee, China University of Technology, Taiwan</td>
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<tr>
<td>13:10 – 15:00</td>
<td>Visiting in Dadaochen, Searching local stories and resources, and form the image of Dadaochen by taking the picture</td>
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<td></td>
<td>Yi Chiu, Shih-Le Culture Co., Ltd., Taiwan</td>
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<tr>
<td>15:00 – 16:00</td>
<td>Discussion in Groups: According to different topics, each groups upload the pictures to Facebook Page “Dadaochen Workshop Online Gallery” or Instagram with the labels, such as #dadaochen, #dihuastreet, #religion, #building, #oldstore and #food. (each pictures with 100 words in English)</td>
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<tr>
<td></td>
<td>Tung-Ming Lee, China University of Technology, Taiwan</td>
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<tr>
<td>16:00 – 17:00</td>
<td>Group Presentations</td>
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<tr>
<td></td>
<td>Tung-Ming Lee, China University of Technology, Taiwan</td>
</tr>
<tr>
<td>17:00 –</td>
<td>Group Photos / End</td>
</tr>
</tbody>
</table>

Tutorial & Workshop VI: Disaster Mitigation Workshop

Venue: Room 903

Host: China University of Technology

Topic: Preventive Conservation and Risk Management of Cultural Heritage

Presenter / Lecturer:
- Koenraad Van Balen／Director, Centre for Conservation at K.U.Leuven (Belgium)
- Rohit Jigyasu／President, ICOMOS International Committee on Risk Preparedness and Professor of the Research Centre for Disaster Mitigation of Urban Cultural Heritage at Ritsumeikan University, Kyoto, Japan (India)
- Alex Ya-Ning Yen／Associate Professor of Department of Architecture and Director of Center for Cultural Sites Rehabilitation and Development at China University of Technology (Taiwan)
### Information:

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:30 – 10:00</td>
<td>Report on Disaster Prevention of Cultural Heritage in Taiwan</td>
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<tr>
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<td>Alex Ya-Ning Yen, China University of Technology, Taiwan</td>
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<tr>
<td>10:00 – 10:10</td>
<td>Break</td>
</tr>
<tr>
<td>10:10 – 10:40</td>
<td>Preventive Conservation and Monitoring of Cultural Heritage</td>
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<td></td>
<td>Koenraad Van Balen, K.U.Leuven, Belgium</td>
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<tr>
<td>10:40 – 11:10</td>
<td>First Aid to Nepalese Cultural Heritage for Recovery and Risk Reduction: Challenges and Opportunities</td>
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<tr>
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<td>Rohit Jigyasu, Ritsumeikan University, India</td>
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<tr>
<td>11:10 – 12:00</td>
<td>Q&amp;A</td>
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</tbody>
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**Tutorial & Workshop VII: Workshop for High School Students**  
3 September 2015

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**Venue:** Room 909

**Host:** China University of Technology

**Topic:** Digital Applications in Cultural Heritage Conservation

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**Presenter / Lecturer:**

- Ana Almagro Vidal / Fundación Montemadrid (Spain)
- Roko Zamic / Professor of Faculty of Civil and Geodetic Engineering at University of Ljubljana (Slovenia)
- Wun-Bin Yang / Lecturer of Department of Interior Design at China University of Technology (Taiwan)
- Jack Chen / Research Associate of Center for Cultural Sites Rehabilitation and Development at China University of Technology (Taiwan)

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**Information:**

<table>
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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:00 – 09:20</td>
<td>Check in</td>
</tr>
<tr>
<td>09:20 – 09:30</td>
<td>Welcome address</td>
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<td>Yeu-Ren Shu, Bureau of Cultural Heritage, Ministry of Cultural</td>
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<tr>
<td>09:30 – 09:50</td>
<td>Digital Application in Cultural Heritage Conservation</td>
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<td>Yeu-Ren Shu, Bureau of Cultural Heritage, Ministry of Cultural</td>
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<tr>
<td>09:50 – 10:20</td>
<td>International trend of Cultural heritage conservation</td>
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<tr>
<td></td>
<td>Ana Almagro Vidal, Fundación Montemadrid, Spain</td>
</tr>
<tr>
<td>10:20 – 10:30</td>
<td>Break</td>
</tr>
<tr>
<td>10:30 – 11:00</td>
<td>International Digital Heritage technology</td>
</tr>
<tr>
<td></td>
<td>Roko Zamic, University of Ljubljana, Slovenia</td>
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<tr>
<td>11:00 – 11:30</td>
<td>Digital Heritage technology in Taiwan</td>
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<tr>
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<td>Wun-Bin Yang, China University of Technology, Taiwan</td>
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<td></td>
<td>PHOTOGRAVMETRIC CAPTURE: THE &quot;3 x 3&quot; RULES</td>
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<td>Jack Chen, China University of Technology, Taiwan</td>
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<tr>
<td>11:30 – 11:50</td>
<td>Q&amp;A</td>
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<td>11:50</td>
<td>End, Visit the exhibition</td>
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## SESSIONS Program

### Tuesday, 1 September 2015  
**Day 2**

#### A-1: Laser scanning and 3D imaging

**Room 101 / Chair: Mario Santana**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>10:30</td>
<td>CIPA2015-27 Digital Technology in the protection of cultural heritage Bao Fan Temple mural digital mapping survey Y. Zheng</td>
</tr>
<tr>
<td>10:48</td>
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<tr>
<td>11:06</td>
<td>CIPA2015-60 Finding the displacement of wood structure in heritage building by 3D laser scanner M.C. Lee, Y.L. Tsai, R.Z. Wang, M.L Lin</td>
</tr>
<tr>
<td>11:24</td>
<td>CIPA2015-153 3D Recording methodology applied to the Grotta Scritta Prehistoric Rock-Shelter in Olmeta-Di-Capocorso (Corsica, France) P. Grussenmeyer, A. Burens, S. Guillemin, E. Alby, F. Allegrini Simonetti, M.-L. Marchetti</td>
</tr>
<tr>
<td>11:42</td>
<td>CIPA2015-16 Comparison Of Laser Scanning And Photogrammetry And Their Use For Digital Recording Of Cultural Monument Case Study: Byzantine Land Walls-Istanbul B. Bayram, G. Nemli, T. Özkan, O.E. Oflaz, B. Kankotan, İ. Çetin</td>
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</tbody>
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#### A-2 & A-3: Mobile Mapping Applications & Photogrammetric recording with 3D cameras

**Room 102 / Chair: José Luis Lerma**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>10:30</td>
<td>CIPA2015-114 Interactive Virtual Exploration of Culture Heritage Sites Using Panoramic Images H. Chang, F. Tsai, T. C. Lin, and T. S. Wu</td>
</tr>
<tr>
<td>10:48</td>
<td>CIPA2015-127 Point Cloud Generation from Close-Range Photograph and Panoramic Images at Kinmen Culture Heritage Site I.-C. Lee and F. Tsai</td>
</tr>
<tr>
<td>11:06</td>
<td>CIPA2015-159 Develop Direct Geo-referencing System Based on Open Source Software and Hardware Platform H.S. Liu, H.M. Liao</td>
</tr>
<tr>
<td>11:24</td>
<td>CIPA2015-8 Towards Image Documentation of Grave Coverings and Epitaphs for Exhibition Purposes G. Pomaska, N. Dementiev</td>
</tr>
<tr>
<td>11:42</td>
<td>CIPA2015-201 Documentation and dissemination of the sculptural elements of Canada's Parliamentary Buildings. Methodology development and evolution, a case study. C. Ouimet</td>
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#### E-1: Cultural heritage conservation on globalization and localization

**Room 103 / Chair: Rémi Wei-Chou Wang**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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</table>
10:48 – 11:06 CIPA2015-88  
**Cultural Consumption of the Overseas Chinese Garden in the Process of Cross-cultural Communication**  
L. Zhai

11:06 – 11:24 CIPA2015-151  
**Discussion of impact of relics activation on protection and utilization approaches—take the old summer palace as an example**  
J. Xiaoqi

D-1 & D-4: Remote sensing techniques for archaeological protection & Technologies aimed at preventive maintenance and monitoring of sites  
Room 104 / Chair: Michael Doneus

10:30 – 10:48 CIPA2015-34  
**Documentation of archaeological sites in northern iraq using remote sensing methods**  
E. Matoušková,K. Pavelka,K. Nováček,L. Starková

10:48 – 11:06 CIPA2015-56  
**4D Visualization of Painted Sculpture and Murals**  

11:06 – 11:24 CIPA2015-169  
**Complex Archaeological Prospection Using Combination of Non-destructive Techniques**  
M. Faltýnová,K. Pavelka,P. Nový,J. Šedina

11:24 – 11:42 CIPA2015-128  
**Structural Analysis of Historical Structures - Working with Point Clouds**  
P. Smars

11:42 – 12:00 CIPA2015-300  
**Aductive Frameworks for a Digital HBIM Canon: Matching Specification Standards to Augment Historic Object Libraries**  
O.E.C.Prizeman

12:00 – 13:30 **Lunch & Coffee**

13:30 – 14:15 **Poster Session 1**  
(and also Thursday, 03 September 2015, 13:30-14:15, for Poster Session 2)  
The lobby of 1st Floor / Chair: Mario Santana (juries: Klaus Hanke, Stratos Stylianidis)

P1— CIPA2015-23  
**The Application of 3D Laser Scanning in the Survey and Measuring of Guyue Bridge of Song Dynasty in Yiwu City**  
N. Lu,Q. Wang,S. Wang,R. Zhang

P2— CIPA2015-50  
**3d Scan of Ornamental Column (huabiao) Using Terrestrial LiDAR and Hand-held Imager**  
W. Zhang,C. Wang,X. Xi

P3— CIPA2015-106  
**The bust of Francesco II Gonzaga: from digital documentation to 3D printing**  
A. Adami,C. Balletti,F. Fassi,L. Fregonese,F. Guerra,L. Taffurelli,P. Vernier

P4— CIPA2015-112  
**Development of Network-type Archaeological Investigation System**  
F. Chiba,S. Yokoyama,A. Kaneda,K. Konno

P5— CIPA2015-119  
**Towards automation in 3D documentation of cultural heritage**  
R Sitnik, E Bunsch, M Karaszewski, J. Krzeslowski, G Maczkowski, E Holowko, and J Michonski

P6— CIPA2015-160  
**Quantifying the world’s oldest edge ground stone tools: application of 3D measurement and analysis of Early Upper Palaeolithic stone axes from Musashi-dai site, Japan**  
A. Noguchi, S. Yokoyama, and F. Chiba
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<th>ID</th>
<th>Title</th>
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</table>
| P7  | CIPA2015-175
Digitalized preservation and presentation of historical building – taking traditional temples and dougong as examples
W.B. Yang, Y.N. Yen, H.M. Cheng |
| P8  | CIPA2015-108
Application of Structure from Motion in Japanese Archaeology
A. Kaneda, Y.A. Nawabi, H. Yamaguchi |
| P9  | CIPA2015-101
Documentation, using GIS techniques in conservation of a World Heritage Site, a case study of "The Old City of Jerusalem"
B. Husseini, Z. Bali |
| P10 | CIPA2015-139
Design and Research of Service Platform for Protection and Dissemination of Cultural Heritage Resources of The Silk Road in the Territory of China
| P11 | CIPA2015-152
Digital Inventory and Documentation of Korea’s Important Cultural Properties Using 3D Laser Scanning
K. Dongseok, K. Gyesoo, K. Siro, K Eunhwa |
| P12 | CIPA2015-42
Data processing workflows from low-cost digital survey to various applications: three case studies of Chinese historic architecture
Z. Sun and Y.K. Cao |
| P13 | CIPA2015-118
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M. Kedzierski, A. Fryskowska, D. Wierzbicki, M. Dabrowska, and A. Grochala |
| P14 | CIPA2015-54
Ta Keo Temple Reconstruction Based on Terrestrial Laser Scanning Technology
X. Xi, C. Wang, Y.P. Wan, and K.N. Khuon |
| P15 | CIPA2015-90
Assistant role of digital platform in the study of space of chinese traditional gardens
W. Fan, L. Jinyue, and Y. Lina |
| P16 | CIPA2015-102
Discussion about the effect of digital plants library on the plants landscape restoration in Yuanmingyuan
L. Bing, S. Guxin, and L. Gongli |
| P17 | CIPA2015-120
Data fusion in Cultural Heritage - A Review
M.M. Ramos and F. Remondino |
| P18 | CIPA2015-167
3D Modeling from Multi-views Images for Cultural Heritage in Wat-Pho, Thailand
N. Soonthranon, P. Srestasathier, and S. Lawawirojwong |
| P19 | CIPA2015-20
Documentation of cultural heritage; techniques, potentials, and constraints
F. Hassani |
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Knowledge Based Models to Communicate Architecture: Villa Borghese
c. bartolomei and a. ippolito |
| P21 | CIPA2015-123
Orthoimages of the outer walls and towers of the château de Chambord
A. Pinte, R. Héno, M. Pierrot-Deseilligny, X. Brunetaud, S Janvier-Badosa, and R. Janvier |
| P22 | CIPA2015-146
Procedural modelling for reconstruction of historic monuments
M. Koehl and F. Roussel |
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Discussion and Reflection on Several Core Issues in the Grand Canal Heritage Conservation Planning Under the Background of Application for World Heritage
D. Yao, D.S. Dai, Y.Z. Tang, G.Y. Zhu, and X. Chen

P40— CIPA2015-219
Who Makes the garden?
W. Xin

P41— CIPA2015-1
Restoration and Rehabilitation of world heritage Site of Chupan Church
S. Darvish Rohani

P42— CIPA2015-13
Characterization of Ancient Tripitaka
Y. X. Gong, L. Geng, and D. C. Gong

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Integrated Conservation of the Cantonese Opera Art Museum and Intangible Cultural Heritage
Q. Guo and X. Li

P44— CIPA2015-81
The pros and cons about the digital recording of Intangible Cultural Heritage and some strategies
H. Yang

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On Chinese-English Translation Issues in the Museums in Taiwan: Taking the Museum of Prehistory in Pei-Nan as an Example
J Liu

P46— CIPA2015-44
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S-T. Peng, S-Y. Hsu, and K-C. Hsieh

P47— CIPA2015-97
The Bibliometric Analysis Of Literature On Museum Studies
C.W. Kuo and Y.H. Yang

P48— CIPA2015-142
A study of historical preservation learning based on cognitive development theory
K.H. Weng, Y.N. Yen, and Y.W. Wu

P49— CIPA2015-49
Impact of learning content on World Heritage Site preservation awareness in town of Luang Prabang, Lao PDR: Application of Protection Motivation Theory
Y.S. Poong, S. Yamaguchi, and J. Takada

P50— CIPA2015-87
A Research of Construction Mechanism of Vassal State’s City Group during Spring and Autumn Period Based on the Analyzation of Geographic Image - Take south region of Shandong as example
X. Gao, B. Li, and X. Zhou

P51— CIPA2015-301
The Metric Documentation of Some Temples in Thailand by Spherical Photogrammetry
C. Srisuwan and G. Fangi

A-1 & G-1: Laser scanning and 3D imaging & Cultural Heritages as Collateral Damage in Conflicts
Room 101／Chair: Pierre Grussenmeyer

14:15 – 14:33
CIPA2015-84
Integrated Digital Technologies for the Architectural Rehabilitation & Conservation of Beinn Bhreagh Hall & Surrounding Site, Nova Scotia, Canada
K. Percy, S. Ward, M. Santana Quintero, T. Morrison

14:33 – 14:51
CIPA2015-204
Benchmarking Range-Based and Image-Based Techniques for Digitizing a Glazed Earthenware Frieze
G. Tucci, V. Bonora, A. Conti, L. Fiorini
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<td>M. Yakar, A. Ulvi, and A.S. Toprak</td>
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<td>CIPA2015-135</td>
<td>First aid to Cultural Heritage. Training initiatives on rapid documentation</td>
<td>A. Almagro Vidal, A. Tandon, R. Eppich</td>
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<td>Boundaries and Boundary Marks - Substantive Cultural Heritage of Extensive Importance</td>
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**B-1 & B-3: GIS tools and applications & Portals and Digital Libraries**

Room 102／Chair: I-Chun Fan

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<td>CIPA2015-179</td>
<td>A GIS-Based Cultural Heritage Study Framework on Continuous Scales: A Case Study on 19th Century Military Industrial Heritage</td>
<td>J. He, J. Liu, S. Xu, C. Wu, and J. Zhang</td>
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<td>Promoting the Effect of the Qing Dynasty Imperial Garden Architectural Component Library on the Digitalization of Cultural Heritage</td>
<td>C. Jindan, Z. Junsong, and Z. Jiujun</td>
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**D-3: Disaster prevention and monitoring**

Room 103／Chair: Koenraad Van Balen

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<td>CIPA2015-195</td>
<td>Information support systems for cultural heritage protection against flooding</td>
<td>K. Nedvedova and R. Pergl</td>
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### B-2 & B-4: Web-based application & Digital Heritage Inventories
Room 104 / Chair: David Myers

14:15 – 14:33  
**CIPA2015-11**  
**Integrated knowledge-based tools for documenting and monitoring damages to built heritage**  
R. Cacciotti

14:33 – 14:51  
**CIPA2015-5**  
**SAHRIS: using the South African Heritage Register to report, track and monitor heritage crime**  
K. Smuts

14:51 – 15:09  
**CIPA2015-12**  
**On-site digital heritage inventory development at Bat, Oman**  
Y. Kondo, T. Miki, T. Kuronuma, and T. Oguchi

15:09 – 15:27  
**CIPA2015-95**  
**Data-driven systems and system-driven data: the story of the Flanders Heritage Inventory (1995-2015)**  
K. Van Daele, L. Meganck, and S. Mortier

15:27 – 15:45  
**CIPA2015-134**  
**The global rock art database: developing a rock art reference model for the RADB system using the CIDOC CRM and Australian heritage examples**  
R.A. Haubt

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**Wednesday, 2 September 2015**  
**Day 3**

08:30 – 17:30  
**Technical Excursion**

**Thursday, 3 September 2015**  
**Day 4**

### F-2 & F-3: Communication & Serious Games
Room 101 / Chair: Gabriele Fangi

10:30 – 10:48  
**CIPA2015-199**  
**The possible use of ancient tower tombs as watchtowers in Syro-Mesopotamia**  
M. Silver, M. Törmä, K. Silver, J. Okkonen, and M. Nuñez

10:48 – 11:06  
**CIPA2015-200**  
**Remote sensing, landscape and archaeology tracing ancient tracks and roads between Palmyra and the Euphrates in Syria**  
M. Silver, M. Törmä, K. Silver, J. Okkonen, and M. Nuñez

11:06 – 11:24  
**CIPA2015-80**  
**Exploiting Textured 3D Models for Developing Serious Games**  
G. Kontogianni and A. Georgopoulos

11:24 – 11:42  
**CIPA2015-184**  
**Combining Digital Archives Content with Serious Game Approach to Create a Gamified Learning Experience**  
D.-T. Shih, C.L. Lin, and C.-Y. Tseng

11:42 – 12:00  
**CIPA2015-72**  
**Documenting Modern Mexican Architectural Heritage for Posterity: Barragan’s Casa Cristo, in Guadalajara, Mexico**  
D. Mezzino, W. Pei, M. Santana Quintero, and R. Reyes Rodriguez
### B-2: Web-based application

Room 102／Chair: An-Rong Dang

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<td>CIPA2015-26 Out of the archaeologist’s desk drawer: communicating archaeological data online D. Abate and M.V. David</td>
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<td>CIPA2015-79 Innovative and applied research on big data platforms of smart heritage J. Qiu, J. Li, and H. Sun</td>
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<td>CIPA2015-116 Using SAHRIS a web-based application for creating heritage cases and permit applications N. Mlungwana</td>
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### C-1 & C-2: Post processing & Digital 3D modeling

Room 103／Chair: Fabio Remondino

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<td>CIPA2015-47 Fusion of range-based data and image-based datasets for efficient documentation of cultural heritage objects and sites J. L. Lerma, M. Cabrelles, and S. Navarro</td>
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<td>CIPA2015-130 Historic photos and TLS data fusion for the 3D reconstruction of a monastery altar ensemble K. Hanke, M. Moser, and R. Rampold</td>
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<td>CIPA2015-136 Digital restoration research and three-dimensional model construction on Xieqiqu M. Gao, W. Piao, and J. Guo</td>
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<td>CIPA2015-161 Point clouds segmentation as base for as-built BIM creation H. Macher, T. Landes, and P. Grussenmeyer</td>
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### E-1 & E-7: Cultural heritage conservation on globalization and localization & Museum and exhibition technology

Room 104／Chair: Peter Waldhäusl

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<td>CIPA2015-210 The Application of Regulating Plant Growth into Protective Engineering of The Western Mansions Area in The Old Summer Palace W. Cong and Y. Song</td>
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### C-2 & C-3 & E-3: Digital 3D modeling & Modeling methods for architecture and archaeology & Cross border for cultural heritage conservation

Room 103 / Chair: Klaus Hanke

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<td>V.M. Lopez-Menchero Bendicho, and M. Ioannides</td>
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### E-1 & F-1: Cultural heritage conservation on globalization and localization & Teaching and learning

Room 104 / Chair: Tsung-Juang Wang

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<td>CIPA2015-117 Study on Spatial Cultural Heritage Integrated into the Core Curriculum</td>
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<td>W.H. Hsu and Y.P. Lai</td>
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### Friday, 4 September 2015

**Day 5**

**E-2: Multi-cooperation for cultural heritage conservation**

Room 101 / Chair: Marinos Ioannides

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<td>of Cultural Heritage - A German Community's View</td>
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<td>S. Münster, P. Kuroczyński, M. Pfarr-Harfst, M. Grellert, and D. Lengyel</td>
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<td>CIPA2015-82 Multi-cooperation of Cultural Heritage Conservation: Guangdong Cangdong Project as a</td>
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12:00 – 13:30 **Lunch & Coffee**

**E-4 & E-6: Integration, conservation on tangible and intangible cultural heritage & Island cultural heritage**
Room 102 / Chair: Stratos Stylianidis

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<td>A. Almagro Vidal, I. Ramírez González, and C. Clemente San Román</td>
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<td>13:48</td>
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<td>14:06</td>
<td><em>Management Documentation: Indicators &amp; Good Practice at Cultural Heritage Places</em></td>
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<td>R. Eppich and J.L. Garcia Grinda</td>
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<td><em>Ancient Stone Tidal Weirs in Penghu Archipelago: Distribution, Category, Structure and Function, a Google Earth and GIS Approach</em></td>
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<td>L. Luo, X. Y. Wang, J. Liu, and H. D. Guo</td>
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<td>14:24</td>
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<td>14:42</td>
<td><em>“Conical Hut”: A Basic Form of House Types in Timor Island</em></td>
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<td>Y.R. Chen, Y.L. Lim, M.H. Wang, and C.Y. Chen</td>
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<td>14:42</td>
<td>CIPA2015-104</td>
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<td>15:00</td>
<td><em>Taiwan underwater object management and preservation mechanism</em></td>
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<td>Y.-Y. Tung</td>
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**E-5 & E-7: Intangible Cultural Heritage capture and documentation & Museum and exhibition technology**
Room 103 / Chair: Nikos Grammalidis

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<td><em>Recovering prehistoric woodworking skills using spatial analysis techniques</em></td>
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<td>K. Kovács and K. Hanke</td>
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<td><em>Documentation, Multi-scale and Multi-dimensional Representation of Cultural Heritage for the Policies of Redevelopment, Development and Regeneration</em></td>
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<td>A. DE MASI</td>
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<td><em>Everything is Data – Overview of Modular System of Sensors for Museum Environment</em></td>
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<td>J. Valach, K. Juliš, P. Štefcová, M. Pech, B. Wolf, M. Kotyk, and J. Frankl</td>
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**C-3: Modeling methods for architecture and archaeology**
Room 104 / Chair: Andreas Georgopoulos

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<tr>
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<td><em>Semantically Documenting Virtual Reconstruction: Building a Path to Knowledge Provenance</em></td>
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<td>G. Bruseker, A. Guillem, and N. Carboni</td>
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<td><em>3D modeling of the Strasbourg’s Cathedral basements for interdisciplinary research and virtual visits</em></td>
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<td>T. Landes, G. Kuhnle, and R. Bruna</td>
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<td><em>SfM for Orthophoto to Generation: A Winning Approach for Cultural Heritage Knowledge</em></td>
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<td>F. Chiabrando, E. Donadio, and F. Rinaudo</td>
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<td><em>Digitally-Assisted Stone Carving of a Relief Sculpture for the Parliament Buildings National Historic Site of Canada</em></td>
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<td>J. Hayes, S. Fai, S. Kretz, C. Ouimet, and P. White</td>
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<td>15:00</td>
<td><em>Overview of 3D Documentation Data and Tools available for Archaeological Researches: case study of the Romanesque Church of Dugny-sur-Meuse (France)</em></td>
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<td>H. Macher, P. Grussenmeyer, C. Kraemer, and S. Guillemin</td>
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Technical Excursions

During the CIPA2015 symposium, three routes will be proposed to the participants for the technical visit of cultural heritage on Wednesday, 2 September 2015.

Each of Route B and C are limited to 70 participants, on the basis of first registered first in:

- **Route A: Taipei City Monuments (on foot)**
  
  09:00 – 09:30 All assemble in Zhongshan Hall  
  10:00 – 12:00 Visit on  
  - Office of the President, Republic of China (Taiwan)  
  - Taipei Guest House,  
  - East Gate of Taipei (Jingfu Gate)  
  12:00 – 13:30 Lunch  
  13:30 – 16:30 Walking tour of  
  - National Chiang Kai-shek Memorial Hall  
  - National Taiwan Museum  
  16:30 – 17:30 Free time

- **Route B: Tamsui to Jinguashih (by bus)**
  
  08:00 – 08:30 All assemble in China University of Technology  
  Departure from China University of Technology at 08:30  
  09:30 – 12:00 Visit on  
  - Fort San Domingo,  
  - Former British Consulate at Tamsui,  
  - Hobe Fort,  
  - Yinshan Temple  
  12:00 – 13:30 Lunch  
  13:30 – 14:30 Transfer from Tamsui to Jinguashih  
  13:30 – 16:30 Walking tour of  
  - Jinguashi Settlement  
  - Remains of the Shuinandong Refinery  
  - Gold Museum, New Taipei City Government  
  16:30 – 17:30 Return to China University of Technology

- **Route C: Jinguashih to Tamsui (by bus)**
  
  08:00 – 08:30 All assemble in China University of Technology  
  Departure from China University of Technology at 08:30  
  09:30 – 12:00 Visit on  
  - Jinguashi Settlement  
  - Remains of the Shuinandong Refinery  
  - Gold Museum, New Taipei City Government  
  12:00 – 13:30 Lunch  
  13:30 – 14:30 Transfer from Jinguashih to Tamsui  
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  - Fort San Domingo,  
  - Former British Consulate at Tamsui,  
  - Hobe Fort,  
  - Yinshan Temple  
  16:30 – 17:30 Return to China University of Technology
Note 1: CIPA2015 Symposium Map

Main Venue: Ke Chih Building, China University of Technology
(No. 56, Sec. 3, Xinglong Rd., Wunshan District, Taipei City 116, Taiwan)
(MRT Wanfang Hospital Station)
Note 2: Taipei MRT Route Map

- GALA DINNER – Regent Taipei
- Taipei Main Station
- URS44 Dadaochen History House
- — RECEPTION – Zhongshan Hall

Taipei 101
China University of Technology
How to get to China University of Technology, Taipei Campus:
Address: No. 56, Sec. 3, Xinglong Rd., Wunshan District, Taipei City 116, Taiwan

Please take MRT Line 1 (to Taipei Zoo) and get off at Wanfang Hospital Station. → Turn right (west) and walk along Xinglong Road → Turn left at McDonald’s and Go straight → China University of Technology will be in front of you.

How to get to Zhongshan Hall from China University of Technology:
Address: No.98, Yenping S. Rd., Taipei, Taiwan, 100, R.O.C.

Please take MRT Line 1 (to Taipei Nangang Exhibition Center) from Wanfang Hospital Station and transfer Line 5 at Zhongxiao Fuxing Station. → Take Line 5 (to Taipei Main Station), get off at Ximen station, exit number 5. → Turn right and walk along Xiushan Street → Walk a total of approximately 3 minutes, the Main Entrance will be on your left.
How to get to Regent Taipei from China University of Technology:
Address: No. 3, Lane 39, Sec. 2, Zhongshan N. Rd., Taipei City 104, Taiwan, R.O.C.
Please take MRT Line 1 (to Taipei Nangang Exhibition Center) from Wanfang Hospital Station and transfer Line 2 at Daan Station. → Take Line 2 (to Tamsui), exit at Zhong Shan station, exit number 3. → Walk along Sec. 1, Nanjing Eest Rd. and turn left on Sec. 2, Zhong Shan North Road. → Walk a total of approximately 6 minutes, the Hotel will be on your right.

How to get to URS44 Dadaochen History House:
Address: No. 44, Sec. 1, Dihua St., Datong Dist., Taipei City 103, Taiwan, R.O.C.
Please take MRT Line 2, get off at Beimen station, exit number 3. → Turn right (north) and walk along 塔城 St. → Go straight on Sec. 1, Dihua St. about 9 minutes, that destination will be on your left.
Note 3: CIPA2015 Sponsors