



International Workshop on Rammed Earth Materials and Sustainable Structures & Hakka Tulou Forum 2011: Structures of Sustainability at International Symposium on Innovation & Sustainability of Structures in Civil Engineering

***October 28-31, 2011
Xiamen University, China***

***Organized by
Ruifeng Liang, West Virginia University, USA
Ying Lei, Xiamen University, China
Gangarao Hota, West Virginia University, USA***

***Supported by
Yongding County Government of Fujian Province, China
Longyan City Government of Fujian Province, China***

Program at Glance

October 28, 2011, Friday	09:00 - 21:00	Arrival and Registration	Yifu International Academic Exchange Center, Xiamen University
	19:00 - 21:00	Welcome Reception	
October 29, 2011, Saturday	8:15 - 8:45	Symposium Opening Ceremony	Music Hall, Science and Art Center, Xiamen University
	8:45 - 9:00	Taking Photo	
	9:00 - 10:15	Keynote Lectures	
	10:15 - 10:30	Tea Break	
	10:30 - 12:10	Keynote Lectures	
	12:20 - 13:30	Buffet	Yifu International Academic Exchange Center, Xiamen University
	13:30 - 14:00	Hakka Tulou Forum Opening Ceremony	Conference room 6, Science and Art Center, Xiamen University
	14:00 - 15:40	Workshop Session 1	
	15:40 - 16:00	Photo Taking of Forum Participants and Tea Break	
	16:00 - 18:25	Workshop Session 2	
19:00 - 22:00	Banquet	Jiali See Food Restaurant on the Ring Road	
October 30, 2011, Sunday	08:15 - 10:20	Workshop Session 3	Conference room 6, Science and Art Center, Xiamen University
	10:20 - 10:35	Tea Break	
	10:35 - 12:15	Workshop Session 4	
	12:20 - 13:30	Buffet	Yifu International Academic Exchange Center, Xiamen University
	13:30~14:00	Overlook of Xiamen University Campus on the Tallest Building	Song En Building, Xiamen University
	14:00 - 16:05	Workshop Session 5	Conference room 6, Science and Art Center, Xiamen University
	16:05 - 16:20	Tea Break	
	16:20 - 18:20	Workshop Session 6	
	18:20 - 20:00	Buffet	Yifu International Academic Exchange Center, Xiamen University
October 31, 2011, Monday	06:30 - 09:30	Journey to World Heritage Fujian Tulou • Hakka Yongding	
	09:30 - 12:00	Tour Gaobei Tulou Village	
	12:00 - 14:00	Lunch at Hukeng Town Visitor Center Special Field Session: Meeting Hakka Rammed Earth Masters and Showing "History Made for Tomorrow: Hakka Tulou"	
	14:00 - 16:00	Tour Hongkeng Folk Culture Village	
	16:00 - 17:30	Return Journey via Tianloukeng Tulou Village	
	17:30 - 20:30	Return Journey to XMU with a stop for dinner	

Technical Program

October 29, 2011, Saturday

★ Workshop Invited Lectures

Room: Conference room 6, Second Floor, Science and Art Center

Session 1 13:30 - 15:40	Co - Chairs: Ruifeng Liang and Paul Jaquin	
	13:30 - 14:00	Hakka Tulou Forum Opening Ceremony <i>Invited Guests</i>
	14:00 - 14:25	"History Made for Tomorrow: Hakka Tulous" <i>Richard Yelland, Curtis Birch Inc. USA</i>
	14:25 - 14:50	A History of Rammed Earth in Asia <i>Paul Jaquin, Director of Earth Building UK</i>
	14:50 - 15:15	Nondestructive Evaluation of Historic Hakka Rammed Earth Structures <i>Ruifeng Liang, West Virginia University, USA</i>
	15:15 - 15:40	Contemporary Rammed Earth Construction and Research in North America <i>Bly Windstorm, North America Rammed Earth Association, USA</i>
	15:40 - 16:00	Tea Break and Workshop Photo Taking
Session 2 16:00 - 18:25	Co - Chairs: Bly Windstorm and Miao Pang	
	16:00 - 16:25	Environmental Assessment and Preservation for Fujian Hakka Villages <i>Minoru Ueda, MU Design, Tokyo, Japan</i>
	16:25 - 16:50	Experimental Study of Cement Mortar - Steel Fiber Reinforced Rammed Earth Wall <i>Miao Pang, Zhejiang University, China</i>
	16:50 - 17:15	Heaven and Earth In Tulou Design <i>Keith Lowe, Tsung Tsin Association of Ontario, Canada</i>
	17:15 - 17:40	The Genes of Tulou: Preservation and Sustainable Development of Tulou <i>Shaosen Wang, Xiamen University, China</i>
	17:40 - 18:05	Structural Responses of Hakka Rammed Earth Buildings under Earthquake Loads <i>Hota Gangarao, West Virginia University, USA</i>
	18:05 - 18:25	Performance Observations of the Beijing Area's Great Wall "Rammed Earth and Rubble Core" <i>David Dark, Executive Director Even Pina Architecture Ltd. (HK)</i>
19:00 - 22:00	Banquet (Jiali Sea Food Restaurant on the Ring Road, Xiamen)	

October 30, 2011, Sunday

★ Workshop Invited Lectures

Room: Conference room 6, Second Floor, Science and Art Center

Session 3 08:15 - 10:20	Co - Chairs: Shaosen Wang and Daniela Ciancio	
	08:15 – 08:40	Distinctions of Architectural Morphology Between Tubao and Tulou in Fujian <i>Zhijian Dai , Xiamen University, China</i>
	08:40 – 09:05	Use of Rammed Earth in Aboriginal Remote Communities of Western Australia: a Case Study on Sustainability and Thermal Properties <i>Daniela Ciancio, University of Western Australia, Australia</i>
	09:05 – 09:30	Translational Research in Mechanics and Materials: Sustainability and Durability <i>Ken P. Chong, George Washington University, USA</i>
	09:30 – 09:55	Sustainable Technology Research and Demonstration Center for Earth Structures <i>Judy Ueda, MU Design, Tokyo, Japan</i>
	09:55 – 10:20	First experience in earthen construction in Tunisia after a training at CRATerre, France <i>Ladjili Karim, Studio Milou Architecture, Singapore</i>
	10:20 – 10:35	Tea Break
Session 4 10:35 - 12:15	Co - Chairs: Ken Chong and Daniela Ciancio	
	10:35 – 11:00	An Overview of Some Current Recommendations on the Suitability of Soils for Rammed Earth <i>Daniela Ciancio, University of Western Australia, Australia</i> <i>Paul Jaquin, Director of Earth Building UK</i>
	11:00 – 11:25	Erosion Damage of the Rammed Earth Wall of Fujian Earth Buildings Caused by the Wind - Driven Rain <i>Xingqian Peng, Huaqiao University, China</i>
	11:25 – 11:50	Spatial Order and Typology of Hakka Dwellings <i>Kazutoshi Katayama , Tokyo University of the Arts, Japan</i>
	11:50 – 12:15	Values of Fujian Yongding Hakka Tulou <i>Daxin Hu, Yongding Tulou Museum, Fujian Yongding, China</i>
	12:20 – 13:30	Buffet (Yifu International Academic Exchange Center , Xiamen University)
13:00 – 14:00	Overlook of Xiamen University Campus on the Tallest Building	

Session 5 14:00 - 16:05	Co - Chairs: Paul Jaquin and Bly Windstorm	
	14:00 - 14:25	Overview of Earth Building in Europe
		<i>Paul Jaquin, Director of Earth Buildings UK</i>
	14:25 - 14:50	Overview of Technics of Rammed Earth Wall
		<i>Cheng - Bin Zhou, Fuzhou University, China</i>
	14:50 - 15:15	Rammed Earth Construction Code and ASTM E2392
		<i>Bly Windstorm, North America Rammed Earth Association, USA</i>
	15:15 - 15:40	Traditional Environmental Knowledge in Hakka Weilongwu: from the view of Anthropology of Landscape
<i>Hironao Kawai, Sun Yat - sen University, China</i>		
15:40 - 16:05	Announcement of the 4th Toronto Hakka Conference and Hakka Tulou Forum 2012: Putting Sustainability into Practice, June 29 to July 1, 2012	
	<i>Keith Lowe, Tsung Tsin Association of Ontario, Canada</i>	
16:05 - 16:20	Tea Break	
Session 6 16:20 - 18:20	Co - Chairs: Ying Lei and Hota Gangarao	
	Roundtable Discussions and Programs Development	
	<i>Success Stories and Lessons</i>	
	<i>Specifications, Codes and Standards</i>	
	<i>Challenges and Opportunities (Future Directions)</i>	
	<i>Collaborative Projects</i>	
	<i>Summary of Action Items</i>	
18:20 - 20:00	Buffet (Yifu International Academic Exchange Center , Xiamen University)	

POST-SYMPOSIUM ACTIVITY

Fujian Nanjing Hakka Tulou (one-day tour)

Tianluokeng Tulou cluster which is located in Nanjing, Fujian consists of five tulous with a square "Buyunlou" at the center, surrounded by three rotunda tulous and an oval tulou, forming a pattern of "four dishes and a soup"

Fujian Yongding Hakka Tulou (two-day tour)

Fujian Hakka Tulou/Rammed Earth is "the most extraordinary type of Chinese rural dwellings" in the mountainous areas in southeastern Fujian, China. Among them Chuxi tulou cluster which is located in Yongding has been inscribed by UNESCO in 2008 as World Heritage Site, as "exceptional examples of a building tradition and function exemplifying a particular type of communal living and defensive organization in harmonious relationship with their environment".



Wuyi Mountains (two-three days tour)

The Wuyi Mountains are a mountain range located in the prefecture of Nanping, in the northern border of Fujian province with Jiangxi province, China. The mountains cover an area of 60 km². In 1999, Mount Wuyi entered UNESCO's list of World Heritage Sites, both natural and cultural. It is known for the most outstanding biodiversity conservation zone of Southeast China and numerous types of tea are produced around Mount Wuyi, including the real Da Hong Pao tea which is the most famous tea in China.





Phoenix Flowers are Blossoming



Ring Road



Chenggong Zheng Statue



Gulang Island



**October 28-30, 2011
Xiamen University
Xiamen, China**