

## SOSTIERRA2017 PRELIMINARY PROGRAMME

### Wednesday 13th September 2017

14.00 - 19.00h – Early reception. Arrival of conference participants and distribution of documentation

14.00 - 19.00h – Showroom (free)

16.00 – 19.00h – Workshops (with inscription fees)

### Thursday 14<sup>th</sup> September 2017

#### SALA A. (Simultaneous translation English-Spanish-English).

8.30 – 9.00h – Arrival of conference participants and distribution of documentation

9.00 – 9.30h – Opening session

9.30-10.30h – Plenary lectures

- The Geography of Earth Building. *Miles Lewis*

- Markers of earthen construction modern revival. *Hubert Guillaud*

10.30 – 11.00h – Coffee break

11.00 – 14.00h – Session 1 (contemporary presentations SALA A y B) T1

#### SALA A. (Simultaneous translation English-Spanish-English). Moderator: Maddalena Achenza

- Adaptation of earth construction in Hadhramaut, Yemen - study and analysis.

*A. A. Alaidarous*

- Stone, clay and turf in architectural construction.

*B. Juvanec*

- The use of natural materials and ancient building techniques: the case for rammed earth construction.

*E.L. Wagner*

- Thinking about historic resources: a proposed guidance document.

*I.R. Stiegler, FAIA & R. McManus, MHP, M. Achenza, M. al-Aidarous, M. Beas, J. Bell, L. Cooke, M. Costi de Castrillo, A. Crosby, B. Esquivel, J. Hurd, B. Işik, P. Jerome, M. Lambert, T. Leiermann, C. Mileto, G. Shemdin, J. Vargas, & F. Vegas*

- Earthen vernacular architecture in Cuneo's territories (Piedmont, Italy).

*F. Fratini, S. Rescic, M. Mattone & L. Rovero*

– Thermal performance and comfort of vernacular earthen buildings in Egypt and Portugal.

*J. Fernandes, M. Dabaieh, R. Mateus, S. M. Silva & L. Bragança, H. Gervásio*

- Transforming Kasena houses and indigenous building technology in Burkina Faso.

*H. Kobayashi, T. Shimizu, M. Ito, S. Nakao*

- Historic cob structures in Moravia.

*Z. Syrová & J. Syrový*

- Comparative evolution of vernacular mudbrick houses in the Nile Delta and Qurna (Luxor).

*M. Correas Amador & C. Simpson*

- Material and typological characterization of the tighremt n'Ait Makhat (Morocco).

*J.M. López-Osorio & S. Batani Sembak, L. Martínez Bernal*

- Vernacular houses of Stratonikeia: Architectural typology, materials and techniques.

*O.B. Avsar & U.D. Genc*

- Vernacular architecture in El Khorbat, Morocco. Evolution of the Igrams.

*T. Gil Piqueras, P. Rodríguez-Navarro & A. Pérez Vila*

### **SALA B. (lectures without translation). Moderator:**

- Mid-century earthen architecture in Aotearoa New Zealand – a new vernacular?.

*M. Hall*

- Mexico's central area earthen architecture. Rammed earth construction: use and technique.

*D. Romero Olguín*

- Scottish earth building materials.

*M. Saez-Martinez & A. Leslie*

- Mestizo and hybrid typologies. Vernacular rural housing in Colombia.

*Y. Pulgarín*

- Ksar Taghit: earthen architecture between authenticity and changes

*T. Bachir Cherif & M. Aiche*

- Tapiabrick: a digital platform on brick-supplemented rammed earth walls.

*V. Cristini & J.R. Ruiz Checa*

- Earthen heritage in the USA: constructive techniques and geographical approximation.

*C. Mileto & F. Vegas López-Manzanares*

- A sustainable repair process for heritage buildings in historic Jeddah.

*A. A. Adas & M.Y. Alaidaroos*

- Interpretation of sustainable desert architecture in Ghadames City, Libya.

*A. Eltrapolsi, H. Altan*

- Domestic wineries in the Urz-Vidriales countryside (Spain).

*M. Ruiz-Bedia & A. Herrera Peral*

- Earthen construction in Ourense, Galicia (Spain).

*A. Fernández Palicio*

- Earth construction in Prehistoric settlements of southern Portugal.

*P. Bruno*

14.00 – 15.30h – Lunch

15.30 – 17.30h – Session 2 (contemporary presentations SALA A y B) T1+T2

**SALA A. (Simultaneous translation English-Spanish-English). Moderator: Fernando Vela Cossío**

- Vernacular construction techniques and earth employ in Arg-e-Bam (Iran).  
*C. Cacciavillani, S. Rinaldi & M. Severini*
- Santal mud dwellings: materials, construction and space typology.  
*I. Ahmed*
- The systemic approach in the intervention on earthen architecture.  
*J.L. González Moreno-Navarro, M. Genís Vinyals, B. Onecha Pérez & A. Casals Balagué*
- Kasbah Taourirt: Conserving Earthen Heritage in Morocco.  
*B. Marcus & C. Cancino & M. Boussalh*
- Thermal assessment of the behavior of retrofitted rammed earth in central Catalonia.  
*G. Barbeta, M.M. Pareta, M. A. Chamorro & M. Sabata*
- Maps, actors & local policies around earth buildings in Auvergne Rhône-Alpes.  
*G. Paccoud, M. Chamodot, L. Génis, F. Gutiérrez, E. Mille & B. Rakotomamonjy, J. Avons-Bariot & D. Studer*
- Thermal insulation for a sustainable rehabilitation of traditional buildings.  
*M. Achenza*
- Investigating the Preservation of Vernacular Earthen Buildings of Louroujina (Akincilar) in North Cyprus.  
*R. Sabri & H. Altan*

**SALA B. (lectures without translation). Moderator: Gabriel Barbeta Solá**

- Earthen roofs in the Region of Murcia, Spain: La Azohía.  
*F. J. López Martínez & V. La Spina*
- A study of pit houses with soil-covered roofs in a humid climate in Japan.  
*T. Tsukidate*
- Vernacular heritage in Mendoza (Cuyo region, Argentina).  
*S.A. Cirvini*
- Earth and gypsum: from theory to practice in Spanish vernacular architecture.  
*V. La Spina*
- Campiña Segoviana's earthen heritage and conservation clues from Isère.  
*E. Sevillano Gutiérrez & E. Camarasaltas Pérez*
- Using machine-dismantled cotton seed hulls in the making of light earth blocks.  
*A. González & S. Cabrera*
- Consumption study and energy optimization of a typical Valencian house.  
*A. Martínez, R. Royo & S. Tormo*
- Rammed earth buildings to meet Italian thermal regulation: monitoring and sample tests.  
*R. Pennacchio & G. Piccablotto*

17.30 – 18.00h – Coffee break

18.00 – 19.30h – Session 3 (contemporary presentations SALA A y B) T2+T3

**SALA A. (Simultaneous translation English-Spanish-English). Moderator: Saverio Mecca**

- A pilot project, a tool for conserving the historic city of Cuenca, Ecuador.  
*B. Rakotomamonjy, E. Sevillano Gutiérrez, E. Carnevale*
- Transformation in the Kasena's large earthen compound houses in Burkina Faso.  
*T. Shimizu, S. Nakao, H. Kobayashi, M. Ito*
- Vernacular Change in Brazil Southeast Region.  
*M.A.P. Rezende & S. L. A. Braga, J. L. R. Vale, M. V. S. Peixoto*
- A minus carbon eco-cycle earthen refugee shelter: a feasibility study.  
*M. Dabaieh*
- Terra Nova - Earthen Architecture and Modernity.  
*F.M. Lorusso & S. Mecca*
- Net Zero Energy straw bale & rammed earth design; cold climate case study.  
*R. Davidson*

**SALA B. (lectures without translation). Moderator:**

- A home with roots. Construction process of an adobe contemporanean house.  
*P. Bel-Anzué*
- A temporary pavilion as a way to experiment with mud. The case of Roly Poly.  
*L. Balboa Quesada & A. J. Jiménez Quesada*
- Natural clay plasters: checking regulations to characterization tests.  
*A. González-Serrano, R. Rodríguez-García, L. Molina & M. Ponce*
- A case-study project of reinterpretation of local traditional techniques.  
*J.R. Ruiz Checa & V. Cristini*
- Hassan Fathy's humane considerations in design and the significance of New Gourná.  
*A. G. Abdel Tawab*
- CEB Factory for seismic resistant earthen architecture design in Nepal.  
*F. Masso Ros*

19.30 – 20.00h – Round table

**Friday 15<sup>th</sup> September 2017**

8.30 – 9.00h – Arrival of conference participants and distribution of documentation

9.00 – 10.45h – Session 4 (contemporary presentations SALA A y B) T4 RESTAPIA

**SALA A. (Simultaneous translation English-Spanish-English). Moderator: Hubert Guillaud**

- Rammed earth and formworks in Medieval fortifications in Castilla-La Mancha, Spain.  
*F.J. Castilla, D. Gallego, J. Molero & C. Peña & D. Sanz*
- The keep of the Alcázar of Carmona (Sevilla, Spain). Materials for the restoration of rammed earth walls.  
*F. J. Blasco-López, J. Canivell, A. Graciani, J. J. Martín-del-Río & F. J. Alejandro*
- Seismic Retrofitting Project: On-site retrofitting techniques workshops.  
*K. H. Wong, C. Cancino, J. C. Menendez, L. Villacorta Santamato*
- Passive design principles in vernacular architecture of Castilla-La Mancha, Spain.  
*A.B. Serrano Lanzarote, M. Navarro Escudero, L. Ramírez Pareja & C. Mateo Cecilia*
- PREFORTI Project: The Preventive Conservation of Historic Rammed-Earth.  
*M. L. Gutiérrez-Carrillo & I. Bestué Cardiel, J. C. Molina Gaitán, J. A. Martínez López*
- Earthen architecture, appreciation and landscape: the oasis of Ferkla (Morocco).  
*F. Juan-Vidal & T. Gil Piqueras*
- The defense of the technique of rammed earth made by Giovanni Battista Antonelli in 1560.  
*P. Rodríguez-Navarro*

**SALA B. (lectures without translation). Moderator: Fco. Javier Blasco López**

- 3D Modelling for the interpretation of watchtowers between capes of San Antonio and La Nao (Alicante, Spain).  
*F. Juan-Vidal & P. Rodríguez-Navarro*
- The Islamic wall of Mula (Spain): 3D reconstruction, restoration and musealization.  
*P. E. Collado Espejo, J. García León & V. La Spina, J. Fernández Del Toro*
- Constructive analysis of the rammed earth walls in the Petrés Castle (Valencia, Spain).  
*F. Vegas López-Manzanares, C. Mileto, F. J. Gómez-Patrocinio & A. Pérez Vila*
- Earth in historical fortifications. Pedro de Lucuze's method.  
*L. Gimeno Romero, L. Cortés Meseguer & S. Tormo Esteve*
- Restoration method on the southern wall of the Medieval access road to the Generalife.  
*I. Bestué Cardiel & F. J. López Martínez & J. C. Molina Gaitán*
- The preservation of the Nubian earthen architecture.  
*G. Torra i Campos & I. García Alonso, M. Cressent & O. Hasabelrasoul Ahmed*
- The use of lime, an example of good practices in the conservation of cultural heritage built on earth.  
*R. Fernández Baca Casares, M. García de Casasola Gómez, E. Ontiveros Ortega, B. Castellano Bravo & P. Santana Martín*

10.45 – 11.15h – Coffee break

11.15 – 14.15h – Session 5 (contemporary presentations SALA A y B) T5 VERSUS

**SALA A. (Simultaneous translation English-Spanish-English). Moderator: José Manuel López-Osorio**

- Vernacular tradition and modernity. New scenarios in urban living.

*R. Chimirri*

- In situ monitoring and characterisation of earthen envelopes: A review.

*M.A. Mellado Mascaraque & F.J. Castilla Pascual & I. Oteiza & F. Martín-Consuegra*

- Understanding the vernacular heritage to design sustainable habitats in Asni, Morocco.

*L. Dipasquale & D. Giorgi*

- A survey of Danish earthen heritage for sustainable building.

*B.T. Eybye & I. Vestergaard*

- Vernacular housing and transformations at the Cordillera de Sama (Bolivia).

*F. Moreno, C. Pérez de Guzmán, S. Santiago*

- Local pre-industrial communities in Tuscany and the exploitation of water.

*D. Ulivieri*

- Is it useless rubble or recyclable building material?.

*B. del Cueto*

- The first rammed earth wall in America. Earth in 16th-century Dominican architecture.

*M. A. Sorroche Cuerva*

- From vernacular to contemporary: Kilwa (Tanzania) and Albrede (The Gambia) tourist information centres.

*N. Sánchez Muñoz & S. Moriset*

- The Chilean adobe as a seismic vernacular technology, the study of the “Norte Chico” area.

*A. Rivera Vidal*

- Water-related built heritage in Campania, Italy. Knowledge for conservation of a sustainable vernacular architecture.

*V. Russo, S. Pollone, G. Ceniccola, L. Romano*

**SALA B. (lectures without translation). Moderator: A. Begoña Serrano Lanzarote**

- Balconies in traditional urban architecture through typology and solar radiation.

*P. Privitera*

- S. Jerónimo de Cotalba. Strategies for the preservation of the monastic complex.

*J.M. Barrera Puigdollers & N. Matarredona Desantes*

- Adobe vernacular heritage in Mexicali, Mexico.

*D. Olvera & L. Mendoza & L. Guerrero*

- Lessons of sustainability from the survey of the Valencian barraca.  
*Y. Hernández Navarro & P. de Dato*
- The painted facades and the urban landscape of Bisceglie. Notes of history and restoration.  
*A. La Notte*
- Study of the situation of traditional constructive techniques and materials in Spain.  
*C. Mileto, F. Vegas López-Manzanares, V. Cristini & M.S. García Sáez*
- Conservation of vernacular architecture, the case of the old town of Nablus/ Palestine.  
*E.M. Amad*
- Sustainable proposal for the conservation of Castillejo of Monteagudo (Murcia, Spain).  
*P. E. Collado Espejo & M. J. Serrano Latorre*
- Contemporary earthen architecture in the northern temperate climate.  
*I. Vestergaard & B.T. Eybye*
- Set of nine cave houses in La Algueña, Alicante (Spain). Renewal proposal.  
*A. Martínez Antón, G. López Patiño & V. Blanca Giménez, F. Aranda Navarro*
- Characteristics of Earthen Architecture in Ağlasun.  
*A. V.B. Kurtulus, E. Ç. Asrav, N. Şahin Güçhan & G. Bilgin Altınöz*
- When the neo-vernacular architecture inspires the contemporary conception.  
*S. Kersenna & S. Chaouche*

14.15 – 15.45h – Lunch

15.45 – 17.30h - Session 6 (contemporary presentations SALA A y B) T6

**SALA A. (Simultaneous translation English-Spanish-English). Moderator: Arturo Martinez Boquera**

- Planning for acceptable contemporary earth construction in South Africa.  
*G. Bosman*
- Low-cost adobe structures with bamboo additives and bamboo frames. Strength tests.  
*M. Paradiso, F. Bizzeti, E. Perria, A. Farigu, O. Lotti*
- Advanced study of the mechanical properties of compressed earth block.  
*G. Ruiz, X.X. Zhang & L. Garijo, I. Cañas, W. A. Fouad*
- Structural assessment of earthen walls using damage tests and models.  
*A. Alonso Durá, A. Martínez Boquera & F. J. Gómez-Patrocinio*
- Seismic analysis of Portuguese adobe buildings.  
*L. Sarchi & R. Monteiro & H. Varum*
- Experimental study of adobe walls with geogrid reinforced mud plaster.  
*S. Invernizzi & M. Mattone & P. Vachey & M. Gentile*
- A preliminary study of CIPS as a consolidant for earthen cultural materials.  
*I. Loo, C. Kyi, & S. Collis, G. Price*

## SALA B. (lectures without translation). Moderator: Adolfo Alonso Durá

- Experimental analysis of compressive mechanical behavior of adobe masonry.  
*J.D. Rodríguez Mariscal & M. Solís Muñiz*
- Stabilisation of earthen surfaces using carob (*Ceratonia siliqua* L.).  
*J. Romero, G. Barbeta*
- Acoustic test on adobe and rammed earth walls.  
*P. Guillén Marzal*
- The influence of ambient conditions into rammed earth compressive strength.  
*B. González-Sánchez, J.R. Rosell Amigó, A. Navarro Ezquerria*
- Improved 2nd order holder. Method for heat transfer calculation for walls.  
*L. Soto Francés, B. Serrano Lanzarote & L. Ortega Madrigal & J.M. Pinazo Ojer*
- Thermal orthophotos and vernacular architecture: surveying half-timber walls in Béjar, Spain.  
*M. Diodato, S. Tormo Esteve & L. Balaguer Garzón*
- Schematic analysis of traditional Vietnamese houses under the influence of Han culture.  
*W.J. Wang*

17.30 – 18.00h – Coffee break

18.00 – 19.00h – Poster Session

19.00 – 19.30h – Round table

19.30 – 20.30h – Closing Session & Awards Ceremony

22.00h – Official Closing Dinner

## Saturday 16th September 2017

### Technical visits

9.00 – 12.30h - Visit 1. Valencia City Center

9.00 – 18.00h - Visit 2. Gypsum in Gestalgar

9.00 – 19.00h - Visit 3. Lime in LLutxent