



# FULL IMMERSION IN EARTH

III edition

25-30 JUNE 2018

The UNITWIN UNESCO Chair of the University of Cagliari  
"Earthen Architecture. Building Culture and Sustainable Development"

organizes

**A WEEK OF PRACTICAL WORKSHOP ON  
RESTORATION TECHNIQUES FOR EARTHEN HOUSES**  
Construction site: Villa San Pietro - ex Casa Aru

- 1) Basics: Knowing earth as a building material
- 2) Building techniques: Adobe and Wattle and Daub (module A)
- 3) Building techniques: Rammed Earth (module B)
- 4) Plasters and Finishes

With the support of:



Organized by:





Each module will be coordinated by professionals trained at CRAterre. The workshop will take place from Monday 25th June until Friday 29th June at the construction site located in Villa San Pietro (CA), ex Casa Aru. On Saturday 30th an excursion day has been planned.

Modules are practical and they will last 8 hours per day. Participants will learn to explore earth as a building material and to apply different relevant restoration techniques.

Equipment and specific materials will be provided on site. The participation is open to a minimum of 20 people, maximum 40. In case the number of participants does not reach the minimum required, the course will be cancelled.



## APPLICATION DEADLINE: 31th MAY

Registration fee (whole workshop):

Professionals/building companies/other	350 €
UNICA Students/UNITWIN UNESCO*/ICOMOS ISCEAH MEMBERS	150 €
Students/Workers	250 €
Single day participation	100 €

Participants who choose the single day registration must indicate the day(s) and the module(s) they want to follow.

The conference and site visit scheduled for Monday 25 June are free and open to everyone.

Lunches can be order and will cost approximatly 7€ each

Bank transfer must be done to:

Città della Terra Cruda, IBAN IT 72 S 07601 04800 000040128654  
please, specifying 'Name of the partecipant - Full immersion nella terra 2018'

In order to submite your registration please click the link below

<https://goo.gl/xpfgvJ>

ECTS (credits) will be issued for students and professionals (to be confirmed).

For further information:

[fullimmersionellaterra@gmail.com](mailto:fullimmersionellaterra@gmail.com)

\*students belonging to the UNESCO chair "Earthen architecture, construction cultures and sustainable development" network

## WORKSHOP SCHEDULAR

### 25 JUNE

9:00 - 13:00

Conferenze (free entry)

14:00 - 17:00

Visit to the construction site and near house to analyse frequent damages

### 26 - 29 JUNE

9:00 - 13:00 / 14:00 - 17:00

1. Knowing earth as a building material
2. Adobe + Wattle and Daub
3. Rammes Earth
4. Plasters and finishes

### 30 JUNE

9:00 - 18:00

Guided tours at the villages of the 'Unione dei Comuni Nora e Bithia'  
(Villa San Pietro, Sarroch, Pula, Domus de Maria, Teuladaa)

## WORKSHOP CONTENT

### 1. KNOWING EARTH AS A BUILDING MATERIAL

Earth, grain distribution, clay content

Practical test

Carazas test

### 2. BUILDING TECHNIQUES module A

Choice of soil

Mix preparation

Adobe

Wattle and Daub

### 3. BUILDING TECHNIQUES module B

Choice of soil

Mix preparation

Rammed Earth

### 4. PLASTER AND FINISHES

Choice of soil

Mix preparation

Equipment

Types of plasters and finishes



## **COORDINATOR:**

Maddalena Achenza

## **TEACHERS:**

### **KNOWING EARTH AS A BUILDING MATERIAL**

Maddalena Achenza

### **ADOBE + WATTLE and DAUB**

Daniel Quintao

### **RAMMED EARTH**

Jean Marie Le Tiec

Miguel Ferreira Mendes

### **PLASTERS and FINISHES**

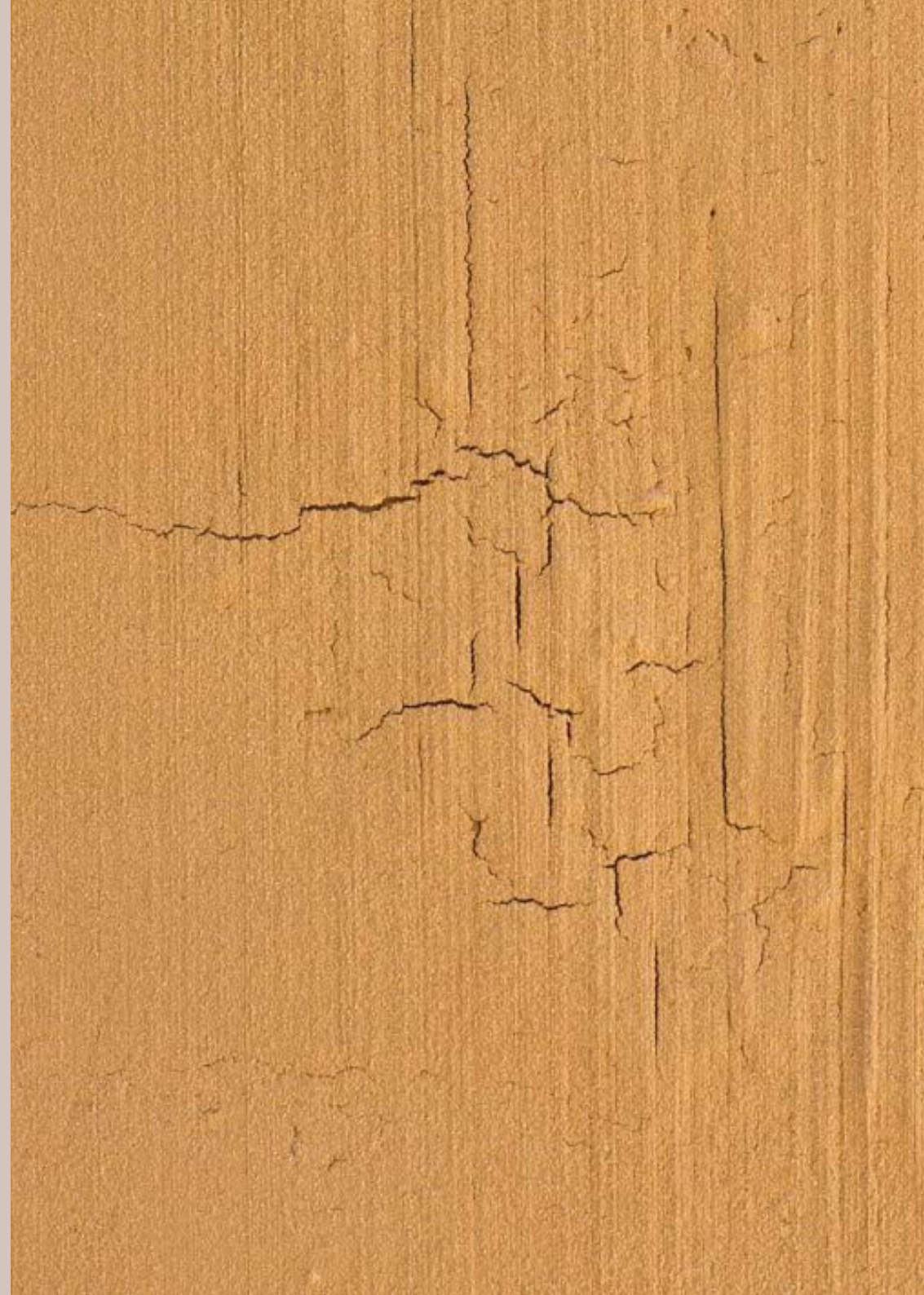
Isabella Breda

Anne Lemarquis

## **TUTORS:**

Marta Cappai, Chiara Cocco, Elena De Santis, Maura Serra

TEACHERS' CVs





KNOWING EARTH



## MADDALENA ACHENZA

Architect/CEEA-CRATerre-School of ARCHITECTURE of Grenoble

Teacher at the University of Cagliari, Faculty of Civil, Environmental and Architectural Engineering, delegate of the UNESCO Chair "Earthen Architecture, Constructive Cultures and Sustainable Development". She has been the coordinator since its establishment of LABTERRA - Center for Studies and Research on Earthen Architecture at the same University. Vice-president of the ICOMOS-ISCEAH Scientific Committee for Earthen Architectural Heritage. Member of national and international scientific committees of Institutions, Associations, Conferences, Foundations. Technical consultant of the International Association of the Earthen cities, for which she has organized conferences, seminars, workshops and other dissemination and promotional actions on the preservation of traditional materials and construction techniques.

Over the past few years she has participated, as coordinator or partner, in several international projects funded by the European Community and the Autonomous Region of Sardinia, regarding the issues of conservation and enhancement of the built vernacular heritage, in particular earthen architecture. She has a long and intense experience of teaching at academic and professional level, in the field of sustainable architecture and earthen heritage, as well as in the conservation and rehabilitation of traditional buildings.

ADOBE  
+  
WATTLE and DAUB





## DANIEL QUINTAO

Architect/CEA - CRATerre - School of ARCHITECTURE of Grenoble

Daniel Quintão is an architect graduated at the School of Architecture at the Izabela Hendrix Institute, in Belo Horizonte, Brazil. In 2008 he obtained the title of specialist in earthen Architecture at CRAterre - École Nationale Supérieure d'Architecture in Grenoble, France. On his return to Brazil, he created, together with architect Frederico Prates, the architecture office o3L. It coordinates and develops projects and works in the field of restoration of cultural heritage and in the application of traditional materials and techniques in new buildings. Since 2013 he has been the technical manager for projects included in the restoration programs of monuments, financed by the Ministry of Culture, through the Instituto do Patrimônio Histórico and Artístico Nacional - IPHAN and do Instituto Estadual do Patrimônio Histórico and Artístico de Minas Gerais - IEPHA / MG. His work also includes advice to municipalities for the development and implementation of public policies for the conservation and preservation of cultural heritage. He participates actively in congresses, workshops to raise awareness and disseminate construction techniques in rural communities, festivals and scientific meetings.



## RAMMED EARTH



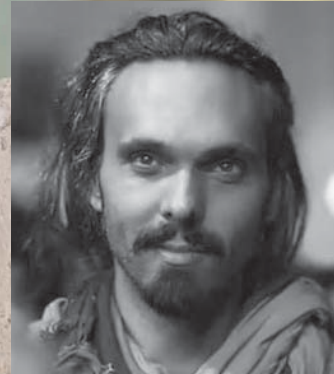


## JEAN MARIE LE TIEC

Architect / DPEA - CRATerre - School of ARCHITECTURE of Grenoble

Since 2005 he has led the profession of architect being a partner of NAMA practice and teacher/researcher at CRATerre-École Nationale Supérieure d'Architecture in Grenoble, France. He is involved in projects that face the question of eco-sustainable housing and building cultures, core of his philosophy. His projects built with earth include, among others, the European Center of the INRA Soils Champions in Orleans, the archaeological museum of Mari in Syria, as well as prototypes of low-cost housing. He has a long experience in training on earthen architecture and related construction techniques.

Within CRAterre he participated in the drafting of the French legislation on rammed earth and of the manual for reconstruction of the neighborhood at Doho in Saudi Arabia designed by architects Ayers Sainn Gross. He assisted the design of buildings such as the Château Lacoste winery designed by Renzo Piano Building Workshop agency and the Païamboué college in New Caledonia designed by K'aDH and Berthier - Frassanito.



## MIGUEL FERREIRA MENDES

Architect/DPEA -CRATerre-School of ARCHITECTURE of Grenoble

Miguel Ferreira Mendes is a Portuguese architect who favors in his projects the bioclimatic approach and the use of healthy materials, and above all, earth. He studied architecture in Lisbon and Milan and obtained a Master's Degree in Ecological Architecture at the School of Architecture in San Francisco, in cooperation with Biosphere 2 and the Convento da Orada Foundation.

He subsequently obtained the DPEA at CRATerre - École Nationale Supérieure d'Architecture in Grenoble, France. In 2003 he co-founded the Centro da Terra, a Portuguese association for the study, documentation and dissemination of earthen architecture, that brings together the majority of freelancers and academics working in this field. Since 2005 he has been training architects, engineers, masons and workers through theoretical courses and practical workshops in Portugal and abroad. He coordinated training activities in developing countries in order to transfer skills and to support self-construction processes. He is responsible and coordinator of "Terra +": Research and Training Program of the Centro da Terra Association. He is author of papers and articles on earthen architecture and speaker at various seminars and conferences in Portugal and abroad.

## PLASTERS and FINISHES





## ISABELLA BREDA

Architect

Graduated in Architecture at IUAV, Università di Venezia. After a professional experience in architectural restoration, she focused on earthen architecture and the possibilities that the material offers in the artistic field. She studied different ceramic techniques and she examined in depth clay characteristics. She specialised in interior design. Her projects address the interaction between art and architecture, human beings and nature. Since 2006, she has been working on artworks using earth and she specialised on surfaces of architectural spaces, on their "skin", on the aesthetic artistic value which can characterize a space and on a "tailor made" conception and design. Isabella's artwork is characterized by a continuous research of an expressive, tactile, emotional language and by graceful shapes.



## ANNE LEMARQUIS

Architect/DSA-CRATerre-School of ARCHITECTURE of Grenoble

Anne Lemarquis begins her activity with earth construction in Troyes, France.

In 2008 she obtains her specialization at CRATerre and right after she moves to Chile, where she focuses on building cultures and on methods of diffusion of the know-how on earthen architecture. She particularly studies earth as a building material and also as a form of artistic expression. She is a co-founder of EcoT: School of Earth construction in Santiago, Chile ([www.ecto.cl](http://www.ecto.cl)). The school aims to promote earth as a building material, and offers education on constructive techniques, seismic mitigation methods, finishes, construction site management, restoration and conservation techniques. In 2013 the 'National Council of Culture and Art' of Chile financed the project presented by EcoT: "Conservation and dissemination of intangible earthen heritage". During the project EcoT achieved many objectives for what concerns the realization of participatory construction sites and training of professionals and builders on site. Anne is a member of 'Colectivo Terron' since 2010, the artistic group 'art and matter' and she also coordinates laboratories focusing on materials sensorial discovery. Since 2015, she leads activities and workshops with 'Labo Pisè', creative laboratories 'Matter and Landscape' in partnership with the 'Centre of National Monuments' in Chateau d'Aulteribe, Auvergne.

## VENUE: VILLA SAN PIETRO, SARDINIA



### CONSTRUCTION SITE: VILLA SAN PIETRO- EX CASA ARU

The construction site is sited in via XX Settembre in Villa San Pietro. Villa San Pietro is a little village located approximately 20km southwest of Cagliari, and 10km from the sea.

### MEALS

Lunch is provided on site by catering service with an additional cost.

### EXTRA ACTIVITIES

We will shortly publish a more detailed programme of the excursions and the activities offered during the week of the workshop.

### ACCOMMODATION - Hotel and B&B in Villa San Pietro

B&B ARAXI  
VIA PUCCINI 25  
070 907113/3486614448

B&B CORNELIA  
VIA PUCCINI 7  
070 907137/ 3477261919

B&B L'ASFODELO  
VICO I GRAZIA DELEDDA 16  
070 907254

ALEX B&B MARE E MONTAGNA  
VIA BELLINI 12  
070 502399/3333648532

B&B IL GIRASOLE SUD SARDEGNA  
VIA VIVALDI 31  
3298133262

B&B VILLA PRIMAVERA  
VIA E. D'ARBOREA 9  
070 907323

B&B LE AROMATICHE  
VIA PASOLINI 21  
3490680052

VILLA DELLE TORRI  
LOC. SANTU MIALI N. 3  
339 6714009

AGRITURISMO SU LILLONI  
LOC. LILLONI  
347 615 5891

AGRITURISMO SAN MACARIO  
LOC. TERREMAINI 7  
070 920 9573

ALBERGO AGRIHOTEL MORADA  
Loc. Su Guventeddu  
070 9075434

AGRITURISMO SA FIGUMORISCA  
347 635 6656

## ACCOMMODATION FACILITIES

### 1. **B&B Il Girasole**

Via Vivaldi 31, Villa San Pietro (CA)

Phone: +393298133262

The bed and breakfast offers:

1 Double Room with private bathroom

1 Double Room with shared bathroom

Breakfast included.

### 2. **Albergo AgriHotel Morada**

Loc. Su Guventeddu, Villa San Pietro (CA)

Phone: +390709075434

The hotel offers:

4 Double room single use

Breakfast included.

Fixed-price menu for dinner is available: meat or fish.

# HOW TO REACH US

## From Elmas Airport / Port of Cagliari

Train + BUS

Tranitalia, departure from Elmas Airport to Cagliari.

COST	DURATION	FREQUENCY
1,30 €	8 minutes	about 30 minutes

ARST (Sardinia Regional Transportation Company) departure from Cagliari Piazza Mateotti: bus line 129 to Villa San Pietro

	COST
SINGLE TICKET	2,50 €
12 TREEP TICKET	25 €
WEEKLY TRAVEL PASS	21,50 €

Bus (ARST) schedule:

CAGLIARI - VILLA SAN PIETRO	7:20 - 8:03	8:00 - 8:43	8:20 - 9:03
VILLA SAN PIETRO - CAGLIARI	19:17 - 20:00	19:32 - 20:15	20:32 - 21:15

Rental Car:

services offered at Elmas Airport <https://goo.gl/rpBRoy>

services offered by municipality of Cagliari <http://www.playcar.net/>

## From Fertilia (Alghero) Airport

Train + BUS

ARST (Sardinia regional transportation company) departure from Aeoporto Fertilia: bus line 760, get off at Sassari via Padre Zirano

COST	DURATION	FREQUENCY
3,10 €	30 minutes	about 2 hours

Trenitalia departure from Sassari to Cagliari

COST	DURATION	FREQUENCY
16,50 €	about 3 hours	about 2 hours

Rental Car:

services offered by Fertilia Airport <http://aeroportodialghero.it/noleggio>.

## From Port of Olbia or Porto Torres

Train

Tranitalia, departure from Olbia/Porto Torres station to Cagliari.

	COST	DURATION	FREQUENCY
OLBIA - CAGLIARI (Trenitalia)	18 €	about 3 and half hours	about 2 hours
P.TORRES - CAGLIARI (Trenitalia)	18 €	about 3and half hours	about 2 hours



## EXTRA ACTIVITIES

- 1. Visit of the archeological site of Nora**  
25 JUNE  
18:30  
Departure from Villa San Pietro  
19:00- 20:00  
Guided tour of Nora and Castellazzo Tower

Nora is located in the peninsula which closes in the south-west the Gulf of Cagliari and is one of the main Sardinian ancient town inhabited by Phoenicians, Punics and Romans. The site, abandoned in late roman period, was discovered in the nineteen-fifties by Gennaro Pesce. Nora is currently an archaeological site open to public, and four Italian Universities co-operate with the archaeological seperintendence for its maintenance.

\*souce [Nora.beniculturali.unipd.it](http://Nora.beniculturali.unipd.it)

COST: Groups more than 20 p. 5€ / Groups less than 20 p. 7,50€

# IL TEAM!

