

# AVEI NEWSLETTER



*Satprem discussing the AVEI School drawings with the masons and workers*

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Please feel free to share this newsletter with your friends and colleagues as we spread the knowledge of earth architecture to the world!

Earthily yours,  
The AVEI Team

**CSEB Workshops in Tamanrasset, Algeria**

In January, Satprem Maïni and Lara Davis were invited to Algeria by the organizers of the Archi'Terre festival, with whom the Earth Institute has been regularly collaborating for the Archi'Terre festival's conferences and workshops in Algiers. The Archi'Terre festival is an activity of the Algerian Ministry of Culture and is under the direction of Yasmine Terki. The Ministry has also established the Algerian Centre for Cultural Heritage Built with Earth (CAPterre). CAPterre aims to preserve Algeria's architectural heritage made from earth, to promote the continued use of earth as a building material, and to provide vocational training and information resources.

In an effort to revive the use of earth-based building techniques in the Saharan wilaya of Tamanrasset of Algeria, CAPterre



*The CAPterre organizing team with workshop participants*

organized an intensive 10-day workshop on Compressed Earth Stabilized Block (CSEB) construction and on earth-based plasters, taught by Laurent Coquemont. Algeria has a rich history of earth construction. However with the increasing prevalence of reinforced concrete (RCC) construction, knowledge and use of these techniques have significantly diminished. CAPterre hopes that

through increased awareness of the properties of earth as a building material and the introduction of the versatile CSEB building material, there will be a renaissance of earth architecture in the region.

From the 11th to the 23rd of January, Satprem and Lara led the workshop on CSEB in Tamanrasset for local architects, engi-



*Lara demonstrating soil mixing techniques*



*Participants operating the Auram Press 3000*

neers, and craftsmen. The workshop covered the history of earth construction, soil identification, stabilization methods, block production, designing with CSEB, AutoCAD exercises, and case studies. At the completion of the workshop, a full day of seminars on Earth Architecture was held with the the Prefect of the state of Tamanrasset in attendance. The Prefect Mr. Abdelhakim Chater has been a great proponent of earth-based construction and started promoting the replacement of RCC with CSEB in construction shortly after he took office.

The workshops were a success, with participants representing several public bodies involved with construction and architecture in the region, such as the local branches of the National Council of Architects and the Center of Professional Training and Apprenticeship, and Tamanrasset's Construction Material Production Company. ■



*Belgian volunteers laying marble tiles for the patio*

### Patio for Volontariat

In March, Madeleine and Arnaud de Blic from the Pondicherry-based humanitarian organization Volontariat asked Lara to oversee the construction of a patio space in a newly-renovated building of their Tuttipakkam Farm outside Pondicherry. The farm, which grows food for the meals given out by Volontariat, also provides a home to the orphaned or abandoned children from around Pondicherry.

The newly-renovated building will be used as a computer lab for the children. In order to provide more space, a covered patio was built on the ground floor. Volontariat's contractor,

Palani Velmurugan, collected together waste marble pieces to create a mosaic floor for the patio. Palani was formerly one of the Auroville Earth Institute's head masons.

Lara was asked to supervise this project because of her experience laying patios during her early years of masonry work. During the project, she oversaw a team of Belgian volunteers on a school trip.

The Auroville Earth Institute has had a long-standing relationship working with Volontariat. from 1992 to 1994, the Earth Institute designed and constructed Volontariat's Shakti Vihar School at the Uppalam site. This school for impoverished children also includes a crèche, a showroom for the crafts produced by Volontariat's training programs, and



*Trainee's plaster rendering of the CAPterre logo*



facilities for a night school. It employs the Earth Institute's signature vaulted structures in Compressed Stabilized Earth Block (CSEB). Currently, the Earth Institute is also lending its expertise in the renovation and expansion of the Souriya Crèche and Home for Street Boys. ■



*Finishing the Patio at Tuttipakkam Farm*

### **Volontariat : Serving the Poorest of the Poor in Pondicherry**

Madeleine de Blic (formerly Herman), a Belgian national, founded Volontariat in 1962 in order to serve Pondicherry's poorest communities. Since 1966, it has been registered as a non-profit, non-political, secular organization.

Volontariat's actions include providing meals, education, and medical care for 600 children every day, homes for homeless and abandoned children, surgeries for infants with heart defects, geriatric care for the elderly, handicraft training and employment for recovering leprosy patients, and other vocational training programs. The programs take place in locations scattered across Pondicherry and its suburbs.

In the past year, Madeleine was decorated by both the French Legion of Honor (Chevalier de la Legion d'Honneur) as well as the Belgian

Order of the Crown (Officier de l'Ordre de la Couronne) in recognition of her work with Volontariat to serve the poorest of the poor in Pondicherry. ■



*Children seated at the Shakti Vihar School*

## Wind Turbine Experiment

T. Ayyappan finished a small wind turbine in March which he has been working on for the past seven years. It generates about 5 kilowatts of power using a 6 coil. The turbine was mounted on the roof of the laboratory building of the Auroville Earth Institute to test its power-generating capabilities.

After this successful experiment, Ayyappan made a second wind turbine employing a 10 coil instead. This second turbine did not meet with the same success, so a third attempt is planned.

These wind turbines will be used for power generation around the Earth Institute campus. If they are able to generate sufficient power, they will also be incorporated into the design of the Earth Institute school on the Mangalam Campus. ■



*Ayyappan with his 5 kW wind turbine*

## Mira Nakashima in Auroville

The Hall of Peace in the Unity Pavilion was inaugurated on the 11th of February as the home for the Peace Table of Asia, an altar to global peace created by George Nakashima. A skilled architect and inspired furniture craftsman, Nakashima was the primary genius in designing and building the Golconde dormitory for the Sri Aurobindo Ashram in Pondicherry. He was a part of the Ashram for two years. In his later years, he worked to uncover the spirit of wood through furniture craftsmanship.

After receiving two exceptionally-sized 300-year old Black Walnut trees, he set about making altars of peace from this wood. He envisioned six altars—one for each continent—of peace, around which communion, meditation, and dialog could occur.

The Peace Table of Asia was given to Auroville and has been displayed in the main building of the Unity Pavilion until its home in the Hall of Peace was inaugurated this year. ■

For this momentous occasion, Mira Nakashima, daughter of the late George Nakashima, came to Auroville. On the day following the inauguration of the hall, she visited the Auroville Earth Institute to meet staff members and learn more about the activities of the Earth Institute. ■

## AV International visits the Mangalam Site

Members of Auroville International (AVI) chapters from several countries came for a presentation of the future Mangalam campus on the 18th of February (to read more about the expansion to the Mangalam campus, see **Issue 13**). The visit began at the Auroville Earth Institute where Satprem and Lara presented the activities of the Earth Institute as well as the overall plan for the Mangalam campus. The visit continued on the Mangalam site, where other Mangalam project members, including Well Paper, Bamboo Centre, and AVDzines, presented their activities.

This visit followed on the heels of a presentation by Lara to AVI about the difficulties of providing appropriate housing using sustainable building methods in the Auroville context. This previous presentation gave added insight into the current context in Auroville for building and the careful measures taken in planning the Mangalam campus. ■



*The layout for the Mangalam campus*

**Exhibition Room  
Renovation**

The exhibition room at the Auroville Earth Institute has been re-organized and updated. With a new coat of paint and updated posters, the exhibition room is more accessible and able to convey the mission and activities of the Earth Institute. We invite those who are interested to learn more about earth construction to visit!

Seventy soil samples from around India and 367 foreign soil samples from 90 countries are on display. Sample raw earth blocks—adobe, cob, etc—from around the world can be viewed, including an adobe from Egypt dating back to 1,300 BC. Also on display are more than 70 different Compressed Stabilized Earth Blocks (CSEB) made with the Auroville Press 3000's 18 interchange-

able molds. Additionally, samples of non-earth-based appropriate building materials are shown, such as ferrocement channels, stone, and wood.

Informative posters display the Earth Institute's various projects around Auroville, in India, and abroad, and large posters explain the earth construction techniques of the Earth Institute: CSEB, rammed earth, ferrocement channels, and arches, vaults, and domes.

Around the Earth Institute campus, buildings and walls demonstrate CSEB, rammed earth, wattle & daub, cob, and poured earth. The noteworthy vaulted structures include an equilateral vault with attached bucket pointed vault, a semicircular vault, an Egyptian vault, a catenary vault, a cloister arch dome, a hemispherical dome, and an octagonal dome.

The exhibition room is open during office hours, Monday to Saturday, 8am to 4.30pm. ■

**Conferences in  
February & March**

On the 19th of February, Satprem traveled to Thrissur, Kerala to participate in the three-day National Workshop on Alternative Technologies for Making the Designs of Buildings under MGNREGS (the Mahatma Gandhi National Rural Employment Guarantee Scheme). The workshop, hosted by the Kerala Institute of Local Administration and organized by HUDCO and the Ministry of Rural Development, focused on promoting labor-intensive and cost-effective building technologies that employ local materials.

Satprem gave a presentation entitled "Building with Earth for Owner Driven Development" the first day of the workshop. It took place at the Kerala Institute of Local Administration and brought together 60 professionals, decision-makers, and officers from the Ministry of Rural Development, representing 14 states of India. Following the success of this workshop, the participants expressed their desire to participate in CSEB training courses at the Auroville Earth Institute.

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On the 13th of March, Satprem participated in ATTIC '14 held at



*The new look of the AVEI exhibition room*

Rajalakshmi Engineering College in Chennai. He presented a paper titled “Building with Earth for a Sustainable Future” to approximately 200 students and faculty members. ■

### AVEI in the (Digital) Press

In January, Dieter Mai, the Social Media Manager for the German company ClayTEC, published a posting about his visit to the Auroville Earth Institute on the ClayTEC blog, ClayBlog. ClayBlog serves to bring together noteworthy stories about clay construction and other trends in sustainability and environmental awareness.

The ClayBlog post covers the philosophy of Satprem and the Earth Institute, the facilities and activities of the Earth Institute, and the plan for expansion of the school facilities with the Mangalam campus. This follows on ClayTec’s previous press coverage for the Earth Institute and a generous donation for the school project.

The full text (in German) can be found at the following link:

[www.clayblog.de/2014/01/auroville-earth-institute/](http://www.clayblog.de/2014/01/auroville-earth-institute/) ■



*The new AVEI homepage*

### AVEI Website Facelift

The Earth Institute website has been revamped by AVEI librarian Hilary Smith to bring a fresh new look and improved navigation. The homepage, as well as several pages pertaining to the mission and activities of the Earth Institute have been redesigned to better convey their message. The navigation has been relabeled and reorganized to better group and describe the abundant content on the site.

Materials available on the site include overviews of earth construction techniques, explanations of AVEI’s own techniques and technologies, case studies from around the world, summaries of AVEI’s construction projects, research reports, and the searchable online catalog of the 2,600 book library for consultation at the Earth Institute office.

Even if you are already familiar with our website, we invite you to browse our upgraded site. With the new organization, you may find content that was previously hidden.

[www.earth-auroville.com](http://www.earth-auroville.com) ■

### New Website for the UNESCO Chair

The UNESCO Chair for Earthen Architecture has launched a blog to collect pedagogical materials, announcements about courses and conferences, project summaries, and reports from the members of the UNESCO Chair network based in 23 different countries. This promises to be a great resource for earth architecture supporters!

[terra.hypotheses.org](http://terra.hypotheses.org) ■

**Meet Our New Team Member!**

The office has gained a new staff member this month!

*Vanitha*

Vanitha joined the Auroville Earth Institute office in March. Originally from Kuila Palayam, she now lives in Sanjeevinagar. She received a degree in Business Administration from the Siga College of Management & Computer Science in Villupuram.

She previously worked in Auroville as an office administrator at Cuppa Chai in nearby Auroshilpam. Now she has joined the Earth Institute team to bring her expertise in Excel to the Cost Estimation Tool, which the Earth Institute uses to calculate the cost of building projects. ■

**Overview of Training Courses at AVEI**

The month of February saw three weeks of CSEB training courses on the Auroville Earth Institute campus. From the 3rd to the 8th, sixteen trainees attended the CSEB Design week-long course. This course is designed for those with an architecture background, and the course attracted primarily architects and engineers from India and one architect from France.

From the 10th to the 22nd, the training courses continued with a two-week course on CSEB Production and Masonry. Twenty-nine trainees participated, primarily from India but also Greece, Israel, and Portugal. ■

**AVEI Training Course Schedule for 2014**

April

7th to 12th - CSEB Production  
14th to 19th - CSEB Masonry

June

2nd to 7th - Ferrocement  
9th to 14th - AVD Theory  
16th to 21st - AVD Masonry

July

7th to 12th - CSEB Design Studio  
14th to 19th - CSEB Intensive  
21st to 26th - AVD Intensive  
28th to 2nd Aug - CSEB Intensive

September

1st to 6th - CSEB Production  
8th to 13th - CSEB Masonry  
15th to 20th - AVD Theory  
22nd to 27th - AVD Masonry



*Trainees working on a CSEB wall*

**AVEI Newsletter**

Issue 15 - March 2014

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Editor-in-Chief:

Hilary D. Smith

Auroville Earth Institute

Auroshilpam

Auroville 605 101 T.N.

India

Tel.: +91 (0) 413 - 262 3330

/ 262 3064

Fax: +91 (0) 413 - 262 2886

[www.earth-auroville.com](http://www.earth-auroville.com)

[info@earth-auroville.com](mailto:info@earth-auroville.com)

[training@earth-auroville.com](mailto:training@earth-auroville.com)