

AVEI NEWSLETTER



The Auramix 5000 and Auram Press 4000, designed by AVEI and Aureka, producing blocks for the upcoming Sharanam project

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The summer holidays have brought many students to the AVEI campus this year with six weeks of training courses during the months of June and July.

Now that the raw construction of the reception building at Sri Vast Ashram has concluded and the design is completed for Aryan's house, the Earth Institute is pleased to have been offered the opportunity by the Sri Aurobindo Society to take on the design and construction of the second phase of the Sharanam project outside Pondicherry.

But otherwise, work has continued quietly, with a smattering of visitors, a new member joining the team, and the joyous occasion of the marriage of AVEI's secretary, Saravanan. Congratulations!

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

Beta Wind Turbine

The Earth Institute’s laboratory has a new wind turbine atop its dual vaults. Ayyappan has recently finished the fine-tuning of this updated wind turbine, the AVEI Turbine 2400, which improves upon the first two prototypes he developed in March 2014. (see newsletter **issue 15**).

At 11 meters above the ground, the 2.4-meter diameter rotor is able to catch the wind and produce up to 500 watts of energy. This is one hundred times more than Ayyappan’s earlier prototypes. The 28 to 30 volts of power charge a battery, which after being hooked up to an inverter, can contribute to powering the Earth Institute. ■



Ayyappan’s new wind turbine on the AVEI laboratory/dormitory



A closeup of the Turbine 2400

Rural Housing Conference

On the 19th of July, Satprem went to Delhi to attend the National Workshop on Priority and Affordable Rural Housing organized by the Ministry of Rural Development. This one-day workshop focused on rural housing, self-building efforts, and sustainable building materials like earth and bamboo. Speakers came from all over India to present, and Satprem gave a case study entitled “Stabilized Earth Technologies in Housing”. ■

Earth & Bamboo video

A video synopsis of the first Earth & Bamboo workshop held at the Earth Institute and the Bamboo Centre in May (and reviewed in the previous newsletter, Issue 22) was recently completed by organizer, Auroville Green Practices. It gives a visual narrative of the hands-on learning experience, interspersed with interviews with both facilitators and students.



<https://www.youtube.com/watch?v=071E4wj-8xg>

<http://www.agpworkshops.com> ■

Earth Builders Unite!

In the next year and a half, the earth-building community will be gearing up for three important international conferences, which will bring experts together to dialogue and exchange.

Earth USA 2015 will be taking place in Santa Fe, USA from the 2nd to the 4th of October. The program is slated to include presenters from the USA, Canada, Mexico, Argentina, Peru, Chile, Brazil, France, Germany, Norway, Spain, Mali, Ghana, Nigeria, Iran, India, Bangladesh, China, and Japan.

The following July, Terra 2016 will take place in Lyon, France. Co-organized by ISCEAH (the International Scientific Committee on Earthen Architectural Heritage) and ICOMOS (the International Council on Monuments and Sites), this event promises to

bring together over 800 individuals to discuss the future of earthen architecture, with a particular focus on how it pertains to sustainable development and urban architecture.

Finally, the year will close with Lehm 2016 in Weimar, Germany. This conference will be held from the 12th to the 14th of November and those wishing to present a paper or poster during this conference still have through the 10th of October 2015 to submit an abstract.

The Earth Institute is enthusiastic to participate in this string of conferences and to see the advances in the field that the dialogue shall bring. Four abstracts from earth-building experts in India were accepted for the Earth USA conference. We hope a similar such forum can begin to take shape for the earth-building community in India, in the interest of knowledge sharing and coordinated efforts on a national level.

Earth USA 2015 Website:
<http://earthusa.org/>

Terra 2016 Website:
<http://terra2016.sciencesconf.org/>

Lehm 2016 Information:
<http://www.dachverband-lehm.de>

Before Earth USA, Lara and Satprem will be leading a pre-conference workshop in Texas organized by Jim Hallock and Earth Block International! You can find out more about this **3-day AVD course** here:

<http://earthusa.org/pre-conference-workshops/> ■

Visitors

In mid June, Hyacinth Pinto stopped by for a brief visit to the Earth Institute. A practicing architect in Goa, Hyacinth is a fellow earth builder who works with various "mud media", from restoration of traditional laterite homes to construction with rammed earth and bamboo. Along with Satprem and Lara, Hyacinth will be attending the Earth USA 2015 conference in Santa Fe, New Mexico. She will be giving a presentation on the diverse community of earth builders in India. We hope that her visit and presentation will give some momentum to bring together the vast network of earth builders in India. ■

EARTH USA 2015

8th International Earthbuilding Conference



October 2 – 4, 2015

New Mexico Museum of Art

Santa Fe, New Mexico

www.earthusa.org

Auroville Town Planning

On the 19th of July, members of the Earth Institute team attended a town planning meeting regarding the Residential Zone of Auroville. Spanish architect Luis Feduchi has proposed a Detailed Development Plan for Auroville residential zones 1 & 2 in line with the Galaxy Model by Roger Anger. This meeting was specially convened because of the exceptional presence of the chairman of Auroville's Town Development Council, Dr. B.V. Doshi. Dr. Doshi is one of India's most famous contemporary architects, who has a particular passion for education and environmental and low-cost building.

Auroville's architects and other officials involved with town planning gathered together to give feedback about Feduchi's plan to promote green corridors, alternative transportation, and public spaces. ■

New Team Member

The Earth Institute has welcomed a new intern to the team.

Sai Kamala

'The engine of life is linkage. Everything is linked. Nothing is self-sufficient...! – *Home*.

I was deeply motivated and inspired by the documentary *Home* directed by Yann Arthus-Bertrand, which was screened during my workshop in Biome Environmental Solutions. In this documentary, I saw how earth has evolved over the years and how we as humans have conquered and drastically changed the earth, making me realize that there is a dire need to manage and preserve what little is left.

This was the beginning of learning that sustainability does not end with a building as a structure, but it should be embedded in our day-to-day lives, from the

products we use to the food we eat. On visiting Auroville, I learnt how people live in harmony with nature, integrating the lush green surroundings to the interior spaces and not limiting a building to a stand-alone structure.

I believe in ecological architecture – designs derived from cost, culture, and climate – and that the design of a building evolves on site through the act of design, in contrast to the conventionally accepted approach, where architecture is a specialized activity divorced from construction. Sustainable solutions exist deeply rooted in our traditional knowledge and our built heritage, some of which have been developed successfully over the years and some of which are still waiting to be adopted into the mainstream.

Mud is one of these building materials that has been tested and tried over thousands of years, which consumes the least embodied energy because earth is available right on the building site and can be used to make a natural form of built space. During my visit to AVEI, I saw that AVEI has experimented with mud as a building material and succeeded in creating well designed, cost-effective, energy-efficient structures.

I feel very lucky to be provided with an opportunity to work with AVEI and I am looking forward to learning a lot from Auroville, about architecture and a new way of living. ■



Feduchi's proposal for the residential zone

Recent AVEI Courses

June and July were busy months for training courses, with six weeks of courses to capitalize on the summer school holidays. The first week of June was the Ferrocement course, which is only offered twice a year and always proves to be a popular choice. Thirty-three students attended primarily from India, but also from Canada, Australia, and Thailand. The following two weeks were composed of AVD Theory and Masonry. A total of 41 people attended over the two weeks, primarily coming from India, but also including individuals from Canada, Thailand, France, and Australia.

After a short break, the back-to-back July training courses began with CSEB Design Studio. Geared specifically for architects and engineers, this course familiarizes students with the design principles and drawings required for

CSEB buildings. It was attended by 29 students, including one Canadian, three Americans, and one French. The rest of the month was devoted to intensive courses: CSEB Intensive and AVD Intensive, which condense the two-week courses into a one-week experience. CSEB Intensive was attended by 35 students from India, Belgium, Canada, USA, and France. The month concluded with AVD Intensive, which was attended by 30 students coming from all over India, France, Belgium, and USA.

NEW COURSE SCHEDULED!

From the 17th to the 22nd of August, the Earth Institute will be offering a one-week, intensive course on CSEB for Disaster Resistance. For more information about the course, see:

http://www.earth-auroville.com/disaster_resistance_course_en.php

AVEI Training Course Schedule for 2015

August

17th to 22nd: Disaster resistance with CSEB

September

(Aug) 31st to 5th: CSEB Production

7th to 12th: CSEB Masonry

14th to 19th: AVD Theory

21st to 26th: AVD Masonry

December

(Nov) 30th to 5th: Ferrocement

7th to 12th: AVD Theory

14th to 19th: AVD Masonry

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AVD Masonry students and facilitators at the completion of the course