

April 2012

It is almost 8 p.m. at Matrimandir. Looking out the office window, the Matrimandir appears as a glowing golden globe emerging from the darkness of the twelve petals that surround it. A string of half a dozen lights at ground level mark the path leading from the office to the sphere, lighting the way for those who come and go quietly to and from their concentration in the Chamber. Others simply walk along the garden paths in the cool evening air, listening to the sound of crickets, to the splashing of the water in the marble pond below Matrimandir, to the night calls of the owls, and, further away, the evening traffic on Auroville's roads.

In a few minutes the globe will darken, for the lights consume a lot of power. Each spotlight is a 300 W halogen bulb and there are 12 of them...so the petal lights are turned off by a clock switch around 8: 15, when people have left the area. It would be nice to keep Matrimandir lit up until later, even all night, like a beacon at the center of the growing township...but before we can do that, there is work to be done. Research on modern and low-consumption lighting techniques has to be made. Lighting is a field very much at the center of our attention these days, and by that providence that arranges things here, a person well experienced in lighting techniques appeared on the scene and is introducing us to a wide range of lighting possibilities since a few months. Demonstrations have been made using a variety of devices, ranging from LED spotlights to fiber optic sources, to strings of totally waterproof LED lights that seem to hold great promise and solve a number of our needs.



The pool and upper cascade in the Garden of Consciousness

Not only the main building, but the Banyan tree, the Amphitheater and especially the Unity pond and mini-Amphitheater just beyond the Banyan tree, have been the focus of recent lighting demonstrations. Without knowing just where and how the different features of the Unity pond should be lit, along with the cascade leading to it and the mini-Amphitheater steps that border it, we were unable to go on and finish the stone cladding work of the pond itself and so its completion was held up. Now with the recent demonstrations, the techniques have been understood and the positions have been identified which will enable us to properly light this area. With this knowledge we can now proceed to finish putting the stone on the body of the main pond. Our goal is to have this entire area, the pond and cascade, and the fountain rising from within the pond, completed before the end of this year. With the lighting keys now in our hands, this goal is within reach.

Not only have we had the good fortune to have in our midst a well-qualified, internationally experienced lighting designer, but there was another person too who came to help out our garden design team recently and who has a vast practical experience in the actual design and building of wonderful gardens. Here again, we were able to benefit from his years of experience about the process of garden design, of how to transform a flat empty landscape into a wondrous garden experience. Appreciating very much the work that had already been done here, he worked with our garden design team on details of the garden of Consciousness, participated in discussions aimed at designing the fourth garden, the garden of Light, and most importantly for the moment he shared his wide experience in water treatment techniques in the garden setting.

Just before Auroville's birthday, we ran the full water circuit in the garden of Consciousness for the first time, beginning with pumping water up into the main pond, from where it then overflowed and cascaded down a series of seven steps into a smaller lower pond where it collected and was again pumped back up to the main pond. Around and around the water circulated, the flow being adjusted until the garden designers felt that the curtain of water cascading down the seven steps had just the right volume and effect they wished it to have.

All was well for just about five days after these trials and then very quickly the water began to turn green! Of course we knew that this would happen - algae, stimulated by the high PH level in our newly built pond and energized by the abundant sunlight falling on the pond multiplied rapidly and turned the crystal clear water into a green soup!

Well, there are several methods to deal with algae, and how to go about cleansing the water is well documented. But each situation is a case study on its own, with its own parameters of flow, volume, chemistry, all of which contribute to the quality of water in the system. At one extreme is the normal "swimming pool" approach to things...just dose your pool with a good amount of chlorine and, presto! ...the water stays clear... there is a price to pay, of course, for the use of this drastic chemical method. First of all, plants and fish will not be happy and indeed will not even survive in this chemical environment, and then there is the problem of obtaining and handling the chemicals involved. So, it is better if one can avoid the chlorine approach.

But then, what to do? The best approach is to follow Nature herself, to use the techniques that she uses to keep her lakes and streams clean. Nature has several ways to keep her ponds clean. Sand and small stones filter out dust and debris being carried by the water, and then the roots of aquatic plants consume dissolved nutrients that would otherwise feed the algae. In addition, if there are waterfalls or waves present, then oxygen is introduced into the water which is a powerful anti-bacterial agent. These features -- the filtration and the cleansing action of aquatic plants or bacteria -- are often incorporated into what is called a "bio-filter".

For the garden of Consciousness we will try to solve our green soup problem by creating a natural bio-filter in the lower pond, at the base of the 7-step cascade and simultaneously we will run the water through a strong UV sterilizer to help remove the algae. This will be done in the next few months. If we find that the growth of the algae is still not under control, then we will try an even larger bio-filter to control the growth.

We did not mention the important fact that our main pond in this garden will be a home to some lotus plants, the white lotus symbolizing Aditi -the Divine Consciousness. These plants rule out the use of

chlorine as it is not suitable for a living plant environment. It will be interesting to observe over the next months how the pond responds to these trials.

Each pond, each water system, is a case study in its own right as we have said. The Unity pond over by the Banyan tree is a different challenge altogether. There we intend to have no plants or fish living in the pond. We will have a complex fountain there with many fine jets. The simple fact of the aeration -the introduction of oxygen into the water because of the action of the jets - will go a long way in controlling the water quality, for the presence of oxygen discourages algae growth, but will not by itself do the whole job. Again the sand filter and the UV lights will have to come in to play and here, perhaps, chlorine might finally have to be used, for this pool must always be crystal-clear. After carrying out a series of filtration trials over the coming year, we will see how things turn out.

Thus lighting and water treatment are two of the subjects most actively under consideration by our gardens team these days. New fields, new ideas, new techniques all being explored and tested, always keeping in view the need to consume a minimum of power, to use no or a minimum of chemicals, to give the upper hand to Nature always to do the job that needs to be done.



Building the compressed earth block walls in the garden of Bliss

While these finishing aspects on the gardens of Consciousness and Unity are being developed, we have embarked on a quite visible stage of development on the garden of Bliss, adjacent to Consciousness. You may recall that the basic design for this garden calls for the creation of a series of seven concentric terraces around a raised central open area which will be covered with white sand and which will hold seven circular bowls, each being a simple fountain on its own. After having completed the basic contouring of the garden area before New Year, we are now creating the low walls that will function as the borders of the seven circular terraced areas. To construct these walls we have opted for a technique which is new for us but which has been widely used in Auroville construction. That is, to use blocks made of compressed earth instead of concrete or fired bricks. Compressed earth blocks contain just a small percentage of cement and do not require firing to become hard. Their use saves on both cement and energy. During March this work moved ahead steadily, and once completed will allow us to create the terraces themselves during the remaining

summer months. By the time the cooler planting season has arrived we will be ready to plant the various flowering plants intended for this garden.



The new Matrimandir exhibition hall at the Visitors' Center

The morning of Auroville's birthday a special event took place over at the main Visitors' Center, about a kilometer down the road from Matrimandir.

There, a new exhibition was opened that has been specially created to introduce visitors to the meaning and structural details of Matrimandir. The new hall houses two models of Matrimandir, one being the original rosewood model that was presented to The Mother. It features the layout for the whole gardens oval as originally proposed. The second a 3- D cut-away model of the Matrimandir building, allowing visitors to see how the Chamber is suspended in the upper hemisphere of the globe and its overall appearance with the twelve petals. The walls of the new hall are hung with eight large panels showing many more details of the construction and the significance the Mother has given to Matrimandir and its gardens.

Quiet and unpretentious, the exhibition conveys to the visitor a sense of the depth and the beauty that lie at the center of the town. This room is a very welcome addition to the large main exhibition hall of the Visitors' Center, which thousands of people from all over the world visit each day.

N.B. The timing for phone booking for visits to the Inner Chamber has now been extended. You may now phone between 10 am and 11:30 am to 0413 - 2622204.

Address for donations and correspondence:

(Please make your cheque, money order or DD payable to '**Matrimandir**')

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Bookings: (0413)262-2204 between 10 to 11:30 am daily; accounts 262-2228

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