

## M P STATE CENTRE

### Lecture on Green Building and Lighting

May 26, 2012, Indore

The 31st uninterrupted monthly meeting and lecture of ISLE MPSC on "Green Building and Lighting" was organised on Saturday May 26, 2012 at Hotel Fortune Landmark in Indore. This event was jointly organised by the Institute of Indian Interior Designers (IIID), Indore Chapter, and the Indian Society for Heating, Refrigeration and Air Conditioning Engineers (ISHRAE), Indore Chapter and ISLE, MPSC. The event was sponsored by KeraKoll India Pvt. Ltd. a leading manufacturer of building materials for the construction of Green Buildings. The programme started with the keynote address of Mr. Hemant Jain, CEO of KeraKoll India Ltd. He informed the audience that his organisation is into the manufacturing of floors and wall installations, external and internal cladding, fast track renovations, sports facilities, industrial and public facilities, etc. which are all green in nature. These deliver significant advantages in terms of protecting the environment, the health and well-being of people and economic benefits as well as leading to improved energy efficiency. The lecture on Natural Buildings was delivered by a young Architect Dhruv Bhaskar, who specialises in Mud Architecture. Mr. Dhruv Bhaskar, is an alumnus of Daly College, Indore and presently works with Auroville Foundation, Pondicherry. He started his presentation with the Auroville Charter explaining that all the buildings in Auroville are made by using rammed earth foundations and walls are also made up of rammed earth while terracotta tube vaults (Guna Tubes) and terracotta jack arches are used in roofing applications. He added that natural materials like Chettinad Lime Plaster is used for plastering the walls and handmade Attangudi tiles are used for flooring and sand cast murals along with mud plaster are used for creating artistic designs on walls. Mr. Dhruv Bhaskar showed the photographs of his projects and highlighted that Green Buildings are not only intended to use local material and indigenous building concepts, but to harmoniously blend in and have essential unity with the nature environment. As far as possible, only local or recycled building material is used for construction. The green buildings are equipped with enclosed 'kund' for storing rain water in the courtyard.

The 'kund' has steps running down to it, shaped like an amphitheatre, which can be used as a sitting area. The surrounding area is used for organic farming, vermicomposting, a paper recycling plant, mushroom farming, solar and wind hybrid energy generating unit. For ensuring adequate day lighting and ventilation in green buildings a very effective use of verandahs, courtyards, jalis and jharokas is done. The presentation on "Tradition to Technology" was delivered by Mr. Ashish Rakheja,

COO, Spectral India Ltd. and Vice-Chairman Technical Committee of the Indian Green Building Council (IGBC). In his presentation he highlighted the five sacred elements of nature i.e. water, sun, air, earth and sky and said that our buildings are equipped with these five elements. He stressed the importance of combining nature with technology and said that the need of hour was to harmonise the five basic elements which make up the universe by orienting the buildings in the right way for saving energy. Stressing the need for measuring thermal radiation, Mr. Ashish Rakheja and said that it was required to optimise wall and roof insulation, optimise glazing area, daylight enhancing and guiding air movement by utilizing the state of the art simulation software to get an authentic idea of the real world situation and then design the buildings. He felt that the coming years would witness green buildings with sky gardens, vertical farms, green walls and hydroponics. The program was attended by members of IIID, ISHRAE and ISLE. Mr. Rajendra Raje, Executive Committee Member of ISLE, Mr. Vinay Babar, Chairman of IIID Indore and Fellow Life Member ISLE and Mr. Akhilesh Jain, Chairman, ISLE, MPSC coordinated the program.

Dr. Alok Mittal  
Committee Member  
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