

Department of Building
School of Design and Environment

presents

Public Lecture

on

**New Naturation Techniques for the Greening and Cooling
of Building Surfaces**

by

**Dr Franz Rudolf
Director**

Society for Surface Naturation and Environmental Protection

Date: 12 February 2004 (Thursday)

Time: 3.00 pm

Venue: LR427, SDE3 - Level 4

Abstract

A main urban problem up to now is the phytophobe urban surface. Phytophobe building surfaces have many disadvantages relating to urban aesthetics, urban and global climate, air quality and municipal economy. Therefore, urban ecology and climatology have emerged as one of the growing research areas these days. A prime aim of the building surface naturation is the creation of harmony between nature and urban living space. Building surface naturations, as science-based packages to allow architects and designers to incorporate some greenery in the city and landscape planning, are market-driving high-performance products.

In this presentation, Dr Franz Rudolf will review urban breakthroughs for building naturation technology and the challenges awaiting us. A critical examination of the fundamentals of classic roof greenery will be carried out. Dr Rudolf will start with the basic principle of building surface naturation as a sensor-aided bio-climatically optimizing BiotopeDesign®. Various technologies to develop high performance building naturations will be reviewed and compared in terms of their air-conditioning, micro- and macroclimatic impact, and the remaining uncertainties in these technologies. Following which will be a discussion on the applications of surface naturation for various urban tasks worldwide and the challenges ahead. It would be promising to have scientifically controlled demonstration projects to test the possibilities and limits of surface naturation under tropical conditions.

About the Speaker

Dr Franz Rudolf established the Society for Surface Naturation and Environmental Protection (SSN) in October 2001 after having had long scientific and industrial experiences in Germany, Austria, Mexico, Spain, Ecuador, Puerto Rico, United Arab Emirates and Russia. SSN is a society of scientists, engineers, institutions and businesses involved in research and development as well as training, in environmental technologies and applications.

Dr Rudolf worked on various joint international projects in the Humboldt University from 1991 to 1999.

His activities have attracted several highly specialised industrial companies such as ZinCo, Bauder, re natur, Stender and huge companies such as Haniel, Ehl, Braas, Ytong, Sarnafil, Deutsche Bahn, Magnetbahn-Planungsgesellschaft, DE-Consult and Hewlett-Packard to collaborate on joint projects with Humboldt-University and SSN in the study of surface naturation and development or application of new surface naturation techniques.

Dr Rudolf is one of the leaders in vertical surface naturation and biotope naturation. He has set up the joint international project AEP sponsored by European Community programs such as TEMPUS, ECLAIR, SPRINT, ALFA, LIFE and ERASMUS. He has organized the international symposiums AEP and set up the 'Berlin Declaration Urban Ecology and Agrarian Ecology' of universities and institutions of higher education. He has been invited to give lectures in many conferences, such as the Berlin Municipal Climate Protection Conference organised by the European Academy of the Urban Environment.

No fee required. All are welcome.

Please phone or email us to reserve your place(s).

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