



# NTRODUCTION

Dynamic analysis and modelling techniques, combined with appropriate test methodologies, have been applied for many years to the assessment of the solar and thermal performance of buildings and building components. However, producing accurate results which inspire confidence at all levels in the building sector can still be a problem.

The specific dynamic analysis and modelling techniques addressed by this conference require a high level of skill in order to be applied properly. Often statisticians and mathematicians do not have the technical knowledge to correctly apply these dynamic techniques to physical processes, whilst engineers may not have adequate knowledge of the complex statistical and mathematical processes. Discussions, comparisons, training, guidance tools, and in general, accessible and sustainable research infrastructures are required to keep the necessary skill at a high level. Due to the wide range of scientific disciplines required for analysing the complexities of the performance of an occupied building in a real outdoor environment, it is difficult and expensive for any one institute, organisation or university to maintain all the required knowledge in-house. As such, whilst the dynamic analysis and modelling techniques are able to deal with the non-linear processes associated with the energy performance of occupied buildings and are well suited for energy management, it is however necessary to provide an environment which allows direct and effective intercomparison of these techniques and the results of their implementation.

# AIMS AND OBJECTIVES

The objective of DYNASTEE 2005 is to provide an effective networking environment, by bringing together the scientific community in the field, to add further momentum to many years of applied research and to identify feasible approaches for the practical implementation of dynamic techniques. The conference is the meeting ground for the presentation of an overview of the activities and strategies to date, discussion of the latest scientific developments and announcement of the networking mechanisms for creating a sustainable scientific environment for applications of dynamic analysis, simulation and testing.

# WHO SHOULD ATTEND DYNASTEE 2005

The conference addresses the scientific community active in the field of construction research and design using state-of-the-art analysis, modelling and testing techniques for the study of the energy and environmental performance of buildings and building components. Participants are expected to come from the wider area of building engineering and physics research, as well as from the field of applied mathematics and statistics.

# VENUE

The conference will be held in the Athens Imperial Hotel, located in central Athens, and conveniently situated next the Metaxourghio Metro station (Line 2) for fast and easy access to Athens International Airport.

### **CONFERENCE PROGRAMME**

# Wednesday, 12th October 2005

13:00-14:00 Registration

14:00-15:30 Opening – Introduction and Overview

15:30-16:30 Lund

16:30-18:00 Session 1 : Experimental testing and monitoring

18:00-18:30 Coffee Breat

18:30-20:00 Session 2 : Experimental testing and monitoring (continued)

# Thursday, 13th October 2005

09:30-11:00 Session 3 : Dynamic analysis methods and techniques
11:00-11:30 Coffee break
11:30-13:00 Session 4 : Applications of dynamic analysis

13:00-14:00 Lunch Break

14:00-15:30 Parallel Workshops

- Mathematical Modelling

- Building Energy Performance Assessment

### Friday, 14th October 2005

09:30-11:00 Session 5 : Dynamic simulation and innovative applications

11:00-11:30 Coffee break

11:30-13:00 Round table : From Research to Application

13:00-14:00 Discussion

Closing of the conference

# **ORGANISING COMMITTEE**

Mrs Eugenia Lazari, Centre for Renewable Energy Sources (CRES), Greece

Mr Gordon Sutherland, Centre for Renewable Energy Sources (CRES), Greece

Mr Luk Vandaele, Belgian Building Research Institute (BBRI), Belgium Dr Paul Baker, Glasgow Caledonian University, United Kingdom

Prof Dagnija Blumberga, Riga Technical University, Latvia

Mr Hans Bloem, European Commission - Joint Research Centre (EC - JRC), Italy

# SCIENTIFIC COMMITTEE

Dr Brian Anderson, Building Research Establishment Scottish Laboratory (BRE Scotland), United Kingdom

Prof Kimon Antonopoulos, National Technical University of Athens (NTUA), Greece

Prof Athanassios Argiriou, University of Patras, Greece

Prof Andreas Athienitis, Concordia University, Canada

Dr Dorota Chwieduk, Policy Academy of Sciences, Poland

Prof Baruch Givoni, University of California at Los Angeles (UCLA), United States of America

**Prof Gérard Guarracino**, Ecole National des travaux public de l'État, France **Prof Jan Kreider**, University of Colorado at Boulder, United States of America

Prof Henrik Madsen, Technical University of Denmark, Denmark

**Prof Francois-Pascal Neirac**, Centre Energetique et Procedes de l'Ecole des Mines de Paris, France **Dr Paul Strachan**, University of Strathclyde, United Kingdom

#### CONFERENCE REGISTRATION FORM

Please complete (using capital letters) and forward to:

DYNASTEE 2005 Conference Secretariat

# Centre for Renewable Energy Sources (CRES)

19th km Marathonos Avenue 190 09 Pikermi, Attiki / Greece Attn. Ms Ioanna Dounaki Tel.: + 30 210 6603212

Fax: + 30 210 6603301-2 e-mail: dounaki@cres.gr

Surname:
First Name:
Mr / Ms / Dr / Prof:
Profession:
Company/Institute:
Address:
Postal Code:
City:
Country:
Telephone:
Fax:
e-mail:

#### **REGISTRATION FEES - PAYMENT METHOD**

Registration until 19 <sup>th</sup> Sept. 2005	150€
Registration after 19th Sept. 2005	180€
Student fee	100 € (document required)

### The registration fee includes:

- ✓ Attendance at all Sessions and Workshops
- ✓ Refreshments and lunches
- ✓ A copy of the proceedings on a CD-ROM

Payments for registration should be made in EURO by wire bank transfer quoting: **DYNASTEE 2005** 

Credit cards or bank cheques cannot be accepted.
Bank transfer for payments in EURO should be made to:

Centre for Renewable Energy Sources (CRES)

Bank: National Bank of Greece

Branch: Ambelokipi Branch 721, Mesogeion 1, Athens, Greece

Account Nr.: 721/106/48015476

IBAN GR43 0110 1060 0000 1064 8015 476

SWIFT (BIC) ETHNGRAA

Registration will be considered valid upon receipt of a copy of the bank transfer issue, mentioning your name, by fax (+30 210 6603301- 2 / attn. Ms. I. Dounaki). Upon receipt of your registration you will receive confirmation from the conference secretariat.

<sup>\*</sup>A meeting of the DYNASTEE Network will take place from 15:00 – 16:30.

An open invitation is extended to all conference participants who wish to attend.