

SEBUA-12 PROGRAM OVERVIEW

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
08:30 - 09:00		Registration				
09:00 - 09:30		Welcome Remarks				
09:30 - 10:30		Keynote Lecture 1 M. P. Mengüç	Keynote Lecture 2 D. Rovas	Keynote Lecture 3 C. Grimm	Keynote Lecture 4 H. Hermanns	Session 9 AGILE, DESIMAX, BaaS– EC Projects
10:30 - 11:00		Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:00 - 11:30		Session 1 Energy Efficient Architecture	Session 4 Building Efficient Energy Management Systems	Session 6 Sustainable Energy Sources For Buildings	Session 7 SmartCoDe– EC Project	Session 9(Cont.) AGILE, DESIMAX, BaaS– EC Projects
11:30 - 12:00						
12:00 - 12:30						
12:30 - 13:00						
13:00 - 13:30		Break	Break	Free Afternoon	Break	END
13:30 - 14:00						
14:00 - 14:30						
14:30 - 15:00						
15:00 - 15:30		Session 2 - Building Models And Energy Efficiency - 1	Session 5 Technologies For Sustainable Use Of Energy In Buildings		Session 8 PEBBLE – EC Project	
15:30 - 16:00						
16:00 - 16:30						
16:30 - 17:00	Registration	Coffee Break	POSTER SESSION and Coffee Break			
17:00 - 17:30						
17:30 - 18:00		Session 3 Building Models And Energy Efficiency - 2	Session 5 (cont.) Technologies For Sustainable Use Of Energy In Buildings			
18:00 - 18:30						
18:30 - 19:00		Welcome Cocktail				
19:00 - 19:30						
20:00 - 20:30						
20:30 - 21:00					Gala Dinner	
21:00 - 22:30						

International Symposium on Sustainable Energy in Buildings and Urban Areas

Pine Bay Holiday Resort, Kusadasi, Turkey
14 – 20 October, 2012

SUNDAY OCTOBER 14, 2012

15:30 - 18:00 REGISTRATION

MONDAY OCTOBER 15, 2012

8:30 - 9:00 REGISTRATION

9:00 - 9:30 WELCOMING REMARKS Prof. Emilia Mladin / Prof. Faruk Arinç

SESSION 1 - ENERGY EFFICIENT ARCHITECTURE

Chair: Emilia Mladin

9:30 - 10:30 Keynote: THE INTEGRATION OF ENGINEERING AND ARCHITECTURE FOR
SUSTAINABLE BUILDINGS
M. P. Menguc

10:30 - 11:00 Coffee Break

11:00 - 11:30 SUSTAINABILITY THROUGH ARCHITECTURAL MORPHOLOGY
H. Tundrea, M. Budescu, M. Vasilache, G. Taranu

11:30 - 12:00 EFFECT OF MOISTURE ON THE ENERGY CONSUMPTION OF BUILDINGS
I. Remache, N. Djermane

12:00 – 12:30 DEVELOPMENT OF THE CAPABILITY OF ENERGYPLUS SOFTWARE TO
SIMULATION OF BUILDING DOUBLE-SKIN FAÇADE
Mohammad Armin Sabooni, Hashem Musavi Vaseti, Mehdi Maerefat and Aziz
Azimi

12:30 - 15:00 BREAK

SESSION 2 - BUILDING MODELS AND ENERGY EFFICIENCY - 1

Chair: Javier Rey

15:00 - 15:30 STUDY CONCERNING THE EFFECTS OF THERMAL REHABILITATION OF A BLOCK OF FLATS

Irina Bliuc, Irina Baran, Radu Pescaru, Aurora Irina Dumitrascu

15:30 - 16:00 ENERGY AND COMFORT. ANALYSIS OF INTEGRATED "LOW EX" SOLUTIONS

Javier Rey, Jon Zubiaurre and David Irusta

16:00 - 16:30 COMMON ERRORS IN ASSESSING ENERGY PERFORMANCE BASED ON DESIGN

EC Mladin, T. Prisecaru

16:30 - 17:00 Coffee Break

SESSION 3- BUILDING MODELS AND ENERGY EFFICIENCY - 2

17:00 - 17:30 UNIVERSITY CAMPUSES ENERGY PERFORMANCE ESTIMATION IN UKRAINE BASED ON MEASURABLE AAPPROACH

V.I. Deshko, O.M. Shevchenko, G.G. Farenyk

17:30 - 18:00 REHABILITATION PROJECT FOR A CULTURAL BUILDING ACCORDING THE PRINCIPLES OF SUSTAINABLE DEVELOPMENT

Mariana Fartatescu, Raluca Manoliu, Calin Corduban, Dorina Isopescu and Nicolae Taranu

18:30 - 19:30 WELCOME COCKTAIL

TUESDAY OCTOBER 16, 2012

SESSION 4 - BUILDING EFFICIENT ENERGY MANAGEMENT SYSTEMS

Chair: Adolph Michael

- 9:30 - 10:30 Keynote: MODEL-BASED CONTROL FOR IMPROVED ENERGY EFFICIENCY
Dimitrios Rovas
- 10:30-11:00 Coffee Break
- 11:00-11:25 ROOM TEMPERATURE CONTROL WITH ADAPTIVE ALGORITHMS
Adolph Michael, Kopmann Nina, Lupulescu Bruno and Müller Dirk
- 11:25-11:50 DEMAND-SHIFTING USING MODEL-ASSISTED CONTROL
G. Kontes, G. Giannakis, E. Kosmatopoulos, D. Rovas
- 11:50-12:15 HARDWARE-IN-THE-LOOP SIMULATION FOR HOME ENERGY SYSTEMS
Kan Chen, Dirk Müller
- 12:15-12:40 THERMAL COMFORT MONITORING IN COMMERCIAL BUILDINGS
Jiří Vass, Jiří Rojíček and Jana Trojanová
- 12:40-15:00 BREAK

SESSION 5 - TECHNOLOGIES FOR SUSTAINABLE USE OF ENERGY IN BUILDINGS

Chair: Chadi MAALOUF

- 15:00 - 15:30 STUDY OF COUPLED HEAT AND MOISTURE TRANSFER WITHIN A VEGETAL FIBRE MATERIAL FOR BUILDING ENVELOPE
Chadi MAALOUF, Mohammed LACHI and Ton Hoang MAI, Etienne
- 15:30 - 16:00 ON THE IMPACT OF COOL ROOFS IN ITALIAN RESIDENTIAL BUILDINGS: EXPERIMENTAL ASSESSMENT OF SUMMER AND WINTER PERFORMANCE
Anna Laura Pisello, Federico Rossi and Franco Cotana
- 16:00 - 16:30 INTEGRATION OF SOLAR ENERGY RECOVERY SYSTEMS IN URBAN DWELLINGS
Cristian C-tin Ungureanu, Tudor Gradinaru and Aurora Irina Dumitrascu
- 16:30 - 17:00 Coffee Break and WORK-IN-PROGRESS POSTER SESSION
- 17:00 -17:30 THE COST OF SOIL CO₂ AT PROJECT SITES IN THE DESERT SOUTHWEST, UNITED STATES
Jon W. Wilson and Dr. Moses Karakouzian
- 17:30 – 18:00 EXPERIMENTAL AND NUMERICAL INVESTIGATION ON ABSORPTION-DIFFUSION REFRIGERATION MACHINE BASED ON LIGHT HYDROCARBONS
N. Ben Ezzine, R. Garma, A. Bellagi

WEDNESDAY OCTOBER 17, 2012

SESSION 6 - SUSTAINABLE ENERGY SOURCES FOR BUILDINGS

Chair: Ismail Tavman

9:30-10:30 Keynote: SMART ENERGY BUILDINGS AND NEIGHBORHOODS: WHICH
INFRASTRUCTURES AND PLATFORMS TO USE?
Christoph Grimm

10:30 - 11:00 Coffee Break

11:00 - 11:30 EXERGETIC ANALYSIS OF A THERMAL STATION IN A DISTRICT HEATING
SYSTEM
Untea, Al. Dobrovicescu, T. Prisecaru, E.C. Mladin, M. Prisecaru

11:30 - 12:00 PERFORMANCE INVESTIGATION OF GEOTHERMAL DISTRICT HEATING
Yildiz Kalinci, Ismail Tavman, and Arif Hepbasli

12:00 - 12:30 THE NEW STRAW PELLETS COMBUSTION BOILER FOR HEATING BUILDINGS
Isemin R, Kuzmin S., Konyakhin V., Mikhalev A., Viryasov D., Milovanov O.,
Nikolopoulos N., Karampinis E., Grammelis P.

12:30 - 13:00 DESIGN OF A COMBINED COOLING, HEATING AND POWER SYSTEM FOR A
FIVE-STOREY RESIDENTIAL BUILDING IN THE HOT CLIMATE OF IRAN
Hasan Ghasemzadeh, Mehdi Maerefat and Aziz Azimi

13:00 - Free Afternoon

THURSDAY OCTOBER 18, 2012

SESSION 7 - SmartCoDe– EC Project

Chair: Peter Neumann

9:30 - 10:30 Keynote: POWER GRID STABILITY DESPITE RENEWABLE INSTABILITY
Holger Hermanns

10:30 - 11:00 Coffee Break

11:00 - 11:30 HIGHLY-INTEGRATED MICROELECTRONIC DEVICES FOR ENERGY
MANAGEMENT
Thomas Herndl

11:30 - 12:00 FROM THEORY TO PRACTICE: REAL WORLD DEMONSTRATORS FOR SMART
GRID APPLICATIONS
Roland Kopetzky

12:00 - 15:00 BREAK

SESSION 8 – PEBBLE – EC Project

Chair: Dimitrios Rovas

15:00 – 15:30 SIMULATION ASSISTED ADAPTION OF A MODEL BASED CONTROL PARAMETER
FINE-TUNING METHODOLOGY FOR A NONRESIDENTIAL BUILDING WITH A
COMPLEX ENERGY SYSTEM
Constantin Ana, Johannes Fütterer, Dr. Rita Streblov, Prof. Dr.-Ing. Müller,
G.D. Kontes, D.V. Rovas

15:30 – 16:00 CONCEPT AND ENERGY MANAGEMENT IN THE NEW E.ON ENERGY BUILDING
Johannes Fütterer

16:00 - 16:30 IMPACT OF RETAIL RATE AND RES -E SUPPORTING STRUCTURES ON THE
ECONOMICS OF LOCAL OPTIMIZATION IN BUILDINGS
Bruno Duplessis and Charles Fremond

20:00 - 22:30 GALA DINNER

FRIDAY OCTOBER 19, 2012

SESSION 9—AGILE, DESIMAX, BaaS— EC Projects

Chair: Emilia Mladin

9:30 - 10:00 RECONFIGURABLE CONVEX CONTROL DESIGN FOR BUILDING CONTROL
Elias Kosmatopoulos

10:00 - 10:30 MULTISCALEMODELLING TO MAXIMISE DEMAND-SIDE MANAGEMENT
Aristides Kiprakis

10:30 – 11:00 Coffee Break

11:00 - 11:30 BAAS PROJECT: COVERING THE BUILDING DESIGN- AND
OPERATIONAL-PHASE INTEROPERABILITY GAP
Cesar Valmaseda

11:30 - 12:30 ROUND TABLE
COST OPTIMAL APPROACH FOR LONG TERM ENERGY EFFICIENCY
MEASURES FOR BUILDINGS

12:30 END

WORK-IN-PROGRESS POSTER PRESENTATIONS

Wednesday, October 17

11:00 – 12:30

P1

EFFECT OF HEATING LOCATION ON STABILITY OF NATURAL CONVECTION IN A SQUARE ENCLOSURE

Debbah Djoubeir, Kholai Omar and Boudebouze Saadoune

P2

DETERMINATION OF THE PARAMETERS THAT CONTROL THE LAMINAR MIXED CONVECTION IN A SQUARE CAVITY ($Pr = 0.015$)

Boulkroune Sofiane, Kholai Omar and Boudebouze Saadoune

P3

COMBUSTION AND NITRIC OXIDE CONTROL IN DIESEL COMBUSTION PROCESSES

Boussouara Karima, Kadja Mahfoud

P4

PREMIXED SWIRL FLAME IN A REFORMER OF FUEL CELL SYSTEM

Bong Il Park, Pil Hyong Lee and Sang Soon Hwang