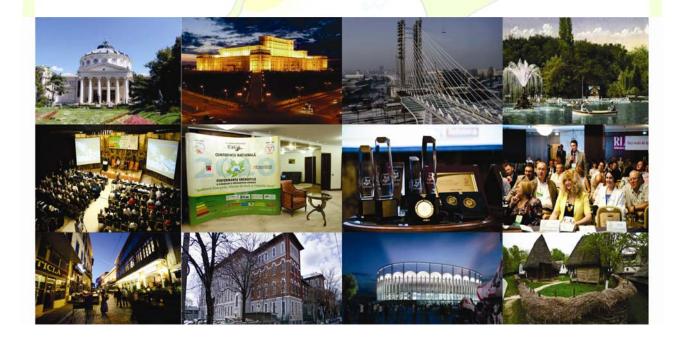


# **ROMANIAN CONFERENCE**



## **Energy Performance of Buildings**

## **RCEPB 2012**, 4<sup>th</sup> Edition



## **Bucharest, 24-25 May 2012**



## DATES AND LOCATIONS

- Thursday, May 24<sup>th</sup> (9:15am to 7:00pm), Bucharest, National Library of Romania
- Friday, May 25<sup>th</sup> (9:30am to 14:00pm), Bucharest, Technical University of Civil Engineering Bucharest (TUCEB), Faculty for Building Systems Engineering

#### ORGANIZERS

Romanian Association for Building Services Engineers (RABSE) Faculty for Building Systems Engineering (FBSE) - TUCEB Romania Energy Auditors Chamber (REAC) Energy Auditors Commission (EAC) - RABSE

### **OBJECTIVES**

The Romanian Energy Performance of Buildings Conference (REPBC), forth edition, is a multi-disciplinary international conference having as **main topics**:

- Implementation progress of the EU Directives 2010/31/EC, 2006/32/EC and 2009/28/EC. perspectives of the new energy efficiency directive
- Policies, programs and funding sources to achieve the 20/20/20 targets
- Sustainable solutions for energy efficient buildings: passive houses, nearly zero-energy buildings and green buildings (optimal-cost method)
- Energy certification and auditing: demand versus offer, services quality, impact on the real estate market, energy auditors issues and solutions (round table with representatives from ministries and professional associations)
- Case studies of energetic sustainability of the urban development.

Energy efficiency, RES use, passive and green buildings are concepts used more and more in European Directives and national regulations. EU targets were established for the reduction of energy consumption and GHG emissions or for RES use in order to minimize the negative environmental and social impact of fossil fuels burning, to strengthen the energetic independence of MS, to reduce the energy invoices for oil and natural gases imports. Therefore papers on related topics are welcomed from all relevant disciplinary areas, ranging from new concepts and solutions, modeling, experiments, to computational simulation. The event will provide a forum for the exchange of latest technical information, for the dissemination of the Romanian and international research results, for the presentation of the new developments in the area of energy and environment and for the debate and shaping of future directions and priorities in sustainable development and energy security.

## PARTICIPANTS

The conference will be of particular value and interest to Energy Auditors, Architects, Engineers, Researchers, Scientists and all practitioners interested in the relevant field of energy and environment, from policy making, technical development to management and marketing. International attendees can take the pulse of the Romanian state of the art in the field of EPB, passive houses, green constructions etc.



#### FORMAT

The conference will include the following events and activities:

- Keynote papers by invited speakers (May 24<sup>th</sup>);
- General contributed papers presented orally in plenary sessions (May 24<sup>th</sup> and May 25<sup>th</sup>).

#### PROCEEDINGS

All papers (see instructions for authors on last page) will be reviewed by the (inter)national conference technical committee. Extended abstracts of accepted papers will be published in the Proceedings of the RCEPB which will be available during the Conference and included in the registration package. The best articles will be promoted for publishing in **MATHEMATICAL MODELLING IN CIVIL ENGINEERING Journal** (indexed by ProQuest and EBSCO research databases and a CNCSIS B<sup>+</sup> cathegory).

## TOPICS

The topical areas of interest include, but are not limited to:

wa <mark>re</mark> ness and Regulations			
Energy conversion and management	Energy policy and planning		
Energy economics	Energy security		
Energy education	Energy and sustainability		
Optimal cost			
nergy and Environment			
Energy efficiency and management	• Urban development		
Energy and industrial ecology	Global warming		
Energy and life cycle analysis	Net zero energy building		
Environmental impact and climate change			
en <mark>e</mark> wable and Clean Ene <mark>rgy Technologies</mark>			
Biogas and biomass	Solar energy		
Geothermal energy	Market and finance of RES		
dvanced Energy Systems			
Advanced power generation, transmission	Green buildings		
and automation	Heating Ventilation and Air Conditioning		
Alternative and hybrid energy systems	Environmentally friendly energy		
Combustion Technologies	technologies		
Energy storage techniques			

#### **IMPORTANT DATES**

April 27<sup>th</sup>, 2012, Extended abstract due
May 4<sup>th</sup>, 2012, Notification of abstract acceptance
May 11<sup>th</sup>, 2012, Full paper due
May 18<sup>th</sup>, 2012, Notification of paper acceptance

• May 21<sup>st</sup>, 2012, Final submission of revised full paper

The papers will be provided on conference DVD available during the event and included in the registration package.

## **OFFICIAL LANGUAGES**

English and Romanian (simultaneous translation will be provided).

#### **HONORARY CHAIR**

Mr. Prof. DHC Liviu DUMITRESCU, Romanian Technical Academy Member, president of the Romanian Association for Buildings Services Engineers RABSE.

### **CONFERENCE CHAIRS**

Mr. Prof.Dr.Eng. Sorin BURCHIU, Dean of Faculty of Building Systems Engineering – TUCEB Mrs. Prof.Dr.Eng. Iolanda COLDA, Faculty of Building Systems Engineers – TUCEB, President of Romania Energy Auditors Chamber

### NATIONAL ORGANIZING COMMITTEE

Mr. Ass.Prof.Dr.Eng. Catalin LUNGU, coordinator of the organizing team, vice-president of Romanian Association for Buildings Services Engineers (RABSE)-Valahia Subsidiary.

## SCIENTIFIC AND ADVISORY COMMITTEE

S <mark>.</mark> Burchiu	I. Colda	F. lordache
F <mark>. B</mark> altaretu	O. Co <mark>cora</mark>	A. Damian
C. <mark>Lu</mark> ngu	C. Teodosiu	N. Antonescu

## **KEYNOTE SPEAKERS**

- Prof. Liviu DUMITRESCU, RABSE President
- Prof. Iolanda COLDA, REAC President
- Representative of Ministry of Regional Development and Tourism
- Representative of Ministry of Environment and Forests

- US Ambassy representative
- Ioan-Silviu Dobosi, REHVA Vice-president
- Catalin-Ioan Lungu,
   RABSE Valahia Subsidiary Vice-President
- Representative of Ministry of Economy, Trade and the Business Environment

etc.



## **GOVERNMENTAL AND INSTITUTIONAL PARTNERS**

PSC, ARACO, AGFR, AE3R, BPIE, SRT etc.

## **SPONSORS**

See "Formular de comanda", "Pachete de servicii" and "Contract de participare" files (available only in Romanian).

## **MEDIA PARTNERS**

- Romania Libera, Util
- Casa mea
- casamea.ro
- business24.ro

- 9AM News
- Planul casei mele
- Ioana-Locuinta MeaCasa de Vacanta
- Instalatorul
- Tehnica Instalatiilor
- Matrix Rom Bucuresti

## COSTS

- 200 lei for RABSE/REAC non-members or members after May 4th 2012
- 100lei for RABSE/REAC members befire May 4<sup>th</sup> 2012



## **REGISTRATION FORM**

Event:European Solutions and Policies for Sustainable Urban Development: Theory and PracticePeriod:May 24<sup>th</sup> & 25<sup>th</sup> 2012

Location:National Library of Romania, 20 Unirii Bvd., District 4, BucharestEvent Duration:2 daysOrganizers:Romanian Association for Building Services Engineers, Faculty for Building Services<br/>Engineers - TUCEB, Energy Auditors Chamber

Please complete this form using capital letters and send it to: AIIR-Valahia Subsidiary, phone/fax +004021/2524295 or email: office@aiiro.ro, clungu@instalatii.utcb.ro, until May 4<sup>th</sup>, 2012.

Section I: REGISTRATION DATA	
First Name:	
Last Name:	
Position:	A S
Company/ Institution/University:	
Address:	
Phone:	
Fax:	
Email:	

#### Section II: INFORMATION REGARDING ACCOMMODATION

The organizers will take in charge the costs for international participants accommodation. Accommodation will be provided at a 4/5 stars hotel, in the downtown of Bucharest.

Data regarding your arrival & departure	23 May 2012 – 24 May 2012 (1 night accomodation)
	24 May 2012 – 25 May 2012 (1 night accomodation)
	23 May 2012 – 25 May 2012 (2 nights accomodation)
	23 May 2012 – 26 May 2012 (3 nights accomodation)
	If other option please fill in



## **DRAFT CONFERENCE PROGRAME**

#### Thursday, May 24<sup>th</sup> Location: National Library of Romania

08:30 – 09:15 Participants registration

09:15–10:20 Organizers&partners welcome

#### Session I

#### 10:00 – 11:30 Round table:

- Perspectives of the new energy efficiency directive

- Policies, programs and funding sources to achieve the 20/20/20 targets

- Sustainable solutions for energy efficient buildings: passive houses, nearly zero-energy buildings and green buildings (optimal-cost method)

- Energy certification and auditing: demand versus offer, services quality, impact on the real estate market, energy auditors issues and solutions (with the participation of the representatives from ministries and professional associations)

11:30 – <mark>11:</mark> 45	Coffee break
Session II	
11: <mark>45</mark> – 13:00	Technical presentations & keynote papers
[ <mark>13</mark> :00– 13:30	Press Conference]
<mark>13</mark> :30 – 14:15	Standing buffet
Session III	
1 <mark>4</mark> :15 – 17:00	Technical presentations & keynote papers
1 <mark>7:</mark> 00 – 17:15	Coffee break
Session IV	
17:1 <mark>5 –</mark> 17:45	Entertainment & Raffle (with great prizes)
17:45 <mark>- 1</mark> 8:30	Cocktail
Friday, May 25 <sup>th</sup>	Location: Faculty for Buildings Services Engineers-TUCEB
Session V	
09:30 – 13:00	Technical Presentations
13:00 – 14:00	Lunch
Session VI	
14:00 – 16:00	RABSE Valahia General Assembly (elections of Executive Committee)
During the conference	e the exhibition "Art Escape" can be visited free of charge by all participants.

Other details and updates on www.rcepb.ro, www.aiiro.ro, www.instalatii.utcb.ro



#### THE TITLE OF THE PAPER (TITLE EN\*)

MIRCEA POPA - Lecturer, PhD, Technical University of Civil Engineering, Faculty of Building Services, e-mail: (Author's name)

**Abstract:** In the summary, the representative aspects of the paper will be mentioned – minimum 8 rows. It will be written in regular (size 10), paragraph left-right, 1,2 cm (ABSTRACT)

Keywords: 4-5 representative words for paper, not included in the paper title(Keywords)

#### **1. Introduction (Chapter)**

The title "Introduction" will be numbered, written in small capitals (size 12) and bolded.

In the introduction of the article, the present state of the reaserchers in the specified domain will be mentioned (by quoting the corresponding bibliography) and the objectives of the paper will be declared.

The paper will be of 6 pages at least, the font used being TNR, size 11, the paragraphs being separated from one another with one line of size 6. (Normal text).

#### 2. Paper content (the title of the first chapter) (Chapter)

The names of the chapters will be numbered if necessary, written in small capitals (size 12), bolded, centered left.

The presentation will be short and concise, and the symbols used will be defined in a symbol list (only if necessary). The International System of Measurement Units will be used. Descriptions of machineries and installations are not reccommended.

#### 2.1. Subchapter Subchapter (1.1)

#### 2.1.1. Subsubchapter Subsubchapter (1.2.1)

#### 3. Paper content (the title of the second chapter) (Chapter)

Equations. Equations are to be numbered with an indented line at right and written with the help of the equations-editor : Settings – size : 12, 10, 7, 18, 12, style: italic variables,LG Greek italic.

5izes			? >
Full	12 pt		ОК
Subscript/Superscript	10 pt	53	Cancel
Sub-Subscript/Superscript	7 pt	$X^{\mathbf{D}n_k}$	
Symbol	18 pt	~1	Apply
Sub-symbol	12		<u>D</u> efaults

$$\begin{split} \underline{I}_{=A} &= \sqrt{2} \sum_{k=1}^{n} e^{jk\omega t} \cdot e^{j0} \cdot \underline{I}_{A}^{(k)}(k); \\ \underline{I}_{=B} &= \sqrt{2} \sum_{k=1}^{n} e^{jk\omega t} \cdot \left(e^{-j\frac{2\pi}{3}}\right)^{k} \underline{I}_{B}^{(k)}(k); \\ \underline{I}_{=C} &= \sqrt{2} \sum_{k=1}^{n} e^{jk\omega t} \cdot \left(e^{+j\frac{2\pi}{3}}\right)^{k} \underline{I}_{C}^{(k)}(k). \end{aligned}$$

$$(Equations)$$

**Tables.** Tables are to be written in size 10. The title of the table is to be centered, bolded and its numerotation written in italics (size 10), centered right.

#### *Table 1* (NUMBER OF THE TABLE)

(1)

Compounds	Mp( <sup>0</sup> C)	Chemical	N (%)	
		formula	Calculated	Resulted
3A	178	C <sub>29</sub> H <sub>34</sub> N <sub>2</sub> O	6,57	3A
3B	264	$C_{29}H_{33}N_3O_3$	8, <mark>92</mark>	3B
3C (	232	C <sub>29</sub> H <sub>32</sub> N <sub>4</sub> O <sub>5</sub>	10,85	<u>3C</u>
5A	185	$C_{29}H_{34}N_2O$	6,56	5A
5B	242	C <sub>29</sub> H <sub>33</sub> N <sub>3</sub> O <sub>3</sub>	8,92	5B
5C	245	$C_{29}H_{32}N_4O_5$	10,85	5C

Melting points and basic analysis (TABLE TITLE)

**Figures.** Figures are to be placed centered, if they are big and complex enough. If not, they can be put on two columns or wrapped in the text, towards the exterior of the page (right for an even page and left for an uneven page). The legend is to be centered under the figure, in size 10.

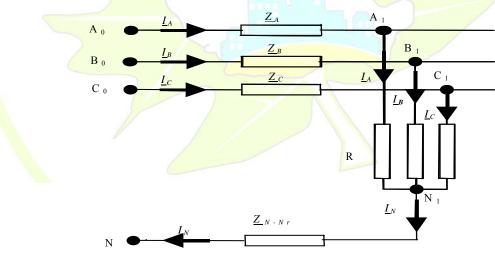


Fig. 1 - The legend is centered (size 10) (FIGURE)

#### N. Conclusions (Chapter)

The paper will end with a conclusion paragraph in which the results obtained by the author until present times will be mentioned, along with the possibilities of continuity and application of them in the article.



#### **References (Chapter)**

The references will be written in the order of the quotations that appear in the text and will also be numbered. The indications in the text will be made by square brackets, for example [1] or [1,3] or [1-3].

In the bibliography, there will be mentioned : the name of the author, the initials of the first name of the author (size 10), the editure, the place and year of apparition or the periodical in which it has appeared, the number (month), the volume, the year, the initial page and the last page of the article (size 10).

- [1] Soviany, C. Embedding Data and Task Parallelism in Image Processing Applications, PhD Thesis, Technische Universiteit Delft, 2003 (Numbered)
- [2] Mauthe, A., Hutchison, D., Coulson, G., Namuye, S. Multimedia Group Communications Towards New Services, in Distributed Systems Eng., Vol. 3, No. 3, Sept. 1996, pp. 197-210
- [3] Arnold, V. I. Metodele matematice ale mecanicii clasice, Editura Științifică și Enciclopedică, București, 1980
- [4] Gioncu, V., Ivan, M. Teoria comportării critice și postcritice a structurilor elastice, Editura Academiei, București, 1984
- [5] \*\*\* COSMOS/M Finite Element System, User Guide, 1995

(\* The red text represent the style name)