



# ESS'2015

9–12 June, 2015

Kyiv, Ukraine



## IV International conference «Energy Smart Systems – ESS'15»



Instytut  
Elektrotechniki  
Electrotechnical Institute



IEEE  
Advancing Technology  
for Humanity

### CONFERENCE ORGANIZERS:

- National Academy of Sciences of Ukraine (*Kyiv*);
- National Technical University of Ukraine «Kyiv Polytechnic Institute» (*Kyiv*);
- Institute of Electrodynamics of National Academy of Sciences of Ukraine (*Kyiv*);
- National Technical University «Kharkiv Polytechnic Institute» (*Kharkiv*);
- Vinnitsia National Technical University (*Vinnitsia*);
- Institute of Electrical Engineering (*Warsaw, Poland*);
- Almaty University of Power Engineering and Telecommunications (*Almaty, Kazakhstan*);
- University of Bologna (*Bologna, Italy*);
- Institute of Power Engineering of Academy of Sciences of Republic of Moldova (*Kishinev, Republic of Moldova*);
- Technical University of Ostrava (*Ostrava, Czech Republic*);
- Tallinn University of Technology (*Tallinn, Estonia*);
- Lublin University of Technology (*Lublin, Poland*);
- Section «Ukraine» Institute of Engineers for electricity and electronics (IEEE);
- Scientific Council on «Scientific bases of power».

INVITES YOU TO PARTICIPATE IN THE IV INTERNATIONAL CONFERENCE  
«ENERGY SMART SYSTEMS – ESS'15».

*Chairman of the Program Committee,  
Academician of NAS of Ukraine*

*Borys Stogniy*

Conference «Energy Smart Systems – ESS'15» will be held from 9 to 12 June 2015 in the National Technical University of Ukraine «Kyiv Polytechnic Institute» (*Kyiv*).

IV International Conference «Energy Smart Systems – ESS'15» is devoted to scientific, technical and economic problems of building of Energy Smart Systems – Smart Grid, which play an increasingly important role in improving energy efficiency across the country.

At the beginning of the XXI century, there have been significant changes in the strategy of energy development in the world, which meet the requirements of sustainable development. Energy smart systems became a vector of energy policy in many countries.

Creation of Energy Smart Systems – is a modernization of the whole complex of the generation and delivery of electricity through improved management, protection, optimization of power systems elements in their relationship – from centralized and distributed generation, power transmission at high voltage, its distribution, automation systems to end users. Energy Smart Systems provide higher performance of electricity grid, which improves the reliability and efficiency of the entire system by regulating consumption, monitoring and dynamic control of bidirectional energy flows in real time. The use of smart energy technologies provides improved adaptation to the dynamic nature of grid of pulsed distributed generation and non-traditional renewable energy sources.

Conference «Energy Smart Systems – ESS’15» is an international forum where academicians and industrial professionals will share new experience and researches results in the area of construction and operation of Energy Smart Systems.

The conference will provide an opportunity not only to share experiences, get fruitful contacts, but also to learn the unique historical places of Kyiv, enjoy the picturesque scenery of Kyiv region – beautiful blessed region of Ukraine.

## TOPICS

1. Status and prospects of Energy Smart Systems.
2. Electricity Reform in Ukraine based on the concept of Smart Grid.
3. Integration of distributed (regional) systems, which produce electricity in a unified centralized system.
4. Information support of Energy Smart Systems.
5. Renewable, low carbon energy.
6. Distributed generation systems, active (manageable) energy consumers.
7. The problems of power quality and electromagnetic compatibility.
8. Power electronics devices for distributed and integrated systems.
9. Formation of the local markets of power supply.

## PROGRAM COMMITTEE

**President – BORYS STOJNIY**

Academician-Secretary of the Department of Physical and Technical Problems of Power Engineering,  
NAS of Ukraine,

**Vice presidents:**

**ALEXANDER KIRILENKO**

Director of Institute of Electrodynamics of NAS  
of Ukraine, academician of NAS of Ukraine

**YURI YAKIMENKO**

First Vice rector of NTUU «KPI»,  
academician of NAS of Ukraine

### Program Committee:

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**Massimo Bianchi**

University of Bologna, Italy

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**Victor Sychenko**

Dnipropetrovsk National University of railroad transport of  
academician Lazaryan, Ukraine

**Michael Segeda**

National University «Lviv Polytechnic», Ukraine

**Evgen Sokol**

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**Alexander Yandulskyi**

National Technical University of Ukraine «Kyiv Polytechnic  
Institute», Ukraine

**Working languages:** English, Ukrainian and Russian.

**Form of participation** in the conference: part of speech or as a listener.

**Application forms** for your participation in the conference and abstract in electronic and printed form, designed according to the requirements listed in annex, must be received by the organization committee no later than **April 15, 2015.**

**Conference agenda:**

- Plenary session;
- Breakout sessions.

**Timeline:**

- April 15, 2015: registration (receiving applications and abstracts);
- April 30, 2015: informing about inclusion in the conference program;
- May 15, 2015: the last payment period.

**Conference schedule:**

- 1) Arrival of participants – June 8, 2015.
- 2) Plenary and breakout sessions in National Technical University of Ukraine «Kyiv Polytechnic Institute» – June 9–10, 2015.
- 3) Excursion program, leaving participants – June 11–12, 2015.

#### **Conditions of participation:**

**The registration fee for each conference** – 120 EUR, including VAT.

Registration fee includes:

- rental of the conference meeting rooms;
- participation in business meeting on the occasion of conference opening
- coffee break in between sessions;
- rental of computer and projection equipment to accompany the reports;
- providing with the conference materials on USB flash drives;
- providing participants with methodological materials;
- familiarization with the local sights.

**Deadline** for payment of registration fees – up to May 15, 2015, after the sign of the contract and receipt of the invoice.

**Publication of the reports materials** will be represented in the scientific magazine «Tekhnichna Elektrodynamika» by the results presented at the conference.

**Delegates are staying in** city hotels during the conference. Organizing Committee organize accommodations for the participants at their request.

#### **Organization Committee:**

Gorodzha Ljudmila  
Novik Nadija  
Bryl Volodimir

Iarmoliuk Olena  
Bazhuk Taras  
Zamkovyj Petro

Derevianko Denys  
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### **APPLICATION FORM to participate in the IV International Conference «Energy Smart Systems – ESS'15»**

1. Last name, first name, middle name (in full)
2. Title, rank, degree
3. Organization (full and abbreviated)
4. Postal address
5. Phone, fax (with area code), e-mail
6. Participation in the conference as a speaker / listener (underline)
7. Title (if planned)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

## Annex Requirements for articles

### **You have to add to your articles:**

- License agreement for use of the work: the transfer of copyright in the print edition of the journal article (form license agreement – on <http://www.techned.org.ua>).

- Full postal address of one of the authors, telephone number, e-mail address.

All original articles (Ukrainian, Russian or English) submitted to the editor in the form of prints (two copies) and electronic versions.

### **Publishing design**

The structure of the article should consist of the following blocks:

1. Block Ukrainian (Russian), if the article is written in Ukrainian (Russian).

- ISSN.

- Title of the article.

- Full name of all authors.

- The full name and postal address of organizations where the authors work, e-mail address.

- Abstract (600-800 characters). (See. Section "to authors" on <http://www.techned.org.ua>).

- Keywords.

2. Block: Article in the original language.

3. Block: numbered list of references (maximum 10), relied upon by the author, in alphabetical order.

4. Block Russian (Ukrainian) language is similar to Block 1.

5. Block **in latin alphabet**:

- Title of the article in English.

- Name and surname of authors - transliteration.

- Full names and email addresses of organizations where the authors work, e-mail address. The names of organizations belonging to a particular department, address, city and country is given in English without cuts.

- Abstract (600-800 characters). (See. Section "to authors" on <http://www.techned.org.ua>).

- Key words.

- List of literature, the same list of references (unit 3), but the authors' names and titles of magazines, literature links - Cyrillic transliteration and titles of articles - in English. After each such reference in brackets One must specify the language of the original article - (Ukr) or (Rus). (See. Section "to authors" on <http://www.techned.org.ua>). The names of the sources are presented without any cuts.

The paper - **no more than 5 pages** (line spacing - 1).

**Description of article layout** (text editor Microsoft Word 97-2003, formula editor Microsoft Equation Editor 3.0 and above). — Paper A4, margins top, bottom, left — 2,5 cm, right - 1,5 cm; line spacing - 1. Font - Times New Roman 11pt, justified alignment, automatic hyphenation, the first line - indent 1.25 cm. The name of the article - font 11pt, bold, capital letters, centered placement. Article executed without footers and page numbering.

Mathematical formulas are created as separate objects in the **formulas editor Microsoft Equation**. Font - Times New Roman 11pt, centered, numbering - in parentheses to the right. Latin letters and symbols should be performed in the style of "Mathematical" Cyrillic - in the style of "text". Not allowed representation formula and its number in a table. The symbols in the formulas in the text and should have the same image. Microsoft Equation objects in the text to locate undesirable.

**Figures (up to 5)** are performed in formats BMP, JPG (300 dpi) without any subpicture signatures and inserted into the text as "Figure". Text Font Figures - Times New Roman 10pt. Figures are recommended with text wrap on 3 mm. Landscape orientation is not acceptable.

**Photos are printed only when absolutely necessary.**

References: font - Times New Roman 10pt, surnames - in italics. The text cited source is indicated in brackets figure, with its number in the reference list. By all cited sources should apply the same standard, that the order of data links and punctuation should be represented equally. Reduction names cited sources is not allowed.

**Articles designed to noncompliance with these requirements will be returned to the author immediately without scrutiny and review.** The date of receipt shall be the date of receipt of the article re-executed in accordance with the above requirements.

More information is available in the magazine on the phone. 366-26-57 and Online Magazine <http://www.techned.org.ua>.

The mailing address of the following: pr. Victory, 56, 57, Kyiv 03680, Ukraine; e-mail: [ted@ied.org.ua](mailto:ted@ied.org.ua).