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LIGHT & ENGINEERING / SVETOTEKHNIKA JOURNAL: A REVIEW OF 2017 AND LOOKING FORWARD TO 2018–2020

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2017 has been a very productive and interesting year for our journal Light & Engineering/Svetotekhnika. It was marked by the publication of a large series of analytical reviews on the current state and prospects for the development of a number of important areas of lighting engineering (a total of 12 reviews), the publication of the regional volume of the Light & Engineering Journal (No. 3) devoted to solar energy technology in China (250 pages, 33 articles), further expansion of publications by international authors in Light & Engineering (since 2010, 120 articles by 230 authors from 23 countries have been published).

The journal's editorial board acted as a co-founder of the newly formed branch Industrial Scientific and Technical Council (ISTC), and members of the journal's management became the vice-chairman of the ISTC and chairmen of two important sections within the ISTC.

A new concept for restructuring the work of the journal going forward was developed, published in the journal, and distributed to all members of the editorial board. In the framework of this important programme of work, the journal's website is undergoing major revision. This initiative is enabled by support of our general partner – the international holding company "Boos Lighting Group". In the course of this work the concept of the combined Light and Engineering / Svetotekhnika Journal was formed with two editions in Russian and English languages, a single editorial board for the publication was created, a group of co-founders of the journal was formed within the Academy of Electro-technical Sciences of the Russian Federation (AES RF), the All- Research Institute of Lighting Engineering (VNISI) and the National Research University "MEI".

The main emphasis of the ongoing restructuring is shifting the centre of activity towards further development of the English version of Light & Engineering, making it the scientific core of the journals published in tandem, whilst enhancing the international character of the publication.

Currently, the mission of our journal is the development of light science, as defined within the boundaries of beam photometric representation s [1,2,3] and the varied application of outcomes: for comfortable lighting, for technological processes, including solar energy, for space and ocean exploration, for disinfection of water and air, for medical purposes, and so on. We define lighting engineering as a field of science and technology, the subject of which is the development of methods of generation, spatial redistribution of optical radiation, as well as its transformation into other types of energy and use for various purposes.

The XXI century is the age of light; UNESCO has declared an annual International Day of Light each May 16th. Fields of application for light are continuously expanding. The presence of a single international scientific and technical journal allows us to consider the fundamental theoretical and applied problems with diverse origins, including the use of light in production, recreation, and daily life, from a unified scientific position. The journal is the only publication in the world, which considers issues of lighting alongside questions of using light for technological purposes within the theory framework of the light field. The critical role of light is evident in the fact that more than 15 % of all generated electricity is used for light-

ing, which rises to up to 20 % in megacities. Publications on the use of light in highly specialized journals of other scientific and technical areas outside the unified positions of ray representations lead to the creation of varied, duplicative terminology systems, and findings that have long since been derived in other areas.

The journal is included in all the key global science databases, such as Scopus, Web of Science and Russian Science Index; well represented and connected on a national and international scale. The journal is included in the list of publications recommended by the Higher Attestation Commission of the Russian Federation for the publication of scientific and technical results of dissertations.

Within the conceptual framework of the two forms of the publication, the English-language form "Light & Engineering" should become the core scientific part of the international publication on the theory of the light field in the photometric description [1–7] and all its possible applications in practice. The Russian-language part "Svetotekhnika" should become a national component fulfilling the role of a national body and serve the purposes of the development of Russian scientific terminology, Russian education, training of scientific personnel, broad exchange of experience in energy saving and labour costs reduction, efficiency gains in all spheres of production, issues relating to the development of the Russian domestic lighting industry.

We prepared and sent letters to members of the International Editorial Advisory Board to find out their views on concept for restructure and secure their support in case of agreement in principle. It gave us great pleasure to hear that almost all international members of the Editorial Board supported our initiative, including, most importantly, the two former CIE presidents. In accordance with this, letters of proposal were prepared and sent to establish partnership relations with CIE National Committees in eight countries which do not have their own regular scientific and technical publications on our subject (Argentina, Brazil, Greece, Turkey, India, Israel, South Korea and Iran). In parallel, authors from these and other countries, who frequently submit articles to our journal were approached with letters seeking their support for our proposal to the CIE national committees in their countries, as well as the proposal to establish correspondent outposts in these countries. Some doubts about the possibility of implementing our programme were expressed and discussed.

Through our partnership offers, we intend expand the publication of various types of articles focused on the state of lighting in these countries in exchange for the National Committees' and correspondents' assistance in selecting and recommending authors and articles from these countries and promoting subscription to our issue in their countries.

At the same time, the journal's leadership put forward the idea of creating a committee or working group on lighting in the press at the CIE secretariat in Vienna, which could include the editors-in-chief of the main scientific and technical journals. This could make the work of all CIE offices more open, with the help of journals it will be possible not only to inform all lighting specialists in different countries about the work of the CIE, on the recommendations issued, technical reports and standards, but also to involve these specialists in discussing draft documents of the technical committees at the stage their development. To test our proposal, we approached the editors of key publications (two in the USA, two in the UK, one in Germany, France, Japan and the Czech Republic) with the principle elements of our proposal; we hope for the support of these highly respected publications. The first positive response from England has already been received.

In August, the editorial staff prepared to participate in a three stage contest for state funding support of professional publications for the period 2018–2020, which was announced by the Russian Ministry of Education and Science. At the first stage, the Ministry of Education selected 500 journals out of 2500. After the second stage only 100 journals remain in the contest. And from this hundred 70 winners are selected at the third stage. It is gratifying that the first stage of the competition in November was a success for our publication.

In the documents prepared for submission to the competition, the following important problems addressed by the journal, the scope of its activities and its main mission for today and for the future were clearly formulated.

The most important tasks facing our publication are:

1. To turn the tandem of our journals into an important centre of publication and expertise, publishing materials devoted to light as a fundamental factor of human society. To disseminate the achieve-

ments of Russian lighting engineering science on an international scale;

2. Expanding the topic coverage of the journal, by publishing articles on the theory of the light field and its applications in lighting, technology and medicine;

3. Ensuring the international status of Light & Engineering / Svetotekhnika by establishing links with the National Lighting Committees of various countries (primarily those without their own scientific issues in lighting) in selecting and reviewing the articles of the authors of these countries, as well as expanding subscription to the journal;

4. Promoting light knowledge through the creation of a virtual publishing hub "House of Light", a centre for the propagation of knowledge about light, its nature, the role of light in human life, the methods of its effective use, the main scientists and inventors, who made a significant contribution to the development of light science and the technology of its use, and to promote the knowledge on light through the journal's website and social media, including Facebook, Twitter, VK, Mendeley, Research Gate, Instagram, and YouTube;

5. Conducting regular reader conferences in Russia and abroad, presenting the journal at international exhibitions;

6. Participation in conferences, including organisation of stands and round tables, as well as the publication of specialized custom issues of the journal in various areas of lighting technology to expand the influence of the publication and improve the economic situation;

7. Exploration of the possibility to establish a Coordinating Committee for Lighting Press under the leadership of the International Commission on Illumination (CIE);

8. Ensuring the active role of the journal in lighting engineering higher education;

9. Creation of awards for the best scientific or design work in the field of lighting;

10. Introduce a bonus system for the best authors and reviewers;

11. Publication of customized analytical reviews by leading specialists in current areas of lighting technology;

12. Creation of a site in two languages with Open Journal Systems (OJS);

13. Increase the annual volume of the Russian version of the publication to ten issues per year, the English version – up to six.

Each article published in the journal undergoes an obligatory "double blind" review, which guarantees a high scientific level of publications.

We hope that the implementation of this large programme of work will occupy the new year for 2018, but will also provide a number of important results for the further development of the Light & Engineering/Svetotekhnika Journal in 2019.

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