

LIGHT & ENGINEERING

(Svetotekhnika)

Editor-in-Chief: Julian B. Aizenberg

Associate editor: Sergey G. Ashurkov

Editorial board chairman: George V. Boos

Editorial Board:	Artyom E. Ataev	Vladimir M. Pyatigorsky
	Vladimir P. Budak	Anna G. Shakhparunyants
	Andrey A. Grigoryev	Nikolay I. Shchepetkov
	Alexei A. Korobko	Alexei K. Solovyov
	Dmitry O. Nalagin	Raisa I. Stolyarevskaya
	Alexander T. Ovcharov	Konstantin A. Tomsky
	Leonid B. Prikupets	Leonid P. Varfolomeev

Foreign Editorial Advisory Board:

Lou Bedocs, Thorn Lighting Limited, United Kingdom

Wout van Bommel, Philips Lighting, the Netherlands

Peter R. Boyce, Lighting Research Center, the USA

Lars Bylund, Bergen's School of Architecture, Norway

Stanislav Darula, Academy Institute of Construction and Architecture, Bratislava, Slovakia

Peter Dehoff, Zumtobel Lighting, Dornbirn, Austria

Marc Fontoynt, Ecole Nationale des Travaux Publics de l'Etat (ENTPE), France

Franz Hengstberger, National Metrology Institute of South Africa

Warren G. Julian, University of Sydney, Australia

Zeya Krasko, OSRAM Sylvania, USA

Evan Mills, Lawrence Berkeley Laboratory, USA

Lucia R. Ronchi, Higher School of Specialization for Optics, University of Florence, Italy

Janos Schanda, University of Veszprem, Hungary

Nicolay Vasilev, Sofia Technical University, Bulgaria

Jennifer Veitch, National Research Council of Canada



Moscow, 2015

Editorial Office:

VNISI, Rooms 327 and 334
106 Prospekt Mira,
Moscow 129626, Russia
Tel: +7.495.682.26.54
Tel./Fax: +7.495.682.58.46
E-mail: lights-nr@inbox.ru
<http://www.sveto-tehnika.ru>

Znack Publishing House
P.O. Box 648,
Moscow, 101000, Russia
Tel./Fax: +7.495.361.93.77

Scientific Editors

Sergey G. Ashurkov

Raisa I. Stolyarevskaya

Style Editor

Marsha Vinogradova

Art and CAD Editor

Andrey M. Bogdanov

CONTENTS

VOLUME 23

NUMBER 1

2015

LIGHT & ENGINEERING

(SVETOTEKHNKA)

Darula Stanislav and Kittler Richard

Classification of Daylight Conditions in Cloud Cover Situations 4

İzzet Yüksek, Sertaç Görgülü, Süreyya Kocabey, Murat Tuna, and Bahtiyar Dursun

Assessment of Daylighting Performances of the Classrooms:
A Case Study in Kırklareli University, Turkey 15

Roger Narboni and Virginie Nicolas

A Light Trap in the Lobby of the Equo Tower in Paris La Défense 25

Valery V. Aurov, Mariya D. Bausheva, and Nikolai I. Shchepetkov

The Light Image of High-Rise Buildings 33

Larisa V. Savelieva

Light as an Instrument for Creating Virtual Images in Architecture 40

Eugene Kh. Allash, Dmitry S. Varga, and Leonid G. Novakovsky

Modernisation of Lighting Devices for Underground Rolling Stock 46

Leonid M. Vasilyak, Alexei M. Voronov, Sergei V. Kostyuchenko, Nikolai N. Kudryavtsev,

Vladimir A. Levchenko, Denis A. Sobur, Dmitry V. Sokolov, and Yury E. Shunkov
Influence of Sinusoidal and Rectangular Current Shapes of an Increased Frequency
on Resonant Radiation of LP Mercury Discharge 56

Vladimir A. Levchenko, Oleg A. Popov, Sergei A. Svitnev, and Pavel V. Starshinov

Experimental Research into the Electrical and Optical Characteristics of Electrodeless
UV Lamps of the Transformer Type 60

Vladimir N. Letushko, Mikhail I. Nizovtsev, and Alexei N. Sterlyagov

Research into Thermal Operating Modes of a Street Luminaire with Light Emitting
Diodes Using the IR Thermography Method 65

Andrei V. Prokhorenko and Alexei K. Solovyov

Energy-Effective Technologies for Housing and Utilities Using a Case Study
of Energy Saving Illumination in Entrance Halls of Apartment Buildings 71

Przemysław Tabaka

Analysis of Properties of Lightning-Optical Equivalents of Traditional Bulbs for Dimming 79

Contents #2 87