

# CONTENT

<b>THE FUTURE OF PUBLIC LIGHTING.....</b>	<b>17</b>
---	-----------

Jiří Habel, Petr Žák

<b>MONITORING AND MODELLING OBTRUSIVE LIGHT IN NATURE PARKS</b>	<b>17</b>
---	-----------

Zoltán KOLLÁTH

<b>EXPERIENCE WITH IMPLEMENTATION OF ENERGY CERTIFICATION OF LIGHTING IN SLOVAKIA.....</b>	<b>18</b>
--	-----------

Smola, A., Gašparovský, D., Janiga, P.

<b>ON NECESSITY OF MODIFICATION OF A LIGHTING FITTINGS PHOTOMETRIC DATA BASE.....</b>	<b>18</b>
---	-----------

Wojciech Żagan

<b>ENERGY EFFICIENCY INDICATORS IN STREET LIGHTING APPLICATIONS .....</b>	<b>19</b>
---	-----------

Ivette Manecz, Péter Schwarcz

<b>VALUATION OF ROAD LIGHTING PARAMETERS FOR LUMINAIRES WITH LED.....</b>	<b>20</b>
---	-----------

Małgorzata Górczewska, Sandra Mroczkowska

<b>MANAGEMENT OF LIGHTING SYSTEMS BASED ON MANY VARIABLES.</b>	<b>20</b>
--	-----------

Luděk Hladký, Libor Štědroň

<b>USE OF RENEWABLE ENERGY TO POWER THE PUBLIC LIGHTING LUMINAIRE .....</b>	<b>21</b>
---	-----------

Tomáš Novák, Stanislav Mišák, Karel Sokanský

<b>THE ART OF A WIDER LOOK.....</b>	<b>21</b>
-------------------------------------	-----------

Robert Andre, Pawel Baranowski

<b>EVALUATION OF PHOTOBIOLOGICAL EFFECTS OF FLUORESCENT LAMPS USED FOR GENERAL LIGHTING PURPOSES .....</b>	<b>22</b>
--	-----------

Konrad Domke, Marcin Pelko

<b>EHB LITECALC – A SOFTWARE TOOLS FOR ENERGY CERTIFICATION OF LIGHTING .....</b>	<b>22</b>
---	-----------

Gašparovský, D., Erkin, E.

<b>CIRCADIAN RHYTHM AND LED LIGHTING.....</b>	<b>23</b>
---	-----------

Ágnes Vidovszky-Németh, János Schanda

<b>MEASUREMENT OF TUBULAR LIGHT GUIDE EFFICIENCY UNDER THE ARTIFICIAL SKY.....</b>	<b>24</b>
--	-----------

Stanislav Darula, Peter Rybár, Jitka Mohelníková, Marek Popeliš

<b>INFLUENCE OF COLOUR OF SHADING OBSTACLES ON INDOOR DAYLIGHTING .....</b>	<b>24</b>
---	-----------

Jiří Pích, Jitka Mohelníková

<b>HOLIGILM-BASED SIMULATIONS FOR BENDED LIGHT GUIDES .....</b>	<b>25</b>
---	-----------

<b>Miroslav Kocifaj.....</b>	<b>25</b>
------------------------------	-----------

<b>ERGONOMICS AND SYSTEM APPROACH TO THE LIGHT CLIMATE ON THE WORKPLACES .....</b>	<b>25</b>
--	-----------

Marián Flimel

<b>THE LIGHTING CONDITIONS IN THE POLISH FLATS – SURVEYS RESULTS .....</b>	<b>26</b>
--	-----------

Elżbieta Janosik, Stanisław Marzec

<b>DEVELOPMENT OF CERAMIC METAL HALIDE LAMPS WITH ULTRA LUMEN MAINTENANCE AND RELIABILITY .....</b>	<b>26</b>
---	-----------

Z. Tóth, T. Russell, T; Z. Kolozsi, Z, V. K. Josepovits

<b>CIE ROLE IN ESTABLISHING BEST MEASUREMENT PRACTICE FOR THE DEVELOPMENT AND TESTING IN THE FIELD OF AND LIGHTING, INCLUDING NOVEL LUMINAIRES AND EMERGING LIGHTING TECHNOLOGIES .....</b>	<b>27</b>
---	-----------

Marek Šmíd

<b>POWER SUPPLIES FOR LED LIGHTING .....</b>	<b>27</b>
--	-----------

Gabor Schulcz

**COMPARISON OF REAL STREET LIGHTING WITH SODIUM LAMPS AND  
LEDS .....28**

Marek Bálský, Rudolf Bayer

**EXPERIMENTAL INVESTIGATION OF THE PURKINJE EFFECT IN CASE OF  
TRADITIONAL AND MODERN STREET LIGHTING LUMINAIRES.....28**

F. Szabó, Z. Vas, P. Csuti, J. Schanda

**ENERGY DEMANDINGNESS OF LIGHTING SYSTEMS .....29**

Jiří Habel, Petr Žák

**THE COLLECTION AND RECYCLING SYSTEM OF LIGHTING EQUIPMENT  
IN HUNGARY .....29**

Béla Kovács

**DEVELOPMENT OF STANDARDIZED ALGORITHM AND CODE FOR  
ROADLIGHTING CALCULATIONS .....30**

Gašparovský, D., Bagačka, R., Janiga, P.

**ANALYSIS OF MEASUREMENT AND EVALUATION OF COLORIMETRY  
SKY TYPES.....30**

Anton Rusnák

**COLORED LIGHTS IN NATURE .....31**

Klara WENZEL

**TO SEE OR NOT TO SEE – REFLECTIONS ON HUMAN COLOR  
PERCEPTION.....31**

Dariusz SAWICKI

**THE INFLUENCE OF ENVIRONMENTAL CONDITIONS ON WORK OF THE  
LED LUMINARIES .....32**

Wiesława Pabjańczyk, Przemysław Markiewicz, Roman Sikora, Zbigniew Gabryjelski

**EFFECT OF DIRECTIONAL REFLECTANCE IN LIGHTING .....32**

Jan Škoda, Petr Baxant

<b>CONTRIBUTION TO THE LUMINANCE DISTRIBUTION IN AN OFFICE DURING DAYTIME.....</b>	<b>33</b>
Stanislav Darula, Richard Kittler	
<b>LED MODULE .....</b>	<b>33</b>
Luděk Hladký, Libor Štědroň	
<b>ANOMALIES OF THE CORRELATED COLOR TEMPERATURE .....</b>	<b>34</b>
Péter Csuti, Balázs Kráncz	
<b>COOLING SYSTEM OF HP LED WITH A PELTIER MODULE – LABORATORY EQUIPMENT .....</b>	<b>34</b>
Przemysław Skrzypeczak, Konrad Domke	
<b>OPTIMIZATION OF ROTATIONALLY SYMMETRICAL MIRROR REFLECTOR PROFILE .....</b>	<b>35</b>
Krzysztof Wandachowicz, Giulio Antonutto	
<b>ASPECTS OF MEASUREMENT AND TRANSFER OF REFRACTION OF LIGHT THROUGH LIGHT GUIDE DIFFUSER .....</b>	<b>35</b>
Marek Krasňan, Alfonz Smola	
<b>USE LUMINANCE ANALYSIS FOR ASSESSING THE ENERGY PERFORMANCE OF LIGHTING.....</b>	<b>36</b>
Petr Baxant, Tomáš Pavelka, Jan Škoda	
<b>COMPARISON OF THE CURRENT LIGHT SOURCES LIFETIMES.....</b>	<b>36</b>
Tomáš Pavelka, Petr Baxant	
<b>POSSIBLE USE OF POWER LEDS FOR LIGHTING AND COMMUNICATION .....</b>	<b>37</b>
Jan Látal, Petr Koudelka, Vladimír Vašínek, František Dostál, Karel Sokanský	
<b>ENVIRONMENTALISM IN THE PUBLIC LIGHTING .....</b>	<b>37</b>
Tomáš Maixner	

<b>LIGHTING ON PEDESTRIAN CROSSING .....</b>	<b>38</b>
Tomáš Maixner, Jiří Skála	
<b>REALITY LED .....</b>	<b>38</b>
Tomáš Maixner, Jiří Skála	
<b>COMPARISON OF REAL STREET LIGHTING WITH SODIUM LAMPS AND LEDS .....</b>	<b>39</b>
Petr Žák, Jiří Habel, Jiří Pleh	
<b>MEASUREMENT OF OBTRUSIVE LIGHT IN TERMS OF CZECH REPUBLIC .....</b>	<b>39</b>
Tomáš Novák, Karel Sokanský, Petr Závada	
<b>RESEARCH OF POWER LEDS FOR MOBILE COMMUNICATION .....</b>	<b>40</b>
Petr Koudeřka, Jan Láta, Vladimír Vašínek, František Dostál, Karel Sokanský	
<b>INSTRUMENTATION FOR LONG TERM MEASURING OF PARAMETERS UNDER NIGHT SKY.....</b>	<b>40</b>
Tomáš Novák, Petr Závada, Karel Sokanský	
<b>HYBRID POWER SYSTEM OF PUBLIC LIGHTING IN SMALLER VILLAGES .....</b>	<b>41</b>
Stanislav Mišák, Jaroslav Šnobl, František Dostál, Daniel Diviš	
<b>DIAGRAM OF DAILY CONSUMPTION OF ELECTRICITY, HOUSES APPLIANCES, DISTRIBUTION THEM INTO CATEGORIES BY IMPORTANCE OF ELECTRICITY SUPPLY .....</b>	<b>41</b>
Petr Závada, Karel Sokanský	
<b>CALCULATION METHODS AND PROGRAMS FOR DAYLIGHT LIGHTING AND COMPARISON OF THEIR USE .....</b>	<b>42</b>
Martina Zapletalová, Jiří Novák	
<b>THE SPORTS PARK STOŽICE IN CAPITAL CITY OF SLOVENIA .....</b>	<b>42</b>
Aleš Kaňa	

<b>TAKING CONTROL OF YOUR HID LIGHTING .....</b>	<b>43</b>
<i>Peter Jones, Clive Riddell</i>	
<b>DIFFERENT METHODS OF THE MAINTENANCE FACTOR SETTING .....</b>	<b>43</b>
<i>Pavel Stupka</i>	
<b>GLASSED-IN OFFICES WITH PC IN TERMS OF ENVIRONMENTAL FACTORS.....</b>	<b>43</b>
<i>Zuzana Mathauserová, Jana Lepší</i>	
<b>METHODOLOGY FOR MEASURING THE SUNLIGHT .....</b>	<b>44</b>
<i>Anton Rusnák</i>	
<b>DEFORMATION OF THE PHOTOMETRIC CHARACTERISTICS OF LUMINAIRES DUE TO POLLUTION OF ENVIRONMENT .....</b>	<b>44</b>
<i>Gašparovský, D., Mácha, M.</i>	
<b>VISUAL QUALITY IN WORKING SPACES WITH ENTIRELY DIFFUSE DAYLIGHT- MEASUREMENTS VS. SIMULATION .....</b>	<b>45</b>
<i>Dariusz Heim, Eliza Szczepańska</i>	
<b>THE POSSIBILITY OF REGULATION LUMINOUS FLUX OF METALHALIDE LAMPS .....</b>	<b>45</b>
<i>Andrzej Wiśniewski</i>	
<b>TWO-DIMENSIONAL VISUALIZATION OF RETROREFLECTION COEFFICIENTS (CIL) .....</b>	<b>46</b>
<i>Tomasz Targosiński</i>	
<b>THE SPECTRUM ANALYSIS OF THE USEFULNESS OF THE LIGHT SOURCES FOR BUILDING THE SUN SIMULATORS .....</b>	<b>46</b>
<i>Konrad Domke, Joanna Ratajczak</i>	
<b>LUMINANCE DISTRIBUTION OF LED LUMINOUS SURFACE.....</b>	<b>47</b>
<i>Dariusz Czyżewski</i>	

**MONITORING OF ROAD LIGHTING CONDITIONS ILLUMINATED WITH THE USE OF LED LUMINARIES .....47**

Dariusz Czyżewski

**LED'S SPECTRAL POWER DISTRIBUTION UNDER DIFFERENT CONDITION OF AMBIENT TEMPERATURE AND DRIVING CURRENT .....48**

Irena Fryc

**MATCHING ALGORITMS DURING ANALYSIS OF MEDICAL IMAGING PARAMETERS: POSSIBILITIES AND CONSTRAINS.....48**

Grażyna Gilewska

**A COMPARISON OF PWM DRIVING AND DC DRIVING OF LEDS LAMP ....49**

Marian Gilewski

**THE STABILIZING OF RGB LED COLOUR WITH CONSTANT-CURRENT DRIVING .....49**

Lech Grodzki

**A MULTICHANNEL DC CONTROL OF POWER LEDS .....50**

Marian Gilewski

**LED GROUP DRIVING.....50**

Lech Grodzki

**MORE LIGHT ON THE ROAD – TESTS OF PASSING LIGHTS WITH MODERN HALOGEN FILAMENT LAMPS.....51**

Piotr Kaźmierczak, Małgorzata Kalisz

**THE LATEST DESIGNS OF ILLUMINATION WORKED OUT IN LIGHTING DIVISION OF WARSAW UNIVERSITY OF TECHNOLOGY.....51**

Rafał Krupiński

**THE CALIBRATION OF THE TRISTIMULUS COLORIMETERS .....52**

Łukasz Litwiniuk

**CONCPET OF APPLICATION OF VARIABLE LIGHTING SURFACE IN  
VEHICLE SIGNALLING LAMPS .....52**

Wojciech Moćko

**APPROXIMATION BY FRACTIONAL POWER MODEL OF MEASURED  
SPECTRORADIOMETRIC DATA TYPE .....52**

Dorota Mozyrska, Irena Fryc

**THE INFLUENCE OF LED LUMINAIRES ON SUPPLY NETWORK .....53**

Wiesława Pabjańczyk, Przemysław Markiewicz, Roman Sikora, Zbigniew Gabryjelski

**ESTIMATION OF EQUIVALENC COLOUR CONTRAST AND LUMINANCE  
WITHIN ILLUMINATION .....53**

Michał Pawlaczyk

**LED LUMINAIRE WITH ADJUSTABLE COLOUR TEMPERATURE AND  
LUMINOUS FLUX .....54**

Andrzej Pawlak, Krzysztof Zaremba

**THE COMPARATIVE ANALYSIS OF ROAD LIGHTING ENERGY  
EFFICIENCY .....55**

Piotr Pracki

**THE SIMPLE MODEL OF DIFFRACTION GRATING .....55**

Łukasz Stelmach, Dariusz Sawicki

**SPHERICAL HARMONICS: THE NEW ALGORITHM OF THE LIGHT POINT  
FIGURE SIMULATION .....56**

Dariusz Sawicki

**THE DYNAMIC MAPPING OF LUMINANCE IN ANALYTICAL MODEL OF  
LIGHT SOURCE – THE STUDY RESULTS .....56**

Sebastian Słomiński

**PHOTOMETRIC CALIBRATOR .....57**

Dorota Sobotko, Grzegorz Szajna

<b>CALIBRATION OF TRISTIMULUS COLORIMETERS .....</b>	<b>57</b>
Grzegorz Szajna	
<b>PHOTOMETRIC AND RADIOMETRIC MEASUREMENTS IN PHOTOMETRY AND RADIOMETRY LABORATORY CENTRAL OFFICE OF MEASURES ...</b>	<b>57</b>
Grzegorz Szajna	
<b>THE CONCEPT FOR THE RYGB LED LUMIA.....</b>	<b>58</b>
Zbigniew Turlej, S. Abramik, E. Lisak, W. Władziński	
<b>ENERGY'S EFFICIENCY AND ECONOMIC ASPECTS IN ROAD LIGHTING</b>	<b>58</b>
Małgorzata Zalesińska	
<b>SEPIC CONVERTER FOR HIGH POWER LED LIGHTING.....</b>	<b>59</b>
Wojciech Wojtkowski	
<b>CALCULATION OF ROAD LIGHTING REALIZED ON LEDS.....</b>	<b>59</b>
Sławomir Zalewski	
<b>LOCAL LIGHTING LUMINAIRES FOR PEOPLE WITH EYESIGHT IMPAIRMENTS .....</b>	<b>60</b>
Andrzej Pawlak	
<b>ROLE OF ILLUMINATION IN PROPERTY PROTECTION.....</b>	<b>60</b>
Gyorgy Takacs	
<b>POWER SOLUTIONS FOR EMERGENCY LIGHTING OF TUNNELS, UNDERPASSES AND ECODUCT .....</b>	<b>61</b>
Stanislav Mišák, Jaroslav Šnobl, František Dostál	
<b>PRACTICAL POSSIBILITIES OF LIGHTING OF PEDESTRIAN CROSSINGS .....</b>	<b>61</b>
Zdeněk Bláha	
<b>IMPLEMENTATION OF PUBLIC LIGHTING AND CONTROL SYSTEM TELE IN HUSTOPEČE U BRNA .....</b>	<b>62</b>
Zdeněk Bláha	

**INDOOR OPTICAL FREE SPACE NETWORKS – REFLECTIVITY OF LIGHT  
ON BUILDING MATERIALS .....62**

**Jan Vitásek, Petr Koudelka, Jan Láta, František Dostál, Karel Sokanský**

**EFFECT OF NIGHT ILLUMINATION ADVERTISING BANNER ON THE  
SURROUNDING RESIDENTIAL HOUSES .....63**

**P. Vrbík, Z. Židková, P. Baxant**

**HELVAR / 920 IMAGINE ROUTER COMMERCIAL ARCHITECTURAL  
LIGHTING CONTROL DALI / DMX / SDIM .....63**

**Josef Neduchal**