



Czech Lighting Society



Slovak Lighting Society

PRELIMINARY CONFERENCE PROGRAMME



LIGHTING AT THE DAWN
OF THE NEW ERA

20 – 22 September 2022

14th European Lighting Conference

LUX EUROPA 2022

PRAGUE – CZECH REPUBLIC – HEART OF EUROPE
Hotel OLYMPIK / ARTEMIS

with kindful support of golden sponsor

YD[®] ILLUMINATION

1. CONFERENCE PROGRAMME AT A GLANCE

Time slots		September 20	September 21	September 22
08:00	08:30	REGISTRATION	BREAKFAST	BREAKFAST
08:30	10:00	Opening	Plenary session PL1	Parallel sessions PS5
		Keynote session KN1		Company presentations
10:00	10:30	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK
10:30	12:00	Keynote session KN2	Plenary session PL2	Parallel sessions PS6
12:00	13:00	LUNCH	LUNCH	LUNCH
13:00	14:30	Parallel sessions PS1	Parallel sessions PS3	Topical workshops WS
14:30	15:00	COFFEE BREAK	COFFEE BREAK	Closure and farewell
15:00	16:30	Parallel sessions PS2	Parallel sessions PS4	
16:30	17:30	Poster session / Exhibition	Poster session / Exhibition	
		Lux Europa Council (only members)	Technical Meeting: EU Lighting Educators	
17:30	19:00	EVENING BREAK	EVENING BREAK	
19:00	22:00	Boat trip on Vltava	Gala dinner	

2. DETAILED CONFERENCE PROGRAMME

Key to header colours:

Opening / Closing session
 Oral session
 Poster / Exhibition
 Workshop / Technical meeting
 Social programme
 Break

Key to presentation types:

KN = Keynote Presentation, **PL** = Plenary Presentation, **OP** = Oral Presentation,
PP = Presented Poster, **PA** = Panel Poster, **PR** = PR Presentation, **CP** = Company Presentation

IMPORTANT NOTICE:

This is preliminary conference programme based on submitted full-text papers. The programme is subject to possible changes including arrangement of the sessions, inclusion of papers into particular session, withdrawals or additions of papers, changes to the mode of presentation etc. Although major changes are not assumed, authors and participants should not rely on this programme as fixed. Official conference programme will be published within the fourth information brochure by September 12, 2022.

September 20, 2022 (TUESDAY)

08:30	08:45	OPENING SESSION Chairmen: Dionýz GAŠPAROVSKÝ (SK), Tomáš NOVÁK (CZ)	
08:30	08:45	Welcome words of the guests and organizers Greeting of the golden sponsor About Lux Europa: past, present and future	
08:45	10:00	KEYNOTE SESSION 1 Chairmen: Dionýz GAŠPAROVSKÝ (SK), Tomáš NOVÁK (CZ)	
08:45	09:30	Peter BLATTNER (CH)	Some highlights of current activities of the International Commission on Illumination CIE (interim)
09:30	09:45	Werner OSTERHAUS, Meike BARFUß, Dirk SEIFERT, Alexander ROSEMANN (DE)	Lighting Technology: Fundamentals of Illuminating Engineering – English-language Edition of a Lighting Education Book
09:45	10:00	YD Illumination (<i>company presentation</i>)	
10:00	10:30	COFFEE BREAK	
10:30	12:00	KEYNOTE SESSION 2 Chairmen: Dionýz GAŠPAROVSKÝ (SK), Tomáš NOVÁK (CZ)	
10:30	11:15	Georges ZISSIS (FR)	Education of European Lighting Professionals: Perspectives and Incentives
11:15	12:00	Luc SCHLANGEN (NL)	Integrative Lighting – The Way to Healthful Lighting Environment
12:00	13:00	LUNCH BREAK	
13:00	14:30	PARALLEL SESSION 1A: Home, School and Retail Lighting Chairs: Anna PELLEGRINO (IT), Laura BELLIA (IT)	
13:00	13:20	089 OP	Sohéil MOGHTADER (DE) Digest Highlights of Current Activities and Future Plans in CEN/TC169 Light and Lighting (interim) (INVITED)
13:20	13:40	017 OP	Banu MANAV, Egemen KAYMAZ (TR) Home as the New Office: Considerations of Interior Lighting Including Occupancy Scenarios of ongoing Covid-19
13:40	14:00	062 OP	Ayşegül TEREÇI, Dilay Kesten ERHART, Uçman TAN (TR) Evaluation and Improvement of Lighting Ergonomics in Home-Office Area
14:00	14:10	082 PP	Jana RADITSCHOVÁ, Dionýz GAŠPAROVSKÝ (SK) Preparing the European Survey on Home Lighting
14:10	14:30	CP	Company presentation (<i>TBA</i>)

13:00	14:30	PARALLEL SESSION 1B: Lighting for Drivers, Cyclists and Pedestrians Chairs: Péter SCHWARCZ (HU), Michal VIK (CZ)	
13:00	13:20	050 OP	Lanlan WEI, Grega BIZJAK, Matej B. KOBAY (SI) A Study of the Relationship Between Lighting Levels and Vehicle Speed
13:20	13:40	003 OP	Steve FOTIOS, Yichong MAO (UK) Using Lighting to Offset the Influence of Driver Distraction on Hazard Detection
13:40	14:00	004 OP	Nima Hafezparast MOADAB, Aysheh ALSHDAIFAT, Steve FOTIOS (UK) The Influence of Light on Alertness When Walking or Driving in the Evening
14:00	14:20	002 OP	Steve FOTIOS, Jim UTTLEY, Shahab GORJIMAHLABANI (UK) A Mixed Methods Approach to Measuring Pedestrian Reassurance
14:20	14:30	007 PP	Jim UTTLEY, Maan BALELA, Steve FOTIOS (UK) The Effect of Darkness on Cycling Rates - A Multi-Country Comparison

14:30	15:00	COFFEE BREAK	
-------	-------	--------------	--

15:00	16:10	PARALLEL SESSION 2A: Electrical and Daylighting in Buildings Chairs: Thomas RÖMHILD (DE), Peter HANULIAK (SK)	
15:00	15:20	045 OP	Piotr PRACKI, Paulina KOMORZYCKA (PL) General Lighting Solutions for the Required Ceiling, Wall and Cylindrical Illumination in Interiors
15:20	15:40	057 OP	Remedios M. LÓPEZ-LOVILLO, Laura BELLIA, Francesca FRAGLIASSO, Ignacio ACOSTA, Samuel DOMÍNGUEZ-AMARILLO (ES) How to Design a Proper Daylight Control System? An Example of Calibration Under Overcast Sky Conditions
15:40	16:00	064 OP	Federica GIULIANI, Mandana S. KHANIE, Niko GENTILE, Natalia SOKOL (PL) New Level of Integrated Techniques for Daylighting Education. Creating an Educational Content Framework for E-platform via a Series of Workshops
16:00	16:10	010 PP	Elif Öztürk GÜL, Mustafa KAVRAZ (TR) An Approach on Visual Comfort and Energy Performance Analyses in Offices
16:10	16:30	PARALLEL SESSION 2A: Artificial Light at Night Chairs: Thomas RÖMHILD (DE), Peter HANULIAK (SK)	
16:10	16:20	041 PP	Patrik KUČERA, Lenka MAIEROVÁ (CZ) Architectural Lighting in the Context of Visual Comfort and Environmental Aspects of Artificial Light at Night
16:20	16:30	079 PP	Petr ŽÁK, Marek BÁLSKÝ (CZ) The Issue of Obtrusive Light Control

15:00	16:30	PARALLEL SESSION 2B: Adaptive Road Lighting Chairs: Constantinos BOUROUSSIS (GR), Axel STOCKMAR (DE)	
15:00	15:20	068 OP	Péter SCHWARCZ (HU) Road Lighting as the Backbone of Smart City Networks. Opportunities and Questions
15:20	15:40	008 OP	Paolo Di LECCE, Marco FRASCAROLO, Sonny GIANANTE (IT) An Innovative Adaptive Lighting Smart City Project: Life Diademe
15:40	16:00	028 OP	Mustafa Berker YURTSEVEN, Sermin ONAYGIL, Önder GÜLER (TR) The Importance of Luminous Intensity Distribution in Adaptive Road Lighting
16:00	16:20	078 OP	Dionýz GAŠPAROVSKÝ, Peter JANIGA (SK) Updating the Typical Values of Energy Performance Indicators in Road Lighting
16:20	16:30	020 PP	Eduardo PEREIRA, Markus WAGENSEIL (AT) Dynamic Road Lighting Using Image-Based Traffic Intensity Sensors; System Considerations and Practical Results on Energy Savings

16:30	17:00	POSTER SESSION / EXHIBITION	
-------	-------	-----------------------------	--

16:30	17:30	LUX EUROPA COUNCIL Meeting (only for council members upon invitation)	
-------	-------	---	--

17:00	19:00	EVENING BREAK	
-------	-------	---------------	--

19:00	22:00	SOCIAL PROGRAMME: Boat trip on Vltava	
-------	-------	--	--

September 21, 2022 (WEDNESDAY)

08:30	10:00	PLENARY SESSION 1 Chairs: Peter THORNS (UK), Peter DEHOFF (AT)	
08:30	09:00	059 PL	David GEISLER-MORODER, Martin HAUER, Christian KNOFLACH, Wilfried POHL (AT) Bringing Daylighting to the Fore: Advances in Integral Control Concepts, Simulation Tools, and Evaluation Metrics
09:00	09:30	066 PL	Valerio R. M. LO VERSO, Luigi GIOVANNINI, Lodovica VALETTI, Anna PELLEGRINO (IT) Integrative Lighting in Educational Buildings: Results From Simulations and Field Measuring Campaigns in Classrooms
09:30	10:00	080 PL	Petr ŽÁK, Roman KOUCKÝ, Marek BÁLSKÝ (CZ) Concept of Prague Public Lighting

10:00	10:30	COFFEE BREAK	
-------	-------	--------------	--

10:30	10:00	PLENARY SESSION 2 Chairs: Sermin ONAYGIL (TR), Annika JÄGERBRAND (SE)	
10:30	11:00	054 PL	Giuseppe VENDRAMIN, Alessandro DEODATI, Emiliano PETRACHI (IT) Urban Lighting: Innovative Luminaires Made of an Eco-Sustainable, Circular and Corrosion-Resistant Material
11:00	11:30	038 PL	Kai BROSZIO, Martine KNOOP, Ljiljana UDOVICIC, Stephan VÖLKER (DE) Non-visual Effectiveness of Light at Night as a Function of the Light Direction
11:30	12:00	060 PL	Paola IACOMUSSI, Johanna BERNASCONI, Mikael LINDGREN, Valerie MUZET (IT) The Outputs of SURFACE Project: Pavement surface characterisation for smart and efficient road lighting

12:00	13:00	LUNCH BREAK	
-------	-------	-------------	--

13:00	14:30	PARALLEL SESSION 3A: Non-visual Effects of Light Chairs: Valéry Ann JACOBS (BE), Meike BARFUß (DE)	
13:00	13:20	027 OP	Myrta GKAINATZI-MASOUTI, Juliëtte van DUIJNHOFEN, Mariëlle AARTS (NL) To what Extend are Non-visual Effects of Light Implemented in Current Lighting Design Practice? Findings from an International Survey
13:20	13:40	069 OP	Johannes WENINGER, Wilfried POHL, Maximilian DICK, Markus CANAZEI (AT) Effects of a Personalizable Workplace Lighting Concept on Acceptance, Usability, and Cognitive Performance
13:40	14:00	018 OP	Laura BELLIA, Urszula BŁASZCZAK, Francesca DIGLIO, Francesca FRAGLIASSO (IT) Interactions Between Light and Environments – Impact on Non-visual Effects Evaluation
14:00	14:10	053 PP	Laura BELLIA, Francesca FRAGLIASSO, Matteo SERACENI, Giulia SODANO (IT) Evaluating Non-visual Effects of Light: An Open Challenge for Designers
14:10	14:20	049 PP	Matej B. KOBAY, Martin KRIVEC, Klemen KNEZ, Grega BIZJAK (SI) Development of Luminaire for Integrative Lighting
14:20	14:30	CP	Company presentation (<i>TBA</i>)

13:00	14:30	PARALLEL SESSION 3B: Outdoor Lighting Quality Criteria Chairs: Dorin BEU (RO), Grega BIZJAK (SI)	
13:00	13:20	024 OP	Ezgi BERBEROĞLU, Sermin ONAYGIL, M. Berker YURTSEVEN (TR) Life Cycle Assessment on Conversion to LED in Road Lighting
13:20	13:40	086 OP	Constantinos A. BOUROUSSIS, Annika K. JÄGERBRAND (GR) Calculations, Analysis, and New Performance Metrics for Spill Light From Road Lighting Installations and Its Relation With Energy Performance
13:40	14:00	014 OP	Axel STOCKMAR (DE) Lighting of Railway Installations According to EN 12464-1/2
14:00	14:10	056 PP	Filippo RATTI (IT) From Application to Design: How to Optimise Tunnel Lighting

14:10	14:20	072 PR	Mikołaj PRZYBYŁA, Jacek DYLAŁ, Krzysztof WANDACHOWICZ, Małgorzata ZALESIŃSKA (PL) Experiences and Challenges Arising From Verification of the Road Lighting Quality Using Luminance Distribution Measurement Method (PR presentation)
14:20	14:30	075 PP	Tomáš NOVÁK, Ondřej DOLEJŠÍ, Pavel VALÍČEK (CZ) Possibilities of Situational Modelling in the Night Traffic Area in Terms of Evaluating the Visibility of Potential Obstacles by the Driver

14:30	15:00	COFFEE BREAK	
-------	-------	--------------	--

15:00	16:30	PARALLEL SESSION 4A: Horticulture Lighting and UV-C Disinfection Chairs: Marek ŠMÍD (CZ), Roman DUBNIČKA (SK)	
15:00	15:20	013 OP	Tim HEGEMANN, Quoc Khanh TRAN (DE) Methods to Determine Photosynthetic Photon Flux Density (PPFD) using low-cost Spectralsensors in daylight
15:20	15:40	015 OP	Jens BALASUS, Quoc Khanh TRAN (DE) Virtual Plant Models as a Tool in Horticultural Luminaire Design
15:40	15:50	048 PP	Laszlo BALAZS, Jozsef NADAS, Zsolt MOLNAR, Tamas PAVA, Zoltan SEJPES (HU) Optimization of Spatial Photon Irradiance Distribution for Indoor Vertical Farms
15:50	16:00	040 PP	Kynthia CHAMILOTHORI, Renate LEMMENS, Yvonne de KORT (NL) Effects of Dappled Light Patterns on Preference, Fascination, and Stress Restoration
16:00	16:10	043 PP	Kriangkrai PATTANAPAKDEE, Ananyaporn NGOENTHUM, Manoch SANLUANG, Sumate NAETILADDANON (TH) Optimal Improvement of Irradiance Uniformity in UV-C Disinfection Chamber
16:10	16:20	051 PP	Dirk SEIFERT (DE) Practical Usage of UV-C for Surface and Air Disinfection
16:20	16:30	CP	Company presentations (TBA)

15:00	16:30	PARALLEL SESSION 4B: Lighting Equipment & Systems Chairs: Matej B. KOBAV (SI), Piotr PRACKI (PL)	
15:00	15:20	001 OP	Frédéric B. LELOUP (BE) Lighting Business: A Competency-Based Course on Business Modelling and Entrepreneurship in Lighting
15:20	15:40	034 OP	Asterios K. TOLIDIS (GR) A Study on a Parametric Model that Interrelate Lighting Parameters Based on Methods of Data Analysis
15:40	16:00	084 OP	Peter JANIGA, Miloš GREGA (SK) 3D Print of Lamps
16:00	16:20	085 OP	Peter JANIGA, Miroslav MURÍN, Minovski DRAGAN (SK) Street Light Grid and Charging Stations
16:20	16:30	005 PP	Rafał KRUPIŃSKI, Wolfgang SCHERZER, Piotr PRACKI, Andrzej WIŚNIEWSKI, Krzysztof SKARŻYŃSKI (PL) Development of Floodlighting Design Systems Based on Raster Images

16:30	17:00	POSTER SESSION / EXHIBITION
-------	-------	-----------------------------

16:30	17:30	TECHNICAL MEETING European Lighting Educators Forum Convener: Meike BARFUß (DE)
-------	-------	--

17:00	19:00	EVENING BREAK
-------	-------	---------------

19:00	22:00	SOCIAL PROGRAMME: Gala dinner
-------	-------	--------------------------------------

September 22, 2022 (THURSDAY)

10:30	11:30	PARALLEL SESSION 5: Road Surface Reflection Properties Chairs: Petr ŽÁK (CZ), Peter JANIGA (SK)	
10:30	10:50	011 OP	Valérie MUZET, Corentin MEYER, Guillaume GUBLIN (FR) Photometric Characterization of Pavements Under Different Wetting Conditions
10:50	11:10	032 OP	Florian GREFFIER, Vincent BOUCHER, Romain DRONNEAU, Valérie MUZET (FR) Design of an Adaptive Road Lighting Installation Taking into Account the Evolution of Pavement Reflection Properties According to the Weather Conditions
11:10	11:20	009 PP	Boucher VINCENT, Greffier FLORIAN (FR) A Method to Estimate Road Optical Reflection Properties From Luminance Map
11:20	11:30	022 PP	Laure LÉBOUC, Vincent BOUCHER, Florian GREFFIER, Sébastien LIANDRAT, Aurélia NICOLAÏ, Paul RICHARD (FR) Influence of Road Surfaces on Target Visibility: Comparison of Experimental Measures and Simulation
11:30	12:00	COMPANY PRESENTATIONS Chairs: Petr ŽÁK (CZ), Peter JANIGA (SK)	
11:30	11:40	CP	Company presentation (TBA)
11:40	11:50	CP	Company presentation (TBA)
11:50	12:00	CP	Company presentation (TBA)

10:00	10:30	COFFEE BREAK
-------	-------	--------------

10:30	12:00	PARALLEL SESSION 6A: Photometry and Radiometry Chairs: Frédéric LELOUP (BE), Roman DUBNIČKA (SK)	
10:30	10:50	077 OP	Petr KLIMENT, Geiland PORROVECCHIO, Marek ŠMÍD (CZ) Candela Realisation Based on Led Standard Lamp and Unfiltered Radiometers in Czech Metrology Institute
10:50	11:10	039 OP	Sneha JAIN, Jan WIENOLD, Marilyn ANDERSEN (CH) Comparison Between CIE 2° and 10° Field Photopic Luminosity Functions V(λ) for Calculating Daylight Discomfort Glare Metrics

11:10	11:20	071 PP	Marcin PELKO (PL) Practical Approach to Application of Radiometer for Measuring and Evaluation Sources With Different Spectral Characteristics of UV Radiation (PR presentation)
11:20	11:30	052 PP	María TEJADA-CASADO, Luvin Munish RAGOO, Luis GÓMEZ-ROBLEDO, Manuel MELGOSA (ES) Simulating CIE LED Illuminants With a Low-Cost Six-Channels LED System
11:30	11:40	012 PP	Nima FOROUZANDEH, Eleonora BREMBILLA (NL) Image-Based Estimation of Material Optical Properties in Real Scenes for Daylight Modeling
11:40	11:50	023 PP	Jan KRÜGER, Josef SCHÜTZ (DE) Pitfalls in Low Power Measurement of Lighting Products
11:50	12:00	058 PP	Michal VIK, Martina VIKOVÁ, Azmary Akter MUKTHY (CZ) Color Rendering Evaluation Using Metameric Pairs and D&H Color Rule

10:30	12:00	PARALLEL SESSION 6B: Obtrusive Light Chairs: Constantinos BOUROUSSIS (GR), Rafał KRUPIŃSKI (PL)	
10:30	10:50	006 OP	David M. KRETZER, Alexander REICHENBACH (CH) Developing Light Pollution Reduction Guidelines for Switzerland
10:50	11:10	016 OP	Andreas WALKLING, Dirk HEUZEROTH, Sandra JACOBI, Jan SAUER (DE) Light Immissions From Street Lighting: New Researcha
11:10	11:20	019 OP	Krzysztof SKARŻYŃSKI (PL) On the Applicability of Obtrusive Light Assessment Parameters – Upward Light Ratio and Upward Flux Ratio
11:20	11:50	063 OP	Annika JÄGERBRAND, Maria NILSSON TENGELIN, Dorukalp DURMUS (SE) An Overview of the Adverse Effects of Outdoor Light at Night and the Research Methods Used in Different Areas
11:50	12:00	083 PP	Petr ŽÁK, Simona VONDRÁČKOVÁ (CZ) Procedure for Establishing Environmental Zones

12:00	13:00	LUNCH BREAK	
-------	-------	-------------	--

13:00	14:30	TOPICAL WORKSHOP WS1 Practical solutions of integrative lighting installations Convener: Werner Osterhaus (DE)	
-------	-------	---	--

13:00	14:30	TOPICAL WORKSHOP WS2 Balancing the architectural lighting and light pollution Convener: Peter Raynham (UK)	
-------	-------	---	--

14:30	15:00	CLOSING SESSION Chairs: Dionýz GAŠPAROVSKÝ (SK), Tomáš NOVÁK (CZ)	
14:30	15:00	Conclusion of the conference Invitation to the next LUX EUROPA Farewell	

PANEL POSTERS

036 PA	Martin MOTYČKA, Jan ŠKODA, Petr BAXANT, Filip NOVÁK (CZ) The Measurement Uncertainty of the Imaging Luminance Measurement Device based on the DSLR Camera
073 PA	Roman DUBNIČKA, Marek MOKRÁŇ, Peter JANIGA (SK) Spectral Mismatch Corrections of Illuminance Meters for Field Measurements of Indoor Workplaces
081 PA	Kamil HOUDEK, Zuzana PANSKÁ, Petr ŽÁK (CZ) Field Comparison of Illuminance Meters
074 PA	Marek MOKRÁŇ, Roman DUBNIČKA, Peter JANIGA, Dionýz GAŠPAROVSKÝ (SK) The Position of the Luminaire and Its Effects on Selected Photometric Parameters of the Lighting System
035 PA	Jan ŠKODA, Martin MOTYČKA, Petr BAXANT (CZ) Glare Evaluation of Outdoor Lighting Systems Using a Luminance Analyser
031 PA	Filip NOVÁK, Petr BAXANT, Martin MOTYČKA, Jan ŠKODA (CZ) Measurement and Analysis of Luminance Values and Ratios on a Road with an Adaptive Lighting System
046 PA	Emre YILMAZ, Nuri Yunus KOCADAG (TR) An Engineering Economy Study on Cost-Benefit Analysis of Street Lighting Transformation
087 PA	Jan LATAL, Stanislav HEJDUK, Tomas STRATIL, Tomas NOVAK, Pavel VALICEK (CZ) Measurement of Light-Technical Parameters of Public Lighting With Regard to Simulated Atmospheric Conditions

EXHIBITORS

●	GL Optic – Light quality control
●	OSMONT – Czech premium lighting
●	TECO Advanced Automation
●	TechnoTeam Bildverarbeitung GmbH
●	VUT Brno
●	YD Illumination (TBC)
●	Zumtobel

EUROPEAN LIGHTING EDUCATORS FORUM

All European Lighting Educators are invited to join. The idea is to encourage European cooperation in lighting, for example by the exchange of students and teaching staff or joint European research projects. The Forum is open to everybody teaching lighting, a membership in a lighting society is not required.

3. SPONSORS

GOLD

YD[®] ILLUMINATION

SILVER



BRONZE



EXHIBITORS



