



*Czech Lighting Society*



*Slovak Lighting Society*

# **FINAL CONFERENCE PROGRAMME**



**LIGHTING AT THE DAWN  
OF THE NEW ERA**

**20 – 22 September 2022**

**14<sup>th</sup> European Lighting Conference**

**LUX EUROPA 2022**

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

with kindful support of golden sponsor

**YD<sup>®</sup> ILLUMINATION**

# COMPANY PROFILE

**38** Years

Founded Years

**70<sup>+</sup>**

Products Sold Countries

**20000<sup>+</sup>**

Serviced Outdoor Projects

Founded in 1984, YD Illumination is a world-class LED lighting product manufacturer for outdoor decoration lighting luminaires and intelligent control system. YD Illumination possesses an experienced and skillful R&D team, technical and engineering team, design center, sales and marketing team, lighting measurement & test laboratory and manufacturing production.

The manufacturer strictly follows the ISO9001 quality management system accreditation and passed international certification of UL, CE, FCC BIS etc. YD Illumination possesses complete independent intellectual property patents of the LED Double Protection Packaging Technology.

## OUTDOOR LED LIGHTING PRODUCTS LIGHTING SYSTEM SOLUTIONS



## 1. CONFERENCE PROGRAMME AT A GLANCE

September 20 (Tuesday)			
08:00	08:30	IRIS I	REGISTRATION
08:30	08:45	Artemis 1–4	Opening Session
08:45	10:00	Artemis 1–4	KN1 Keynote Session
10:00	10:30	Triumpf	COFFEE BREAK
10:30	12:00	Artemis 1–4	KN2 Keynote Session
12:00	13:00	Dining Hall	LUNCH
13:00	14:30	Artemis 1–2	PS1A: Home, School and Retail Lighting
13:00	14:30	Artemis 3–4	PS1B: Lighting for Drivers, Cyclists and Pedestrians
14:30	15:00	Triumpf	COFFEE BREAK
15:00	16:30	Artemis 1–2	PS2A: Electrical and Daylighting in Buildings
15:00	16:30	Artemis 3–4	PS2B: Adaptive Road Lighting
16:30	17:30	Triumpf	Poster Session / Exhibition
16:30	17:30	Tristar	Lux Europa Council Meeting (only for invited members)
17:30	18:30		EVENING BREAK
18:30	22:30		Boat trip on Vltava

September 21 (Wednesday)			
08:30	10:00	Artemis 1–4	PL1 Plenary Session
10:00	10:30	Triumpf	COFFEE BREAK
10:30	12:00	Artemis 1–4	PL2 Plenary Session
12:00	13:00	Dining Hall	LUNCH
13:00	14:30	Artemis 1–2	PS3A: Non-visual Effects of Light
13:00	14:30	Artemis 3–4	PS3B: Outdoor Lighting Quality Criteria
14:30	15:00	Triumpf	COFFEE BREAK
15:00	16:00	Artemis 1–2	PS4A: Horticulture Lighting and UV-C Disinfection
16:00	16:30	Artemis 1–2	CP1: Exhibitors' Session
15:00	16:30	Artemis 3–4	PS4B: Lighting Equipment & Systems
16:30	17:30	Triumpf	Poster Session / Exhibition
16:30	17:30	Artemis 1–2	Technical Meeting: EU Lighting Educators
17:30	19:00		EVENING BREAK
19:00	22:30	Dining Hall	Gala dinner

September 22 (Thursday)			
08:30	09:30	Artemis 1–2	PS5: Road Surface Reflection Properties
09:30	10:00	Artemis 1–2	CP2: Sponsors‘ Session
10:00	10:30	Triumpf	COFFEE BREAK
10:30	12:00	Artemis 1–2	PS6A: Photometry and Radiometry
10:30	12:00	Artemis 3–4	PS6B: Obtrusive Light
12:00	13:00	Dining Hall	LUNCH
13:00	14:30	Artemis 1–2	Technical Workshop WS1: Practical solutions of integrative lighting installations
13:00	14:30	Artemis 3–4	Technical Workshop WS2: Balancing the architectural lighting and light pollution
14:30	15:00	Artemis 1–2	Closure and farewell

## 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

### September 20 (TUESDAY)

08:30	08:45	<b>OPENING SESSION</b> Chairmen: Dionýz GAŠPAROVSKÝ (SK), Tomáš NOVÁK (CZ) Room: Artemis 1–4
08:30	08:45	Lighting at the Dawn of the New Era Welcome words of the guests and organizers Greeting of the golden sponsor YD Illumination About Lux Europa: past, present and future
08:45	10:00	<b>KEYNOTE SESSION 1</b> Chairmen: Dionýz GAŠPAROVSKÝ (SK), Tomáš NOVÁK (CZ) Room: Artemis 1–4
08:45	09:30	Peter BLATTNER (CH) <b>Some highlights of current activities of the International Commission on Illumination CIE</b> (interim)
09:30	09:45	Werner OSTERHAUS, Meike BARFUß, Dirk SEIFERT, Alexander ROSEMAN (DE) <b>Lighting Technology: Fundamentals of Illuminating Engineering – English-language Edition of a Lighting Education Book</b>
09:45	10:00	YD Illumination ( <i>company presentation</i> )
10:00	10:30	<b>COFFEE BREAK</b>
10:30	12:00	<b>KEYNOTE SESSION 2</b> Chairmen: Dionýz GAŠPAROVSKÝ (SK), Tomáš NOVÁK (CZ) Room: Artemis 1–4
10:30	11:15	Georges ZISSIS (FR) <b>Education of European Lighting Professionals: Perspectives and Incentives</b>
11:15	12:00	Luc SCHLANGEN (NL) <b>Integrative Lighting – The Way to Healthful Lighting Environment</b>
12:00	13:00	<b>LUNCH BREAK</b>

13:00	14:30	<b>PARALLEL SESSION 1A: Home, School and Retail Lighting</b> Chairs: Anna PELLEGRINO (IT), Laura BELLIA (IT) Room: Artemis 1–2	
13:00	13:20	089 OP	Sohéil MOGHTADER (DE) <b>Digest Highlights of Current Activities and Future Plans in CEN/TC169 Light and Lighting</b> (INVITED)
13:20	13:40	017 OP	Banu MANAV, Egemen KAYMAZ (TR) <b>Home as the New Office: Considerations of Interior Lighting Including Occupancy Scenarios of Ongoing COVID-19</b>
13:40	14:00	062 OP	Ayşegül TEREÇİ, Dilay Kesten ERHART, Uçman TAN (TR) <b>Evaluation and Improvement of Lighting Ergonomics in Home-Office Area</b>
14:00	14:10	082 PP	Jana RADITSCHOVÁ, Dionýz GAŠPAROVSKÝ, Magdaléna KADLEČÍKOVÁ (SK) <b>Preparing the European Survey on Home Lighting</b>
14:10	14:30		

13:00	14:30	<b>PARALLEL SESSION 1B: Lighting for Drivers, Cyclists and Pedestrians</b> Chairs: Péter SCHWARCZ (HU), Michal VIK (CZ) Room: Artemis 3–4	
13:00	13:20	050 OP	Lanlan WEI, Grega BIZJAK, Matej B. KOBAR (SI) <b>A Study of the Relationship Between Lighting Levels and Vehicle Speed</b>
13:20	13:40	003 OP	Steve FOTIOS, Yichong MAO (UK) <b>Using Lighting to Offset the Influence of Driver Distraction on Hazard Detection</b>
13:40	14:00	004 OP	Nima Hafezparast MOADAB, Aysheh ALSHDAIFAT, Steve FOTIOS (UK) <b>The Influence of Light on Alertness When Walking or Driving in the Evening</b>
14:00	14:20	002 OP	Steve FOTIOS, Jim UTTLEY, Shahab GORJIMAHLABANI (UK) <b>A Mixed Methods Approach to Measuring Pedestrian Reassurance</b>
14:20	14:30	007 PP	Jim UTTLEY, Steve FOTIOS, Maan BALELA (UK) <b>The Effect of Darkness on Cycling Rates - A Multi-Country Comparison</b>

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

15:00	16:10	<b>PARALLEL SESSION 2A: Electrical and Daylighting in Buildings</b> Chairs: Thomas RÖMHILD (DE), Peter HANULIAK (SK) Room: Artemis 1–2	
15:00	15:20	045 OP	Piotr PRACKI, Paulina KOMORZYCKA (PL) <b>General Lighting Solutions for the Required Ceiling, Wall and Cylindrical Illumination in Interiors</b>
15:20	15:40	057 OP	Remedios M. LÓPEZ-LOVILLO, Laura BELLIA, Francesca FRAGLIASSO, Ignacio ACOSTA, Samuel DOMÍNGUEZ-AMARILLO, Juan José SENDRA (ES) <b>How to Design a Proper Daylight Control System? An Example of Calibration Under Overcast Sky Conditions</b>
15:40	16:00	064 OP	Federica GIULIANI, Natalia SOKOL, Niko GENTILE, Mandana S. KHANIE, Valerio R. M. LO VERSO, Federica CAFFARO (PL) <b>NLITED – New Level of Integrated Techniques for Daylighting Education: Preliminary Data on the Use of an E-learning Platform</b>
16:00	16:10	040 PP	Kynthia CHAMILOTHORI, Renate LEMMENS, Özge KARAMAN MADAN, Yvonne de KORT (NL) <b>Effects of Dappled Light Patterns on Preference, Fascination, and Restoration in an Online Study</b>
16:10	16:30		

15:00	16:30	<b>PARALLEL SESSION 2B: Adaptive Road Lighting</b> Chairs: Constantinos BOUROUSSIS (GR), Axel STOCKMAR (DE) Room: Artemis 3–4	
15:00	15:20	068 OP	Péter SCHWARCZ (HU) <b>Road Lighting as the Backbone of Smart City Networks. Opportunities and Questions</b>
15:20	15:40	008 OP	Paolo Di LECCE, Marco FRASCAROLO, Sonny GIANANTE (IT) <b>An Innovative Adaptive Lighting Smart City Project: Life Diademe</b>
15:40	16:00	028 OP	Mustafa Berker YURTSEVEN, Sermin ONAYGIL, Önder GÜLER (TR) <b>The Importance of Luminous Intensity Distribution in Adaptive Road Lighting for Twin Bracket Central Arrangement Systems</b>
16:00	16:20	078 OP	Dionýz GAŠPAROVSKÝ, Peter JANIGA, Jana RADITSCHOVÁ (SK) <b>Updating the Typical Values of Energy Performance Indicators in Road Lighting</b>
16:20	16:30	020 PP	Eduardo PEREIRA, Markus WAGENSEIL (AT) <b>Dynamic Road Lighting Using Image-Based Traffic Intensity Sensors; System Considerations and Practical Results on Energy Savings</b>

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

16:30	17:30	<b>LUX EUROPA COUNCIL Meeting</b> (only for council members upon invitation) Room: Tristar	
-------	-------	--	--

17:30	18:30	EVENING BREAK	
-------	-------	---------------	--

18:30	22:30	SOCIAL PROGRAMME: <b>Boat trip on Vltava</b>	
-------	-------	--	--

## September 21 (WEDNESDAY)

08:30	10:00	<b>PLENARY SESSION 1</b> Chairs: Peter THORNS (UK), Peter DEHOFF (AT) Room: Artemis 1–4	
08:30	09:00	059 PL	David GEISLER-MORODER, Martin HAUER, Christian KNOFLACH, Wilfried POHL (AT) <b>Bringing Daylighting to the Fore: Advances in Integral Control Concepts, Simulation Tools, and Evaluation Metrics</b>
09:00	09:30	066 PL	Valerio R. M. LO VERSO, Luigi GIOVANNINI, Lodovica VALETTI, Anna PELLEGRINO (IT) <b>Preliminary Results on Integrative Lighting in Classrooms: Simulations and Field Measurements</b>
09:30	10:00	080 PL	Petr ŽÁK, Roman KOUCKÝ, Marek BÁLSKÝ (CZ) <b>Concept of Prague Public Lighting</b>

10:00	10:30	<b>COFFEE BREAK</b>	
-------	-------	---------------------	--

10:30	10:00	<b>PLENARY SESSION 2</b> Chairs: Sermin ONAYGIL (TR), Annika JÄGERBRAND (SE) Room: Artemis 1–4	
10:30	11:00	054 PL	Alessandro DEODATI, Emiliano PETRACHI, Giuseppe VENDRAMIN (IT) <b>Urban Lighting: Innovative Luminaires Made of an Eco-Sustainable, Circular and Corrosion-Resistant Material</b>
11:00	11:30	038 PL	Kai BROSZIO, Martine KNOOP, Ljiljana UDOVICIC, Stephan VÖLKER (DE) <b>Non-visual Effectiveness of Light at Night as a Function of the Light Direction</b>
11:30	12:00	060 PL	Paola IACOMUSSI, Valerie MUZET, Johanna BERNASCONI, Mikael LINDGREN (IT) <b>The Outputs of SURFACE Project: Pavement Surface Characterisation for Smart and Efficient Road Lighting</b>

12:00	13:00	<b>LUNCH BREAK</b>	
-------	-------	--------------------	--

13:00	14:30	<b>PARALLEL SESSION 3A: Non-visual Effects of Light</b> Chairs: Valéry Ann JACOBS (BE), Meike BARFUß (DE) Room: Artemis 1–2	
13:00	13:20	027 OP	Myrta GKAINATZI-MASOUTI, Juliëtte van DUIJNHOFEN, Mariëlle AARTS (NL) <b>To what Extend are Non-visual Effects of Light Implemented in Current Lighting Design Practice? Findings from an International Survey</b>
13:20	13:40	069 OP	Johannes WENINGER, Markus CANAZEI, Wilfried POHL (AT) <b>Effects of a Personalizable Workplace Lighting Concept on Acceptance, Usability, and Cognitive Performance</b>
13:40	14:00	018 OP	Laura BELLIA, Urszula BŁASZCZAK, Francesca DIGLIO, Francesca FRAGLIASSO (IT) <b>Interactions Between Light and Environments – Impact on Non-visual Effects Evaluation</b>
14:00	14:10	053 PP	Laura BELLIA, Francesca FRAGLIASSO, Matteo SERACENI, Giulia SODANO (IT) <b>Evaluating Non-visual Effects of Light: An Open Challenge for Designers</b>
14:10	14:20	049 PP	Matej B. KOBÁV, Martin KRIVÉC, Klemen KNEZ, Grega BIZJAK (SI) <b>Development of Luminaire for Integrative Lighting</b>
14:20	14:30		

13:00	14:30	PARALLEL SESSION 3B: <b>Outdoor Lighting Quality Criteria</b> Chairs: Dorin BEU (RO), Grega BIZJAK (SI) Room: Artemis 3–4	
13:00	13:20	024 OP	Ezgi BERBEROĞLU, Sermin ONAYGIL, M. Berker YURTSEVEN (TR) <b>Life Cycle Assessment on Conversion to LED in Road Lighting</b>
13:20	13:40	014 OP	Axel STOCKMAR (DE) <b>Lighting of Railway Installations According to EN 12464-1/2</b>
13:40	13:50	056 PP	Filippo RATTI, Lorenzo TREVISANELLO, Mauro CANCIAN (IT) <b>From Application to Design: How to Optimise Tunnel Lighting</b>
13:50	14:10	072 PR	Mikołaj PRZYBYŁA, Jacek DYLAŁ, Krzysztof WANDACHOWICZ, Małgorzata ZALESIŃSKA (PL) <b>Experiences and Challenges Connected with Verification of the Quality of Road Lighting – Part 1: Measurement of Luminance Distribution</b> (PR presentation)
14:10	14:20	075 PP	Tomáš NOVÁK, Ondřej DOLEJŠÍ, Pavel VALÍČEK (CZ) <b>Possibilities of Modelling Situations in the Night Traffic Area in Terms of Evaluating the Visibility of Potential Obstacles by the Driver</b>
14:20	14:30		

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

15:00	16:00	PARALLEL SESSION 4A: <b>Horticulture Lighting and UV-C Disinfection</b> Chairs: Marek ŠMÍD (CZ), Roman DUBNIČKA (SK) Room: Artemis 1–2	
15:00	15:20	013 OP	Tim HEGEMANN, Quoc Khanh TRAN (DE) <b>Methods to Determine Photosynthetic Photon Flux Density (PPFD) using Low-cost Spectral Sensors in Daylight</b>
15:20	15:40	015 OP	Jens BALASUS, Quoc Khanh TRAN (DE) <b>Virtual Plant Models as a Tool in Horticultural Luminaire Design</b>
15:40	15:50	048 PP	László BALÁZS, József NÁDAS, Zsolt MOLNÁR, Tamás PÁVA, Zoltán SEJPES (HU) <b>Optimization of Spatial Photon Irradiance Distribution for Indoor Vertical Farms</b>
15:50	16:00	051 PP	Dirk SEIFERT (DE) <b>Practical Usage of UV-C for Surface and Air Disinfection</b>

16:00	16:30	CP1: EXHIBITORS' SESSION Chairs: Marek ŠMÍD (CZ), Roman DUBNIČKA (SK) Room: Artemis 1–2	
16:00	16:10	CP	OSMONT (company presentation)
16:10	16:20	CP	TECO (company presentation)
16:20	16:30	CP	Lumi DISP Illumination (company presentation)

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

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

16:30	17:30	<b>TECHNICAL MEETING</b> <b>European Lighting Educators Forum</b> Convener: Meike BARFUß (DE) Room: Artemis 1–4	
-------	-------	--	--

17:30	19:00	EVENING BREAK	
-------	-------	---------------	--

19:00	22:30	SOCIAL PROGRAMME: <b>Gala dinner</b>	
-------	-------	--------------------------------------	--

## September 22 (THURSDAY)

08:30	09:30	<b>PARALLEL SESSION 5: Road Surface Reflection Properties</b> Chairs: Petr ŽÁK (CZ), Peter JANIGA (SK) Room: Artemis 1–2	
08:30	08:50	011 OP	Valérie MUZET, Guillaume GUBLIN, Corentin MEYER (FR) <b>Photometric Characterization of Pavements Under Different Wetting Conditions</b>
08:50	09:10	032 OP	Florian GREFFIER, Vincent BOUCHER, Romain DRONNEAU, Valérie MUZET (FR) <b>Design of an Adaptive Road Lighting Installation Taking into Account the Evolution of Pavement Reflection Properties According to the Weather Conditions</b>
09:10	09:20	009 PP	Boucher VINCENT, Greffier FLORIAN (FR) <b>A Method to Estimate Road Optical Reflection Properties From Luminance Map</b>
09:20	09:30	022 PP	Laure LÉBOUC, Vincent BOUCHER, Florian GREFFIER, Sébastien LIANDRAT, Aurélia NICOLAÏ, Paul RICHARD (FR) <b>Influence of Road Surfaces on Target Visibility: Experimental Measurements</b>

09:30	10:10	CP2: SPONSORS' SESSION Chairs: Petr ŽÁK (CZ), Peter JANIGA (SK) Room: Artemis 1–2	
09:30	09:40	CP	Heliobus (silver <i>company presentation</i> )
09:40	09:50	CP	ZUMTOBEL (silver <i>company presentation</i> )
09:50	10:00	CP	GL OPTIC (bronze <i>company presentation</i> )
10:00	10:10	CP	TechnoTeam (bronze <i>company presentation</i> )

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

10:30	12:00	PARALLEL SESSION 6A: <b>Photometry and Radiometry</b> Chairs: Frédéric LELOUP (BE), Roman DUBNIČKA (SK) Room: Artemis 1–2	
10:30	10:50	077 OP	Petr KLIMENT, Marek ŠMÍD, Geiland PORROVECCHIO, Jiří TESAŘ (CZ) <b>Candela Realisation Based on LED Standard Lamp and Unfiltered Radiometers at CMI</b>
10:50	11:10	039 OP	Sneha JAIN, Jan WIENOLD, Marilyn ANDERSEN (CH) <b>Comparison Between CIE 2° and 10° Field Photopic Luminosity Functions V(<math>\lambda</math>) for Calculating Daylight Discomfort Glare Metrics</b>
11:10	11:20	071 PR	Marcin PELKO (PL) <b>Practical Approach to Application of Radiometer for Measuring and Evaluation Sources With Different Spectral Characteristics of UV Radiation</b> ( <i>PR presentation</i> )
11:20	11:30	052 PP	María TEJADA-CASADO, Luvín Munish RAGOO, Luis GÓMEZ-ROBLEDO, Manuel MELGOSA (ES) <b>Simulating CIE LED Illuminants With a Low-Cost Six-Channels LED System</b>
11:30	11:40	012 PP	Nima FOROUZANDEH, Eleonora BREMBILLA, J. ALSTAN JAKUBIEC (NL) <b>Image-based Material Characterization for Daylight Simulation Using Illuminance-proxy and Artificial Neural Networks</b>
11:40	11:50	023 PP	Jan KRÜGER, Josef SCHÜTZ (DE) <b>Pitfalls in Low Power Measurement of Smart Lighting Products</b>
11:50	12:00	058 PP	Michal VIK, Martina VIKOVÁ, Azmary Akter MUKTHY (CZ) <b>Color Rendering Evaluation Using Metameric Pairs and D&amp;H Color Rule</b>

10:30	12:00	PARALLEL SESSION 6B: <b>Obtrusive Light</b> Chairs: Constantinos BOUROUSSIS (GR), Rafał KRUPIŃSKI (PL) Room: Artemis 3–4	
10:30	10:50	006 OP	David M. KRETZER, Alexander REICHENBACH (CH) <b>Developing Light Pollution Reduction Guidelines for Switzerland</b>
10:50	11:10	063 OP	Annika JÄGERBRAND, Maria NILSSON TENGELIN, Dorukalp DURMUS (SE) <b>An Overview of the Adverse Effects of Outdoor Light at Night and the Research Methods Used in Different Areas</b>
11:10	11:30	019 OP	Krzysztof SKARŻYŃSKI (PL) <b>On the Applicability of Obtrusive Light Assessment Parameters – Upward Light Ratio and Upward Flux Ratio</b>
11:30	11:40	041 PP	Patrik KUČERA, Romain LAPUJADE, Jaroslav VYCHYTIL, Lenka MAIEROVÁ (CZ) <b>Architectural Lighting in the Context of Visual Comfort and Environmental Aspects of Artificial Light at Night</b>
11:40	11:50	079 PP	Petr ŽÁK, Marek BÁLSKÝ, Michal KOZLOK (CZ) <b>The Issue of Obtrusive Light Control</b>
11:50	12:00	083 PP	Petr ŽÁK, Simona VONDRÁČKOVÁ (CZ) <b>Procedure for Establishing Environmental Zones</b>

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

13:00	14:30	TOPICAL WORKSHOP WS1 <b>Practical solutions of integrative lighting installations</b> Convener: Werner Osterhaus (DE) Room: Artemis 1–2	
-------	-------	--	--










13:00	14:30	TOPICAL WORKSHOP WS2 <b>Balancing the architectural lighting and light pollution</b> Convener: Peter Raynham (UK) Room: Artemis 3–4	
-------	-------	--	--

14:30	15:00	CLOSING SESSION Chairs: Dionýz GAŠPAROVSKÝ (SK), Tomáš NOVÁK (CZ) Room: Artemis 1–2	
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 (CZ) <b>The Measurement Uncertainty of the Imaging Luminance Measurement Device based on the DSLR Camera</b>
073 PA	Roman DUBNIČKA, Marek MOKRÁŇ, Peter JANIGA (SK) <b>Spectral Mismatch Corrections of Illuminance Meters for Field Measurements of Indoor Workplaces</b>
081 PA	Kamil HOUDEK, Zuzana PANSKÁ, Petr ŽÁK (CZ) <b>Field Comparison of Illuminance Meters</b>
074 PA	Marek MOKRÁŇ, Roman DUBNIČKA, Peter JANIGA, Dionýz GAŠPAROVSKÝ (SK) <b>The Position of the Luminaire and Its Effects on Selected Photometric Parameters of the Lighting System</b>
035 PA	Jan ŠKODA, Martin MOTYČKA, Petr BAXANT, Filip NOVÁK (CZ) <b>Glare Evaluation of Outdoor Lighting Systems Using a Luminance Analyser</b>
031 PA	Filip NOVÁK, Petr BAXANT, Martin MOTYČKA (CZ) <b>Measurement and Analysis of Luminance Values and Ratios on a Road with an Adaptive Lighting System</b>
087 PA	Jan LÁTAL, Stanislav HEJDUK, Tomáš STRATIL, Tomáš NOVÁK, Pavel VALICEK (CZ) <b>Measurement of Light-Technical Parameters of Public Lighting With Regard to Simulated Atmospheric Conditions</b>

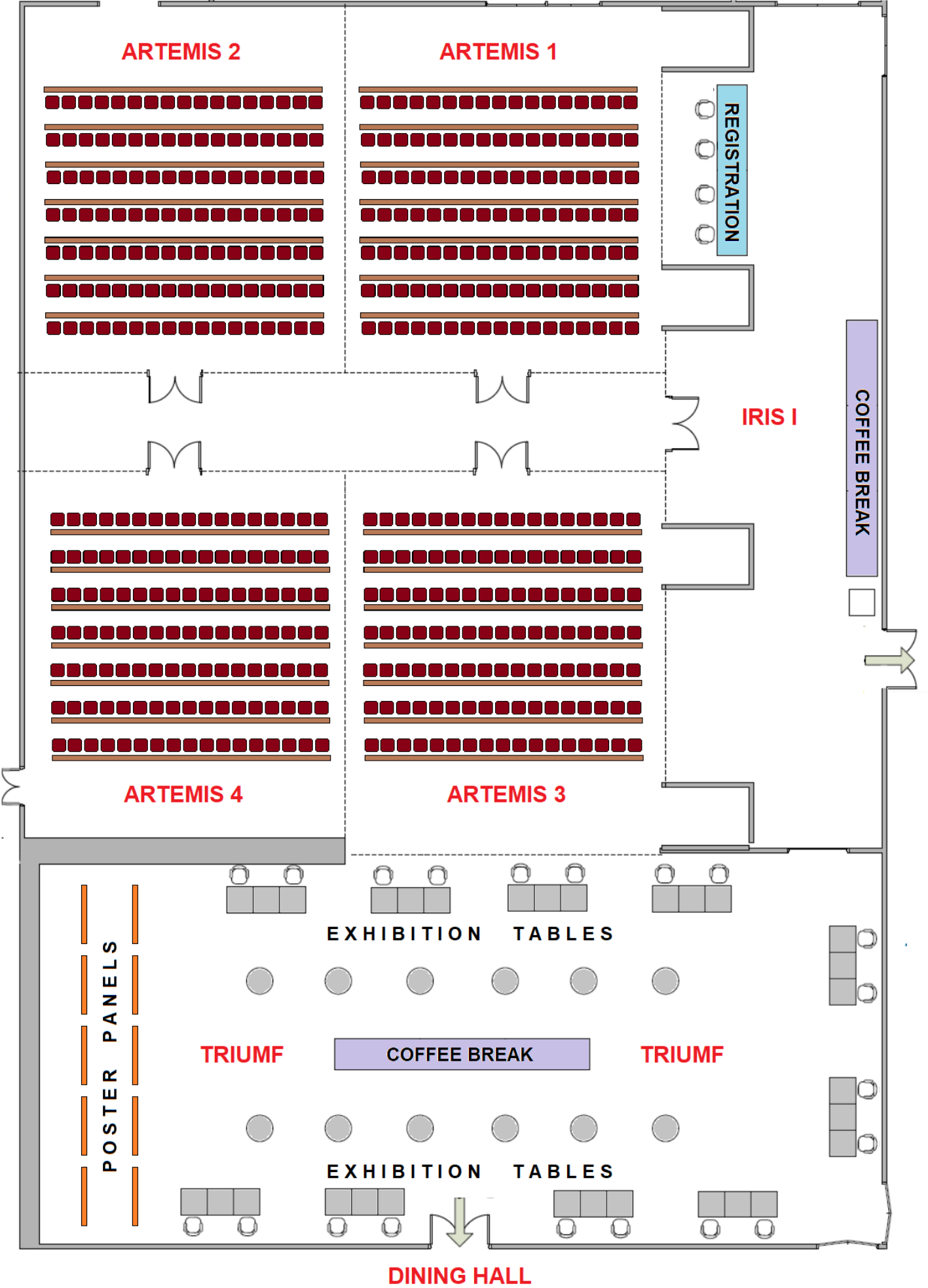
## EXHIBITORS

	GL Optic – Light quality control
	Heliobus – The daylight company
	Lumi DISP
	Měřicí technika Morava
	OSMONT – Czech premium lighting
	TECO Advanced Automation
	TechnoTeam Bildverarbeitung GmbH
	TECHNOLOGIE HLAVNÍHO MĚSTA PRAHY – Pulz naší metropole
	Zumtobel

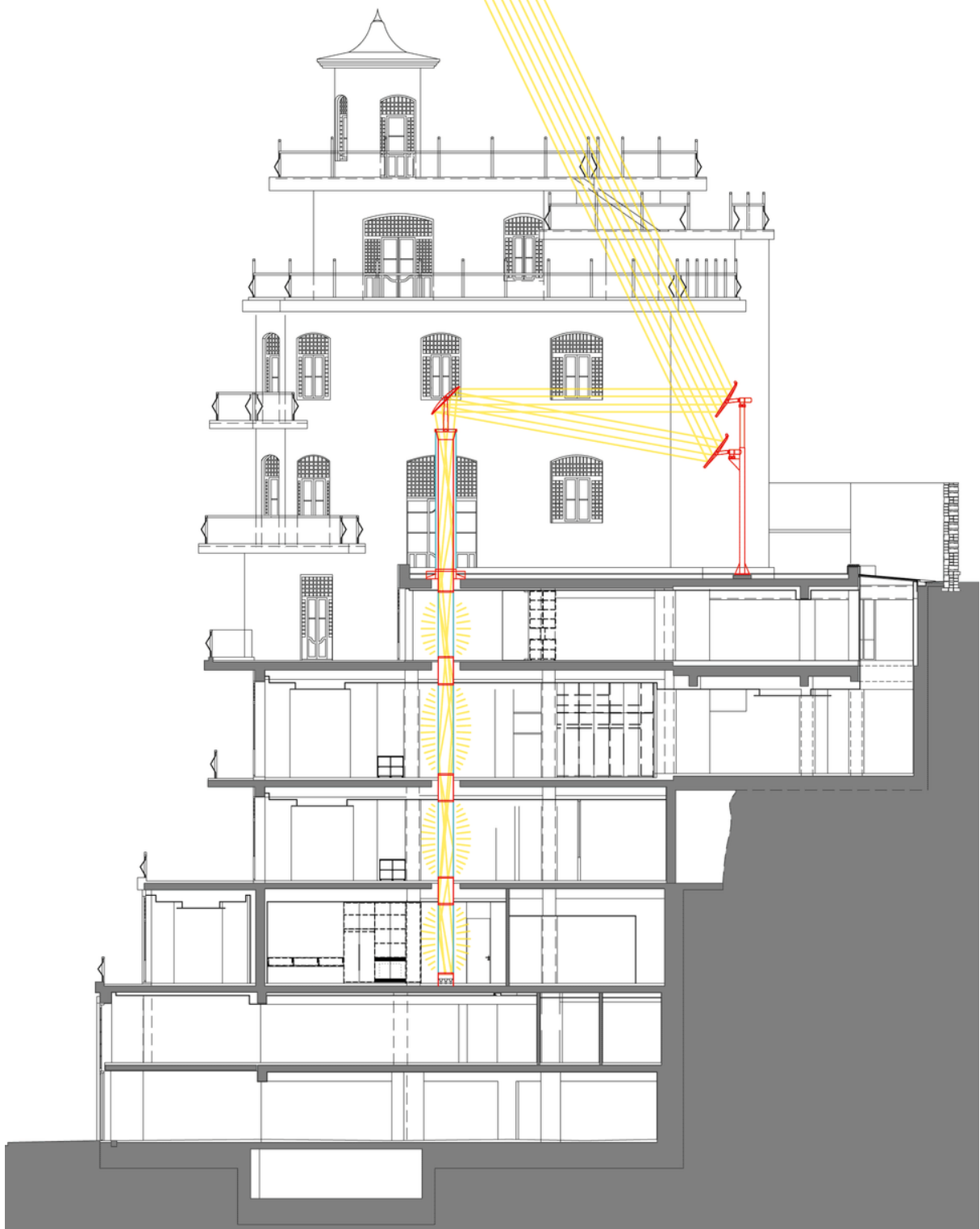
## EUROPEAN LIGHTING EDUCATORS FORUM

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. CONFERENCE LAYOUT PLAN



we bring daylight into dark spaces



## Haviřov and Ostrava can be proud of their new modern public lighting system

Thorn, global producer of indoor and outdoor lighting and part of the Zumtobel Group, has supplied state-of-the-art public lighting for two new regional projects in Haviřov and Ostrava, completed last and this year. In both cases, these are unique luminaires URBA by Thorn, which are extremely energy-efficient and contribute to environmental protection thanks to their adjustable light intensity.

A modern transport terminal has been in operation in Haviřov since last year, built in the reconstructed area in front of the railway station. It includes new parking spaces, lockable bike racks, a cycle path, repaired sidewalks, new pedestrian crossings, covered bus stops and arrival corridors.

And all this is illuminated by unique URBA luminaires with dimming function. The new Thorn lighting has also been used in Ostrava, where new public spaces for leisure activities have been available in two sections of Havlíčkovo nábřeží since the first half of this year.

The public lighting was also reconstructed, from new cable lines through masts to luminaires with the latest LED technology by Thorn. In addition to excellent light-technical parameters, the URBA luminaires offer environmental friendliness and energy efficiency – for example, they



**THORN**  
LIGHTING



automatically dim their light intensity after midnight. In addition, the use of high-quality materials and sophisticated workmanship guarantees a long service life with minimal maintenance requirements. The Thorn brand is the market leader in public lighting. Its sophisticated URBA urban luminaires for street lighting and public spaces are the epitome of smart, efficient and environmentally friendly lighting with a wide range of smart solutions from self-dimming to remote control. In addition, Thorn's LED luminaires minimize the "light smog" and thus contribute to the protection of the night sky and biodiversity. As a result, URBA luminaires can boast the prestigious „IDA Dark Sky Approved“ certification issued by the international non-profit organization Dark Sky Association, with which Thorn has cooperated for a long time.

### **About the Zumtobel Group**

*The Zumtobel Group aims to create wellbeing and improve people's quality of life through light – as a group, and through all its individual brands, Thorn, Tridonic and Zumtobel. As a leading supplier of innovative lighting solutions, the Group offers its customers around the world a comprehensive portfolio, where the focus is invariably on people and their needs. The company's know-how about the effects of light on people, acquired over decades, forms the basis for sustainable and future-oriented lighting solutions that are increasingly energy- and resource-efficient while providing the best possible quality of light. The Group is listed on the Vienna Stock Exchange (ATX Prime) and currently holds a workforce of around 5,800 employees. In the 2021/22 financial year, the company posted revenues of EUR 1,148.3 million. The Zumtobel Group is based in Dornbirn in the Vorarlberg region of Austria. For further information, please visit [z.lighting/group](https://www.zlighting/group).*

## ZUMTOBEL Group

#### 4. SPONSORS

##### GOLD



##### SILVER



##### BRONZE



## EXHIBITORS



## 5. SECRETARIAT

Conference headquarters:

**Česká společnost pro osvětlování, z. s.**

17. listopadu 2172/15

708 00 Ostrava-Poruba

Czech Republic

Chairman:

**Tomáš Novák**

 +420 602 724 207

 tomas.novak1@vsb.cz

Conference programme:

# Slovenská svetelnotechnická spoločnosť

Ilkovičova 3

812 19 Bratislava

Slovak Republic

Chairman:

# Dionýz Gašparovský

 +421 903 455 035

✉ dionyz.gasparovsky@stuba.sk

### Notes:

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.