

**Monday, September 18
Morning**

Linhart Hall

09:00 - 09:10

OPENING SESSION
Grega Bizjak, SI (Local Organizing Committee Chair)
Peter Blattner, CH (CIE President)

Keynote Presentation
Chair: Peter Blattner, CH

09:10 - 10:10

IP01
THE FUTURE OF INDOOR LIGHTING STANDARDS (AND HOW TO GET THERE)
Peter Boyce, GB & Kit Cuttle, NZ

10:10 - 10:25

GOLD PIN AWARD CEREMONY

10:25 - 10:50

COFFEE BREAK

Linhart Hall

Kosovel Hall

M3 & M4 Halls combined

Oral Presentations

10:50 - 12:10

PA1-1
D2 - Spectroradiometry and photometry
Chair: TBD

PA1-2
D3 - Office lighting
Chair: TBD

PA1-3
D4/D3 - Road safety
Chair: TBD

10:50 - 11:05

OP40
Constantinos Bouroussis, CH
RECONSTRUCTION OF CAMERA SPECTRAL
RESPONSIVITY USING MULTIPLE NARROW-BAND
LED RADIANCE SOURCES

OP57
Bodil Karlsson, SE
EMOTIONS ASSOCIATED WITH AN OFFICE
ILLUMINATION AND A PROCESS TO IMPROVE THEM

OP6
Nima Moadab, GB
IMPROVING THE DETECTION OF PEDESTRIANS
AFTER DARK

11:05 - 11:20

OP61
Udo Krüger, DE
SENSITIVITY EVALUATION OF MEASUREMENT
UNCERTAINTY CONTRIBUTIONS OF SPECTRAL DATA
FOR CALCULATED INTEGRAL QUANTITIES

OP11
Özge Karaman Madan, NL
EFFECTS OF DYNAMIC LIGHT PATTERNS WITH
NATURAL AND NON-NATURAL TEMPORAL
COMPOSITION ON REPORTED STRESS RECOVERY,
FASCINATION, AND ASSOCIATION WITH NATURE

OP66
Arjen Mentens, BE
IMPACT OF COLOUR TEMPERATURE AND
ILLUMINATION LEVEL ON SAFETY PERCEPTION FOR
PARKING GARAGE LIGHTING

11:20 - 11:35

OP77
Christian Schrader, DE
SPECTRAL DEPENDENT NON-LINEARITY OF CHARGE
ACCUMULATING PIXEL MATRIX SENSORS

OP74
Arjen Raue, NL
BIODYNAMIC LIGHTING IN PRACTICE: PILOT STUDY
IN A GOVERNMENT OFFICE

OP36
Jim Uttley, GB
CYCLIST FATALITIES INCREASE ON UNLIT ROADS

11:35 - 11:50

OP35
Hiroshi Shitomi, JP
METROLOGICAL IMPACT OF INTRODUCING CONE
FUNDAMENTAL-BASED PHOTOMETRY AS THE BASIS
TO DERIVE PHOTOMETRIC UNITS

OP81
Jennifer Veitch, CA
OFFICE LIGHTING FOR LIGHT-SENSITIVE
INDIVIDUALS: A PILOT TEST

OP5
Steve Fotios, GB
CYCLISTS ARE INCORRECTLY REPRESENTED IN
LIGHTING DESIGN STANDARDS

11:50 - 12:10

Discussion

Discussion

Discussion

12:10 - 13:20

LUNCH BREAK

Monday, September 18
Afternoon

	Linhart Hall	Kosovel Hall	M3 & M4 Halls combined
	Workshop/Seminar	Oral Presentations	Workshop/Seminar
13:20 - 14:55	WS1 (D3) Convenor: Peter Thorns, GB	PA2-1 D4/D1 - Road lighting measurement Chair: TBD	WS2 (D2) Convenor: Tony Bergen, AU
13:20 - 13:35	INTERIOR LIGHTING DESIGN - METRICS AND METHODS	OP8 Florian Greffier, FR Qd VS Q0 FOR SCALING OF STANDARD R-TABLES IN ROAD LIGHTING DESIGN: THE QUESTION IS WORTH ASKING	CAN CONE FUNDAMENTALS BE USED IN EVERYDAY PHOTOMETRY?
13:35 - 13:50		OP30 Laure Lebouc, FR EXPLORATORY STUDY TO DEFINE NEW OBSERVATION GEOMETRIES FOR ROAD LIGHTING DESIGN	
13:50 - 14:05		OP69 Maria Nilsson Tengelin, SE A NOVEL METHOD FOR FIELD MEASUREMENT OF LIGHT DISTRIBUTION OF MODERN VEHICLE HEADLAMPS	
14:05 - 14:20		OP68 Valérie Muzet, FR ON SITE PHOTOMETRIC CHARACTERIZATION OF WET PAVEMENTS	
14:20 - 14:35		OP76 Katrin Schier, DE TOWARDS A GENERALIZABLE MODEL FOR THE DETECTION OF NON-UNIFORMITIES IN LUMINANCE DISTRIBUTIONS	
14:35 - 14:55		Discussion	
14:55 - 15:20		COFFEE BREAK	

	Linhart Hall	Kosovel Hall	M3 & M4 Halls combined
	Presented Posters (PS)		
15:20 - 16:05	PS1 Presented Posters (D1/D3/D6/D8) Chair: TBD	PS2 Presented Posters (D3/D1/D6) Chair: TBD	PS3 Presented Posters (D2/D4) Chair: TBD
15:20 - 15:25	PP9 Ruili He, GB VISUAL COLOUR-DIFFERENCE ASSESSMENT OF 3D PRINTED SAMPLES	PP2 Michèle Atié, FR METHOD FOR EVALUATING FIDELITY OF RESTITUTION OF SUBJECTIVE IMPRESSIONS IN IMMERSIVE VIRTUAL REALITY IN DAYLIT INTERIOR SCENES	PP7 Dionyz Gasparovsky, SK LIGHTING ENVIRONMENT IN URBAN PARKLANDS AND GARDENS: CASE MODELS FOR BRATISLAVA
15:25 - 15:30	PP11 Luke Hellwig, US IMPROVEMENTS TO CIECAM16 AND FUTURE DIRECTIONS	PP4 Kynthia Chamilothoni, NL THE IMPACT OF COLOUR AND SIMULATION DETAIL ON SUBJECTIVE IMPRESSIONS OF DAYLIT SCENES SHOWN IN VIRTUAL REALITY	PP20 Enoch Saint-Jacques, FR INVESTIGATING THE EVOLUTION OF ROAD SURFACE DESCRIPTORS ACCORDING TO OBSERVATION ANGLES USING A DATABASE OF THE REFLECTION PROPERTIES OF URBAN MATERIALS
15:30 - 15:35	PP16 Stuart Mucklejohn, GB QUANTIFYING THE POTENTIAL IMPACT OF LIGHTING UNIFORMITY ON PLANT GROWTH IN HORTICULTURAL INSTALLATIONS	PP15 Marshal Maskarenj, BE MIXED EFFECT OF TIME OF DAY AND CORRELATED COLOUR TEMPERATURE ON DISCOMFORT GLARE	PP22 Christoph Schulze, DE CHARACTERISATION OF ROAD REFLECTION IN RELATION TO VEHICLE HEADLAMP ILLUMINATION
15:35 - 15:40	PP21 Christoph Schierz, DE THEORETICAL CONSIDERATIONS ON THE ROLE OF THE FLUORESCENT RETINAL AGING PIGMENT LIPOFUSCIN ON COLOUR PERCEPTION	PP17 Yuki Oe, JP EVALUATION STRUCTURE ON PREFERENCE OF PAINTING'S APPEARANCE IN MUSEUM LIGHTING	PP28 Lanlan Wei, SI EXPLORE THE RELATIONSHIP BETWEEN AMBIENT LIGHT AND CYCLING FREQUENCY AND SPEED
15:40 - 15:45	PP23 Chen Shenfei, CN EVALUATION OF ARTIFICIAL LIGHT AT NIGHT IN URBAN COMMERCIAL AREAS BASED ON COLOR HARMONY AND VISUAL ENTROPY	PP24 Hao Shi meng, CN EFFECTS OF COLOURED LIGHTING ON HUMAN PHYSIOLOGICAL AND PSYCHOLOGICAL RESPONSES IN REAL AND VIRTUAL REALITY ENVIRONMENTS	PP5 Alejandro Ferrero, SP PRELIMINARY STUDY FOR TRACEABILITY ON SPECULAR GLOSS
15:45 - 15:50	PP3 Simon Belgers, NL DEGRADATION OF BIOLOGICAL POTENCY IN LED LIGHT SOURCES WITH THEIR LIFETIME	PP25 Valerio Lo Verso, IT SUSTAINABLE DAYLIGHTING TRAINING: THE NLITED PROJECT	PP8 Lou Gevaux, FR METHOD FOR TRACEABILITY OF MULTISCALE BIDIRECTIONAL REFLECTANCE DISTRIBUTION FUNCTION MEASUREMENTS
15:50 - 15:55	PP6 Francesca Fragliasso, IT DOES LIGHT AFFECT FUNGAL GROWTH? EXPERIMENTAL ANALYSIS UNDER MONOCHROMATIC LED SOURCES	PP26 Bo Tang, CN THE INFLUENCE OF THE CONTENTS OF DYNAMIC WINDOW VIEW ON THE HEALING EFFECT OF PEOPLE IN ISOLATED, CONFINED AND EXTREME ENVIRONMENT	PP10 János Hegedűs, HU LED LIFETIME TESTS FOR CIRCUIT SIMULATION MODELLING
15:55 - 16:00	PP18 Masayuki Osumi, JP SPARKLE AND GRAININESS INDEX MEASUREMENT OF METALLIC COATINGS WITH MATTING AGENT	PP29 Songbo Zhang, CN ENERGY SAVING WITHOUT COMPROMISING HUMAN COMFORT: A FIELD STUDY OF SMART LIGHTING IN OFFICE	PP14 Ville Mantela, FI TEMPORAL LIGHT ARTEFACT METRICS OF COMMERCIAL LED LAMPS
16:00 - 16:05		PP13 Li Zhou, CN THE EFFECT OF LIGHT INTERVENTION ON EMOTION BASED ON THE COMBINED IMPACT OF VISUAL PREFERENCE AND NON-VISUAL INFLUENCE	PP19 Masoud Rastgou, FI VALIDATION OF A MICRO-REFLECTOMETER FOR ACCURATE CHARACTERIZATION OF THIN FILM COATINGS

Second foyer	
16:05 - 17:35	Poster session 1

Lobby of Faculty of Electrical Engineering, University of Ljubljana	
19:00 - 21:00	Student Networking Event (by invitation)

**Tuesday, September 19
Morning**

Linhart Hall			
Invited Presentation Chair: TBD			
IP02			
08:30 - 09:30	GETTING THE DATA RIGHT - APPLYING FAIR PRINCIPLES TO MEASUREMENT AND DATA. FINDABLE - ACCESSIBLE – INTEROPERABLE Simon Hodson, FR		
COFFEE BREAK			
Room configuration			
	Linhart Hall	Kosovel Hall	M3 & M4 Halls combined
Oral Presentations			
10:00 - 11:20	PA3-1 D3 - Sustainability 1 and resiliency Chair: TBD	PA3-2 D3/D6 - Integrative lighting 1 Chair: TBD	PA3-3 D1/D3 - Augmented and virtual reality Chair: TBD
10:00 - 10:15	OP23 Yuki Akizuki, JP STUDY ON LIGHTING PLANNING FOR ACTIVE EVACUATION GUIDANCE DESIGN	OP3 Kai Broszio, DE LIGHT DIRECTION AT NIGHT INFLUENCES NON- VISUAL EFFECTIVENESS	OP63 Li-Chen Ou, TW CHARACTERISING HEAD-MOUNTED DISPLAYS BASED ON VISUAL ASSESSMENT
10:15 - 10:30	OP86 Hideki Yamaguchi, JP EVALUATION OF LIGHTING ENVIRONMENT IN A GYMNASIUM FOR VARIOUS ACTIVITIES DURING USE OF AN EVACUATION CENTER	OP53 Yingying Huang, CN THE EFFECT OF S-CONE ON LIGHT-INDUCED ALERTNESS BASED ON ACCURACY STUDY OF EEG EVALUATION METHOD	OP67 Hiroyuki Miyake, JP RELIABILITY OF SPACIOUSNESS EVALUATION FOR ROOMS WITH WINDOWS IN AN EXPERIMENT USING HEAD-MOUNTED DISPLAY VIRTUAL REALITY
10:30 - 10:45	OP25 Rengin Aslanoğlu, PL A CROSS-COUNTRY AND SEASON ANALYSIS OF RESIDENTIAL LIGHTING	OP52 Steffen Hartmeyer, CH INSIGHTS INTO SPECTRALLY RESOLVED LIGHT- DOSIMETRY DATA	OP13 Xi Mou, US THE EFFECT OF AMBIENT LIGHTING IN THE USAGE OF AUGMENTED REALITY
10:45 - 11:00	OP37 Johannes Weninger, AT ENERGY AND LIGHT DOSE WEIGHTED USER PROFILES FOR SIMULATION AND EXTENDED COMMISSIONING	OP16 Anna Pellegrino, IT INTEGRATIVE LIGHTING IN OFFICES: RESULTS FROM FIELD MEASUREMENTS AND ANNUAL SIMULATIONS	OP14 Niloofer Nikookar, US INVESTIGATING THE IMPACT OF COMBINED DAYLIGHT AND ELECTRIC LIGHT ON HUMAN PERCEPTION OF INDOOR SPACES USING IMAGE PROCESSING AND VIRTUAL REALITY
11:00 - 11:20	Discussion	Discussion	Discussion
11:20 - 12:30	LUNCH BREAK		

**Tuesday, September 19
Afternoon**

		Linhart Hall	Kosovel Hall	M3 & M4 Halls combined
		Oral Presentations		
12:30	- 14:05	PA4-1 D3//D1/D6 - Integrative lighting 2 Chair: TBD	PA4-2 D4 - Sustainability 2 Chair: TBD	PA4-3 D1/D2 - Optical properties of materials Chair: TBD
12:30	- 12:45	OP4 Roel Daneels, BE A CONTINUOUS RATING EXPERIMENT TO TEST THE FEASIBILITY OF WORKING WITH HIGH-LUMINANCE MONITORS TO INCREASE LIGHT AT EYE LEVEL	OP22 Celine Villa, FR FOUR-MONTH FOLLOW-UP OF THE PERFORMANCE OF LUMINESCENT ROAD MARKINGS	OP31 Maria Santandreu Oliver, BE SOFT METROLOGY OF TRANSMISSION HAZE: AN EXPLORATORY STUDY
12:45	- 13:00	OP17 Luke Price, GB LIGHTING HYGIENE, MELANOPIC DAYLIGHT EFFICACY RATIOS AND ELECTRICAL ENERGY	OP34 Leopoldo Angrisani, IT A FIRST STEP IN PERFORMANCE ASSESSMENT OF A GRAZING LIGHTING SYSTEM FOR MOTORWAYS: A PRACTICAL CASE STUDY CONSIDERING FOG AS THE MAIN INFLUENCE QUANTITY	OP24 Robin Aschan, FI UNIVERSAL BIDIRECTIONAL REFLECTANCE DISTRIBUTION FUNCTION DATA FORMAT FOR MACHINE-DRIVEN SCIENCE
13:00	13:15	OP75 Hannah Rolf, DE EFFECTS OF LIGHT ON ATTENTION OF FULL TIME DAYTIME WORKERS	OP44 Leonard De Causmaecker, BE TOWARDS PUBLIC LED LIGHTING WITH MINIMAL IMPACT ON INSECT MOVEMENT	OP28 Guillaume Ged, FR EFFECT OF SURFACE CURVATURE ON SPECULAR GLOSS EVALUATIONS
13:15	- 13:30	OP10 Zhiguo Hu, CN THE CONTRIBUTION OF IPRGC-RELATED MELANOPIC ILLUMINANCE TO SPATIAL BRIGHTNESS IN INTERIOR SPACES	OP55 Annika Jägerbrand, SE WHAT TO REPORT IN STUDIES OF ANTHROPOGENIC LIGHT AND LIGHT POLLUTION	Discussion
13:30	- 13:45	OP42 Caroline Karmann, DE VARIATION IN NON-IMAGE FORMING EFFECTS OF LIGHT AT THE WORKPLACE: A PILOT STUDY IN SWISS OPEN-PLAN OFFICES	OP70 Tomas Novak, CZ BILLBOARD LIGHTING SYSTEMS MODELING FROM THE POINT OF VIEW OF ITS RADIATION INTO UPPER HEMISPHERE	
13:45	- 14:05	Discussion	Discussion	

14:05 - 14:30	COFFEE BREAK			
	Linhart Hall	Kosovel Hall	M3 & M4 Halls combined	
	Oral Presentations		Workshop/Seminar	
14:30 - 16:05	PA5-1 D2/D1 - Temporal light modulation Chair: TBD	PA5-2 D3 - Daylight Chair: TBD	WS3 (Cross CIE) Convenor: Luoxi Hao, CN	
14:30 - 14:45	OP12 Christophe Martinsons, FR UNTANGLING LIGHT IN "NOISY" LUMINOUS ENVIRONMENTS	OP1 Ignacio Acosta, SP CONTINUOUS OVERCAST DAYLIGHT AUTONOMY: A NEW SENSORLESS ALGORITHM FOR LIGHTING SMART CONTROLS	LIGHTING EDUCATION: METHODS, APPROACHES AND EXPERIENCES	
14:45 - 15:00	OP21 Anders Thorseth, DK TOWARDS A COMPREHENSIVE CALCULATION OF MEASUREMENT UNCERTAINTY FOR TEMPORAL LIGHT MODULATION	OP26 Priji Balakrishnan, DE SKYSPECTRA: AN OPEN-SOURCE DATA PACKAGE OF WORLD-WIDE SPECTRAL DAYLIGHT		
15:00 - 15:15	OP62 Johannes Ledig, DE UTILIZING THE ROLLING SHUTTER OF ACTIVE PIXEL MATRIX SENSORS TO PERFORM QUALITATIVE MEASUREMENTS OF TEMPORAL LIGHT MODULATION	OP73 Amanda Pinheiro, BR DAYLIGHT REQUIREMENTS: AN OVERVIEW OF DEFINITIONS, PROGRESS AND GAPS		
15:15 - 15:30	OP80 Annika Stein, DE SYSTEMATIC ERRORS OF TEMPORAL LIGHT MODULATION METRICS RELATED TO SAMPLING DURATION	OP15 Alfiya Orman, US IMPLEMENTATION OF SPECTRAL SKY DEFINITIONS IN A LIGHTING SIMULATION TOOL AND COMPARISON TO SPECTRAL MEASUREMENTS		
15:30 - 15:45	OP60 Xiangzhen Kong, NL DEPENDENCE OF TEMPORAL FREQUENCY AND CHROMATICITY ON THE VISIBILITY OF THE PHANTOM ARRAY EFFECT	OP59 Dong Hyun Kim, CH PERFORMANCE INVESTIGATION OF CAMERAS USING HDR SENSORS FOR DAYLIGHT GLARE EVALUATIONS		
15:45 - 16:05	Discussion	Discussion		
16:05 - 17:35	Second foyer Poster session 2			
20:00 - 00:00	Grand Hotel Union Conference Dinner			

**Wednesday, September 20
Morning**

Linhart Hall	
Invited Presentation Chair: TBD	
08:30 - 09:30	IP03 SEEING AND FEELING CHANGES IN DAYLIGHT OVER TIME Anya Hurlbert, GB
09:30 - 09:55	COFFEE BREAK
09:55 - 10:00	Room configuration

	Linhart Hall	Kosovel Hall	M3 & M4 Halls combined
	Oral Presentations	Workshop/Seminar	Oral Presentations
10:00 - 11:20	PA6-1 D3/D4 - Energy efficiency Chair: TBD	WS4 (D3/D4) Convenors: Jennifer Veitch, CA & Steve Fotios, GB	PA6-2 D4/D6/D8/D1 - Metrology challenges and opportunities Chair: TBD
10:00 - 10:15	OP2 Wenkai Bian, AU A MACHINE-LEARNING APPROACH TO THE OPTIMIZATION OF LIGHTING CONTROL SYSTEMS FOR ENERGY SAVINGS AND VISUAL NEEDS	LOOKING AHEAD - LIGHTING FOR PREPAREDNESS	OP29 Paola Iacomussi, IT IS IT TIME FOR A NON-BIOLOGICAL REFERENCE OBSERVER?
10:15 - 10:30	OP45 Kia Aurora Ainola, FI A MODEL FOR DETECTING DAYLIGHT PROVISION TO SAVE ENERGY AND TO COMPLY WITH THE EN 12464-1 STANDARD		OP39 Tony Bergen, AU THE NEED FOR STANDARDISATION IN THE MANUFACTURE, CALIBRATION AND USE OF BILIRUBIN RADIOMETERS
10:30 - 10:45	OP58 Egemen Kaymaz, TR ANALYSES ON LIGHTING ENERGY CONSUMPTION THROUGH COST-OPTIMAL INVESTMENTS FOR RESIDENCES: A CASE STUDY IN TURKEY		OP33 Aiman Raza, FR HDR IMAGING FOR LOW LIGHT HYPERSPECTRAL ACQUISITION
10:45 - 11:00	OP71 Sermin Onaygil, TR ENERGY SAVINGS FOR ADAPTIVE LED CONVERSION IN EXISTING ROAD LIGHTING INSTALLATIONS		OP72 Kazim Hilmi Or, TR LI-FI DATA TRANSMISSION PERSPECTIVE IN HUMAN ARTIFICIAL VISION IN BLIND PATIENTS
11:00 - 11:20	Discussion		Discussion

11:20 - 12:30	LUNCH BREAK
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11:20 - 12:30

LUNCH BREAK

Wednesday, September 20
Afternoon

	Linhart Hall	Kosovel Hall	M3 & M4 Halls combined
	Oral Presentations		Workshop/Seminar
12:30 - 14:05	PA7-1 D2/D6 - Integrative lighting 3 Chair: TBD	PA7-2 D1 - Colour Chair: TBD	WS5 (D4) Convenor: Sermin Onaygil, TR
12:30 - 12:45	OP20 Manuel Spitschan, DE GUIDELINES AND CHECKLIST FOR DOCUMENTING AND REPORTING HUMAN LABORATORY-BASED OCULAR LIGHT EXPOSURE INTERVENTIONS	OP64 Jiaye Li, US CHARACTERIZING CAM02UCS PREDICTIONS OF PERCEIVED COLOURFULNESS AND HUE CHANGES AT DIFFERENT LIGHT LEVELS DUE TO HUNT EFFECT	METRICS FOR LIGHTING DESIGN AND IMPLEMENTATION: SHOULD THEY CHANGE IN RESPONSE TO AN ENERGY EMERGENCY?
12:45 - 13:00	OP19 Niloufar Tabandeh, DE PHYSIOLOGICALLY-RELEVANT SPECTRAL AND ALPHA-OPIC CHARACTERISATION OF NATURAL SCENES ACROSS TIME AND SPACE	OP32 Yoshi Ohno, US A COLOUR FIDELITY MODEL BASED ON HUNT EFFECT	
13:00 - 13:15	OP82 Tongyue Wang, CN EFFECTS OF FULL-DAY DYNAMIC LIGHTING PATTERNS ON HORMONE CONCENTRATION, CORE BODY TEMPERATURE AND SUBJECTIVE ALERTNESS AT BEDTIME IN CONFINED SPACES	OP48 Changjun Li, CN TESTING COLOUR-DIFFERENCE FORMULAS FROM LMS COLOUR SPACES INSPIRED FROM CIELAB	
13:15 - 13:30	OP83 Yanni Wang, CN EFFECTS OF ZERO BLUE LIGHTING ON SLEEP, MOOD AND SUBJECTIVE ALERTNESS OF OCCUPANTS IN ANTARCTIC	OP54 Toshie Iwata, JP METRICS INDICATING PROPERTIES OF LIGHT COLOUR AND SUBJECTIVE EVALUATION OF COLOUR APPEARANCE	
13:30 - 13:45	OP84 Junli Xu, CN EVALUATION OF ANNUAL DYNAMIC LIGHT VARIATION FOR NON-VISUAL EFFECTS: A CASE STUDY IN GROUND FLOOR CLASSROOMS OF CHINESE MIDDLE SCHOOL BASED ON LARK 2.0 SIMULATION TOOL	OP65 Yan Lu, GB A NEW DATABASE OF HUMAN SKIN COLOUR	
13:45 - 14:05	Discussion	Discussion	

14:05 - 14:30

COFFEE BREAK

	Linhart Hall	Kosovel Hall	M3 & M4 Halls combined
	Oral Presentations		
14:30 - 16:05	PA8-1 D1/D3/D2 - Glare and discomfort Chair: TBD	PA8-2 D1/D3 - Indoor lighting Chair: TBD	PA8-3 D4 - Outdoor integrative lighting Chair: TBD
14:30 - 14:45	OP56 Sneha Jain, CH IS THERE AN EFFECT OF MACULAR PIGMENT DENSITY ON DISCOMFORT GLARE IN INDOOR DAYLIGHT CONDITIONS?	OP50 Xinyi Hao, CN A STUDY OF THE PSYCHOLOGICAL GAIN OF ARTIFICIAL VIEW WINDOWS IN A WINDOWLESS SPACE	OP7 Shahab Gorjimahlibani, GB DO FEMALE PEDESTRIANS EXPRESS A LOWER DEGREE OF REASSURANCE THAN MALE PEDESTRIANS? AND DOES ROAD LIGHTING HELP?
14:45 - 15:00	OP18 Geraldine Quek, SG INVESTIGATING THE ADDITIVITY OF GLARE SOURCES IN DISCOMFORT GLARE METRICS	OP27 Craig Bernecker, US 50 YEARS LATER: EXTENDING THE WORK OF JOHN FLYNN AND CIE STUDY GROUP A	OP47 Aysheh Alshdaifat, GB ROAD LIGHTING IMPACT ON PEDESTRIAN ALERTNESS: TESTING THE NULL FINDING OF GIBBONS AND BHAGAVATHULA

15:00 - 15:15	<p>OP46 Zeynep Ekim, SE PERCEPTION OF GLARE IN RELATION TO THE CIE SCALE ON UNIFIED GLARE RATING AND THE IMPACT OF AMBIENT LIGHT ON BOTH UGR AND SUBJECTIVE GLARE INDEX SCALES (SGI)</p>	<p>OP43 Siyao Cui, CN NEUROPHYSIOLOGY-BASED LUMINOUS ENVIRONMENT CLASSIFICATION AND FEATURE EXTRACTION</p>	<p>OP78 Péter Schwarcz, HU CALCULATION METHOD AND EVALUATION OF POSSIBLE EFFECT ON CIRCADIAN SYSTEM OF DRIVERS UNDER TYPICAL STREETLIGHTING CONDITIONS</p>
15:15 - 15:30	<p>OP51 Naoya Hara, JP VISUAL CHARACTERISTICS IN THREE DISCOMFORT GLARE EVALUATION MODELS IN ACCORDANCE WITH THE VISUAL SYSTEM</p>	<p>OP85 İpek Yalçın, TR ATMOSPHERE DECIPHERED: LUMINANCE CONTRAST MEASURE FOR LIGHTING DESIGN</p>	<p>OP87 Xianxian Zeng, CN EXPLORING THE RESTORATIVE POTENTIAL OF DAYTIME AND NIGHTTIME SCENERY IN CAMPUS SPACE: PHYSIOLOGICAL, PSYCHOLOGICAL AND BEHAVIOURAL ANALYSIS</p>
15:30 - 15:45	<p>OP88 Steve Fotios, GB DISCOMFORT FROM GLARE: WHY WE NEED A CIE TECHNICAL COMMITTEE TO REPORT ON BEST PRACTICE FOR COMMONLY USED METHODS AND TO PROPOSE NEW METHODS</p>	<p>OP9 Kevin Houser, US A CORE LIGHTING CURRICULUM FOR UNIVERSITY STUDENTS</p>	<p>OP49 Ronald Gibbons, US NATURALISTIC ASSESSMENT OF THE IMPACT OF ROADWAY LIGHTING ON MELATONIN</p>
15:45 - 16:05	Discussion	Discussion	Discussion

Linhart Hall			
16:05 - 16:35	CLOSING SESSION		

Konnex klub			
18:00 - 22:00	Badminton tournament		

Posters

Poster session 1: Monday, September 18, 16:05 - 17:35

NOTE: Presented Posters are shown with the respective presented poster presentation number (PPxx) and the Posters with Poster number (POxxx).

PP9	Ruili He	United Kingdom	VISUAL COLOUR-DIFFERENCE ASSESSMENT OF 3D PRINTED SAMPLES
PP11	Luke Hellwig	United States	IMPROVEMENTS TO CIECAM16 AND FUTURE DIRECTIONS
PP15	Marshal Maskarenj	Belgium	MIXED EFFECT OF TIME OF DAY AND CORRELATED COLOUR TEMPERATURE ON DISCOMFORT GLARE
PP21	Christoph Schierz	Germany	THEORETICAL CONSIDERATIONS ON THE ROLE OF THE FLUORESCENT RETINAL AGING PIGMENT LIPOFUSCIN ON COLOUR PERCEPTION
PP24	Hao Shi meng	China	EFFECTS OF COLORED LIGHTING ON HUMAN PHYSIOLOGICAL AND PSYCHOLOGICAL RESPONSES IN REAL AND VIRTUAL REALITY ENVIRONMENTS
PO02	Suphatsara Asarasri	Thailand	THE EFFECT OF VARIOUS LED LIGHT HUES AND COLOR SATURATION ON STRESS MITIGATION FOR OFFICE WORKERS: AN EXPERIMENTAL STUDY
PO24	Qiang Liu	China	EVALUATING THE COLOR PREFERENCE OF LIGHTING USING DISPLAY SIMULATION: A VALIDATION WITH REAL SCENE OBSERVATION DATA
PO27	Naomi Miller	United States	TEMPORAL LIGHT MODULATION ("FLICKER"): A SET OF WAVEFORM AND METRIC TARGETS FOR INDUSTRY DISCUSSIONACT TITLE
PO28	Kazim Hilmi Or	Turkey	INDIVIDUAL DIMENSIONS OF HUMAN-CENTERIC LIGHTING
PO34	Beatrice Sarti	Italy	SIMPLIFYING THE COLOUR RENDERING INDEX
PO40	Kazuto Takase	Japan	BCD LUMINANCE ESTIMATION MODEL REFLECTING OPTICAL AND RECEPTIVE FIELD CHARACTERISTICS
PO47	Diana Araiza	United States	DYNAMIC LIGHTING CONTROL FOR ENERGY SAVINGS BASED ON JUST NOTICEABLE DIFFERENCE EXPERIMENT FOR MUSEUMS AND RETAIL.
PO74	Annabelle Hill	Denmark	EVALUATION OF EMOTIONS INDUCED BY BIOPHILIC LIGHTING PATTERNS USING EEG AND QUALITATIVE METHODS
PO83	YeSeul Baek	South Korea	PERCEPTUAL COLOUR CHANGES IN HIGH-DYNAMIC-RANGE CONDITIONS: AN EXPERIMENT ON APPEARANCE MATCHING AND COMPARISON WITH CIECAM02
PO95	Dorukalp Durmus	United States	QUANTIFYING THE BRIGHTNESS OF CHROMATIC LIGHTING IN A WIDE FIELD OF VIEW
PO97	Dominik Dušek	Czech Republic	EVALUATION OF LIGHT DISTURBANCE SOURCES AND THEIR EFFECT ON HUMAN VISION
PO107	Jeffery Hovis	Canada	COLOUR VISION DEFICIENCIES IN THE DIGITAL TIME: A SURVEY OF USER EXPERIENCES WITH MODIFICATIONS TO AID THEIR COLOUR DISCRIMINATION
PO114	Hyeran Kang	South Korea	SPECTRAL SENSITIVITY FUNCTION OF THE PHANTOM ARRAY EFFECT AT DIFFERENT WAVELENGTHS
PO122	Manuel Melgosa	Spain	USING MUNSELL SOIL COLOR CHARTS IN MARS AND EARTH
PO126	Balázs Vince Nagy	Hungary	DARK ADAPTATION MODELING
PO131	Marcela Pechová	Czech Republic	COLOR DISCRIMINATION AT LOW ADAPTATION LUMINANCE
PO135	Aiman Raza	France	PROTOCOL TO SIMULATE AND EVALUATE SUNGLASS FILTERED COLOUR VISION THROUGH IMAGE COLOUR APPEARANCE MODELLING
PO146	Ágnes Urbin	Hungary	OBSERVATION OF ADAPTED WHITE UNDER DIFFERENT STATES OF CHROMATIC ADAPTATION
PO148	Michal Vik	Czech Republic	STUDY OF INTER-INSTRUMENT AGREEMENT IN WHITENESS MEASUREMENTS
PO149	Martina Víková	Czech Republic	STUDY OF EXPOSURE CONDITION WITH RELATION TO COLOR CHANGE OF PHOTOCROMIC SUBSTRATES
PO170	Chan-Su Lee	South Korea	VISIBILITY MODEL OF THE PHANTOM ARRAY EFFECT
PO178	Pedro Bustamante	Spain	DAYLIGHT SPECTRUM INDEX: MEASURING THE DAYLIGHTING AFFINITY OF ELECTRIC LIGHTS
PP5	Alejandro Ferrero	Spain	PRELIMINARY STUDY FOR TRACEABILITY ON SPECULAR GLOSS
PP8	Lou Gevaux	France	METHOD FOR TRACEABILITY OF MULTISCALE BIDIRECTIONAL REFLECTANCE DISTRIBUTION FUNCTION MEASUREMENTS

PP10	János Hegedüs	Hungary	LED LIFETIME TESTS FOR CIRCUIT SIMULATION MODELLING
PP14	Ville Mantela	Finland	TEMPORAL LIGHT ARTEFACT METRICS OF COMMERCIAL LED LAMPS
PP19	Masoud Rastgou	Finland	VALIDATION OF A MICRO-REFLECTOMETER FOR ACCURATE CHARACTERIZATION OF THIN FILM COATINGS
PO09	Guillaume Dotreppe	Belgium	ANGULAR DEPENDENCY OF THE LIMITING PHOTOMETRIC DISTANCE
PO10	Dominique Dumortier	France	LIGHTMONITOR: a new wearable device measuring light spectrum and day/night activity
PO22	Vineetha Kalavally	Malaysia	SPECTRAL RECONSTRUCTION AND SAMPLING FREQUENCY DECISIONS IN WEARABLE LIGHT DOSIMETRY
PO30	Jianguan Pan	China	RESEARCH ON THE DETERMINATION OF THE REFERENCE IN MEASUREMENT OF THE OPTICAL FIELD OF NED
PO33	Ángela María Sáez	Spain	FRAMEWORK FOR EVALUATION OF PROCEDURES FOR HDR LUMINANCE IMAGING MEASUREMENTS
PO35	Dmitri Scums	Belarus	PRECISION APPROXIMATION OF CIE 1931 COLOR-MATCHING FUNCTIONS BY ANALYTIC FUNCTIONS
PO39	Florian Stuker	Switzerland	PERFORMANCE CHARACTERIZATION OF A LARGE REFURBISHED 4 m INTEGRATING SPHERE
PO41	Juliëtte van Duijnhoven	Netherlands	ILLUMINANCE READINGS FROM THIRTEEN SMARTPHONES: MEASUREMENT INACCURACIES
PO44	Bing Zhang	China	RESEARCH ON THE BRIGHTNESS LIMIT OF MEDIA FACADE IN MIXED COMMERCIAL AND RESIDENTIAL STREETS
PO45	Yuqin Zong	United States	NEW GENERATION OF REFERENCE PHOTOMETERS FOR REDUCED UNCERTAINTY
PO50	Yunni Cho	Switzerland	DISPLAYING REAL-TIME VIDEOS IN VIRTUAL REALITY TO EVALUATE THE DYNAMICS OF VIEWS-OUT
PO57	András Poppe	Hungary	IMPLEMENTATION OF A HIGH-SPEED LED CHARACTERISATION SYSTEM
PO65	Filip Novák	Czech Republic	USING A LUMINANCE ANALYSER TO MEASURE THE LUMINANCE OF CELESTIAL BODIES DURING ECLIPSES AND OTHER ASTRONOMICAL MEASUREMENTS
PO68	Manuel Spitschan	Germany	NOVEL MULTISPECTRAL ALPHA-OPIC AND UV CORNEAL IRRADIANCE LIGHT LOGGER WITH INTEGRATED ACCELEROMETER FOR USE IN FIELD RESEARCH
PO69	Veronika Štampfl	Slovenia	INFLUENCE OF PHOTOGRAPHIC LIGHT-SHAPING ATTACHMENTS ON COLOUR PROPERTIES OF THE ORIGINAL LIGHT SOURCE
PO70	Yang Ding	China	FACTORS INFLUENCING NIGHT SKY LIGHT POLLUTION IN GRASSLAND TOWNS
PO77	Tsung-Hsun Yang	Taiwan	WHITE LED CHARACTERISTIC SPECTRUM OF VARIOUS CCT WITH OPTIMAL COLOUR FIDELITY INDEX AND COLOUR RENDERING INDEX
PO79	María Teresa Aguilar-Carrasco	Spain	A FIRST APPROACH TO A PREDICTIVE MODEL OF THE SKY SPECTRAL POWER DISTRIBUTION IN THE MEDITERRANEAN AREA
PO82	Jan Audenaert	Belgium	THE UGR CORRECTION FACTOR: A CASE STUDY
PO84	Nina Basic	Switzerland	INTERCOMPARISON OF BIDIRECTIONAL REFLECTANCE DISTRIBUTION FUNCTION MEASUREMENTS AT IN- AND OUT-OF-PLANE GEOMETRIES
PO88	Benjamin Legrand	France	A NEW BRDF MODEL FOR IN-SITU OPTICAL AND THERMICAL MATERIAL CHARACTERIZATION
PO90	Cheng-Hsien Chen	Taiwan	CURVE FITTINGS OF SPECTRAL RADIANCES OF R, G, AND B MINI-LED SAMPLES MEASURED BY A 2D-SPECTRORADIOMETER
PO91	Annegret Dahlmann-Noor	United Kingdom	MEASURING THE VISUAL ENVIRONMENT OF CHILDREN AND YOUNG PEOPLE AT RISK OF MYOPIA: A SCOPING REVIEW
PO94	Xiaoming Xu	China	URBAN ARTIFICIAL LIGHT SPECTRUM DISTRIBUTION MODE OVER NIGHT SKY
PO96	Martin Dury	United Kingdom	AN ASSESSMENT OF TWENTY YEARS OF TRAP DETECTOR ABSOLUTE RESPONSIVITY MEASUREMENTS
PO103	Gyula Lipák	Hungary	MODELLING THE SPECTRAL POWER DISTRIBUTION OF MONOCHROMATIC AND PHOSPHOR-CONVERTED POWER LEDs
PO113	Liviu Ivanescu	Canada	SPECTRORADIOMETER CALIBRATION WITH AN UAV-BORNE LIGHT SOURCE
PO118	Zühal Alpaslan Kösemen	Turkey	UNCERTAINTY EVALUATION OF HORTICULTURAL LEDs AND MONTE CARLO SIMULATION APPROACH
PO125	Emi Murayama	Japan	IMPACT OF DAYLIGHT CHANGES ON PSYCHOLOGICAL AND PHYSIOLOGICAL ASPECTS OF RESIDENTS IN APARTMENT BUILDING
PO127	Siarhey Nikanenko	Belarus	PROBLEMS OF MODERN LED LIGHT SOURCES PHOTOMETRIC MEASUREMENTS

PO133	Bertalan Pizág	Hungary	INVESTIGATING THE FRAME ASSEMBLY ISSUES OF NEAR-FIELD GONIOPHOTOMETERS USING A VIRTUAL INSTRUMENT AND THE MONTE CARLO METHOD
PO134	Mario Erwin Quiroga Riaño	Colombia	INNOVATIVE DEVICE TO VERIFY AND/OR CALIBRATE LUXMETERS (LIGHT METERS)
PO138	Wataru Shichi	Japan	A DEVELOPMENT OF MICOR-PRISM ARRAYS ACHIEVING IMAGE PROJECTION BY PRINCIPLE OF LIGHTING OPTICS : OPTICAL DESING AND NUMERICAL ESTIMATION OF LIGHTING PERFORMANCE
PO139	Nathan Slembrouck	Belgium	SNAPSHOT AND LINESCAN HYPERSPECTRAL IMAGING FOR VISUAL APPEARANCE MEASUREMENTS
PO144	Toshihiro Toyota	Japan	A DEVELOPMENT OF MICRO-PRISM ARRAYS ACHIEVING IMAGE PROJECTION BY PRINCIPLE OF LIGHTING OPTICS: FEASIBILITY STUDY ON THE IMPLEMENTATION
PO153	Ling Xia	China	CALIBRATE THE ABSOLUTE LUMINANCE OF HDR PANORAMAS USING A REGULAR TETRAHEDRON ILLUMINANCE METER
PO175	Xiaofei Wang	China	APPLICATION OF VISIBLE LIGHT COMMUNICATION TECHNOLOGY IN DIGITAL OPERATING ROOM
PP2	Michèle Atié	France	METHOD FOR EVALUATING FIDELITY OF RESTITUTION OF SUBJECTIVE IMPRESSIONS IN IMMERSIVE VIRTUAL REALITY IN DAYLIT INTERIOR SCENES
PP4	Kynthia Chamilothoni	Netherlands	THE IMPACT OF COLOUR AND SIMULATION DETAIL ON SUBJECTIVE IMPRESSIONS OF DAYLIT SCENES SHOWN IN VIRTUAL REALITY
PP16	Stuart Mucklejohn	United Kingdom	QUANTIFYING THE POTENTIAL IMPACT OF LIGHTING UNIFORMITY ON PLANT GROWTH IN HORTICULTURAL INSTALLATIONS
PP17	Yuki Oe	Japan	EVALUATION STRUCTURE ON PREFERENCE OF PAINTING'S APPEARANCE IN MUSEUM LIGHTING
PP23	Chen Shenfei	China	EVALUATION OF ARTIFICIAL LIGHT AT NIGHT IN URBAN COMMERCIAL AREAS BASED ON COLOR HARMONY AND VISUAL ENTROPY
PP25	Valerio Lo Verso	Poland	SUSTAINABLE DAYLIGHTING TRAINING: THE NLITED PROJECT
PP26	Bo Tang	China	THE INFLUENCE OF THE CONTENTS OF DYNAMIC WINDOW VIEW ON THE HEALING EFFECT OF PEOPLE IN ISOLATED, CONFINED AND EXTREME ENVIRONMENT
PP29	Songbo Zhang	China	ENERGY SAVING WITHOUT COMPROMISING HUMAN COMFORT: A FIELD STUDY OF SMART LIGHTING IN OFFICE
PP7	Dionyz Gasparovsky	Slovakia	LIGHTING ENVIRONMENT IN URBAN PARKLANDS AND GARDENS: CASE MODELS FOR BRATISLAVA
PP20	Enoch Saint-Jacques	France	INVESTIGATING THE EVOLUTION OF ROAD SURFACE DESCRIPTORS ACCORDING TO OBSERVATION ANGLES USING A DATABASE OF THE REFLECTION PROPERTIES OF URBAN MATERIALS
PP22	Christoph Schulze	Germany	CHARACTERISATION OF ROAD REFLECTION IN RELATION TO VEHICLE HEADLAMP ILLUMINATION
PP28	Lanlan Wei	Slovenia	EXPLORE THE RELATIONSHIP BETWEEN AMBIENT LIGHT AND CYCLING FREQUENCY AND SPEED
PP3	Simon Belgers	Netherlands	DEGRADATION OF BIOLOGICAL POTENCY IN LED LIGHT SOURCES WITH THEIR LIFETIME
PP6	Francesca Fragliasso	Italy	DOES LIGHT AFFECT FUNGAL GROWTH? EXPERIMENTAL ANALYSIS UNDER MONOCHROMATIC LED SOURCES
PP13	Li Zhou	China	THE EFFECT OF LIGHT INTERVENTION ON EMOTION BASED ON THE COMBINED IMPACT OF VISUAL PREFERENCE AND NON-VISUAL INFLUENCE
PP18	Masayuki Osumi	Japan	SPARKLE AND GRAININESS INDEX MEASUREMENT OF METALLIC COATINGS WITH MATTING AGENT
PO03	Laura Bellia	Italy	CORRELATING PHOTOPIC AND MELANOPIC REFLECTANCE TO SURFACE COLOUR ATTRIBUTES FOR INDOOR ENVIRONMENTS DESIGN
PO06	Sabine de Groot	Netherlands	A SIMULATION-BASED METHOD TO QUANTIFY DAYLIGHT EXPOSURE AND ITS EFFECT ON THE ONSET OF MYOPIA IN PRIMARY SCHOOL CHILDREN
PO11	Dorukalp	United States	CALCULATING SPATIAL EFFICIENCY TO QUANTIFY INDOOR LIGHTING SUSTAINABILITY
PO12	Qing Durmus	China	ANALYSIS ON DAYLIGHT GLARE OF TYPICAL MODEL OF UNIVERSITY GYMNASIUM UNDER SPORTS BEHAVIOR
PO16	Jenifer Godoy Daltrozo	Brazil	LIGHTING EDUCATION: A COMPARISION OF BRAZILIAN AND ITALIAN CONTEXT
PO17	James Greenberg	United States	EMULATING DAYLIGHT IN A NEONATAL INTENSIVE CARE UNIT WITH A NOVEL SPECTRALLY TUNABLE LIGHTING SYSTEM
PO18	Lishu Hong	China	WINDOW-VIEW-RECOGNITION BASED ACCEPTABLE DYNAMIC DAYLIGHTING OF RESIDENCE
PO20	Daisuke Ito	Japan	PROPOSAL FOR A METHOD OF EVALUATING CONTRAST GLARE AND SATURATION GLARE IN DAYLIT INTERIORS USING VERTICAL ILLUMINANCE AT THE EYE
PO23	Yandan Lin	China	THE EFFECT OF INDOOR LIGHTING ON HUMAN PSYCHOLOGY AND PHYSICAL ACTIVITY DURING COVID-19 LOCKDOWN: A SURVEY
PO61	Yandan Lin	China	HOW DAYLIGHT LED INFLUENCE HUMAN VISUAL AND NON-VISUAL PERFORMANCE

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PO60	Benjamin Legrand	France	COLORIMETRIC CALIBRATION BETWEEN RGB AND LMSR SPACES
PO137	Dmitri Scums	Belarus	ON THE QUESTION OF THE UNCERTAINTY OF CIE 1931 COLOR-MATCHING FUNCTIONS
PO141	Florian Stuker	Switzerland	NEW CALIBRATION STANDARDS AND METHODS FOR RADIOMETRY AND PHOTOMETRY AFTER PHASEOUT OF INCANDESCENT LAMPS
PO26	Naomi Miller	United States	A CASE STUDY OF TUNABLE WHITE LED LIGHTING WITH NETWORKED LIGHTING CONTROLS
PO32	Pracki Piotr	Poland	LIMITATIONS IN CEILING AND WALL ILLUMINATION FOR GENERAL LIGHTING IN INTERIORS
PO36	Rongdi Shao	China	STUDY OF DAYLIGHT HEALING FOR LONG-TERM QUARANTINED OCCUPANTS DURING THE COVID-19 PANDEMIC
PO37	Naoko Shinohara	Japan	EFFECTS OF LIGHT WITH THE SAME CORRELATED COLOUR TEMPERATURE BUT DIFFERENT COLOUR OF APPEARANCE ON THE IMPRESSION OF A SPACE
PO42	Yujie Wu	China	SIMULATION OF ENERGY CONSUMPTION IN BUILDINGS WITH SMART BLINDS
PO48	Miguel Angel Campano Laborda	Spain	OFFICE LIGHTING SMART CONTROLS BASED ON USER REQUIREMENTS
PO49	Adriana Castro	Brazil	METRICS AND MONITORING OF THE NON-VISUAL EFFECTS OF LIGHT INDOORS: A SYSTEMATIC REVIEW
PO52	Johanna Enger	Sweden	PERCEPTUAL METRICS FOR LIGHT QUALITY IN SPATIAL ENVIRONMENTS
PO55	Parvathy Biju	Sweden	A PILOT TEST OF DAYLIGHTING AND ELECTRIC LIGHTING DISTRIBUTION TO ADDRESS VISUAL AND NON-VISUAL REQUIREMENTS
PO62	Kai Liu	China	RESEARCH ON THE EVALUATION METHOD OF SPATIAL BRIGHTNESS FOR CLASSROOM LIGHTING ENVIRONMENTS
PO64	Ayaka Nomura	Japan	INFLUENCE OF INDIVIDUAL'S LIGHT ENVIRONMENT EXPERIENCES ON CHOICE OF SEAT AND LIGHTING SUITABLE FOR EACH TASK IN ACTIVITY BASED WORKING
PO67	parinaz sabet	Italy	THE EFFECTS OF THE URBAN MORPHOLOGY ON WINDOW VIEW
PO71	Hang Su	China	IMPACT OF NATURAL LIGHT PENETRATION ON OCCUPANTS IN UNDERGROUND SPACE: AN FIELD QUASI-EXPERIMENT STUDY
PO75	Noriko Umemiya	Japan	CHARACTERISTICS OF LIGHT EVALUATION OF ELDERLY PEOPLE UNDER HIGHLY ILLUMINATED ENVIRONMENT
PO76	Natalia Vasquez	Denmark	OCCUPANTS' SENSITIVITY TO DAYLIGHT SPECTRAL COMPOSITION AND WINDOW VIEWS: RESULTS FROM EXPERIMENTS CONDUCTED IN DENMARK AND BRAZIL
PO78	Chikako Ohki	Japan	EVALUATION STRUCTURE OF VISUAL ENVIRONMENT CAUSED BY WINDOWS: RELATIONSHIP BETWEEN VIEW AND DAYLIGHTING
PO80	Yuka Akuzawa	Japan	REPRODUCTION OF DAYLIT ENVIRONMENT IN WORKSPACES USING LED LIGHTING VERIFICATION OF THE INFLUENCE OF VIEW FROM A WINDOW
PO81	Kaori Arano	Japan	VIEW EVALUATION INDEX USING VISIBLE VOLUME IN OFFICE BUILDINGS
PO89	Yuki Budoh	Japan	CAUSAL CONNECTION BETWEEN PSYCHOLOGICAL VIEW AND DAYLIGHTING EVALUATION IN LIVING SPACES
PO92	Shujian Dai	China	RESEARCH ON THE INFLUENCE OF COLORED LIGHTING IN LIVING ROOM ON SPACE ATMOSPHERE PERCEPTION AND MOOD
PO93	Verena de Kok	Netherlands	LIGHTING CONDITIONS IN DUTCH HOME OFFICE SPACES – A FIRST INVENTORY
PO98	Yuri Fujiwara	Japan	VALIDATION OF THE EFFECTIVENESS OF USING MINDFULNESS CONTENT WITH LED PANEL LIGHT FOR HOME
PO104	Hillevi Hemphälä	Sweden	CAN AMBER LED LIGHTING AFFECT VISUAL ABILITY AND CAUSE EYESTRAIN?LE
PO105	Carolina Hiller	Sweden	THE PERCEPTION OF LIGHT COLOUR IS RELATIVE – A PILOT STUDY DESCRIBING PERCEIVED LIGHT COLOUR
PO109	Shinichi Inoue	Japan	NEUROPHYSIOLOGY-BASED EVALUATION METHOD FOR BRIGHTNESS PERCEPTION
PO115	Yuki Kato	Japan	A STUDY ON RELAXATION AND REFRESHMENT DURING SELF-SEAT BREAKS IN OFFICES
PO116	MIKA Kato	Japan	INFLUENCE OF SPATIAL AVERAGE LUMINANCE RANGE AND EVALUATION TECHNIQUE ON PERCEIVED SPATIAL BRIGHTNESS

PO119	Tsung-Xian Lee	Taiwan	A NEW WAY OF COLOUR MIXING FOR DAYLIGHT-QUALITY WHITE LED
PO121	Juanjie Li	China	THE COMPREHENSIVE STUDY OF INTEGRATIVE LIGHTING ON THE PERFORMANCE, ALERTNESS, MOOD AND EYESTRAIN OF SCHOOL CHILDREN
PO123	Etsuko Mochizuki	Japan	LIGHTING ENVIRONMENT DURING BREAKS WHEN WORKING FROM HOME
PO128	Shoki Nishihara	Japan	SPACIOUSNESS EVALUATION DEVIATION CAUSED BY BRIGHTNESS DIFFERENCES BETWEEN REFERENCE AND COMPARATIVE CONDITIONS IN THE MAGNITUDE ESTIMATION METHOD
PO129	Shino Okuda	Japan	PREFERRED LIGHTING FOR UKIYO-E, JAPANESE WOODBLOCK PRINT PAINTING
PO132	Matej Pekolj	Slovenia	SHORTCOMINGS IN DETERMINING THE LENI INDICATOR ACCORDING TO THE EN 15193 STANDARD
PO136	Mina Sagawa	Japan	REFLECTED GLARE ON MUSEUM EXHIBITS WITH DISPLAY CASES: AN EXAMINATION OF A GLARE PREDICTION METHOD BASED ON LUMINANCE DISTRIBUTION
PO140	Cláudia Amorim	Brazil	LIGHTING EDUCATION: ANALYSIS OF THE INTERNATIONAL PANORAMA THROUGH A SYSTEMATIC LITERATURE REVIEW
PO142	Naoyuki Suzuki	Japan	FUNDAMENTAL STUDY OF METHODS FOR PREDICTION THE BRIGHTNESS OF VISUAL OBJECT BY USING THE STANDARD DEVIATION OF LUMINANCE LOGARITHM
PO145	Saori Ueno	Japan	ACHIEVING ENERGY SAVINGS AND STIMULATING COMMUNICATION IN OFFICE SPACES USING TASK AMBIENT LIGHTING
PO150	Lei Wang	China	STUDY ON THE INFLUENCE OF DIMMING SWITCH STRATEGY TO LABORATORY ANIMALS
PO152	Karin Wendin	Sweden	PERCEPTION OF LIGHT QUALITIES – A DESIGNED STUDY ON LIGHT SOURCES IN COMBINATIONS
PO154	Lifeiyue Xiang	Japan	REPRODUCTION OF DAYLIGHTING BY LED LUMINAIRES SIMULATING ILLUMINANCE AND CORRELATED COLOUR TEMPERATURE FLUCTUATION: VERIFICATION OF PHYSIOLOGICAL AND
PO157	Hanui Yu	Japan	PSYCHOLOGICAL AND PHYSIOLOGICAL ANALYSIS ON THE EFFECT OF PEACEFULNESS OF MIZUKAGE VIDEOS
PO159	Yandan	China	IMPACTS OF LED TEMPORALLY MODULATED LIGHT ON ATMOSPHERE PERCEPTION
PO161	Sevda Aliparast	Turkey	AN ENERGY EFFICIENT HUMAN CENTERED LIGHTING FOR OPEN PLAN OFFICES WITH COMFORT CRITERIA
PO164	Roman Dubnicka	Slovakia	INFLUENCE OF THE DENSITY OF THE MEASUREMENT AND CALCULATION GRID ON PHOTOMETRIC PARAMETERS OF INDOOR WORKPLACES
PO166	KeJia Fang	China	DESIGN AND IMPLEMENTATION OF SMART HOME CLOUD CONFIGURATION PLATFORM
PO168	Yuto Horiuchi	Japan	IMAGE PHOTOMETRY FOR EVALUATING LIGHTING ENVIRONMENTS: IMPROVEMENT IN SPEED AND ACCURACY BY USING RAW FORMAT PHOTO DATA
PO169	Matej Bernard Kobav	Slovenia	INTEGRATIVE LIGHTING LUMINAIRE WITH HIGH CCT RANGE AND VERY HIGH CRI
PO171	Henri Juslén	Finland	THE CARBON FOOTPRINT OF LIGHTING RENOVATIONS OVER A TEN-YEAR USAGE PERIOD AT EU REGION
PO176	Rong Zhao	China	LIGHTWEIGHTING OF 3D MODELS BASED ON BIM AND WEBGL
PO01	Maria Nilsson Tengelin	Sweden	ACCURATE MEASUREMENT OF DRIVERS' REACTION TIMES IN THREE DIFFERENT ROAD LIGHTING SETTINGS
PO04	Irene Celli	Italy	A POWER-EFFICIENT SMART LASER-PHOTOLUMINESCENT-LIGHT (LPL) WITH PV- SYSTEM INTEGRATION: EXPERIMENTAL ANALYSIS AND OPTIMIZATION FOR PEDESTRIAN ROADS
PO08	Raquel Yerani Cruz	Mexico	DAYLIGHTING UNDER SKY CONDITIONS IN AN URBAN AREA
PO13	Maan Balela	United Kingdom	USING A CASE-CONTROL METHOD TO EXPLORE THE IMPACT OF LIGHTING ON CYCLE RATES: INVESTIGATING THE CHOICE OF CASE AND CONTROL TIME PERIODS
PO14	Demet Yesiltepe	United Kingdom	DARKNESS IS A GREATER DETERRENT TO CYCLING IN SUBURBAN THAN IN CITY CENTRE LOCATIONS
PO15	Dionyz Gasparovsky	Slovakia	PUBLIC LIGHTING IN PERIODS OF ENERGY CRISIS AND OTHER UNUSUAL SITUATIONS
PO19	Dmitrii Ingi	Finland	PUBLIC PARTICIPATION GEOGRAPHIC INFORMATION SYSTEM AS A TOOL FOR OUTDOOR LIGHTING STUDIES
PO21	Annika Jägerbrand	Sweden	ASSESSING THE USE OF ENVIRONMENTAL LIGHTING ZONES FOR THE PROTECTION OF AQUATIC NATURE CONSERVATION AREAS
PO31	Henrika Pihlajaniemi	Finland	MEASURING DARKNESS FOR SAFE AND SUSTAINABLE EXPERIENCES IN NORTHERN CITIES
PO43	Xianxian Zeng	China	COMPARING AFFECTIVE EXPERIENCE OF IN-SITU WALKING BETWEEN DAYTIME AND NIGHTTIME USING WEARABLE BIOSENSORS
PO46	Yuki Akizuki	Japan	APPLICATION OF NIGHT-TIME LANDSCAPE LIGHTING TO DISASTER PREVENTION

PO51	Paolo Di Lecce	Italy	A PROPOSAL OF EXTENSION OF DYNAMIC ADAPTIVE ROAD LIGHTING CONCEPT THROUGH A REAL CASE STUDY
PO53	Shahab Gorjimahlabani	United Kingdom	MEASURING PEDESTRIAN REASSURANCE: COMPARING EVALUATIONS GIVEN BY SOLO PEDESTRIANS AND ACCOMPANIED GROUPS
PO56	Bill Green	Belgium	REDUCING STRAY LIGHT IN OUTDOOR LUMINAIRES
PO59	Paola Iacomussi	Italy	ERRORS IN GONIOPHOTOMETRIC CHARACTERISATION OF SURFACES
PO63	Kosuke Miyamoto	Japan	ROAD SURFACE REFLECTION CHARACTERISTICS OF PERMEABLE PAVEMENT USED FOR EXPRESSWAYS IN JAPAN
PO66	Agathe Pharel	Belgium	THE ECOLOGICAL SHIFT OF OUTDOOR LIGHTING: TOWARDS A MULTIDISCIPLINARY APPROACH TO DESIGNING ADAPTIVE INFRASTRUCTURES
PO73	Dorian Talon	France	LED LIGHTING IN ROAD TUNNELS: STUDY OF THE INFLUENCE OF CORRELATED COLOUR TEMPERATURE ON VISIBILITY, SIMULATION OF ENERGY-EFFICIENT ADAPTIVE LIGHTING SCENARIOS
PO85	Karin Bieske	Germany	HEADLAMPS FOR OUTDOOR WORK IN DARKNESS
PO87	Vincent Boucher	France	MATHEMATICAL CONSIDERATIONS FOR ROAD REFLECTION PROPERTIES
PO108	Yoshihisa Ikeda	Japan	LIGHTING CONDITIONS FOR THE VISIBILITY OF OBJECTS ON THE ROAD SURFACE DURING TUNNEL DRIVING
PO111	Tomoki Maehama	Japan	EVALUATION OF DISCOMFORT GLARE IN ROAD LIGHTING USING FIXED LOW MOUNTING HEIGHT LUMINAIRES
PO117	Shunsuke Kohko	Japan	VISIBILITY TO DRIVERS OF PEDESTRIANS CROSSING A ROAD WITH A PRO-BEAM ROADWAY LIGHTING SYSTEM
PO143	Youhei Takahashi	Japan	PROPOSAL OF MAINTENANCE MANAGEMENT METHOD FOR ROAD LIGHTING FACILITIES USING UNMANNED AERIAL VEHICLES
PO147	Lodovica Valetti	Italy	AN EXPLORATORY STUDY TO ASSESS OUTDOOR LIGHTING IN URBAN CONTEXTS CONSIDERING IMPLICATIONS ON HUMAN HEALTH AND WELLBEING
PO158	Feng Zang	China	RESEARCH ON THE DEVELOPMENT PATH OF KEY TECHNOLOGIES BASED ON SMART LIGHT POLE SYSTEM
PO162	Romain Chasseigne	France	AIRBORNE LUMINANCE METER FOR OBTRUSIVE LIGHT MEASUREMENTS
PO165	Ezgi Erturk	United Kingdom	THE IMPACT OF LIGHT AND DARK ON CRIME IN LONDON
PO173	Yoshiyuki Sagane	Japan	VISIBILITY PERFORMANCE OF LOW POSITION ROAD LIGHTING SYSTEM
PO07	Yi-Sheng Chen	Taiwan	USING DYNAMIC LIGHT TO REGULATE SLOW OSCILLATIONS OF BRAIN TO IMPROVE SLOW WAVE SLEEP AND MEMORY CONSOLIDATION
PO25	Katja Malovrh Rebec	Slovenia	NON IMAGE FORMING HUMAN RESPONSES TO DIFFERENT LIGHTING CONDITIONS IN BUILT ENVIRONMENT: PRECISE MEASUREMENTS
PO38	Uday Nakade	Germany	SIMULATION OF ALPHA-OPIC CORNEAL IRRADIANCE ACROSS DIFFERENT HEAD SHAPES USING PHYSICALLY REALISTIC SPECTRAL RENDERING
PO86	Simone Bonavia	United Kingdom	THE ROLE OF SPATIAL DISTRIBUTION IN METRICS FOR NON-VISUAL RESPONSE TO LIGHT
PO106	Dandan Hou	China	VALIDATION OF DIURNAL CIRCADIAN LIGHTING ACCUMULATION MODEL BASED ON A LIGHT HABIT SURVEY OF 448 CHINESE PARTICIPANTS
PO120	Jin Li	China	RESEARCH OF DISINFECTION EFFECTIVENESS OF DIFFERENT UV SPECTRUM
PO124	Martin Motyčka	Czech Republic	THE MEASUREMENT UNCERTAINTY OF THE IMAGING LUMINANCE MEASUREMENT DEVICES
PO156	Yonghong Yan	China	THE INFLUENCE OF MOBA GAME WORK ON ACTION VIDEO GAME PLAYERS' VISUAL FUNCTION, COGNITIVE FUNCTION AND VISUAL FATIGUE IN LOW-ILLUMINANCE E-SPORTS LIGHT ENVIRONMENT
PO160	Yandan Lin	China	COLOUR CONSTANCY FOR LOW-ILLUMINANCE SCENES BASED ON BRIGHT REGION
PO163	Jan Coosemans	Belgium	TIME-SEQUENTIAL RGB IMAGING WITH A MULTISPECTRAL ILLUMINATION SOURCE AND A GATED CMOS CAMERA
PO174	Midori Tanaka	Japan	MODELLING OF PERCEPTUAL GLOSS UNDER MIXED LIGHTING CONDITIONS
PO05	Liliana Beltran	United States	AN INNOVATIVE EFFICIENT FULL SCALE HORIZONTAL LIGHT PIPE