# **EXHIBITION OPENING** 19.00 – 19.45

### Luminaires created

# by designers Alexandru ALĂMOREANU and Gabriel PĂDUREAN

# Thursday, 2 June

**OPENING SESSION** 09.00 – 10.00

Opening by Florin POP, President of the Conference

Welcome in Cluj-Napoca by Emil BOC, the Mayor of Cluj-Napoca

Message of Nicolae COROIU, General Manager of Electrica S.A.

Message of Radu MUNTEANU, Rector of Technical University of Cluj-Napoca

Message in the name of Wout van BOMMEL, CIE President

Message of Cornel BIANCHI, CNRI President

Opening lecture

Tunnel lighting design in view of different european regulations by Axel STOCKMAR

President of CIE - German National Committee on Illumination

### Thursday, 2 June

**INVITED PAPERS** 10.00 – 11.20

Chairpersons: Florin POP, Sermin ONAYGİL

### Michel de BRUYN, Luc de LAMALLE, Belgium

The Urban Photometry

# Luciano Di FRAIA, Italy

Energy and Maintenance Problems in Lighting

### Koichi IKEDA, Shinichiro NODA, Japan

Prediction of Colour Appearances in Nayatani, Hunt, CIECAM and NC-IIIC Spaces for Comparison with Perceived Attributes of Munsell Colours

Janos SCHANDA, Hungary LED Photometry and Colorimetry

# Thursday, 2 June

# **BALKAN LIGHT SOCIETY INVITED PAPERS**

11.45 - 13.30

Chairmen: Cornel BIANCHI, Axel STOCKMAR

# Miomir KOSTIC, Lidija DJOKIC, Dejan POJATAR, Natasa STRBAC-HADZIBEGOVIC Serbia and Montenegro Influence of the Theory of Mesopic Vision on Road Lighting Design

# Sermin ONAYGİL, Önder GÜLER, Emre ERKİN, Turkey

The Effect of Observer Position and Movement on Road Lighting Criteria

# ORGULAN Andrej, VORŠIČ Jože, Slovenia

Slovenian Experience with the Enforcement of Light Pollution Legislation

# Florin POP, Romania

Demands, Efficiency and Costs of Daylighting

# Hristo VASSILEV, Krassimir VELINOV, Gancho GANCHEV, Bulgaria

High Efficiency Street Luminaires

# **COLOR AND VISION** 15.00 – 16.15

Chairmen: Dorin BEU, Janos SCHANDA

Cornel BIANCHI, Camelia BURLACU, Florin BĂLTĂREŢU, Hrisia Elena MOROLDO, Ioan PĂUŢ, Romania Alegerea Corectă a Culorii Aparente a Luminii în Iluminatul Urban, Criteriu Determinant al Calității Ambientale (Right Choose of the Light Apparent Color in the Urban Lighting, Determinant Criterion of the Environment Quality)

# Banu MANAV, Mehmet Ş.KÜÇÜKDOĞU, Turkey

Effects of Illuminance and Color Temperature on pleasantness: a Case Study for Office Settings

# Henk ROTMAN, The Netherlands

New Lamps and Gear System for Outdoorlighting - The Story of CosmoPolis

# Aleksandra STOJKOVIC - Van GOETHEM, Belgium

Pedestrian Crossing: How to light it Corectly?

# Silviu ŞTEFANESCU, Andi OSTROVEANU, Antoniu TURCU, Romania

Solid State Lighting a new Trend in Lighting Technology

### Cristian SUVAGĂU, Roy HUGHES, Canada

Lighting for Good Health

# Thursday, 2 June

# LIGHT, THE SHAPE OF SPACE

16.20 - 18.00

### Chairmen: Alexandru ALĂMOREANU, Michel de BRUYN

# Peter DEHOFF, Austria

Office Lighting in Europe and Around the World

# Ana DRNDAREVIC, Serbia and Montenegro

Decorative Illumination of St. Marko's Church in Belgrade

# Ferenc HAASZ, Hungary

Modern Art Gallery was born

# James Earl JEWELL, Alan Lawrence LINDSLEY, USA

Three Bridges

# Zoltán MAKAI, Romania, Ferenc HAÁSZ, Hungary

Lumina Putnei (The Light of Putna)

# Elisabeta SZABO, Csaba ZAGONI, Romania

Illuminatul Clădirilor Monument Istoric - Centrul Comercial Baia Mare Millenium III (Lighting of the Buildings Historical Monuments – Millenium III Commercial Center Baia Mare)

# Katerina TSIKALOUDAKI, Greece, José Roberto GARCIA CHAVEZ, Mexico

Shading and Daylighting: Synonymous or Antonynous Functions of the Building Façade?

# Şerban ŢIGANAŞ, Romania

Lumina în Arhitectura Epocii Digitale (Light in the Digital Era Architecture)

## Friday, 3 June

# SPECIAL SESSION - LAEL, Kyung Hee University, KOREA

08.30 - 10.00

Chairmen: Florin POP, Jeong Tai KIM

#### Jeong Tai KIM, Gon KIM

Redesign of the Differentiated Window System Composed of the Daylight and View Pane of Glass

# Ki Hoon MOON, Min Gu HWANG, Gil Dong CHOI, Hyun Tae AHN

Lightscape as an Evaluation Tool of Daylighting and Visual Performance

# In Young JEONG, Min Gu HWANG, Ki Hoon MOON, Jeong Tai KIM

Daylighting Performance Evaluation of Sloped Lightshelf by Using Scale Model

# Hyun Jeong KIM, Hwa Young SHIN, Jeong Tai KIM

Luminous Characteristics on the Lightscape of Hwaseong Fortress

# Yoon Seok CHOI, So Mi YI, Hyun Tae AHN, Min Gu HWANG, Jeong Tai KIM

Validation of Lightscape as Exterior Lighting Simulation by using Digital Photometer

#### **POSTERS**

### You Sook KIM, Jin Seok DO, Beom Seok LEE, In Young JEONG, Ki Hoon MOON

Mirror Sunlighting System: Development and Performance

### In Bo SHIM, In Hye YU, Bong Kyun KIM, Hyun Tae AHN, Jeong Tai KIM

Characteristics of Seoul Outdoor Lighting Award

### Hae Mi SHIN, Chan Su KIM, Gil Dong CHOI, Jeong Tai KIM

Outdoor Lighting Master Plan of Cheonggyecheon Restoration Project in Seoul

### Friday, 3 June

### LIGHTING EQUIPMENTS

10.20 - 11.40

Chairmen: Virgil MAIER, Henk ROTMAN

# Mircea CHINDRIŞ, Andrei CZIKER, Romania

Influența Surselor de Lumină asupra Rețelelor de Alimentare a Instalațiilor de Iluminat (Influence of Lighting Sources on Lightning Networks)

## Silvia-Maria DIGA, Virginia IVANOV, Romania

Interacțiunea Transformator Trifazat de Alimentare – Rețea de Iluminat echipată cu Lămpi cu Descărcări (Interaction Three-Phase Transformer Supply – Lighting Network with the Discharge Lamps)

# Stefan FASSBINDER, Germany

Some Basic Facts and some Advanced Information on Ballasts for Fluorescent

# Dorin LUCACHE, Mihai ALBU, Dan IOACHIM, Romania

Alimentarea Centralizată a Tuburilor Fluorescente la Înaltă Frecvență (High Frequency Centralized Supply of the Fluorescent Lamps)

# Sermin ONAYGİL, Emre ERKİN, Önder GÜLER, Turkey

Applicable Light Points in the Residences for Compact Fluorescent Lamps and Potential Energy Saving

## Călin ORĂVIȚAN, Romania

Determinări Experimentale privind Lămpile cu Descărcare în Vapori de Sodiu ca Surse de Poluare Electromagnetică (Experimental Study on the Sodium Lamps as Electromagnetic Pollution Sources)

# **EXTERIOR LIGHTING**

12.20 - 14.00

Chairmen: Cătălin Daniel GĂLĂŢANU, Luciano DI FRAIA

### Cătălin Daniel GĂLĂŢANU, Iulian GHERASIM, Jan IGNAT, Alina OŢEL, Romania

Aspects of Street Lighting Quality in the Market Economy

# Virgil MAIER, Corina MARTINEAC, Sorin PAVEL, Romania

Calculul Numeric al Fluxului Luminos (Numerical Calculus of the Luminous Flux)

# Gyula MAJOR, Hungary

Stadium Lighting in Hugary

# Corina MARTINEAC, Virgil MAIER, Sorin PAVEL, Romania

Aplicații ale Metodei Fluxului Integral la verificarea Parametrilor Luminotehnici ai Sistemelor de Iluminat Exterior (Application of the Integral Flux Method on the Lighting Systems Luminous Parameters Verification)

### Angel PACHAMANOV, Radostin PACHAMANOV, Bulgaria

Automatic Control and Monitoring of Tunnel Lighting through Power Line Carrier Communication

### Dessislava PACHAMANOVA, USA, Angel PACHAMANOV, Bulgaria

Optimization Model for Automatic Control of Tunnel Lighting using Power Line Carrier Communication

### Neli RATZ, Emil RATZ, Angel PACHAMANOV, Bulgaria

Creation of High Pressure Discharge Lamps Compatible Models in MATLAB

**POSTER** 

### Daniel BREBENARIU, Romania

Eficiență Energetică în Sistemul de Iluminat Public al Municipiului Reșița (Energy Efficiency in the Public Lighting System of Reșița)

Friday, 3 June

# INTERIOR LIGHTING

15.30 - 18.00

Chairmen: Mircea CHINDRIŞ, Koichi IKEDA

# Paolo BERTOLDI, Călin CIUGUDEANU, Italy

Five - Year Assessment of the European GreenLight Programme

# Cornel BIANCHI, Mihai HUSCH, Cosmin ȚICLEANU, Romania

Implementarea unei Structuri Profesionale Reale în Conocepția, Realizarea și Menținerea Sistemelor de Iluminat – O Necesitate Actuală (Implementation of the Professional Structure in the Conception, Execution and Maintenance of the Lighting Systems – a Real Necessity)

# Cornel BIANCHI, Cosmin ȚICLEANU, Romania

Utilizarea Modernă a Luminii Naturale în Sistemele de Iluminat Interior (Modern Utilization of Daylight in Interior Lighting)

### Dorin BEU, Florin POP, Romania

Energy Efficiency in Interior Lighting - a Romanian case Study

# Paul DINCULESCU, Romania

Asupra Condițiilor de Referință în Calculul Instalațiilor de Iluminat Interior General (On the Reference Conditions in General Interior Lighting Calculations)

# Oana DOBRE, Gilbert ACHARD, France

Optical Modelling of a Diffusing Prism Light Pipe using the Apilux Software

### Cătălin Daniel GĂLĂȚANU, Romania

Quantitative Approach in Virtual Reality

# Adrian GLIGOR, Horaţiu Ştefan GRIF, Florin POP, Romania

Considerații privind un Sistem de Contral Inteligent pentru un Iluminat Eficient (Aspects on an Itelligent Control System for an Efficient Lighting)

# GRIF Horatiu Stefan\*, GLIGOR Adrian\*, POP Florin, Romania

Daylight Control using Internal Model Control Principle

# Monica MUNTEAN, Canada, Ioan ŞORA, Romania

Modeling Methods for Interior Lighting Systems - Local Illumination Models

# Monica MUNTEAN, Canada, Ioan SORA, Romania

Modeling Methods for Interior Lighting Systems - Global Illumination Models