

# Wednesday 02 June, 2010

09:00-11:00 **Session 1, Opening / Energy Efficiency**

Chairman: A. Smet

## **Welcome & Announcements**

Mr. Ami Lustig, Elevcon 2010 Chairman, Israel

Mr. John Inglis, President of IAEE, Australia

Mr. Urs W. Studer, Major of Lucerne, Switzerland

Mr. Jürgen Tinggren, President of the Management Committee of Schindler Elevators & Escalators, Switzerland

## **The studies in Europe and the energy efficiency guideline VDI 4707**

U. Lindegger, Schindler Aufzüge AG, Switzerland

## **Energy efficiency of lifts developments**

W. Kasteleijn, Liftinstituut Holding B.V., The Netherlands

## **Efficiency of gearless machines and possibilities of increasing their efficiency**

E. Vogler, ThyssenKrupp Aufzugswerke GmbH, Germany

11:00-11:30 Break **(GROUP PICTURE)**

11:30-13:30 **Session 2, Traffic**

Chairman: L. Rivet

## **State-of-the-art traffic analyses**

L. Finschi, Schindler Aufzüge AG, Switzerland

## **An advanced zoning system for a skyscraper**

H. Aoki, Elevator Laboratory Ltd., Japan

## **Designing elevator installations using modern estimates of passenger demand**

R. Peters<sup>1</sup> & R. Smith<sup>2</sup>,

<sup>1</sup>Peters Research Ltd. UK,

<sup>2</sup>ThyssenKrupp Elevator, UAE

## **Circular transportation in the 21st century (without the "beautiful" counterweight!)**

A. M. Godwin, Lerch Bates, UK

13:30-14:45 Lunch break

14:45-15:45 **Session 3, Posters**

## **City of Miami Beach: representation of an authority having jurisdiction**

J. Antona, Chief, Elevator Safety Section, Miami Beach, Florida, USA

## **Energy efficient modernisation of hydraulic drives**

T. Aschwanden & C. Jost, Bucher Hydraulics AG, Switzerland

## **Lifts energy consumption study**

L. Asvestopoulos & N. Spyropoulos, Kleemann Hellas SA, Greece

## **Elevator installations near by the Bosphorus from Ottoman era**

E. Barlas<sup>1</sup>, C. E. Imrak<sup>2</sup> & E. Kayaoglu<sup>2</sup>,

<sup>1</sup>Barlas Consultancy, Istanbul, Turkey,

<sup>2</sup>Mechanical Engineering Faculty, Istanbul Technical University, Turkey

## **Semiconductor technologies for novel elevator sensors**

B. De Coi & F. Lustenberger, ESPROS Photonics Ltd., Switzerland

## **Energy-saving techniques of elevator group control system**

S. Kobori, M. Iwata, N. Suzuki & S. Yamashita, Mitsubishi Electric Corp., Japan

## **Statistical analysis of accidents regarding the use of elevators in Greece**

M. – P. Koutsovasili<sup>1,2</sup>, N. Papanikolaou<sup>1</sup>,

V. Zarikas<sup>1</sup> & C. Kyritsi<sup>3</sup>

<sup>1</sup>Lamia Institute of Technology, Department of Electrical Engineering, Greece,

<sup>2</sup>Elevators Panagiotis N. Koutsovasilis, Greece,

<sup>3</sup>Athens Trolley – Buses S.A, Greece

## **Sensitivity analysis of lift car installation design variables to guide shoes wear**

F. J. Martínez<sup>1</sup>, R. Monge<sup>1</sup>, M. A. Martínez<sup>2</sup>, J. A. Roig<sup>3</sup>, A. Gómez<sup>1</sup> & M. A. Jiménez<sup>1</sup>

<sup>1</sup>Instituto Tecnológico de Aragón, Research, Development & Technological Services Area, Zaragoza, Spain,

<sup>2</sup>University of Zaragoza, Spain,

<sup>3</sup>MP Lifts, Spain

## **New leakage current filter, "passive canceller" is breakthrough against noise of inverter unit**

H. Ohkubo<sup>1</sup>, J. Takeda<sup>1</sup>, R. Ohtsubo<sup>1</sup>, K. Shimane<sup>1</sup>,

Y. Komori<sup>1</sup> & J. Tsuda<sup>2</sup>,

<sup>1</sup>Toshiba Elevator and Building Systems Corp., JAPAN,

<sup>2</sup>Toshiba Corp., JAPAN

## **Study on parameters decreasing the bearing noise level - sealed spherical roller bearing case**

J. Pommereul, SKF Group, Industrial Marketing, Gothenburg, Sweden

## **Elevating parameters consideration to Middle East / South Asia**

V. Rajah, Fortune Consultants, Asia

## **New machinery directive and its impact on the vertical transportation sector**

N. Spyropoulos & L. Asvestopoulos, Kleemann Hellas SA, Greece

## **Liftinstituut as accredited elevator/escalator certification organisation (AECO): what are the differences and similarities between being a notified body or an AECO?**

J. Van Vliet, Liftinstituut Holding B.V., The Netherlands

## **New sliding clip push through force and seismic applications**

A. Visconti, G. La Perna & G. Signor, Monteferro Spa, Italy

15:45-16:00 Break

16:00-18:15 **Session 4, Safety**

Chairman: A. T. P. So

## **Optical elevator door sensor system with planar detection area**

E. Sano, M. Shikai, Y. Kawae, A. Shiratsuki, H. Nakajima & T. Masuda, Mitsubishi Electric Corporation, Japan

## **Lift performance and stack effect**

R. Howkins, Arup, UK

## **Fault-tolerant encoder and its application for elevators**

A. Forrai & T. Ueda, Mitsubishi Elevator Europe, The Netherlands

## **Safe operation of an elevator drive without motor contactors**

H. Koenig, Emerson Control Techniques, Newtown, UK

## **BACnet protocols for elevators – first draft announcement**

A.T.P. So, Scientific Advisor, IAEE, Hong Kong

18:15-19:00 Break

19:00 Welcome reception (Best Western Hotel Flora)

# Thursday 03 June, 2010

08:30-10:30 **Session 5, Testing, Service & Maintenance**  
Chairman: S. Targit

**A short history of destructive elevator testing and today's non-destructive approach forecast on future techniques**

P. Molineus, Henning Testing Systems GmbH, Germany

**Improvement of vertical transportation service in existing buildings**

L. Asvestopoulos & N. Spyropoulos, Kleemann Hellas SA, Greece

**Maintenance support tools for elevator equipments that use cellular phones**

Y. Sasamori<sup>1</sup>, T. Kotani<sup>1</sup>, S. Kimura<sup>1</sup> & T. Hayashi<sup>2</sup>,

<sup>1</sup>Toshiba Elevator and Building Systems Corp., Japan,

<sup>2</sup>KDDI Corporation, Japan

**Improving maintenance strategies of elevators and escalators with condition monitoring**

J. Pommereul, SKF Group, Industrial Marketing, Gothenburg, Sweden

10:30-11:00 Break

11:00-12:30 **Session 6, Mechanical I**

Chairman: G. Thumm

**Development of brake control system for elevators**

R. Kondo<sup>1</sup>, H. Kigawa<sup>1</sup>, T. Ueda<sup>2</sup>, M. Shibata<sup>1</sup>, J. Hashimoto<sup>1</sup>, A. Chida<sup>1</sup> & H. Marumo<sup>1</sup>,

<sup>1</sup>Mitsubishi Electric Corporation, Japan,

<sup>2</sup>Mitsubishi Elevator Europe, The Netherlands

**Application of finite element method to design of progressive crush buffer concepts for elevators**

J. M. Bielsa<sup>1</sup>, S. Watanabe<sup>2</sup>, J. Orús<sup>1</sup>, I. Nadal<sup>1</sup>,

C. Peribañez<sup>1</sup>, A. Gómez<sup>1</sup> & M. A. Jiménez<sup>1</sup>,

<sup>1</sup>Research, Development & Technological Services Area, Instituto Tecnológico de Aragón (ITA), Zaragoza, Spain,

<sup>2</sup>Advanced Technology R&D Center, Mitsubishi Electric Corporation, Tsukaguchi-Honmachi, Amagasaki City, Hyogo, Japan

**Small ropes - aspects for usage in elevator application**

W. Vogel & W. Scheunemann,

Pfeifer DRAKO Drahtseilwerk GmbH, Germany

12:30-12:45 Break

12:45-13:45 **Session 7, Workshop**

Convenors: H. Jappsen & O. Rieke, Jappsen Ingenieure, Germany

**Difficulties in comparing the efficiency of different destination control systems**

13:45-15:00 Lunch break

## Afternoon and Evening Programme

15:00 Meeting and boarding @ pier number 6 (next to the KKL).

15:15 Departure from Lucerne by boat.

- We shall take the funicular to go up to Buergenstock, where we shall see the Hammetschwand lift which is Europe's highest outdoor lift (152 m).

- We shall hike along the scenic mountain trail for about 25 minutes and go up by lift to the Hammetschwand, enjoy the panoramic view and return to the lift station from where we hike back the 2.6 km path to Buergenstock CLUB.

- Participants who do not wish to hike can stay in the hotel area and enjoy an aperitif.

18:00 Welcome and aperitif at Buergenstock CLUB.

19:00 Dinner and speech of Mr. Christoph Lindenmeyer, CEO of Schindler Switzerland

23:00 Returning by bus to Lucerne

**The tour and dinner are organised and sponsored by Schindler**

# Friday 04 June, 2010

## 08:30-10:00 **Session 8, Escalators**

Chairman: *V. Rajah*

### **Escalators that are friendly to humans and the environment**

Y. Ise, M. Sakaue & T. Fukuda,  
MITO Design & Production Division., Urban Planning and  
Development Systems, Hitachi, Ltd., Japan

### **Electrically based intelligent escalator braking systems**

L. Al-Sharif<sup>1</sup>, K. Seaborne<sup>2</sup> & D. Austin<sup>3</sup>,  
<sup>1</sup>University of Jordan, UK,  
<sup>2</sup>London Underground Ltd., UK,  
<sup>3</sup>KONE Escalators, UK

### **Helical escalators and moving walkways**

D. Michel, Helixator, Germany

10:00-10:30 Break

## 10:30-12:30 **Session 9, Mechanical II & Hydraulic**

Chairman: *J. Inglis*

### **Design parameters and stress analysis of elevator guide rail brackets**

S. Koç<sup>1</sup>, C. E. Imrak<sup>2</sup>, S. Targit<sup>3</sup>,  
<sup>1</sup>Wittur, R & D Department, Istanbul, Turkey,  
<sup>2</sup>Mechanical Engineering Faculty, Istanbul Technical  
University, Turkey,  
<sup>3</sup>ASRAY Company, Gebze, Kocaeli, Turkey

### **Practical stress behaviour of complete rail fastening systems**

M. Merz, Hilti Corporation, Principality of Liechtenstein

### **Importance of thermal balance for hydraulic elevators**

K. F. Celik<sup>1</sup> & M. Kucur<sup>2</sup>,  
<sup>1</sup>Blain Hydraulics GmbH, Germany,  
<sup>2</sup>Istanbul University, Engineering Faculty, Turkey

### **Modern hydraulic power units: evolving from electronic control into intelligence**

E. Goenechea, Bucher Hydraulics AG, Switzerland

12:30-13:45 Lunch break

## 13:45-14:45 **Session 10, Evacuation**

Chairman: *R. Howkins*

### **Evacuating using elevators: enhancing the CTBUH approach for the Dutch high-rise covenant**

J. Wit, Deerns Consulting Engineers, The Netherlands

### **The use of cameras to evacuate people in elevators**

J. Trett<sup>1</sup> & C. Simpkins<sup>2</sup>,  
<sup>1</sup>C.E. Electronics Ltd., UK,  
<sup>2</sup>C.E. Electronics Inc., USA

14:45-15:00 Break

## 15:00-16:45 **Session 11, Energy Consumption / Closing**

Chairman: *L. Al Sharif*

### **Impact of traffic on annual elevator energy consumption**

M. L. Siikonen, J. Sorsa & H. Hakala,  
KONE Corporation, Finland

### **State of the art of calculation methods for elevator energy consumption**

A. M. Lorente, A. Gómez, D. Díez & F. Arteché,  
Instituto Tecnológico de Aragón, Zaragoza, Spain

### **Elevator system under use of variable speed transmission**

C. Studer, H. Kocher & N. Medar,  
Schindler Elevators Ltd., Switzerland

### **Report from Workshop / Best Paper / Closing Remarks**

16:45-17:00 Break

## 17:00-17:30 **IAEE General Assembly & Elections**