

## ELEVCON 2023 - Preliminary Program - Day 1

**Tuesday, June 20, 2023**

Time	Function
<b>08:30-09:00</b>	<b>Registration and Morning Coffee</b>
<b>09:30-10:00</b>	<p><b>OPENING SESSION</b>                      Welcome &amp; Introductory Remarks:  <b>Dr. Marja-Liisa Siikonen</b>, M.Sc, Ph.D., CEO, MLS Lift Consulting Ltd.  <b>Gil Stier</b>, IAEE Administrative Board Chairman</p>
<b>09:30-10:30</b>	<p><b>SESSION 1: ELEVATOR COMMUNICATION AND INFORMATION SYSTEMS</b>  <b>Chairperson: Dr. Stefan Gerstenmeyer</b>, Global Cluster Lead, Traffic and Group Control                      Research &amp; Development, TK Elevator, Germany</p>
09:30-10:00	<p>Subject: <b>Electronic Sensors, EN Standards, Safety Components, Overview</b>                      Abstract: <b>The State-of-The-Art and Future of Safe Shaft Information Systems</b>                      Author: Stephan Rohr, ELGO Batscale AG, Liechtenstein                      Presenting: <b>Dr.-Ing. Stephan Rohr</b>, Chief Technology Officer, ELGO Batscale AG, Liechtenstein</p>
10:00-10:30	<p>Subject: <b>Emergency, Security, Communication, Monitoring (voice, video)</b>                      Abstract: <b>Future of Elevator Emergency Communication after Traditional Fixed Lines, 2g and 3g Networks Sunset</b>                      Author: Petr Chovanek, 2N Telekomunikace a.s, Czech Republic                      Presenting: <b>Mr. Petr Chovanek</b>, 2N Telekomunikace a.s, Czech Republic</p>
<b>10:30-11:00</b>	<b>Coffee Break &amp; Exhibition Visit</b>
<b>11:00-12:30</b>	<p><b>SESSION 2: ELEVATOR AND SHAFT COMPONENTS</b>  <b>Chairperson: Prof. Dr.-Ing. Mazen Ayoubi</b>, Head of Research and Innovation, PohlCon GmbH, Germany</p>
11:00-11:30	<p>Subject: <b>Shaft Components, Bracket design, Simulation, Earthquake, Seismic</b>                      Abstract: <b>The Simulation of Seismic Effects on Guide Rail Fasteners and Re-design of Brackets</b>                      Authors: Abdümelik Sancak<sup>1</sup>, Adem Candaş<sup>2</sup>, C. Erdem İmrak<sup>3</sup>, Sefa Targit<sup>4,1,2,3</sup> ITU Elevator Technologies Laboratory,                      34437 Istanbul, Turkey, <sup>4</sup>ASRAY, Pelitli Yolu Str. No:133 Gebze/Kocaeli                      Presenting: <b>Mr. Abdümelik Sancak</b>, ITU Elevator Technologies Laboratory, Turkey</p>
11:30-12:00	<p>Subject: <b>Elevator Cab, Point Fixed Laminated Glass</b>                      Abstract: <b>Finite Element Analysis of Glass Panels with Bolted Connections Designed for a Running Car</b>                      Authors: Prof. Eren Kalay<sup>1</sup>, C. Erdem İmrak<sup>1</sup> and Adem Candaş<sup>1, 1,2,3</sup> ITU Faculty of Mechanical Engineering</p>

12:00-12:30	<p>Presenting: <b>Prof. Eran Kalay</b>, ITU Faculty of Mechanical Engineering, Turkey</p> <p>Subject: <b>Elevator Component, Strength Evaluation, Adhesion</b>  Abstract: <b>Evaluation of Elevator's Car Floor Using Adhesive Bonding</b>  Authors: Akira Nagao*, Takashi Abe*, Katsuhiko Shimada*, Tomoki Kariya, Hiroshi Kawakami, Akihiro Yamaguchi, Hitachi Building Systems Co., Ltd.*, Hitachi, Ltd  Presenting: <b>Mr. Akira Nagao</b>, Hitachi Building Systems Co., Ltd., Japan</p>
<b>12:30-14:00</b>	<b>Lunch &amp; Exhibition Visit</b>
<b>14:00-16:00</b>	<p><b>SESSION 3: SAFETY COMPONENTS</b>  <b>Chairperson: Prof. Erdem Imrak</b>, ITU Elevator Technologies Laboratory, 34437 Istanbul, Turkey</p>
14:00-14:30	<p>Subject: <b>Elevator Design, Brakes and Safety Components</b>  Abstract: <b>Selection Criteria for Safety Components – Based on Elevator Brakes for Traction Machines</b>  Author: Alexander Hutler, Chr. Mayr GmbH + Co. KG, Germany  Presenting: <b>Mr. Alexander Hutler</b>, Key Account Manager Elevator Brakes, Chr. Mayr GmbH + Co. KG, Germany</p>
14:30-15:00	<p>Subject: <b>Shaft Component, Divider Beams, Installation</b>  Abstract: <b>Divider Beam Design as Part of The Standard Elevator Design</b>  Author: Michael Merz, Hilti Corporation, Principality of Liechtenstein  Presenting: <b>Dr. Sc.techn. Michael Merz</b>, Competence Manager, Hilti Corporation, Principality of Liechtenstein</p>
15:00-15:30	<p>Subject: <b>Testing, Acoustical Impairment, Noise and Vibration to the Shaft</b>  Abstract: <b>Compare Study on The Performance of Acoustic Insulation Element for Guide Rail Connections Using Anchor Channels with Channel Bolts</b>  Authors: Mazen Ayoubi<sup>1</sup> and Sacha Aobotta<sup>1</sup>, PohlCon GmbH, Berlin  Presenting: <b>Prof. Dr.-Ing. Mazen Ayoubi</b>, Head of Research and Innovation PohlCon GmbH, Germany</p>
15:30-16:00	<p>Subject: <b>Safety, Monitor, Escalator, Computer Vision</b>  Abstract: <b>Enhancing Escalator Safety with The Use of Optic-Fiber Sensing Technology</b>  Authors: W.H. Chung<sup>1, 2</sup>, K.C. Cheng<sup>2</sup>, H. Y. Tam<sup>2</sup>, <sup>1</sup>Avaron Technologies Limited, <sup>2</sup>The Hong Kong Polytechnic University, HKSAR, Hong Kong, China  Presenting: <b>Prof. Hwa-Yaw Tam</b>, The Hong Kong Polytechnic University, HKSAR, Hong Kong</p>
<b>16:00-16:30</b>	<b>Coffee Break</b>

16:30-17:30	<p><b>SESSION 4: WORKSHOP 1</b></p> <p>Subject: <b>How to Setup Safety Devices in an Elevator</b></p> <p>Authors: Stephan Rohr<sup>1</sup>, Christopher Bormann<sup>2</sup>, <sup>1</sup> ELGO Batscale AG, Liechtenstein, <sup>2</sup> ELGO Electronic GmbH, Germany</p> <p>Presenting: <b>Dr.-Ing. Stephan Rohr</b>, Chief Technology Officer. ELGO Batscale AG, Liechtenstein</p>
18:00	<b>Reception</b>
<b>ELEVCON 2023 - Preliminary Program - Day 2</b>	
<b>Wednesday, June 21, 2023</b>	
<b>Time</b>	<b>Function</b>
<b>08:30-09:00</b>	<b>Registration and Morning Coffee</b>
<b>09:00-10:30</b>	<p><b>SESSION 5: INSPECTION AND MODERNIZATION</b></p> <p>Chairperson: <b>Dr. Albert So</b>, International Association of Elevator Engineers (HK-China Branch), Visiting Professor in Lift Engineering Faculty of Arts, Science &amp; Technology, University of Northampton, UK</p>
09:00-9:30	<p>Subject: <b>Modernization, Site Survey, Method</b></p> <p>Abstract: <b>Digital Elevator Survey – Improving Modernization Site Surveys</b></p> <p>Author: Darren Batey, Kone Industrial Ltd., Finland</p> <p>Presenting: <b>Mr. Darren Batey</b>, Customer Solutions Manager, Kone Industrial Ltd., Finland</p>
9:30-10:00	<p>Subject: <b>Rope Inspection, Objective analysis, Testing</b></p> <p>Abstract: <b>The Magnetic Rope Testing in The Elevator Market: Analysis and Evidence</b></p> <p>Authors: Bruno Vusini, Daniel Rossi, Tommaso Bertani, AMC Instruments</p> <p>Presenting: <b>Dr. Bruno Vusini</b>, Managing Director, AMC Instruments, Italy</p>
10:00-10:30	<p>Subject: <b>Elevator Monitoring with Computer Vision, Detect Objects</b></p> <p>Abstract: <b>Automatic Detection of Objects Blocking Elevator Doors Using Computer Vision</b></p> <p>Authors: David Baumgartner<sup>1</sup>, Ignace Jordens<sup>2</sup>, Daniel Wilfing<sup>3</sup>, Oliver Krauss<sup>1</sup>, Dorfmeister<sup>1</sup>, Gerald Zwettler<sup>1</sup>, <sup>1</sup> University of Applied Sciences Upper Austria – Research Group Advanced Information System and Technology (AIST), Austria, <sup>2</sup> PXL University of Applied Sciences and Arts, Belgium, <sup>3</sup> VIEW Promotion GmbH (Ltd)</p> <p>Presenting: <b>Mr. Gerald Zwettler</b>, Senior Researcher, University of Applied Sciences Upper Austria – Research Group Advanced Information System and Technology (AIST), Austria</p>
<b>10:30-11:00</b>	<b>Coffee Break &amp; Exhibition Visit</b>

<p><b>11:00-12:30</b></p> <p>11:00-11:30</p> <p>11:30-12:00</p> <p>12:00-12:30</p>	<p><b>SESSION 6: PERFORMANCE AND COMFORT</b>  <b>Chairperson: Mr. Sefa Targit, Vice President, MAKFED Turkish Machinery Federation, Turkey</b></p> <p>Subject: <b>Ride Comfort, Regression Analysis</b>  Abstract: <b>Estimation of Parameters Affecting Ride Comfort in Elevators</b>  Authors: Keisuke Terada, Yoshitake Kamijo, and Yoshiyuki Iwata, Toshiba Infrastructure Systems &amp; Solutions Corporation  Presenting: <b>Mr. Keisuke Terada</b>, Toshiba Infrastructure Systems &amp; Solutions, Tokyo, Japan</p> <p>Subject: <b>Elevator Energy Consumption</b>  Abstract: <b>A Procedure to estimate Elevator Energy Consumption using Elevator Traffic Simulation</b>  Authors: Janne Sorsa, D.Sc. (Tech) KONE Corporation, Finland  Presenting: <b>Dr. Janne Sorsa</b>, D.Sc. (Tech) KONE Corporation, Finland</p> <p>Subject: <b>Seismic Detectors, Self-Diagnostics, Auto Recovery</b>  Abstract: <b>Enhancement of Auto-Recovery Function for Elevators After Earthquake</b>  Author: Shohei Kondo, Shuichi Hayakawa and Junji Takeda, Toshiba Elevator and Building Systems Corporation, Japan  Presenting: <b>Mr. Shohei Kondo</b>, Shuichi Hayakawa and Junji Takeda, Toshiba Elevator and Building Systems Corporation, Japan</p>
<p><b>12:30-14:00</b></p>	<p><b>Lunch &amp; Exhibition Visit</b></p>
<p><b>14:00-16:00</b></p> <p>14:00-14:30</p> <p>14:30-15:00</p>	<p><b>SESSION 7: MAINTENANCE AND SELF-DIAGNOSTICS</b>  <b>Chairperson: Dr. Lee Edward Gray, Professor of Architectural History, University of North Carolina at Charlotte, USA</b></p> <p>Subject: <b>Maintenance, ASME Standard, Tasks</b>  Abstract: <b>Vertical Equipment Maintenance</b>  Author: John W. Koshak, QEC, CEI eMCP, LLC - Managing Member, USA  Presenting: <b>Mr. John W. Koshak</b>, QEC, CEI eMCP, LLC, Managing Member, USA</p> <p>Subject: <b>Maintenance, Predictive, False Alarms, Fault Data</b>  Abstract: <b>Condition Monitoring of Elevator Using Deep Learning and Frequency Analysis Approach</b>  Authors: Krishna Mohan Mishra<sup>1</sup>, John-Eric Saxen<sup>2</sup>, Jerker Bjorkqvist<sup>2</sup>, and Kalevi J. Huhtala<sup>1</sup>, <sup>1</sup>Unit of Automation Technology and Mechanical Engineering, Tampere University, Tampere, Finland, <sup>2</sup>Department of Information Sciences, Abo Akademi University, Turku, Finland</p>

15:00-15:30	<p>Presenting: <b>Dr. Krishna Mishra</b>, Unit of Automation Technology and Mechanical Engineering, Tampere University, Tampere, Finland</p> <p>Subject: <b>Communication, IoT, COP Common Operating System</b></p> <p>Abstract: <b>IoT Takes the Elevator World into Industry 5.0: The Omnipresent IoT Development will change inevitably the Elevator World, A Quantum Leap of System Utilization and Yield</b></p> <p>Author: Christian-Erik Thöny, CEDES Group, Switzerland</p> <p>Presenting: <b>Mr. Christian-Erik Thöny</b>, Member of Advisory Board CSEM, CEDES Group, Switzerland</p>
<b>15:30-16:00</b>	<b>Coffee Break</b>
16:00-17:00	<p><b>SESSION 8: WORKSHOP 2</b></p> <p>Subject: <b>Reverse Engineering - Remote Monitoring of Elevators and Authorised Third-Party Access to Elevator Data</b></p> <p>Author: <b>Mr. Esko Kilpeläinen</b>, Modusolutions, Finland</p> <p>Presenting: <b>Mr. Esko Kilpeläinen</b>, Modusolutions, Finland</p>
<b>18:00</b>	<p><b>Gala Dinner</b></p> <p>High Tech Award Elevatori-Elevcon</p> <p>Presenting: <b>Eng. Matteo Volpe</b>, Editor Elevatori Magazine, Italy</p>
<b>ELEVCON 2023 - Preliminary Program - Day 3</b>	
<b>Thursday, June 23, 2023</b>	
<b>Time</b>	<b>Function</b>
<b>08:30-09:00</b>	<b>Morning Coffee</b>
<b>08:30-10:30</b>	<p><b>SESSION 9: ELEVATOR DESIGN AND SIMULATION</b></p> <p><b>Chairperson: Mr. Robert Nicholson</b>, President, Architectural Elevator Consulting, LLC, USA</p>
08:30-09:00	<p>Subject: <b>Optimal Elevator Design, Space, Consultant</b></p> <p>Abstract: <b>Design Challenges in Asia due to Manufacturers' Differences</b></p> <p>Authors: K. Rajah Venkatraman, Vinay Venkatraman, Fortune Consultants, India</p> <p>Presenting: <b>K. Rajah Venkatraman</b>, Vinay Venkatraman, Fortune Consultants, India</p>
09:00-09:30	<p>Subject: <b>Internal, External Design Considerations, Construction, Multicultural Environment, Safety</b></p> <p>Abstract: <b>Rethinking Elevator Concept, Part of the Building as a System with Social and Physical Environment</b></p> <p>Authors: Dr. Magdalena Krstanoski, Concept2Solution, LLC, USA</p>

<p>09:30-10:00</p> <p>10:00-10:30</p>	<p>Presenting: <b>Dr. Magdalena Krstanoski</b>, Vertical Transportation Consultant, Concept2Solution, LLC, USA</p> <p>Subject: <b>Elevator Design, High Schools, Case Study</b>  Abstract: <b>Vertical High Schools - The Future of Failure?</b>  Authors: Scott Hampson, Arup, Australia  Presenting: <b>Mr. Scott Hampson</b>, Vertical Transportation Leader, Arup, Australia</p> <p>Subject: <b>Elevator Design, Dual Cars, Multifunctional</b>  Abstract: <b>Inspiration from the Shard: Time-sharing Dual Cars Multifunctional Lift Design for Super Tall Luxury Residential Towers</b>  Author: Hongliang Liang, Aliang Lift Design Studio Ltd, UK  Presenting: <b>Mr. Hongliang Liang</b>, Vertical Transportation Consultant, Aliang Lift Design Studio Ltd, UK</p>
<p><b>10:30-11:00</b></p>	<p><b>Coffee Break</b></p>
<p><b>11:00-12:30</b></p> <p>11:00-11:30</p> <p>11:30-12:00</p> <p>12:00-12:30</p>	<p><b>SESSION 10: EMERGENCY AND EVACUATION</b>  <b>Chairperson: Dr. Janne Sorsa</b>, Head of People Flow Planning, KONE Major Projects</p> <p>Subject: <b>Elevator and Escalator Design, Traffic, Simulation</b>  Abstract: <b>Simulation Based Design of Transportation Systems in Buildings</b>  Authors: Henri Hakonen, Lic.Sc. (Tech.) &amp; Juha-Matti Kuusinen, D.Sc. (Tech.), and Janne Sorsa, D.Sc. (Tech) KONE Corporation, Finland  Presenting: <b>Mr. Henri Hakonen, Lic.Sc. (Tech.)</b>, KONE Corporation, Finland</p> <p>Subject: <b>Evacuation, Tall Buildings, Lifts</b>  Abstract: <b>Evacuation of very tall Buildings using Elevators</b>  Authors: Peter Sumner, WSP The Mailbox, Birmingham, UK  Presenting: <b>Mr. Peter Sumner</b>, Technical Director, WSP The Mailbox, Birmingham, UK</p> <p>Subject: <b>Evacuation, EN and ISO Standards</b>  Abstract: <b>Evacuation Lift Standardization</b>  Author: Ari Kattainen, KONE Technology and Innovation, Finland  Presenting: <b>Mr. Ari Kattainen</b>, Leading Expert, Codes and Standards, KONE Technology and Innovation, Finland</p>
<p><b>12:30-14:00</b></p>	<p><b>Lunch &amp; Exhibition Visit</b></p>
<p><b>14:00-15:30</b></p>	<p><b>SESSION 11: FUTURE ELEVATOR SYSTEMS</b></p>

	<p><b>Chairperson: Dr. Marja-Liisa Siikonen</b>, M.Sc, Ph.D. CEO, MLS Lift Consulting Ltd. &amp; Elevcon 2023 Chairwoman &amp; Program Manager</p>
14:00-14:30	<p>Subject: <b>Elevator, Space and Moon Environment</b>  Abstract: <b>Elevators on the moon are closer than you think</b>  Authors: Yuval Valiano-Rips<sup>1</sup>, Maya Glickman-Pariente<sup>2</sup>, <sup>1</sup>Rips Elevators Group (Rips engineering Ltd), Israel, <sup>2</sup>SPACECIALIST Ltd, Israel  Presenting: <b>Mr. Yuval Valiano-Rips</b>, Rips Elevators Group, Rips Engineering Ltd, Israel</p>
14:30-15:00	<p>Subject: <b>Ropeless, Vertical and Horizontal Movement History</b>  Abstract: <b>An Historical Overview of Multidirectional, Cableless Elevator Systems</b>  Author: Dr. Lee E. Gray, The University of North Carolina at Charlotte, USA  Presenting: <b>Dr. Lee Edward Gray</b>, Professor of Architectural History, University of North Carolina at Charlotte, USA</p>
15:00-15:30	<p>Subject: <b>Ropeless, Hoisting Systems, Simulation, Power Consumption, Power Failure</b>  Abstract: <b>Study on Linear Permanent Magnet Synchronous Machines for Ropeless Lifts</b>  Authors: Albert So<sup>1</sup> and W.L. Chan<sup>2</sup>, International Association of Elevator Engineers (HK-China Branch), <sup>1</sup>University of Northampton, <sup>2</sup>The Hong Kong Polytechnic University, UK, Hong Kong  Presenting: <b>Dr. Albert So</b>, International Association of Elevator Engineers (HK-China Branch), Visiting Professor in Lift Engineering Faculty of Arts, Science &amp; Technology, University of Northampton, UK</p>
15:30-16:00	<p><b>Closing Remarks</b></p>