LIFT & ESCALATOR SYMPOSIUM

2020 Symposium on Lift and Escalator Technologies
23 - 25 September 2020
Online

Day 1

	08:30 **Welcome and Introduction** **Stefan Kaczmarczyk and Richard Peters**
	Session 1: Energy and Equipment **Chair: Rory Smith**
08:35 – 08:50	**A MATLAB/SIMULINK BASED ELEVATOR ENERGY CONSUMPTION MODEL** *Lutfi Al-Sharif, The University of Jordan, Jordan.*
08:50 – 09:05	**AN ENERGY EFFICIENT FUEL CELL HYBRID ELEVATOR: THE MAIN CONCEPT AND DESIGN TOPOLOGY** *Stefan Kaczmarczyk, University of Northampton, UK.*
09:05 – 09:20	**A DESIGN METHODOLOGY OF ROPE TENSION METER USED FOR LIFT AUTOMATIC DOOR ASSEMBLY** *Anup Balharpure, Rewale Engineering Pvt. Ltd, India.*
09:20 – 09:35	**Q&A**
	Break **09:35 – 10:00**
10:00 - 11:00	**Panel Discussion** **THE FUTURE FOR STANDARDS IN THE LIFT INDUSTRY** **Chair: Nick Mellor** **Panel: Ian Jones, TAK Mathews, Rory Smith, Graham Worthington**
11:00	**Close Day 1**

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Day 2

	08:30 **Welcome** **Nick Mellor**
	Session 2: Technology **Chair: Richard Peters**
08:35 – 08:50	**IOT, MAGIC OR MYTH** *Rory Smith, University of Northampton, USA.*
08:50 – 09:05	**RESEARCH OF REAL TIME VIDEO MONITORING AND REMOTE CONTROL SYSTEM OF ESCALATORS** *Yantai Luo, Shanghai Mitsubishi Elevator Corporation, Japan.*
09:05 – 09:20	**FEASIBILITY STUDY OF USING A COUPLER SKATE ENCODER SYSTEM FOR MONITORING THE REAL TIME STATUS OF LIFT DOOR OPERATION** *Rohit Nehe, Creestaa Lifts, India.*
09:20 – 09:35	**Q&A**
	Break **09:35 – 09:45**
	Session 3: Engineering **Chair: Stefan Kaczmarczyk**
09:45 – 10:00	**COMPUTATIONAL ENVIRONMENT FOR SIMULATING IMPACT OF BUILDING SWAY ON HIGH RISE LIFTS** *Jaakko Kalliomäki, KONE, Finland.*
10:00 – 10:15	**STUDY ON A VIBRATION REDUCTION SYSTEM FOR LIFT ROLLER GUIDES** *Yosuke Shima, Tokyo Denki University Japan.*
10:15 – 10:30	**COMPUTER-AIDED STRUCTURAL ANALYSIS OF THE LIFT CAR - GUIDING SYSTEM UNDER THE NORMAL AND EMERGENCY ARREST OPERATIONAL CONDITIONS** *Mohammad Ghaleeh, University of Northampton, UK.*
10:30 – 10:45	**Q&A**
	Break **10:45 – 11:00**
11:00 – 12:00	**Panel Discussion** **THE LIFT INDUSTRY AND COVID-19** **Chair: David Cooper** **Panel: Phil Hofer, Sridhar Rajagopal, Ian Smith, Jochem Wit**
12:00	**Close Day 2**

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Day 3

08:30 **Welcome** **David Cooper**	
Session 4: Escalator Safety and Earthquakes **Chair: Lutfi Al-Sharif**	
08:35 – 08:50	**STUDY ON EVACUATION ROUTE IN CASE OF A DISASTER CONSIDERING THE FRAGILITY OF MECHANICAL STRUCTURES** *Kazusada Natsu, Tokyo Denki University, Japan.*
08:50 – 09:05	**THE PASSENGER INPUT INTO ESCALATOR ACCIDENTS** *David Cooper, LECS UK Ltd, UK.*
09:05 – 09:20	**STUDY ON ESCALATOR FALL OFF BEHAVIOUR DURING EARTHQUAKES** *Nayuta Sudo, Tokyo Denki University, Japan.*
09:20 – 09:35	**Q&A**
Break **09:35 – 09:50**	
Session 5: Traffic and Control **Chair: Rory Smith**	
09:50 – 10:05	**THE ROUND TRIP TIME SIMULATION** *Matthew Appleby, Peters Research Ltd, UK.*
10:05 – 10:20	**CALL-GIVING DEVICES IN LIFT TRAFFIC DESIGN WITH A DESTINATION CONTROL SYSTEM** *Mikko Kontturi, KONE Industrial Ltd, Finland.*
10:20 – 10:35	**USING THE INTER-LINKED MONTE CARLO SIMULATION METHOD (iMCS) TO CALCULATE THE VALUE OF THE ELEVATOR ROUND TRIP TIME TO REFLECT THE RANDOM NATURE OF PASSENGER ARRIVALS** *Lutfi Al-Sharif, The University of Jordan, Jordan.*
10:35 – 10:50	**THE MAXIMUM NUMBER OF PASSENGERS BOARDING A LIFT IN OFFICE BUILDINGS BASED ON AUTOMATED PASSENGER COUNTS** *Tiina Laine, KONE Industrial Ltd, Finland.*
10:50 – 11:05	**Q&A**
11:05 **Closing: Stefan Kaczmarczyk & Richard Peters** **End of Proceedings**	