

Holistic Overview of Structural Design and Construction Management







9:30 – 10:00 am

# **Keynote Speaker I:**Diofantos G. Hadjimitsis

Tassos Papadopoulos Building, Ground Floor Amphitheatre

#### V-Room A:

https://us02web.zoom.us/j/85384619724?pwd=ODJI VldxRkkwU1RRL082V1BSMDJvZz09

PMI: 853 8461 9724, Password: 010902



Professor, Dept. of Civil Engineering and Geomatics, Faculty of Engineering and Technology of the Cyprus University

Managing Director of the 'ERATOSTHENES CENTRE OF EXCELLENCE'

#### Title:

The 'EXCELSIOR' H2020 Teaming Project and the 'Eratosthenes Centre of Excellence' in Cyprus: Remote Sensing for the benefit of Civil Engineering and Geomatics Tea & Coffee Break 10:00 - 10:30 am



**Next: Technical Session I** 

10:30 am - 12:30 pm, V-Rooms A, B, and C



### Technical Session I 10:30 - 12:30

# V-Room A Construction Engineering



#### Moderator:

Dr. Amarjit Singh

#### IT Staff:

Christos Rodosthenous

Presentation #	Name/Presenter	Presentation Title
1	Jace Thibault	QUANTIFYING UNCERTAINTY IN SIMULATION MODELING
2	Kerim Koc and Asli Pelin Gurgun	A META ANALYSIS OF DECISION MAKING PROBLEMS IN CONSTRUCTION RISK MANAGEMENT
3	Obuks A. Ejohwomu	IMPROVING CONSTRUCTION PROJECT PERFORMANCE IN DEVELOPING COUNTRIES: CONTRACTOR APPROACH
4	Enrique Villacis Tapia	ANALYZING THE HUMAN SPHERE WITH THE CIRCULAR ECONOMY MODEL IN POST-EARTHQUAKE CONSTRUCTION: MECHE'S HOUSE
5	Photios G. Ioannou	A RELATIONAL DATABASE MANAGEMENT SYSTEM FOR LIFE-CYCLE COST ANALYSIS OF BIM PROJECTS
6	Elia A. Tantele	EVALUATION OF HEALTH AND SAFETY INSPECTIONS IN THE CONSTRUCTION INDUSTRY
7	Enrique Villacis Tapia	PERTINENCE OF A NEUROSCIENCE CONSTRUCTION INDUSTRY CLASS IN ORDER TO RAISE GLOBAL CRISIS AWARENESS



#### Moderator:

Dr. Hossein Askarinejad

#### IT Staff:

Georgia Matheou and Christina Chen

# Technical Session I 10:30 - 12:30

# V-Room B Materials



Presentation #	Name/Presenter	Presentation Title
1	Robert Černý	WATER VAPOR TRANSPORT IN PLASTERS CONTAINING SUPERABSORBENT POLYMERS
2	Zbyšek Pavlík	LIGHTWEIGHT COATING MORTARS FOR BUILDINGS RESTORATION
3	Faten Abi Farraj	CRUSHED LIMESTONE SAND: AN EFFECTIVE ALTERNATIVE TO NATURAL SAND IN CONCRETE
4	Jan Fořt	EFFECT OF SUPERABSORBENT PARTICLE SIZE ON RHEOLOGY AND MECHANICAL PERFORMANCE OF CEMENT MORTARS
5	Milena Pavlíková	MAGNESIUM OXYCHLORIDE CEMENT-BASED COMPOSITE WITH FOAM GLASS USED AS LIGHTWEIGHT ADMIXTURE
6	Lukáš Fiala	EXPERIMENTAL DETERMINATION OF ACOUSTIC BEHAVIOR OF BUILDING MATERIALS BY MEANS OF ACCELEROMETERIC MEASUREMENTS



### Technical Session I 10:30 - 12:30

# V-Room C Road and Bridge Engineering



#### Moderator:

Dr. Sherine Ahmed El Baradei

#### IT Staff:

Petros Christoforou and Jun Okabe

Presentation #	Name/Presenter	Presentation Title
1	R. Edward Minchin Jr	A SYNTHESIS OF CONSTRUCTABILITY IN TRANSPORTATION CONSTRUCTION
2	Philippe Van Bogaert	CONSIDERATIONS ON THE APPLICATION OF EUROCODES 2 AND 4 FOR CONCRETE BRIDGES
3	Photios G. Ioannou	ALAMILLO BRIDGE: CONSTRUCTION SIMULATION MODELS IN EZSTROBE
4	Nokulunga Xolile Mashwama	THE FACTORS MILITATING INTERNAL STAKEHOLDERS ON ROAD INFRASTRUCTURE PROJECTS
5	R. Edward Minchin Jr	BUNDLING: AN INNOVATION IN BRIDGE DELIVERY
6	M. Imran Rafiq	TEXTILE REINFORCED MORTAR BASED FLEXURAL STRENGTHENING OF REINFORCED CONCRETE BEAMS
7	Nokulunga Xolile Mashwama	THE EFFECTS OF POOR PERFORMANCE ON ROADS INFRASTRUCTURE PROJECT

Lunch Break 12:30 - 13:25 pm



Next: Keynote II

Prof. Christis Chrysostomou

13:25 – 13:55 pm, V-Room A

Lunch Break: 12:30 – 13:25

13:25 – 13:55 pm

# Keynote Speaker II: Christis Z. Chrysostomou



Professor, Dept. of Civil Engineering and Geomatics Cyprus University of Technology

Tassos Papadopoulos Building, Ground Floor Amphitheatre

V-Room A:

https://us02web.zoom.us/j/85384619724?pwd= ODJIVIdxRkkwU1RRL082V1BSMDJvZz09

PMI: 853 8461 9724, Password: 010902

#### Title:

Are we safe from earthquakes?

#### Abstract:

Earthquakes are a natural phenomenon that is with us since the creation of the Earth and have devastating effects on the built environment. The shaking of the ground affects through inertia forces, fires, landslides, tsunamis etc. the everyday-life of people causing deaths and interruption of the normal life of the society. The probable effects of an earthquake at a specific area and at a given time-frame are described by the term "seismic risk". The two components of the seismic risk are seismic hazard, which is a natural phenomenon, and vulnerability, which can be affected by human intervention through prevention, preparedness, response and recovery. In this presentation, the actions taken by the Cyprus Society in these four main sectors of action are presented and conclusions are drawn.



#### Technical Session II 14:00 - 16:00

#### V-Room A





#### Moderator:

Dr. Markella Menikou

#### IT Staff:

Christos Rodosthenous

Presentation #	Name/Presenter	Presentation Title
1	Enrique Villacis Tapia	SPECIALIZED DESIGN OF ARCHITECTURAL OBJECTS FOR THE REHABILITATION OF PEOPLE WITH VISUAL DISABILITIES
2	Ossama Salem	BIM AND VR/AR TECHNOLOGIES: FROM PROJECT DEVELOPMENT TO LIFECYCLE ASSET MANAGEMENT
3	Miroslav Todorov and Mihail Todorov	STRUCTURAL CONCEPTS IMPLEMENTED WHILE SURVEYING BUILDINGS OF HISTORICAL AND CULTURAL SIGNIFICANCE
4	Klaus Holschemacher	QUO VADIS CIVIL ENGINEERING EDUCATION: 20 YEARS AFTER BOLOGNA DECLARATION
5	Enrique Villacis Tapia	BREAKING STUDENTS' COMFORT ZONE: LEARNING FROM COMMUNITY MEMBERS, A STRATEGY WITHIN THE AEC EDUCATION
6	Markella Menikou	DIVINING THE FUTURE: INTEGRATIVE TECHNOLOGICAL THINKING IN ARCHITECTURAL PEDAGOGY
7	Fernando Brandão Alves	REHABILITATION OF BRICK-WALL FAÇADES
8	Smadar Shilony	KNOWLEDGE AREAS FOR TRAINING JUNIOR CIVIL ENGINEERS IN OPERATIONS AND CONSTRUCTION MANAGEMENT TASKS



#### Moderator:

Dr. Dejan Dinevski

#### IT Staff:

Georgia Matheou and Christina Chen

## Technical Session II 14:00 - 16:00

# V-Room B Materials and Design



Presentation #	Name/Presenter	Presentation Title
1	Václav Kočí	EFFECT OF LOAD BEARING MATERIALS ON SUSCEPTIBILITY TO BIOFILMS GROWTH
2	Fin O'Flaherty	DEVELOPMENT OF LIME BASED, LOAD-BEARING MATERIALS FOR WALL CONSTRUCTION
3	Chris Danezis	ASSESSING AGING IN REINFORCED CONCRETE USING NOVEL REMOTE SENSING TECHNIQUES
4	Abid Nadeem	PHASE CHANGE MATERIALS RANKING BY USING THE ANALYTIC HIERARCHY PROCESS
5	Jan Kočí	EFFECT OF APPLIED INTERIOR THERMAL INSULATION SYSTEMS ON THE ENERGY PERFORMANCE OF A HISTORICAL/CONTEMPORARY MASONRY
6	Ezzeldin Sayed-Ahmed	EFFECT OF CFRP STRIPS BONDING LOCATION ON FLEXURAL CAPACITY AND DUCTILITY OF REINFORCED CONCRETE BEAMS
7	Jiří Maděra	COMPUTATIONAL ANALYSIS OF HEAT AND MASS TRANSPORT IN CHARACTERISTIC DETAIL OF INTERIOR THERMAL INSULATION SYSTEM
8	Ahmed Hammad	APPLICATION OF FUZZY TOPSIS FOR SELECTING MOST SUSTAINABLE BUILDING WALL MATERIAL



# Technical Session II 14:00 - 16:00

# V-Room C LADR Workshop



#### Moderator:

Dr. Asli Pelin Gurgun

#### IT Staff:

Petros Christoforou and Jun Okabe

Presentation #	Name/Presenter	Presentation Title
1	Amarjit Singh	THE KA LOKO TRAGEDY
2	Abhilasha Panwar and Kumar Neeraj Jha	CAUSAL MODELING OF DISPUTES IN CONSTRUCTION PROJECTS
3	Paul Thornton and Yiannis Vacanas	QUANTIFYING LOST PRODUCTIVITY IN CONSTRUCTION PROJECTS: A NEW FRAMEWORK
4	Fikreyesus Demeke Cherkos	ENABLING SUCCESSFUL APPLICATION OF PPPs in NEW (INEXPERIENCED) MARKETS: IMPLICATIONS OF PPPs' SUCCESS AND FAILURE IN TOLL ROADS
5	Mehrdad Sarhadi and Saied Yousefi	EVOLVING HISTORY OF SUSTAINABLE PROJECT: EXPLORING SUSTAINABILITY AT THE AGENCY LEVEL

Tea & Coffee Break 16:00 - 16:30 pm



**Next: Technical Session III** 

16:30 - 18:30 pm, V-Rooms A, B, and C



### Technical Session III 16:30 - 18:30

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Cyprus
University of
Technology

#### V-Room A

# Sustainability and Environmental Engineering

Moderator:

Dr. Eliana Iliofotou

IT Staff:

Christos Rodosthenous

Presentation #	Name/Presenter	Presentation Title
1	Nokulunga Xolile Mashwama	A STAKEHOLDER PERSPECTIVE ON THE IMPLEMENTATION OF SUSTAINABLE CONSTRUCTION PRACTICES
2	Adonis Cleanthous	PAPER-SHADE: DEVELOPMENT OF SUSTAINABLE MODULAR BUILDING SHADING SYSTEMS UTILIZING RECYCLED PAPER TOWARDS SERIAL PRODUCTION
3	Sherine Ahmed El Baradei	COMBINED EFFECT OF WIND SPEED AND COVERING IRRIGATION CANALS ON WATER QUALITY PARAMETERS
4	Joas Serugga	A FRAMEWORK FOR EMERGENT NEEDS ANALYSIS DURING FRONT-END DESIGN IN SOCIAL HOUSING
5	Andrea Vallejo Espinosa	INFLUENCE OF VERTICAL GARDENS ON THE AIR QUALITY OF A CITY HISTORIC CENTER
6	Andres Basantes	A MANUAL SUCTION TOILET FOR SEWAGE REDUCTION
7	Samaan G. Ladkany	LATEST WORLDWIDE DEVELOPMENTS IN MOLTEN SALT TECHNOLOGY AND APPLICATIONS
8	Elia A. Tantele	DEVELOPMENT OF WASTE MANAGEMENT PLANNING FOR THE CONSTRUCITON SECTOR CONSIDERING CYCLE ECONOMY



# Technical Session III 16:30 - 18:30



# V-Room B Structural and Geotechnical Engineering

#### Moderator:

Dr. Siamak Yazdani

#### IT Staff:

Georgia Matheou and Jun Okabe

Presentation #	Name/Presenter	Presentation Title
1	Klaus Holschemacher	EXPERIMENTAL INVESTIGATION ON STRENGTHENING OF REINFORCED CONCRETE COLUMNS WITH CARBON CONCRETE COMPOSITE
2	Fin O'Flaherty	CORRELATION BETWEEN THE INSPECTION MANUAL SEVERITY CODES AND MOMENT COEFFICIENT FOR DETERIORATED CONCRETE BEAMS
3	Samaan Ladkany	ALTERNATIVE DESIGNS OF MOLTEN SALT STORAGE SHELLS FOR USE IN SOLAR ENERGY STORAGE
4	Philippe Van Bogaert	TORSIONAL STIFFNESS AS AN INFLUENCE PARAMETER ON ARCH STABILITY
5	Dejan Dinevski	INFLUENCE OF GEOMETRY RECOVERY ON STRESS STATE OF OPTIMIZED PARTS
6	Miroslav Todorov and Mihail Todorov	LANDSLIDE INVESTIGATION ASPECTS
7	Danieli Moshe and Jacov Bloch	ABOUT THE EARTHQUAKE RESISTANCE OF REINFORCED CONCRETE OF SHELLS OF REVOLUTION
8	Han-Yong Jeon	FAILURE ANALYSIS OF GEOGRIDS WITH SUDDEN LOADING BY STEPPED ISOTHERMAL METHOD AS ACCELERATED CREEP TEST



### Technical Session III 16:30 - 18:30

# V-Room C LADR Workshop



#### Moderator:

Dr. Ulrike Quapp

#### IT Staff:

Petros Christoforou and Christina Chen

Presentation #	Name/Presenter	Presentation Title
1	Lance VanDemark	BUILDING ENVELOPE ISSUES WITHIN CONSTRUCTION DEFECT LITIGATION
2	Sparsh Johari	UNIQUE SOLUTIONS FOR CHALLENGING RIVER DISPUTES
3	Ulrike Quapp	NON-COMPLIANCE OF FIXED TARIFFS FOR ARCHITECTURAL AND ENGINEERING SERVICES WITH EUROPEAN LAW
4	Venkata Santosh Kumar Delhi and Ajay Agrawal	HOW CONTROL-FOCUSED ARE THE STANDARD FORMS? AN ASSESSMENT THROUGH TEXT MINING
5	Yiannis Vacanas and Chris Danezis	DETERMINATION OF EFFECTIVE DELAY AVOIDANCE PRACTICES IN CONSTRUCTION PROJECTS
6	Santu Kar and Abhilasha Panwar	RIVER WATER PROJECT DISPUTES AND THEIR IMPLICATIONS

