



Vancouver, Canada  
 May 31 – June 3, 2017/ *Mai 31 – Juin 3, 2017*

**Schedule for the 6th International Conference on Engineering Mechanics and Materials**  
**Conference Chair: Shahria Alam ([shahria.alam@ubc.ca](mailto:shahria.alam@ubc.ca))**

Update: May 26, 2017

**Please note that the information in this schedule is final and is not expected to change.**

<b>Day: Wednesday, May 31, 2017</b>			<b>Time: 13:00 – 14.30</b>	<b>Room: Coquitlam</b>	<b>Chair</b>
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	Pedram Sadeghian	
531	Pedram Sadeghian	Compressive Behaviour of Concrete Cylinders Reinforced with Glass Fiber Reinforced Polymer Bars	Advanced Composite Materials		
592	Hamid Akbarzadeh	Engineered Graded Materials: Vibration of Doubly-Curved Nano-Panels			
628	Michael Rostami	Anchorage Capacity of TL4 Concrete Bridge Barrier-deck junction reinforced with GFRP Bars with newly-developed, cost-effective, 180° hooks			
644	Faizul Mohee	Application of High-strength Composite Materials for the Nuclear Waste Containers and Flasks			
645	Faizul Mohee	TOWARDS A MECHANICAL ANCHOR SYSTEM FOR CFRP PLATES			

<b>Day: Wednesday, May 31, 2017</b>			<b>Time: 13:00 – 14.30</b>	<b>Room: Chehalis</b>	<b>Chair</b>
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	Urmil Dave	
537	M. T. Bassuoni	DETERIORATION OF JOINTS IN CONCRETE PAVEMENTS: INVESTIGATION OF FIELD CORES	Concrete Durability		
555	Mona El Mosallamy	Effects of Sample Preparation on the Results of The Oxygen Consumption Test Used to Evaluate Oxidation Potential of Sulfide-Bearing Aggregate			
559	Noura Sinno	Evaluating the Potential Alkali-Silica Reactivity of Mineral Fillers: A Preliminary Study			
569	Ahmed Hamza	THE EFFECT OF CEMENT TYPE ON CONCRETE RESISTANCE TO SULFATES			
595	Pejman Azarsa	Detection and characterization of surface cracks and defects in concrete structures using various NDTs			

<b>Day: Wednesday, May 31, 2017</b>				<b>Time: 13:00 – 14.30</b>		<b>Room: Cypress 1</b>		<b>Chair</b>	
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>				<b>Theme</b>			
609	Ahmed Suleiman	Predicting Self-healing in Concrete Using Artificial Neural Networks				Concrete Durability	Moncef Nehdi		
649	Bruce Menu	Evaluation of Early Age Shrinkage Cracking Tendency of Concrete							
578	Lisa Feldman	A Corrosion Comparison of Historical and Modern Reinforcing Bars							
560	M. T. Bassuoni	Response of Concrete to Incremental Levels of Sulfuric Acid Attack							
503	Arman Roshan	Different Approaches to Model Cover Cracking of RC Structures due to Corrosion							

<b>Day: Wednesday, May 31, 2017</b>				<b>Time: 13:00 – 14:30</b>		<b>Room: Cowichan</b>		<b>Chair</b>	
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>				<b>Theme</b>			
520	Kishoare Tamanna	EXPERIMENTAL INVESTIGATION OF MECHANICAL PROPERTIES OF RUBBERIZED CONCRETE CONTAINING RECYCLED COARSE AGGREGATE				Recycled Materials	Samer Al Martini		
570	Md Jahidul Islam	A Study on Green Lightweight Concrete using Recycled Poly-Ethylene Terephthalate (PET) as Coarse Aggregate							
571	Samer Al Martini	Sustainable Self-Consolidating Concrete using Recycled Aggregate and Supplementary Cementitious Materials							
580	John Gales	Developing Reclaimed Concrete Cement for Structural Grade Sustainable Concretes							
616	Mohamed Abdel-Raheem	Utilization of Red Mud as Partial Cement in Cement Mortar							

<b>Day: Wednesday, May 31, 2017      Time: 15:00 – 16:30      Room: Coquitlam</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
532	Pedram Sadeghian	Short Concrete Columns Reinforced with GFRP Rebars under Eccentric Loading	Composite Materials	Ayan Sadhu
509	Mosharef Hossain	Compressive Strength Enhancement of Low Strength Concrete Subjected to Freeze-Thaw Effect Using GFRP Confinement		
549	Mohtady Sherif	EFFECT OF GFRP BAR SPLICE LENGTH ON FLEXURAL STRENGTH OF JOINTED PRECAST DECK SLAB WITH UHPFRC-FILLED CLOSURE STRIP		
625	Michael Rostami	Ultimate Load Tests on a 40-m long TL-5 Bridge Barrier reinforced with GFRP bars with special profile 180° hooks		
627	Reem Abou Ali	Effect of Cementitious Protection on Flexural Response of CFRP Reinforced Beams Exposed to Elevated Temperature		

<b>Day: Wednesday, May 31, 2017      Time: 15:00 – 16:30      Room: Cowichan</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
586	Md Manik Mia	Fatigue-Life Prediction of Shear Stud Using Finite Element Analysis	Structural Safety and Reliability	Mohamed Nagib AbouZeid
577	Christian Wokem	Fatigue reliability of structural connections using stress concentration information		
636	Arnold Yuan	Karhunen-Loève Expansion for Extreme Values of Homogeneous Gamma Fields		
648	Young-Jin Cha	Advanced deep learning based damage detection using computer vision		
563	Morteza Fadaee	Investigation on impact loads for test level 4 of bridge barriers		

<b>Day: Wednesday, May 31, 2017      Time: 15:00 – 16.30      Room: Chehalis</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
600	Biao Li	Experimental investigation on the mechanical behavior and microstructure of polypropylene fiber reinforced concrete subjected to uniaxial compression	Fiber Reinforcement	Samer Al Martini
558	Michael Cohen	Predicting the Shear Resistance of SFRC Beams		
564	Roman Melnikov	Numerical modeling of reinforced ECC building frames		
583	Shailza Sapal	EFFECTIVENESS OF A NATURAL POZZOLANIC MATERIAL FROM SOUTHERN SASKTACHEWAN FOR CEMENT REPLACEMENT IN CONCRETE		
607	Radhouane Masmoudi	CYCLIC BEHAVIOR OF CONCRETE FILLED FIBER REINFORCED POLYMER TUBE		

<b>Day: Wednesday, May 31, 2017      Time: 15:00 – 16.30      Room: Cypress 1</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
608	Radhouane Masmoudi	Effect of sand-coating bond performance on the flexural capacity of circular concrete-filled FRP tubes	High Performance and High Strength Materials	Urmil Dave
606	Shirin Ahmad	STRUCTURAL PERFORMANCE OF ENGINEERED CEMENTITIOUS COMPOSITES SUBJECTED TO PRE AND POST-FATIGUE MONOTONIC LOADING		
545	Shameem Ahmed	BUCKLING RESISTANCE OF STAINLESS STEEL WELDED I-COLUMNS		
596	Mohammad Anwar-U-Saadat	Effect of geometric imperfection and residual stress on the capacity of stainless steel I-sections subjected to lateral-torsional buckling		
542	Pedram Sadeghian	Structural Behaviour of Sandwich Panels Constructed of Foam Cores and Flax FRP Facings		

<b>Day: Thursday, June 1, 2017      Time: 9:30 – 10:30      Room: Fraser</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
507	SHUAI LI	Seismic vulnerability assessment of a long-span cable-stayed bridge isolated by SMA Wire-based lead rubber bearings	Structural Safety and Reliability	Ahmad Rteil
521	Alok Dua	Efficacy of Concrete Constitutive Models for Bullet Impact tests		
572	Tanvir Manzur	Effect of Drilled Cores on Axial Load Capacity of Reinforced Columns with Brick Aggregate Concrete		
655	Moein Ahmadipour	Integrated Timber Design using S-Timber module of S-FRAME Software		

<b>Day: Thursday, June 1, 2017      Time: 11:00 – 12:00      Room: Mackenzie</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
527	Chike Okoloekwe	Kinematic Model for Strain Evaluation in Dented Pipelines using Multidimensional B-Spline Interpolation	Computational Mechanics	Moncef Nehdi
539	Victoria Buffam	Stability of Extended Shear Tab Connections		
554	Bernardo Garcia Ramirez	Development of Nonlinear Analysis Models for Shear Wall Reinforced-Concrete Structures using the Finite-Element Method		
574	Riley Quintin	Complex Load Sharing in Weak-axis Moment Connections of Industrial Steel Structures		

<b>Day: Thursday, June 1, 2017      Time: 14:00 – 15:30      Room: Mackenzie</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
635	Arash Sahraei	LATERAL TORSIONAL BUCKLING ANALYSIS AND DESIGN OF STEEL BEAMS WITH CONTINUOUS SPANS	Computational Mechanics	Ahmad Rteil
594	Hamid Reza Naderian	AN OPTIMAL NUMERICAL SCHEME FOR MULTI-SPAN COMPOSITE LAMINATED FRP DECK BRIDGES		
658	Ramon Rosales-Espinoza	Experimental and Analytical Performance of an Innovative Pile-to-Pile Mechanical Connector		
584	Iraj Mamaghani	HYSTERETIC BEHAVIOR OF STRUCTURAL STEELS UNDER BIAXIAL NONPROPORTIONAL COMPRESSION AND TORSION		
637	Arash Sahraei	EFFECT OF BRACING HEIGHT ON LATERAL TORSIONAL BUCKLING RESISTANCE OF STEEL BEAMS		

<b>Day: Thursday, June 1, 2017      Time: 16:00 – 17:30      Room: Seymour</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
516	Lisa Feldman	Towards Development Length Criteria for Plain Reinforcing Bars in Tension	Novel Experimental and Numerical Methods	Ayan Sadhu
523	Jessy Frech Baronet	INFLUENCE OF RELATIVE HUMIDITY ON CREEP AND RELAXATION BEHAVIOR OF CEMENT PASTE AT THE MICROSTRUCTURAL LEVEL		
524	Ahmad Shahroodi	Electrical Properties as an Indicator for Rheological Properties Development of Fresh Concrete		
598	James Booth	Non-Destructive, Acoustic Evaluation of Masonry Compressive Strength		
599	Moein Ahmadipour	Finite Element modeling of timber I-Joists with web holes and flange notches		

<b>Day: Thursday, June 1, 2017      Time: 16:00 – 17:30      Room: Mackenzie</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
623	Peter Mikhailenko	Observation of Polymer Modified Asphalt Microstructure by ESEM	Recycled, Repair, and Modified Materials	Mohamed Nagib AbouZeid
617	Mohamed Abdel-Raheem	Further Experimentation on the Utilization of Gasifier Ash in Mortar		
656	Ahmad Rteil	Using Wood Ash as Cement Replacement		
548	Ezzat Fahmy	A PROPOSED USE OF CONCRETE CLOTH IN THE REPAIR WORKS OF CONCRETE BEAMS		
654	M. Shahidul Islam	Properties of Oriented Strand Board (OSB), and timber to evaluate the stiffness of timber I-joist		

<b>Day: Friday, June 2, 2017      Time: 9:00 – 10:30      Room: Fraser</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
500	Mohamed Darwish	Structural Dynamic Characteristics of the London Ancient Egyptian Obelisk	Dynamics of Structures	Amir Fam
502	Mahmoud Hassan	Parameters Affecting the Dynamic Behavior of the Machine Foundations		
661	Mohamed Elassaly	SEISMIC DAMAGE ASSESSMENT OF RC BUILDING WITH TRANSFER SLAB SYSTEM		
611	Yingcai Han	Dynamic Analysis for Modular Structures		
615	Ayan Sadhu	Detection of progressive deterioration of structures using wavelet transform		

<b>Day: Friday, June 2, 2017      Time: 11:00 – 12:00      Room: Mackenzie</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
543	Urmil Dave	PARAMETRIC STUDY ON FLY ASH & BOTTOM ASH BASED ALKALI ACTIVATED MORTAR AND CONCRETE	Innovative and Emerging Materials	Mohamed Nagib AbouZeid
556	Cherif Khalil	USING GRAPHENE AS A NANOFILLER IN THE CONSTRUCTION INDUSTRY		
614	Athnasious Ghaly	EFFECT OF NANO SILICA ON THE PERFORMANCE OF CEMENTITIOUS MATERIALS		
642	Daman Panesar	A Review: The Effect of Graphene Oxide on the Properties of Cement-Based Composites		

<b>Day: Friday, June 2, 2017      Time: 11:00 – 12:00      Room: Fraser</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
586	Md Manik Mia	Static Strength of Headed Shear Stud Connectors Using Finite Element Analysis	Materials and Structures under Extreme Loads (Seismic, Wind, Fire, Tsunami)	Pedram Sadeghian
643	Sosan Rizvi	Seismic performance of beam-column joint reinforced with different shape memory alloy alternatives.		
519	Md Arman Chowdhury	Cyclic behavior of post tensioned steel beam column connection with reduced length strands		
505	Anas Issa	SEISMIC VULNERABILITY ASSESSMENT OF PRE-CODE FRAME BUILDING RETROFITTED USING BUCKLING RESTRAINED BRACES		



Day: Friday, June 2, 2017		Time: 14:00 – 15:30		Room: Fraser		Chair	
ID	Presenter	Topic	Theme				
629	Kaila Spencer	Seismic performance assessment and design of Shape memory alloy (SMA) cross-wire configured high damping rubber bearing	Smart Materials and Structural Components	Pedram Sadeghian			
511	Shahin Zareie	The dynamic analysis of a novel shape memory alloy-based bracing system					
506	Yulong Liang	Influence of Ti2Ni precipitates on phase transformation of Ni-Ti-Fe shape memory alloy					
613	Mohamed Fawzy	TECHNICAL AND ECONOMIC FEASIBILITY OF SELF HEALING MATERIALS					
528	Jayanthan Madheswaran	Numerical Analysis of Steel Slit Dampers Under Cyclic Loading					

Day: Friday, June 2, 2017		Time: 14:00 – 15:30		Room: Mackenzie		Chair	
ID	Presenter	Topic	Theme				
508	Farshad Hedayati Dezfali	Performance Evaluation of Carbon Fiber-Reinforced Elastomeric Isolators (C-FREI) through Experimental Tests	Materials and Structures under Extreme Loads (Seismic, Wind, Fire, Tsunami)	Amir Fam			
510	Ahmad Rahmzadeh	Cyclic Behavior of Post-Tensioned Steel Connections with Shape Memory Alloy Angles					
536	Wai Man Wong	Finite-Element Modelling of Reinforced Engineered Cementitious Composite (ECC) Structure under Seismic Loads					
546	Sam Salem	EXPERIMENTAL FIRE TESTING OF CONCEALED STEEL-GLULAM TIMBER SEMI-RIGID BOLTED CONNECTIONS					
567	Asif Iqbal	Analytical Study of Ductile Connections for Cross-Laminated Timber Structures					

<b>Day: Friday, June 2, 2017      Time: 16:00 – 17:30      Room: Mackenzie</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	
566	Shahin Zareie	The introduction and modeling of novel shape memory alloy-based bracing	Materials and Structures under Extreme Loads (Seismic, Wind, Fire, Tsunami)	Asif Iqbal
585	Iraj Mamaghani	Modelling Cyclic Stress-Strain Behavior of Confined Concrete		
647	Navpreet Bharaj	CASE STUDY OF SEISMIC LOAD REDUCTION FACTORS FOR EQUIVALENT SEISMIC LOADS FOR LOW AND MID-RISE BUILDINGS		
597	Md Shahnewaz	Performance of Cross Laminated Timber Shear Walls under Cyclic Loading		
646	AHM Muntasir Billah	Seismic and Wind Vulnerability Assessment for the Pattullo Bridge		

<b>Day: Saturday, June 3, 2017      Time: 9:00 – 10:30      Room: Tompson</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
620	Danesh Nourzadeh	Response of multi-story frames and individual columns to blast loading	Materials and Structures under Extreme Loads (Seismic, Wind, Fire, Tsunami)	Muntasir Billah
591	John Gales	MASS HERITAGE TIMBER PERFORMANCE IN FIRE		
631	Matthew Smith	Enabling operational resilience through performance-based fire design		
619	Danesh Nourzadeh	Experimental study on blast induced roof loads in building structures		
650	Mohamed Ali	Effect of Fire Exposure on Impact Resistance of Hybrid Fiber-Reinforced Engineered Cementitious Composites		

<b>Day: Saturday, June 3, 2017      Time: 9:00 – 10:30      Room: Fraser</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
604	Katherine Bown	The effects of adjusting aggregate fineness and mix proportions to produce concrete masonry blocks of various strengths	Novel Experimental and Numerical Methods	Daman Panesar
659	Xu Huang	An Integrated Simulation Method for Performance-Based Assessment of a Structure		
529	Onyekachi Ndubuaku	A NOVEL APPROACH FOR STRESS-STRAIN CHARACTERIZATION OF METALLIC MATERIALS USING THE PRODUCT-LOG (OMEGA) FUNCTION		
565	Sylvester Agbo	Prediction of Burst Load in Pressurized Pipelines using Extended Finite Element Method (XFEM)		

<b>Day: Saturday, June 3, 2017      Time: 11:00 – 12:00      Room: Mackenzie</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
534	Wei Wang	Large size superelastic SMA bars: heat treatment strategy, mechanical property and seismic application	Advanced Construction Materials	Farshad Hedayati Dezfuli
667	David Lai	Recent Development and Trial of Corrosion Resistant Structural Steel		
653	Zhongxing Wang	Experimental Study and Parametric Analysis on the Stability Behavior of High-Strength Aluminum Alloy Angle Columns under Axial Compression		
612	Zhenjun Yang	In-situ $\mu$ XCT Tests and 3D Image-based Numerical Modelling of Concrete and Fibre Reinforced Concrete		

<b>Day: Saturday, June 3, 2017      Time: 11:00 – 12:00      Room: Mackenzie</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
640	Fangjian Chen	A REVIEW OF LOW-CYCLE FATIGUE OF CORRODED STEEL BARS	Performance assessment of materials/ structures	Daman Panesar
552	Ezzat Fahmy	IMPACT OF MIXING WATER TEMPERATURE ON PORTLAND CEMENT CONCRETE PERFROMANCE		
538	Douglas Tomlinson	Electrical Resistivity Response of Young Normal Strength Concrete Mixes under Low Temperature Cycling		
568	Jonelle Jn Baptiste	Application of a Four-Bar Crank Rocker Mechanism as a Subtalar Joint Wear Testing Machine		

<b>Day: Saturday, June 3, 2017      Time: 11:00 – 12:00      Room: Thompson</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
575	Nurmunira Muhammad	Investigation of the strength development using magnesium alkalinisation for subgrade soil	Soil-Structure and Fluid-Structure Interactions	Abass Braimah
522	Alok Dua	Understanding the Response of Reinforced Concrete Slabs Due to Contact Explosion of TNT		
593	Miad Saberi	Particle breakage and constitutive modeling of granular soil-structure interface		
589	Miad Saberi	A two-surface plasticity constitutive model for soil-structure interfaces		

<b>Day: Saturday, June 3, 2017      Time: 11:00 – 12:00      Room: Fraser</b>				
<b>ID</b>	<b>Presenter</b>	<b>Topic</b>	<b>Theme</b>	<b>Chair</b>
665	Falak Naz	DESIGN OF A TWO-SPAN CONTINUOUS CPCI GIRDER BRIDGE WITH SEMI-INTEGRAL ABUTMENT	Structural Safety	Muntasir Billah*
518	Harsh Rathod	Non-Contact Non-Destructive Infrared Thermography based Evaluation of Reinforced Concrete Structures		
638	Yasamin Rafie Nazari	Site specific record selection and seismic fragility analysis		
639	Yasamin Rafie Nazari	Seismic vulnerability assessment of Canadian reinforced concrete shear wall buildings designed in pre-modern seismic code era		

<b>Day: Saturday, June 3, 2017      Time: 11:00 – 12:00      Room: Cowichan</b>				
ID	Presenter	Topic	Theme	Chair
582	Burkan Isgor	An innovative reactive-transport modeling framework for cementitious porous media	Materials and Construction	Dan Palermo
544	Mohamed Elkashef	100% RAP mixes using a soybean-derived rejuvenator		
670	Feng Fu	CAPACITY OF RECYCLED AGGREGATE CONCRETE UNDER NORMAL AND EXTREME LOADING CONDITIONS		
662	Lancine Doumbouya	APPLICATION OF BIM TECHNOLOGY IN DESIGN AND CONSTRUCTION: A CASE STUDY OF THE PHARMACEUTICAL INDUSTRIAL BASE OF AMINO ACID BUILDING PROJECT		