

Conference Schedule

Wednesday 27 August 2014



8.00am-17.00pm	Registration, Surasammanakhan, Second floor	
8.30am-9.00am	Opening Ceremony, Suranaree Auditorium, Second floor	
9.00am-9.40am	Keynote Lecture 1: Fire Resistance of Geopolymer Concrete <i>Prof. Jay Sanjayan, Swinburne University of Technology</i>	Chair : Dr. S. Limkatanyu
9.40am-10.20am	Keynote Lecture 2: High Calcium Fly ash Geopolymer- Alternative Cement for Thailand <i>Prof. P. Chindaprasirt, Khon Kaen University</i>	Chair : Dr. S. Limkatanyu
10.20am-10.40am	Coffee Break	
10.40am-11.20am	Keynote Lecture 3: The Effects of Climate Change on the Raw Water Supply of the Metropolitan Waterworks Authority <i>Dr. S. Wongsu, King Mongkut's University of Technology Thonburi</i>	Chair : Dr. C. Jothityangkoon
11.20am-12.00pm	Keynote Lecture 4: Green Roads and Footpaths Using Recycled C&D Materials <i>Dr. A. Arulrajah, Swinburne University of Technology</i>	Chair : Dr. C. Jothityangkoon
12.00pm-13.00pm	Lunch	

	Session 1: Soil Behavior and Foundation Engineering, (Seminar 1) Chair : Dr. A. Chinkulkijniwat	Session 2: Rock mechanics, (Seminar 2) Chair : Dr. P. Jongpradist	Session 3: Tunneling, (Seminar 3) Chair : Dr. N. Yoobanpot	Session 4: Ground improvements, (Seminar 4) Chair : Dr. S. Likitlersuang
13.00pm-13.30pm	Invited paper: Compressibility and Hydraulic Conductivity of Clayey Soil-Bentonite Backfills for Vertical Cutoff Slurry Wall, Yan Jun Du	Invited paper: Performance Assessment of Sludge-Mixed Cement Grout in Rock Fractures, K. Fuenkajorn	Invited paper: Groundwater Seepage Blocking of Underground Structures and Leaking Behavior of Shield Tunnels in Soft Deposit of Shanghai: An Overview, S.L. Shen	Invited paper: Improvement of Lateritic Soil Using Geopolymer, P. Voottipruex
13.30pm-13.45pm	Effects of Phosphate Dispersants on the Sedimentation and Viscosity Behaviors of Soil-Bentonite Backfills, Y. L. YANG et al.	Effect of stress path on biaxial strengths of three Thai sandstones, S. Komenthammasopon & K. Fuenkajorn	Large-Scale Transmission Tunnel Rehabilitation Project for Sustainable Water Supply Management in Bangkok Urban Area A Case Study of Metropolitan Waterworks Authority Bangkok, Thailand, D.Klahan et al.	Numerical investigation on SCDM pile under axial load test, A. Wonglert & P. Jongpradist
13.45pm-14.00pm	Assessment of Physical and Geotechnical Properties of Recycled Concrete aggregate and Crushed Rock Blends, S. Chea	Effects of loading rate on strengths and deformability of rock salt under elevated temperatures, K. Phatthaisong & K. Fuenkajorn	Application of Rayleigh wave exploration in evaluation of grouting effect of immersed tube tunnels, Zezhong Zhang et al.	Investigation of lateral displacement of PVD improved deposit under embankment load, Fang Xu et al.
14.00pm-14.15pm	A Portable Cone Penetrometer for compaction work control, T. Tirametatarat & A. Chinkulkijniwat	Verification of rock mass strength criterion using laboratory test models, S. Thaweeboon & K. Fuenkajorn	Earth pressures acting on the crown of buried HDPE pipes, Min Zhou et al.	Effects of geogrid-encasement on the strength and deformation behaviours of cement-mixed clay, K. Kaewsresai et al.
14.15pm-14.30pm	Field performance of deep excavation of a metro station in the karst strata of Guangzhou, China, Q.L. Cui et al.	Thermal effects on shearing resistance of fractures in granite, P. Naphudsa & K. Fuenkajorn	Impact of Constitutive model on the Numerical Analysis of Tunneling in Bangkok Clay, T. Detkhong & P. Jongpradist	Influence of Polypropylene Fibers on Strength and Deformation Characteristics of Geo-lightweight Material, W. Kumsorn & P. Jongpradist
14.30pm-14.45pm	Stability Analysis of Cantilever Flood Walls in Clay, S. Keawsawasvong & B. Ukritchon	Shear strength and stiffness of sandstone fractures as affected by shear velocity, H. Kodae & K. Fuenkajorn	Influence of permittivity of medium inside the crack gap on intensity factors of cracks in 3D piezoelectric media, W. Phongtinnaboot et al.	Strength Performance of Deeping Mixing Columns in Soft Bangkok clay Deposit, S. Chayanon et al.
14.45pm-15.00pm	Slope Stability and Deformation of Embankment on soft ground supported with Timber Raft & Pile Foundation, P. Pongchompu	Shearing resistance of rock fractures as affected by shear velocities and confinements, M. Kleepmek & K. Fuenkajorn	Simulation of failure behavior of rock mass around tunnels by element-free Galerkin method, A. Thongraksa et al.	Interaction of Bearing Reinforcement and Clayey Sand Mixtures, K. Sukmak et al.
15.00pm-15.20pm	Coffee Break			

	Session 5: Soil Behavior and Foundation Engineering, (Seminar 1) Chair : Prof. Yan Jun Du	Session 6: Rock mechanics, (Seminar 2) Chair : Prof. K. Fuenkajorn	Session 7: Pavement technology, (Seminar 3) Chair : Dr. P. Jitsangiam	Session 8: Ground improvements, (Seminar 4) Chair : Dr. P. Voottipruex
15.20pm-15.50pm	Invited paper: Deformation of Reconstituted Clays, Martin D. Liu	Invited paper: The Past 20 years of Rock Mechanics and Geological Engineering in Infrastructure Development in Thailand and Neighboring Countries, N. Phienwej	Invited paper: Laboratory Study on Engineering Characteristics of Hot Mix Asphalt used in Thailand, S. Likitlersuang	Invited paper: Development of Simplified Models for Predicting Lateral Pile Movement Caused by Braced Excavation in Clay by Numerical Analyses , P. Jongpradist
15.50pm-16.05pm	Destructuring of Structured Clays during Subyielding, J. Suebsuk et al.	Effects of pore pressure on strengths and elasticity of sandstones, S. Khamrat & K. Fuenkajorn	Characteristic of Moisture Measurement on Base Material of Flexible Pavement, Reynaldo Siahaan et al.	Parameters Affecting Lateral Movement of Slopes Stabilized with DCM Columns, P. Jamsawang et al.
16.05pm-16.20pm	Modelling unloading-reloading behavior of Ariake clay under oedometer condition, A. Suddeepong et al.	Effects of stress rate on strength of rock salt under 273-373 Kelvin, S. Sartkaew & K. Fuenkajorn	Skid Resistance of Asphalt Concrete based on Mixture and Aggregate Characteristics Predictive Model Development for Thailand, S. Chotisakul et al.	Electrically conductive geomembrane enhances liner integrity surveys at post installation, H. B. Ng & B. Ramsey
16.20pm-16.35pm	Numerical Analyses of Piled Raft Foundation in soft soil using 3D-FEM, K. Watcharasawe et al.	Effects of temperatures on strength and deformability of Tak granite, K. Rodklang & K. Fuenkajorn	Multi-parameter analysis of impact imaging data for high speed railway under-track structure investigation, F. Chen et al.	Swelling Characteristics of Expansive Soils improved with Cement and Fly ash, P. Jamsawang & P. Voottipruex
16.35pm-16.50pm	The strength properties of soft soil under complex stress path, H. Sun	Performance assessment of consolidated crushed salt, S. Somtong & K. Fuenkajorn	Dynamic Modulus Characteristics of Bound Cement-Treated Crushed Rock Base Course, K. Nusit	Dynamic stability of medium dense sand with and without Microfine cement (MFC) grouts along with sodium silicate, S. N. Shah et al.
16.50pm-17.05pm	Shear Response of Recycled Concrete Aggregate and Crushed Rock Blends, N. Prongmanee et al.	Salt creep under cyclic loading and elevated temperatures, S. Archeeploha & K. Fuenkajorn	Shrinkage Behaviour of Cement-Treated Crushed Rock Base in Western Australia, P. Jitsangiam et al.	Geotechnical Investigation of Stabilised Municipal Biosolids, F. Maghoolpilehrood et al.
17.05pm-17.20pm	Laboratory simulation of surface subsidence under super-critical conditions, T. Thongprapha et al.	Principle of Geomechanics Magnetic Model Test and Its Application in Geomechanical Engineering Problems, Jinfeng Bi et al.	Glyphosate as a Vegetation Management Tool on Railway Tracks: Opportunities and Challenges, A. Suvittawat	Effect of Fly Ash on Strength and Compressibility of Dark Magnesium Clay, R. Goodary et al.
18.00pm-22.00pm	Welcome party (Western style food and western music)			

Conference Schedule

Thursday 28 August 2014



8.00am-17.00pm	Registration, Surasammanakhan, Second floor	
9.00am-9.40am	Keynote Lecture 1: Lateral Displacement of PVD Improved Ground Under Embankment Load with/without Vacuum Pressure, <i>Prof. J. C. Chai, Saga University</i>	Chair : Prof. S.L. Shen
9.40am-10.20am	Keynote Lecture 2: Recent Advances in The Use of Geosynthetics to Enhance Sustainability of Roadways, <i>Prof. J. Han, The University of Kansas</i>	Chair : Prof. S.L. Shen
10.20am-10.40am	Coffee Break	
10.40am-11.20am	Keynote Lecture 3: Research of T-Shaped Cement Deep Mixed Columns Used for Soft Ground Improvement, <i>Prof. S. Y. Liu, Southeast University</i>	Chair : Prof. J. C. Chai
11.20am-12.00pm	Keynote Lecture 4: Application of Life Cycle Assessment (LCA) for Sustainable Infrastructure Design, <i>Prof. Krishna R. Reddy, University of Illinois</i>	Chair : Prof. J. C. Chai
12.00pm-13.00pm	Lunch	

	Session 9: Numerical and analytical methods in civil engineering, (Seminar 1) Chair : Dr. T. Imjai	Session 10: Construction materials, (Seminar 2) Chair : Dr. W. Kongkitkul	Session 11: (TRF Senior Research Scholar 2013) Ground Improvement Techniques : Research and Development, (Seminar 3), Chair : Prof. S. Horpibulsuk	
13.00pm-13.30pm	Invited paper: Finite Frame Elements with Lateral Interfaces: from Geotechnical-Engineering to Nano-Engineering Applications, S. Limkatanyu	Invited paper: Influences of Temperature and Mixing Time of Asphalts on Their Tensile Stiffness and Fatigue Properties, W. Kongkitkul	Invited paper: Geothermal Energy: Introducing an Emerging Technology, G. Narsilio	
13.30pm-13.45pm	An exact finite element model for axially loaded pile, C. Buachart	Investigation into the Reduction of Sulfur and Heavy Metal from the Mae Moh Coal Field by Chemical Treatment, P. Khamhom & B. Terakulsatit	Determination of effective stress in unsaturated soil using pore structure, A. Chinkulkijniwat et al.	
13.45pm-14.00pm	Finite Element Analysis of Geosynthetic-Reinforced Flexible Pavements, T. Imjai et al.	Comparison of compressive strength and drying shrinkage by various Portland cement type and Geopolymer, C. Ridtirud	Strength and Microstructure of Water Treatment Sludge-Fly Ash Geolopolymer, P. Chanprasert et al.	
14.00pm-14.15pm	Exact beam-Kerr type foundation element: the virtual displacement derivation, S. Limkatanyu et al.	Effect of alkali solutions on compressive strength and microstructure of high calcium fly ash geopolymer containing Portland cement, S. Hanjitsuwan and T. Phoo-ngernkham	Durability against Wetting and Drying of Water Treatment Sludge-Fly Ash Geolopolymer, W. Samingthong et al.	
14.15pm-14.30pm	Beam on elastic substrate medium with inclusion of microstructure and surface effects, S. Limkatanyu et al.	Efficiency Enhancement of Drilling Mud by Using Fly Ash as an Additive, P. Korsinwattana&B. Terakulsatit	Durability of Clay-Fly Ash Geopolymer in Sodium Sulfate Solution, P. Sukmak et al.	
14.30pm-14.45pm	Full wavefield imaging detection method and its application on defect investigation of Highway Embankment, P.F. Zhong et al.	Study on detecting internal cracks in concrete structure caused by frost heave damage using impact imaging method, D. Peng et al.	A Study on Physical and Geotechnical Properties of Melamine Debris Improved Marginal Lateritic Soil for Pavement Applications, J. Donrak et al.	
14.45pm-15.00pm	A New Simple Method for Post-tension Strands Friction Coefficient Measurement, C. Suchinda	Comparative deflection hardening behavior of fly ash-based geopolymer composite with the conventional cement-based composite, B. Nematollahi et al.	Recycled Conctete Aggregate Geogrid Interface, P. Choeklang	
15.00pm-15.20pm	Coffee Break			

	Session 12: Sustainable materials and technologies, (Seminar 1) Chair : Dr. Martin D. Liu	Session 13: Water supply and water resource management, (Seminar 2) Chair : Dr. U. Seeboonruang	Session 14: (TRF Senior Research Scholar 2013) Ground Improvement Techniques : Research and Development, (Seminar 3), Chair : Prof. S. Horpibulsuk	
15.20pm-15.35pm	Effects of Soil Structure Interaction on Seismic Response of Buildings, S. Prum & M. Jiravacharadet	Use of Computational Fluid Dynamics to Assess the Effect of Pier Types on Bridge Pier Scour, D. Kositgittiwong	Invited paper: In-situ Pavement Recycling with Cement Stabilisation for Thailand Roads: Problems and Solutions, P. Jitsangiam	
15.35pm-15.50pm	Building with the Manufacturing Process (BMP System), N. Pattanajak & S. Horpibulsuk	Leakage Step Testing in Water Distribution System by Night Flow Analysis and Water Balance, K. Wetchasat		
15.50pm-16.05pm	Reverse Logistics of Recycled Concrete Aggregate (RCA) - A Study of the Thai Perception from a Logistics Standpoint, H. Gruenwald	Flood Protection System for East Bank Raw Water Canal of Bangkok Water Treatment Plant, K. Wetchasat	Strength Improvement of Lateritic Soil by Calcium Carbide Residue for Pavement Applications, A. Kampala et al.	
16.05pm-16.20pm	High Efficiency Integrated Solar-Water Supply System for Isolated Agricultural Areas in Thailand: Renewable Energy Development, T. Imjai et al.	Development of Sludge Disposal System of Samsen Water Treatment Plant, A Case Study: The Metropolitan Waterworks Authority, B. Vongsa et al.	Improvement of Chloride Resistance of Recycled Aggregate Concrete by Using Ground Fluidized Bed Fly Ash and Ground Bagasse Ash, R. Somna et al.	
16.20pm-16.35pm	Cellular lightweight concrete containing high-calcium fly ash and natural zeolite, K. Jitchaiyaphum et al.	Quality Assessment of Village Waterworks System in Northeastern Thailand: A Methodology, C. Jothityangkoon & B. Kongsuk	Strength and Microstructure of Marginal Lateritic Soil-Fly Ash Geopolymer, I. Phummiphan et al.	
16.35pm-16.50pm	Evaluation of carbon footprint for concrete works from house construction drawings provided by Department of Public Works and Town & Planning, Thailand, A. Uchaipichat & N. Promthong	An Application of Leak Detection Method (Step Test) for a Large Area of Water Users in Metropolitan Waterworks, K. Wetchasat	Geotechnical Properties of Crushed Slag Improved Marginal Lateritic Soil for Pavement Applications, P. Sudla & S. Horpibulsuk	
16.50pm-17.05pm	Sustainable design: case study of a detached housing in Bangkok, B. Wethyavivorn et al.	An Application of Wavelet Analysis on Deep Groundwater Signals in the Lower Chao Phraya Basin, U. Seeboonruang	A Fibre-reinforced Polymer System in Asphalt Concrete for use in Thailand, T. Takaikaew et al.	
17.05pm-17.20pm	Identification of Optimal Strategies for Energy Management and Reducing Carbon Dioxide Equivalent Emissions at Wastewater Treatment Plants in Bangkok, Thailand, S. Srinil et al.	Feasibility study of vertical integrated farming for community by utilizing wind turbine pumping and hydroponic wastewater treatment, P. Keeratiurai	Material Performance of Asphalt Concrete Using Different Aggregates Available in Thailand, S. Horpibulsuk et al.	
17.20pm-17.35pm	Modeling Build-Up Growth Utilizing Spatial Statistically Approach, P. Littidej & W. Aunphoklang	Geosynthetics for Water and Wastewater, M. Sadlier	Effect of Rainfall Intensity on Internal Moisture Content in Shallow Slope with High Permeable Soil, C. Jeeptaku et al.	
18.00pm-22.00pm	Closing and Farewall party (Chinese style food and Phimai Nakhon Ratchasima cultural show)			