

Yoichi Watabe

Professor

Laboratory of Soil Mechanics

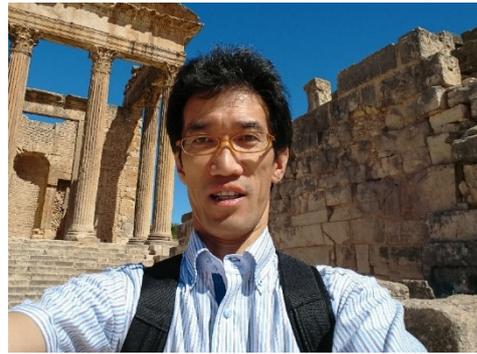
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Professor Yoichi Watabe graduated from Tokyo Institute of Technology in 1990 and he obtained Doctor of Engineering from Tokyo Institute of Technology in 1995. Then, he joined to work at Port and Airport Research Institute (formerly Port and Harbour Research Institute under the Ministry of Transport), Japan. He engaged geotechnical research activities as a key member of Soil Mechanics Laboratory (1995 to 2002), as the Leader of Geotechnical and Geo-environment Research Group (2002 to 2012), and as the Director of Geotechnical Engineering Field (2012 to 2016). After his working career for 21 years at Port and Airport Research Institute, he moved to Hokkaido University as a Professor of Division of Civil Engineering in 2016. From 1997 to 1999, he was also a Post-Doctoral Fellow at Laval University, Quebec, Canada. He has been invited many technical committees for Port and Airport construction projects under the Japanese ministry. Particularly, his contributions were notable for the construction of the second phase island and maintenance of the first phase inland of the Kansai International Airport and the new island for the fourth runway “D-runway” of the Tokyo International Airport (Haneda Airport). His main research topics have been consistently on soft soil engineering. He started his research with centrifuge modeling when he was a student of Tokyo Institute of Technology; however, he has been using “conventional” equipments as an engineer, such as triaxial apparatus and oedometer, after joining to Port and Airport Research Institute. His research outcome on determination method for soil parameters has become a part of Japanese design code for port facilities corresponding to the performance-based design. From 2010 to 2014, he was the secretary of Japanese Geotechnical Society and contributed to the organization of the 15th Asian Regional Conference of ISSMGE (International Society of Soil Mechanics and Geotechnical Engineering). He chaired ISSMGE-technical committee: TC217 on “Land Reclamation” from 2015 to 2019, and currently, he chairs a new ISSMGE-technical committee: TC214 on “Foundation Engineering for Difficult Soft Soil Conditions (Soft Soils)” from 2020.

Minna Karstunen

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Minna Karstunen is Professor in Geotechnical Engineering at Chalmers University of Technology, Gothenburg, Sweden and a Fellow of the Institution of Civil Engineers, UK. She is also a member of the Royal Academy of Sciences and Arts in Gothenburg (KVVS). Minna got her PhD at the University of Wales Swansea in 1998, supervised by Prof. Gyan Pande, funded by the Academy of Finland. Her PhD studies were followed by a successful academic career in the UK, at the University of Glasgow (1996-2005) and the University of Strathclyde (2005-2013). Minna joined Chalmers in 2012, where she has built a dynamic research group working on modelling soils and other geomaterials across the scales, with focus on soft sensitive clays. Minna's industrial experience relates to the design of roads, tunnels and bridge foundations on very soft soils. Currently, she is involved as an independent expert in the West Link project in Sweden. The latter relates to building a railway tunnel under the historic city centre of Gothenburg, entailing some challenging deep excavations in very soft clay. Even though Minna is internationally known for her research on constitutive model development, in parallel, she has been working on other topics, including novel numerical techniques for representing periodic ground improvement on soft soils and strain localization. Minna has coordinated a number of European projects related to soft soil modelling and soft clay engineering (SCMEP-Soft Soil Modelling for Engineering Practice 2000-2004, AMGISS-Advanced Modelling of Ground Improvement on Soft Soils 2005-2009 & GEO-INSTALL- Modelling Installation Effects in Geotechnical Engineering) and has published over 100 scientific publications.

Suched Likitlersuang

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Suched Likitlersuang graduated with a bachelor's degree in civil engineering from Chulalongkorn University in 1998 and received a master's degree in geotechnical engineering from Asian Institute of Technology in 2000. He obtained a doctorate in civil engineering from the University of Oxford in 2004. He joined the Department of Civil Engineering at Chulalongkorn University since and was promoted to full professorship in 2011. He is currently a full professor at the Department of Civil Engineering, Faculty of Engineering, Chulalongkorn University. He is also the founding head of Centre Excellence in Geotechnical and Geoenvironmental Engineering, Chulalongkorn University. He was an Adjunct Faculty at Asian Institute of Technology from 2011 to 2014 and a Visiting Scholar at Tokyo Institute of Technology in 2017. His research interests include constitutive modelling for geomaterial, stress-strain characteristic of soils, numerical analysis in geomechanics, pavement engineering, geotechnical earthquake engineering and soil bioengineering. His contributions through research to innovative design and construction practices in geotechnical engineering and soft ground improvement have been recognised. He received many research grants from national and international agencies. Recently, his works have moved closer to industrial needs by collaborating with the private and non-governmental sector in the implementation of innovative research-based solution. He is a member of the Thai Geotechnical Society and the Engineering Institute of Thailand. He is also Editorial Board members of Geotechnical Research and Engineering Journal. He has also served as a reviewer in many reputable journals.

Fabio M. Soccodato

Professor

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Professor Fabio M. Soccodato graduated from Sapienza University of Rome in 1991 and he obtained his PhD in Geotechnical Engineering in 1996. After about ten year of research activities at the University of Rome, he moved to the University of Cagliari, Department of Civil-Environmental Engineering and Architecture, as a research associate and, in 2011, as a professor.

Research topics in the field of soft soils involved experimental activities (lab tests) as well as mathematical modelling of the behavior of soft, natural and artificially, cemented soft clayey soils.

He participated to a number of National Research Projects such as, among others, Tunnels in difficult conditions (1998-2002), Interaction phenomena induced by tunnelling on existing building heritage, New C Line of Rome Underground (2002-2011) and Seismic behavior of multi-propped retaining walls and slopes (2010-2022).

Cristina Jommi

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Professor of Dykes and Embankments
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Cristina Jommi is Professor of Geotechnical Engineering at Politecnico di Milano, Italy, and she holds a Chair of Dykes and Embankments at Delft University of Technology in the Netherlands.

She got her PhD from the Politecnico di Milano in 1992, where she remained as assistant and associate professor until 1992. She became Professor of Dykes and Embankments at Delft University of Technology in 2013 and since 2017 she is sharing this position with a professorship at Politecnico di Milano. Her research activity covers the multiphysics behavior of geomaterials from the element scale to the field, with combined theoretical, experimental and numerical approaches. At TU Delft, she has been leading a full-scale test on a historical dyke on soft soils, and she is collaborating with public authorities in Italy and the Netherlands on various applied research projects. She is promoting and leading comprehensive research project on the monotonic and cyclic response of peats and soft organic soils, and on various aspects of soil-atmosphere interaction of relevance for the assessment and maintenance of infrastructures on soft soils, including evaporation, cracking, and gas formation due to biodegradation. She has co-authored more than 100 scientific publications in soil mechanics and geotechnical engineering.

Guoxiong Mei

Professor

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Dr. Guoxiong Mei is Professor in Geotechnical Engineering at Guangxi University. His research areas include soil mechanics, foundation engineering, soil-structure interaction, and ground treatment for difficult soft soil. His work was supported by the Henry Fok Education Foundation Fund (in 2003), the Excellent Young Scientists Fund of NSFC (in 2013), and several others. He was elected in the Changjiang Scholar Program of Chinese Ministry of Education in 2014. Dr. Mei is an author of over 160 journal papers. He also published 4 text books, and was involved in the committee for 3 design guidelines. Dr. Mei is an active member of ISSMGE, and editorial board member of *Chinese Journal of Geotechnical Engineering* (2012-2016) and *Rock and Soil Mechanics* (2008-present). He received the first prize for Shanghai Science and Technology Progress Award, the first prize for Guangxi Science and Technology Progress Award, and the Mao Yisheng Youth Award by Chinese Institute of Soil Mechanics and Geotechnical Engineering.

Brief description of professional specialty

Consolidation theory for soft grounds: (1) He proposed a consolidation theory to incorporate continuous drainage boundaries, which can describe the time-dependent drainage behavior at the interface between two adjacent media. (2) He proposed a distributed drainage boundary to optimize the layout of sand cushion above dredged soils. The use of sand is significantly reduced but the consolidation efficiency is not much affected, especially in the later stage of consolidation. (3) He proposed to simplify the prefabricated vertical drain with an elliptical shape, based on which the consolidation efficiency is improved. In addition, the smear effect is explicitly considered. (4) He proposed to drill drainage holes around the circumference of pipe pile, from which excess pore water pressures can be dissipated. This is so-called the permeable pipe pile technique. This ground treatment can improve the strength of the ground, at the same time, mobilize the resistance as early as possible by allowing the occurrence of drainage immediately after pile driving.

Xilin Lü

Professor

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Professor Xilin Lü graduated from Chongqing University in 2003 and he obtained PhD from Tongji University in 2009. He joined the faculty of the college of civil engineering at Tongji University in 2009. He is currently a professor and director of research institute of soil and foundation engineering at the department of geotechnical engineering, college of civil engineering, Tongji University. He was as visiting scholar at University of Southern California (2007-2008) and California Institute of Technology (2012, 2014-2017). His research areas include instability and progressive failure of soil, underground engineering in soft soil, settlement of embankment, and slope stability. His work was supported by Ministry of Science and Technology of the People's Republic of China, NSFC, Shanghai Science and Technology Commission, and several others. He is an author of over 100 journal and conferences papers. He published 3 text books, and was involved in the committee for 2 design guidelines. He is an editorial board member of Journal of Basic Science and Engineering, Chinese Journal of Ground Improvement, and Hazard Control in Tunnelling and Underground Engineering.

Brief description of professional specialty

Progressive failure analysis of soil and application in engineering: (1) He put forward the strength description considering the influence of complex changes of soil fabric and stress, solved the problem of accurate prediction of soil strain localization by adopting three-dimensional non-coaxial plastic bifurcation criterion, and clarified the difference and relationship between instability and plastic limit failure. (2) He revealed the mechanism of macro mechanical response and micro characteristics in the progressive process of soil degradation, established the finite element numerical simulation method of progressive failure process based on nonlocal regularization, effectively solved the numerical calculation grid sensitivity problem caused by the transition from hardening to softening of soil. (3) He developed model testing technology of soil progressive instability and failure in underground engineering under the condition of hydraulic environment change. He revealed the soil failure mechanism of underground excavation face induced by hydraulic environment change, and established an accurate evaluation model of soil stability considering the influence of hydraulic pressure.

S. Feyza Cinicioglu

Professor in Geotechnical Engineering
Head of Civil Engineering Dept

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**President of Turkish Geotechnical Society
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Feyza Cinicioglu graduated from Bogazici University and received her M.Eng degree from Sheffield University in 1976. She worked as a civil engineer between the years of 1976-1983 and then joined in academia. She received her Ph.D. in the field of geotechnical engineering in 1986 from Bogazici University. Prof. Cinicioglu worked as a full professor of Civil Engineering at Istanbul University in the years 1995-2018. During, that time she held several administrative and academic positions in Istanbul University, such as chair of geotechnical division, head of Civil Engineering Department and Dean of Graduate School. Starting from 2018, she continued her academic duties in the Civil Engineering Department of Ozyegin University as a full Professor and Department Head. She is always an active member of Turkish Geotechnical Society and geotechnical committees and boards. Feyza organized numerous national and international conferences and meetings. She has also been acting as the President of the Turkish Geotechnical Society for ISSMGE since 2011.

Feyza's major areas of research are soft clay behavior, development of new methodologies for embankment design and construction on soft clays, macro and micro soil behavior, soil-structure interaction and seismic microzonation.

Yeo Khen Cheok, Ken

Technical Advisor (Reclamation)

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Dr Ken YEO has over 35 years of experience in geotechnical engineering, with specialization in observational method and verification of ground performance using in-situ testing and geotechnical instrumentation to provide added value in design and flexibility in construction methods and schedule. His previous works in reclamation projects are associated with various ground improvement techniques such as dynamic compaction (heavy tamping), stone column & gravel piles, vibro-compaction of sandy/silty soils and basal reinforcement of embankment on soft ground with prefabricated vertical drains. He also prepares geotechnical assessment reports on performance of these ground improvement techniques based on designed ground instrumentation and monitored data, with in-situ testing such as cone penetration test. Ken has recently working in Hong Kong Airport projects associated with deep soil mixing, jet grout column, rapid impact compaction and QAQC procedure for performance testing and verification.

Ken has been working as an academic and also as an engineer in public sector and in private sector both as contractor and consultant before joining Hong Kong Airport reclamation projects. He has a wide range of project experience in reinforced soils, instrumentation in piling and soft clay foundation, fatal landslip investigation and material testing.

He is a professional engineer (RPE) in Hong Kong and a member of MHKIE in geotechnical discipline.

Maria Esther Soares Marques

Professora Associada

Coordenadora da Pós Graduação em Engenharia de Transportes

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Graduated in Civil Engineering from the Federal University of Rio de Janeiro (1989). Master's degree in Civil Engineering from COPPE / UFRJ (1996) and a Doctoral degree in Civil Engineering from COPPE / UFRJ (2001), both with field and laboratory research carried out at Université Laval, Québec.

Geotechnical engineering experience, acting mainly on the following themes: soft soils, field and laboratory tests, earth works and pavements.

Associate professor at the Military Institute of Engineering (IME) at Rio de Janeiro since 2007, teaching geotechnical undergraduate courses at the Civil Engineering Department, supervised 20 graduation final works. Supervisor and Professor of two Graduate Programs at IME: Transportation Engineering and Defense Engineering, supervised 26 master's and 2 doctoral theses (+ 8 MSc and 3 DSc in progress). Coordinator of the Graduate Program in Transport Engineering from 2011 to 2014, and from 2020 to date.

In addition to the experience in consulting on geotechnical projects on soft soils, she has about 100 technical papers in congresses and journals. Published two co-authored books: Embankments over soft soils - design and performance (2010, in Portuguese) and Design and Performance of Embankments on Very Soft Soils (2013) and 7 book chapters on the subject.

Victor N. Kaliakin

Professor

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Dr. Victor N. Kaliakin is a professor in the Department of Civil and Environmental Engineering at the University of Delaware. Before joining the University of Delaware in 1990, he was a Member of Technical Staff in the Solid Mechanics Division at Sandia National Laboratory in Livermore, CA (1987-1989), Visiting Assistant Professor in the Department of Civil Engineering and Engineering Mechanics at the University of Arizona (1986-1987), Assistant Research Engineer at the Engineering Computer Corporation in Sacramento, CA (1981-1983), and a staff engineer at the Engineering Decision Analysis Company, Inc., Palo Alto, CA (1979-1980).

Dr. Kaliakin earned his bachelor (1978) and PhD (1985) degrees from the University of California, Davis. His master degree (1979) was earned from the University of California, Berkeley.

Dr. Kaliakin performs research in computational geomechanics, the development and implementation of constitutive models for cohesive soils, and the development of robust constitutive models for polymeric reinforcement. More recent research efforts include the numerical simulation of instrumented field structures, the development of robust mixed and penalty finite elements for two-field problems, the modeling of silt-clay “transition” soils, unsaturated soils, and thermo-hydro-mechanical response of cohesive soils, and gravelly soils at low confinement pressures.

Dr. Kaliakin has authored two textbooks (*Approximate Solution Techniques, Numerical Modeling and Finite Element Methods*, New York: Marcel Dekker, Inc., 2002 and *Soil Mechanics: Calculations, Principles, and Methods*, UK: Butterworth-Heinemann, 2017) as well as numerous chapters in edited books, refereed journal papers, and papers appearing in conference proceedings.

Since his first language was Russian, Dr. Kaliakin has been active in sundry activities with Russian speaking countries, held in the USA and abroad. These include the first and second U.S.A.-Russia Geotechnical Engineering Symposia (2012 and 2018), and the first and second Kazakhstan – USA Geotechnical Engineering Workshops (2015 and 2018).

Josif Josifovski

Professor

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Josif Josifovski is a Full Professor in Geotechnical Engineering at the University “Ss. Cyril and Methodius”, Faculty of Civil Engineering-Skopje specializing in Numerical Modelling in Geotechnics. He studied Civil Engineering at University “Ss. Cyril and Methodius”, Computational Engineering at Ruhr University in Bochum, did his Ph.D. at “Ss. Cyril and Methodius” and Hamburg University of Technology in 2010 through the SEEFORM International study program.

Professor Josifovski teaches Geotechnical Engineering, Foundation Design, Ground Investigation and Ground Improvement to Undergraduate; Numerical Modelling in Geotechnics, Special Geotechnical works and problems in Foundation Engineering to Postgraduate and Unsaturated Soil Mechanics and Soil-Structure Interaction to PhD students. Since 2012 Professor Josifovski is a manager of the Faculty of Civil Engineering Laboratory in Skopje. Since 2015 He is a member of the Scientific Committee of the Institute for Research in Environment, Civil Engineering and Energy (IEGE). Since 2020 Prof Josifovski is a Chairman of the ISRSM TC 11 Geotechnics (Institute for Standardization of R. North Macedonia).

A specific area of Professor Josifovski scientific interest is the behavior of soft soil conditions and soil structure interaction effects. More precisely, the advance constitutive modeling of unsaturated soil through coupled flow-deformation analysis. Recently, His research is also concentrated in the field of geothermally-activate foundations with the emphasis on the numerical modeling of thermo-hydro-mechanical behavior of the soils. Professor Josifovski has been working on wide range of geotechnical problems but His main interest has always been the deep foundation systems, deep excavations and retaining walls as well as the slope stability problems. Through His consulting work on large geotechnical projects many of the solutions were also proven in practice.

As a professional experience, it is important to mention His work in FP6 Programme on Earthquake Protection of Historical Buildings by Reversible Mixed Technologies (2004-2007), CEN TC 250/SC7/EG7-Evolution Group 7 on Pile design (2010-2019), presently He is a member to TC 250/SC7/WG3 Geotechnical structures.

Gerardo Pittaro

Principal Geotechnical Engineer

Mott MacDonald

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My name is Gerardo Pittaro, I did my Bachelor of Science in Universidad Nacional de Cordoba (Argentina) and my Master's of Science with Geotechnics specialization in Politecnico di Torino (Italy). Currently I am a PhD candidate at the National University of Singapore.

In the last 10 over years I have been working in Foundation, Tunnelling and Deep Excavation works for large infrastructure projects where I had the chance to work in Italy and Argentina for infrastructure projects in Europe and South America. Since 2014, I have joined Mott MacDonald in Singapore where and I am currently working as a Principal Geotechnical Engineer and Project Manager for large infrastructure projects including Bored Tunnels and Stations for trains, Cut and Cover Tunnels for underground highways and Connecting Tunnels for airport as wells as Site Investigation for infrastructure projects. I have been involved in projects from tender stage, to detail design, to construction support stage where I have been also worked on site during construction support for Piling and Tunnelling works.

In 2017 I started a PhD while working, I am currently conducting a research at the National University of Singapore in the area of sustainable Geotechnical Design involving ground improvement with soft clay-cement admixtures. My current research focuses on characterization of shear and tensile strength parameters of in situ soft soil-cement admixtures through laboratory testing: Indirect Tension test, Unconfined Compressive Strength and Triaxial tests (CIU, CID); in situ variability of soft clay-cement admixtures and site instrumentation. The idea of this research is to bring together site instrumentation with academic knowledge to achieve a more sustainable design for future use of soft soil cement admixtures used for Deep Excavations (but not limited to Deep Excavations).

I consider that I could bring valuable experience in characterization of Cement Treated Soft Soils, Definition of Design Parameters such admixtures. I also can bring valuable knowledge in Statistical and Spatial Variability analysis of Soft Soil Cement admixtures. I have experience in Instrumentation and Analysis of Deep Excavation in Soft Soil as well as Deep Foundation in Soft Soil conditions. I also expect to gain as well as share my expertise on numerical analysis and field observation to get a better future prediction and simulation of constructions in soft soils.

Hans B. Dete

Civil engineer

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Hans Brígido Dete is a civil engineer working in the geotechnical department at Técnica – Engenheiros Consultores, Lda. He started his career in September 2020 by running a back-analysis of a wide road embankment built over thick muddy clays in Maputo and, by studying reinforced soft soil foundation by floating columns.

This study was carried on in order to get the degree of Civil Engineer from Eduardo Mondlane University (2021).

Hans enjoys designing of reinforced soft soil foundations by floating columns, back-analysis of embankments built over soft clays improved with prefabricated vertical drains (PVDs) and, although he has no practical experience in the field of monitoring, he enjoys reading about the new outcomes of the field instrumentation industry.

He is a member of the Mozambican Geotechnical Society (SMG) and appointed member for the TC 214 – Foundation Engineering for Difficult Soil Conditions (ISSMGE).

Favorite quote:

“Unfortunately, soils are made by nature and not by man, and the products of nature are always complex” – Karl Terzaghi.

Roman Marte

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Biography:

Prof. Roman Marte studied civil engineering at Technical University of Graz in Austria, where he also received a Ph.D. in 1998. Afterwards he was member and from 2006 to 2012 Partner and Executive Direktor of GDP ZT GmbH in Austria, working in different fields of Geotechnical Engineering. Due to the very heterogenous geology and morphology of the Alps, Roman Marte was involved in his career with geotechnical issues ranging from big landslides in mountain regions to excavation and foundation problems in soft soils of Alpine valleys. Since 2012 Roman Marte is head of the Institute of Soil Mechanics, Foundation Engineering and Computational Geotechnics at Technical University of Graz.

Brief description of professional experiences and research focus in soft soils:

Wide practical experiences as well as a main research focus on soft soils of Roman Marte, deals with post glacial lacustrine fine sediments which fill many glacial deepend Alpine vallies. This normal to sligthly underconsolidated soils range from sand-silt mixtures to clay-silt mixtures, had been sedimented approximatly the last 10.000 years and show thicknesses between a few decades of meters to several hundreds of meters. The focus in practical engineering deals with foundation, soil improvement and excavation problems. In research work in situ parameter determination is a main focus, as it is difficult to catch undisturbed samples for lab testing for this types of soils. Further on the unintentional disturbance of this types of soils due to exploration as well as different foundation and soil improvement techniques is of research interest.

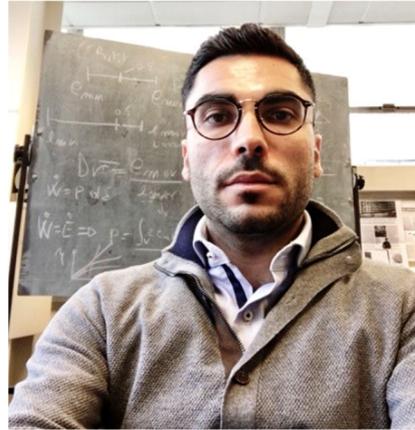
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Domenico Lombardi is a Lecturer in Geotechnical Engineering at the University of Manchester (United Kingdom), member of Institution of Civil Engineers, and fellow of the Higher Education Academy. He completed his PhD at the University of Bristol (United Kingdom), working on the seismic performance of foundations in liquefiable soils. Before joining the University of Manchester, he was a researcher at Yamaguchi University (Japan), where he worked on the post-liquefaction behavior of sands and large deformation of soft soils. His current research interests relate to the experimental modelling and computational simulation of nonlinear behaviour of soft soils, with pioneering contributions to the areas of offshore renewable and earthquake engineering. From 2018 he has been the director of the geotechnical centrifuge facility at the University of Manchester. Domenico has published over 50 papers and co-authored two textbooks published by the Institution of Civil Engineers entitled: “Seismic Design of Foundations: concepts and applications” and “Fundamentals of Engineering Mathematics”.

Juan Paulín Aguirre

Director of Engineering for Ibero-America

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Postgraduate Professor

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Civil Engineer with a Master's Degree studies -in Soils Mechanics- by the UNAM. Since 1991, he has participated in the research and execution of several geotechnical and structural projects in leading civil engineering companies. Juan Paulín has collaborated in the definition of constructive procedures and engineering staff training; he has been called in as an advisor in major and specialized international projects, and has coordinated diverse disciplines in project development.

Early in his career he worked for the Public Works Department of Mexico City's Government, providing specialized opinion and carrying out engineering studies for high-risk projects. In 1997 he worked for "Ingenieros Civiles Asociados" ICA, in projects assigned to the company's Engineering Division, such as the infrastructure recovery project in the southern coast of the state of Chiapas in 1998; the rehabilitation of the "Línea 2" of Mexico City's Metro System; Torre Mayor –the first Mexico's tallest building– and the Chiapas Bridge. Since 2001 he works for CIMESA, one of the Soletanche-Bachy Group's specialized construction subsidiaries, currently He heads the Engineering Management Division for Ibero-America.

Juan Paulín has studied and developed innovative technical solutions in retention systems, which have allowed the deeper excavations to date (50 m) in the soft clay of Mexico City's subsoil, also in the soft clay of the Bogota City's, as well as massive soil improvement systems. Among the latter are hardening of soft clays, the applications of rigid inclusions in very soft soils for the control of soil settlements, or the reduction of the liquefaction potential of loose granular soils.

He was in charge of the development the project and follow-up of the construction of shafts that reaches depths of up to 110 m, and assembly gallery of the sections III and IV of the 62 km "Túnel Emisor Oriente" waste water tunnel in Mexico.

The scope of his construction experience comprises civil and industrial projects, dams, bridges, tunnels, hydraulic projects, silos, harbors, maritime works and treatment plants, among others.

In 2008 he received the "Manuel González Flores" national award from the Sociedad Mexicana de Mecánica de Suelos" SMMS, as the best engineer in the professional practice category, and the 2001-2002 Javier Barros Sierra award by the "Colegio de Ingenieros Civiles de México" CICM, as coauthor of the best Civil Engineering book.

He is a frequent lecturer and has written and coauthored numerous national and international publications on geotechnical engineering and specialized construction. Professor of postgraduates in Engineering and Advisory Committee Member in the Civil Engineering Degree of UNAM.

Umur Salih OKYAY

Ph.D., M.Sc, B.C.E., B.G.E.

Civil and Structural Engineering

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Dr. Umur Salih Okyay graduated from Istanbul Technical University Civil Engineering department in 2003 as Civil Engineer and from Mining department in 2004 as Professional Geologist with double degree. He achieved a Master of Science study in France at Ecole Centrale Nantes and attained a PhD Degree in France.

Umur Salih Okyay carried out his doctoral thesis in collaboration with INSA Lyon, LCPC Nantes and PINTO Construction and Consulting Company. During his thesis, he has realized numerous centrifugal tests, in-situ measurements, numerical and analytical studies in the area of static and dynamic soil-structure interaction. His doctoral study guided the national research project ASIRI which aimed to develop recommendations for the design of rigid inclusions. His studies have been published in a number of peer-reviewed publications and presented at different international conferences.

Civil engineer, Geotechnical Engineer and Geological Engineer with engineering geology background more than 15 years of experience in the field of structural engineering and geotechnics his engineering consulting activities are mainly in Structural and Geotechnical Design for some major tunnel projects in Turkey and abroad during the early period of his practice. As Senior Principal in Charge of all Pinto civil and geotechnical engineering projects, Mr. Okyay's responsibilities range from investigation, analysis and product review to final design participation and project management for large projects. Currently, he is working in WSP Consulting Company in Lyon and Paris. Besides his activities at the company, he gives lecture courses and conferences in Universities and engineering schools. He believes that the academic knowledge should be engaged with engineering practice.

Hong DOAN

Principal Engineer

Subsea 7

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Dr Hong Doan has more than twelve years experience in geotechnical engineering and foundation installation activity, including over nine years in the offshore sector. This includes a wide experience (i) as a practicing geotechnical engineer, working on projects related to foundation design and soil-structure interaction analysis, including offshore soil investigation, advanced testing techniques, advanced numerical techniques for jackets, jack-up rigs, pipeline, subsea structures and offshore wind turbines, and supervision of offshore installation; (ii) as a technical lead within wind farm design and construction and other renewable industry; (iii) as a leading interface role in and broad experience within development and construction of oil& gas fields, of offshore wind farms.

Current role of Principal Engineer at Subsea 7 (France based office), he is responsible for the provision of support to projects and tenders; and for the development and the supervision of engineering teams on a variety of projects across the project life cycle. Furthermore daily duties include business development, participating in expert working groups in the worldwide R&D projects and representing Subsea 7 at industry level.

Hamza MENACEUR

Ph.D. Geotechnical Engineering

Menard Group

France

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Dr. Hamza Menaceur graduated from the national school ENSTP of Algiers in 2010 as Civil Engineer. He is achieved a research Master and PhD degree in geotechnical at Ecole des Ponts ParisTech (ENPC) in France.

After obtaining his PhD degree in 2014, Mr. Menaceur has worked two years at the ENSG (École Nationale Supérieure de Géologie) as professor-researcher during which he carried out a teaching mission in geotechnics covering the fundamental aspects up to structures and a research mission focused on soil treatment and geotechnical structures durability. The research findings of Mr. Menaceur have led to the publication of various papers in international journals and they have been presented at various international and national conferences.

Since 2017, he works in the field of geotechnical engineering for Menard company, a world specialist in ground improvement works, and whose main missions are the following:

- Provide technical support to all Menard agencies around the world
- Participate in research projects
- Design the foundation solutions based on soil improvement technologies
- Train design engineers and ensure the consistency of design approaches within Menard
- Develop and provide simple calculation tools

Mr. Menaceur also works as a geotechnical trainer within the ESTP de Paris and Ponts Formation Conseil.

Stefano Muraro

Assistant Professor

Civil Engineering and Geosciences

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Stefano Muraro obtained his Bachelor (2010) and Master degree (2012) in Environmental & Civil Engineering at the University of Trento (Italy). In 2019 he obtained his PhD at Delft University of Technology with a PhD thesis dedicated to geotechnical problems of embankments founded on soft organic soils. During his PhD, he conducted extensive advanced laboratory tests to develop a constitutive approach for peats based on direct multiscale experimental evidence.

In 2021 Stefano joined the Faculty of Civil Engineering and Geosciences at Delft University of Technology as Assistant Professor of Experimental Soil Mechanics. His research focuses on the comprehension of the physical processes ruling the multiphase behaviour of soft soils and on the proposal of innovative measures to mitigate complex challenges of soils in deltaic areas. A versatile research methodology is adopted combining advanced laboratory testing and theoretical and numerical modelling, which serve geotechnical applications.

Dr. James Fern

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Dr. James Fern is a geotechnical engineer at the Swiss Federal Railways (SBB) working in the field of track engineering on soft soils. He graduated from EPFL with a MSc in civil engineering and from the University of Cambridge (UK) with a PhD in theoretical soil mechanics. As a scientist, he has worked for the University of California at Berkeley (USA) and Deltares (NL) as well as for EPF Lausanne and ETH Zurich (CH) with main research the them the geotechnical characterization of natural soils and its use in numerical modelling. He has also been active in developing the Anura3D software, which is dedicated to large deformation modelling of soils and fluids and based on the material point method (MPM).

James has also been a consulting engineer in the tunnel, mining and dam industries. In recent years he has been involved in large projects such as the Grand Paris underground or the CERN HiLumi project. He has been an expert for Bane NOR (N) for tunneling projects involving soft clays and peat. James is currently supervising research projects sponsored by the Swiss railways.

Sung Ryul Kim

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Professor Sung-Ryul Kim received a B.S. (1996), an M.S. (1998) and a Ph.D. (2003) in civil engineering from the Seoul National University. He began his career with the faculty of the Department of Civil Engineering at Dong-A University in 2005 and joined the faculty of the Department of Civil and Environmental Engineering at Seoul National University in 2017.

His research focused on the foundation design including offshore bucket foundation, foundation in deep soft deposits and aseismic design of foundations. He has studied on the short and long-term stability of the bucket foundations by performing various numerical simulations and model tests. He has also worked on the design of deep foundations under the negative skin friction and the dynamic soil-pile-structure interactions by performing pile loading tests, numerical simulations and shaking table model tests. He has published numerous journal articles related to the foundation designs.

Professor Sung-Ryul Kim is a Chair of Technical Committee of the Foundation Design in Korean Geotechnical Society and Technical Committee of the Aseismic Design of Geotechnical Structures in Earthquake Engineering Society of Korea. He served Editor in Chief of Journal of Korean Geotechnical Society from 2017 to 2020 and currently Senior Editor of Journal of Korean Society of Civil Engineers. He has received professional awards including 2007 Young Research Award from Korean Geotechnical Society, Excellent Paper Award from the Korean Federation of Science and Technology Societies and Presidential Award from KSCE.

Moon S. Nam

Researcher

Expressway and Transportation Research

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Dr. Moon S. Nam is a researcher in the Expressway and Transportation Research Institute at the Korea Expressway Corporation. Before joining the Korea Expressway Corporation in 2006, he was a research associate in the Korea Institute of Construction Technology, South Korea (2005-2006), research associate in the University of Houston, U.S.A (2004-2005).

Dr. Nam earned his bachelor (1997) and MSCE (2000) degrees from the Kyungsoong University, South Korea. His Doctor degree was earned from the University of Houston, U.S.A (2004).

Dr. Nam performs research in the improvement of design method for deep foundations, the improvement driving comfort at bridge ends, and the development and implementation of mechanically stabilized earthwall abutments. More recent research efforts include the field instrumentation, field investigation and numerical analysis for integral abutment bridges in order to improve design, construction and maintenance specifications of integral abutment bridges. Dr. Nam published numerous design & construction specification and papers related to the deep foundations, mechanically stabilized earthwall abutments and integral abutment bridges.

Dr. Nam was a Chair of Technical Committee of the Foundation Design in Korean Geotechnical (2018-2020), a Technical Committee Member of the World Road Association (2012-present), Technical Committee Member (TC 202 & 212) of [International Society for Soil Mechanics and Geotechnical Engineering](#).

Haizuo Zhou

Associate Professor

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Dr. Haizuo Zhou is an associate professor in Geotechnical Engineering at Tianjin University. He earned his bachelor (2009), master (2012) and PhD (2016) degrees from North China University of Technology, Hohai University, and Tianjin University, respectively. He was a joint PhD student at Cambridge University from 2015-2016.

His research interests include soil mechanics, soil-structure interaction, and ground improvement in difficult soft soil. Associated ground improvement techniques contain stone columns, rigid columns, and prefabricated vertical drains. Currently, he acts as the PI for two NSFC projects. He published 70 journal papers, including more than 40 SCI-indexed papers. Relevant achievements have been recommended by five design guidelines.

Shiao Huey Chow

Senior Lecturer in Geotechnical Engineering
Department of Infrastructure Engineering
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Technology

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Bio:

Dr Shiao Huey Chow is a Senior Lecturer at the Department of Infrastructure Engineering, the University of Melbourne. She is an established experimentalist in geotechnical engineering (laboratory soil element testing, laboratory 1g model testing, centrifuge modelling and field investigation). Her expertise includes strain rate effects in soil, offshore geotechnical site investigation using free-fall penetrometers and anchoring solution in sand. Her works have received several international best paper awards, including the Telford Premium Prize in 2016 and Manby Prize in 2014 from the Institution of Civil Engineers (ICE), UK. Prior to her appointment at Melbourne, she was a Research Fellow for 7 years (2013 to 2020) at the Centre for Offshore Foundation Systems (COFS), the University of Western Australia (UWA).

Brief description of my professional specialty in soft soils:

Dr Shiao Huey Chow has been working on soft soil research using physical modelling techniques (soil element tests, 1g laboratory model tests, centrifuge modelling and field tests) for more than 10 years. Her research on soft soil behaviour focusses on strain rate effects in clay, and development of novel insitu site investigation tool (i.e. free-fall penetrometers) to characterise offshore soft sediments. Her motivation to join TC214 arises from her new research interests on the weak compressible Coode Island Silt, which creates significant geotechnical challenges at the Fishermans Bend precinct, Australia's largest urban renewal project. Shiao Huey has published extensively in this area with more than 30 peer-reviewed journal and conference papers, and secured research grants including prestigious Australian Research Council Discovery Project scheme to support her research.

Erika Prina Howald

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Civil and Environmental Engineer

Professor of Geotechnical Engineering and Natural Hazards at the:

1. University of applied sciences and arts, Western Switzerland
2. School of Management and Engineering Vaud (HEIG-VD)
3. Department of Built Environment and Geoinformation (EC+G)
4. Institute of territorial engineering (Insit)

Erika obtained her master's degree in environmental engineering at the Technical School of Milano (Politecnico di Milano), Italy, and her Master's Degree of Civil Engineer at the Laboratory for Soil Mechanics of the Swiss Federal Institute of Technology of Lausanne (École Polytechnique Federal de Lausanne, EPFL), Switzerland.

She worked from 2001 to 2007 as a geotechnical engineer at the civil engineering company "Géotechnique Appliquée Dériaz SA", Lausanne. Since September 2007 she has been professor of Geotechnical Engineering and Natural Hazards at the Institute of territorial engineering of the School of Management and Engineering Vaud (HEIG-VD), Yverdon-les-Bains (University of applied sciences and arts Western Switzerland), where she has taken the role of Director of the Laboratory for geotechnical engineering for 13 years. Her tasks involve teaching and research activities focused on geotechnical engineering (soil mechanics, foundations, retaining walls, slope stability, laboratory testing for soil characterization and interpretation of the laboratory tests results) and natural hazards-related topics.

Erika has also been cantonal advisor for problems and projects in connection with gravitational hazards for the Canton of Vaud since 2013 and, starting from May 2015, she has been Member of the Directive Committee of Geotechnics Suisse as well. In addition, in July 2019 she became President of the Swiss Working Group for Eurocode 7 - Part 2.

Her published work and main research interests include the influence of freezing and thawing cycles on the soil bearing capacity in permafrost areas, rock fall hazard assessment and zoning in presence of protection measures and the vulnerability of structures to impacts of gravitational natural hazards (landslides, debris flows, rock falls, snow avalanches etc.).

Ariane Locat

Professor

Département de génie civil et de génie des eaux

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Ariane Locat has done her bachelor degree in geological engineering, at Université Laval, and obtained her Ph.D in civil engineering under the supervision of Prof. Serge Leroueil, at the Department of civil and water engineering at Université Laval, and the co-supervision of Dr. Hans Petter Jostad, from the Norwegian Geotechnical Institute. As of 2012, she works as a professor at the Department of civil and water engineering at Université Laval in Québec City. Her research mainly focuses on geotechnical characterisation of landslides, understanding mechanical behaviour of sensitive clay and numerical modeling of stresses and deformations during landslides in clay deposits. She was selected for the 2020 Canadian Geotechnical Society (CGS) Colloquium. She is the chair of the Easter-Québec CGS regional section and of the 8th Canadian conference on GeoHazards to be held in Québec city in June 2022 and was the co-chair of the 2nd International Workshop on Landslides in Sensitive Clays held in Trondheim in June 2017. She is also involved at the Laboratoire d'études sur les risques naturels de l'Université Laval.

Juan Pablo Osorio

Lecturer

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Dr Juan Pablo Osorio is currently a lecturer at the School of Civil and Structural Engineering at Technological University Dublin. He earned his Bachelor in Civil Engineering from EAFIT University (2003) in Colombia, ME in Geotechnical Engineering from the National Autonomous University of Mexico – UNAM (2006), PhD in Geotechnical Engineering from Trinity College Dublin (2012) and MBA from EAFIT University (2015). Dr Osorio holds the title of Chartered Engineer with Engineers Ireland. He has over sixteen years of experience as a lecturer, researcher and consultant in foundation engineering, soft soil and peat behaviour and ground improvement. Juan Pablo has worked in field-testing, instrumentation and monitoring for infrastructure, residential, industrial and research projects in Ireland and Colombia. Dr Osorio has also worked as an Assistant Professor in Civil and Geotechnical Engineering at the University of Antioquia, in Colombia, where he took the post of Programme Coordinator of the BE in Civil Engineering (2014-2015).

During his ME studies, Juan Pablo researched the design of shallow and deep foundation, compressibility behaviour of the highly compressible Mexico City clay, and soil-structure interaction. For his PhD thesis, he built the first vacuum consolidation trial in a peat bog in Ireland, where he successfully design, constructed, monitored and analysed a vacuum consolidation field test on a 10 m x 10 m area in peat deposits. The test was instrumented and monitored for 11 months. Dr Osorio evaluated the effects of the PVD spacing and different vacuum generating systems. Other areas of interest for Juan Pablo include the risk and reliability analysis of geotechnical structures and the influence of the geological origin on the behaviour of soils.

Currently, Dr Osorio is a member of the Committee of the Geotechnical Society of Ireland. He recently also became a member of the NSAI TC 15/SC 7 Geotechnics (April 2021), the National Standards Authority of Ireland technical committee working on developing the second generation of Eurocode 7.

Paulo Venda Oliveira

Professor

Geotechnics

Department of Civil Engineering

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Paulo J. Venda Oliveira is Professor of Geotechnics at the Department of Civil Engineering of the University of Coimbra. His research interests include: numeral modelling of the behaviour of soft soils, laboratory characterization of soft soils and chemical stabilized soils with or without reinforcement with steel/synthetic fibres, stabilization of soils with enzymes, bacteria and biopolymers, creep behaviour of soft soils and stabilised soils with chemical binders. Paulo Venda Oliveira authored more than 100 scientific and technical papers, 32 of them in peer-review international journals. He has been supervisor of more than 25 of Master and PhD dissertations. He has developed a finite element (FE) code, with several constitutive models, enabling to perform elastoplastic analyses with coupled consolidation and creep. He supervised 3 Research Grants in the field of creep phenomenon of chemically stabilised soils. He supervised the National Research Project “PTDC/ECM/101875/2008” entitled “Creep study of deep mixing columns”. Actually, he supervises the National Research Project “AAC n° 02/SAICT/2017” entitled “Characterization and numerical modelling of stabilised soils reinforced with fibres under cyclic loading”.

Henrique Lopes

Design Engineer

Geology and Geotechnics Division

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Henrique Lopes is a Project Engineer at the Geology and Geotechnics Division of TPF Consultores em Engenharia e Arquitetura S.A., member of TPF Group.

He obtained his bachelor degree in Geological Engineering at School of Science and Technology of NOVA University of Lisbon in 2012 and his Master in Geological Engineering-Geotechnics, in 2014, at the same University. Since 2015 Henrique have been working in TPF Consultores as Project Engineer for large infrastructure projects, collaborating in the design of railway lines, underground lines, and roads. Currently, he is involved in the development of the operation manual for four tailing dams in Brazil.

During his short professional career, Henrique has been awarded the “Jovens Geotécnicos Prize”, from Portuguese Geotechnics Society, and “Best Internship Prize-Geological and Mine Engineering” from Portuguese Engineers Association.

Fintan Buggy

Consultant, Geotechnical Engineering

Roughan & O'Donovan

Ireland

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Fintan is a Technical Director and RODs Senior Geotechnical Engineer responsible for site investigations, environmental and geotechnical assessments and design studies. He has 40 years international experience in a wide spectrum of geotechnical engineering roles. He has led Roughan & O'Donovan's design for the geotechnical aspects of the Limerick Tunnel PPP project, and has significant experience in ground improvement and deep foundations for road and railway infrastructure on soft ground including vertical drains, surcharge, basal reinforcement, piled and multi-stage embankment construction.

Education, Qualifications & Memberships

1981 - B.Sc. Civil, Loughborough University of Technology, Leics., UK

1985 - C.Eng. M.I.C.E.

1987 - M.Sc. Soil Mechanics, Imperial College, London

1992 -1995 - P.E., Professional Engineer, Florida and Mississippi, USA)

2012 - M.I.E.I., Member Institution of Engineers Ireland

2014 to present – NSAI TC250 CC7 Member working group on Eurocode 7 revisions

2014 - 2016 Chairman, Geotechnical Society of Ireland

2016 - 2017 Secretary, Geotechnical Society of Ireland

2018 - Registered Ground Engineering Adviser

Employment History:

2020 - Date - Technical Director / Consultant Geotechnical Engineer, Roughan & O'Donovan

2005 - 2020 - Associate / Geotechnical Engineer, Roughan & O'Donovan

1994 - 2005 - Geotechnical Engineering Group Manager, Dames & Moore/URS Corporation, USA

1988 - 1994 - Project & Geotechnical Engineer, Dames & Moore/URS Corporation, USA

1981 - 1988 - Geotechnical Engineer, Cementation Specialist Holdings, UK

1979 - 1980 - Student Engineer, W.P. Trant Ltd., UK

