Bio-data (From 2006 to 2010)

1. Prof. Bala

Prof. Bala graduated in Civil Engineering from University of Ceylon, Colombo in 1963. He obtained his Ph. D from Cambridge University at a time when Ken Roscoe was the Head of the Soil Mechanics Group. He was also a post-Doctorate Fellow at the Norwegian Geotechnical Institute (NGI) from 1969 to 1970 when Dr. Bjerrum was the Director of the Institute. Prof. Bala taught for three years in Sri Lanka and then moved to AIT in Bangkok to work under the leadership of Dr. Za-Chieh Moh. There he stayed for twenty-seven years and retired as a Chair Professor in 2001. Prof. Bala spent a year at the Nanyang Technological University as a Visiting Professor and now serves as a Professor of Geotechnical Engineering at the Griffith University, Gold Coast Campus. Prof. Bala hold or held the Fellowship in the Geological Society of London, ICE (London), ASCE, EA (Australia), IEM (Malaysia), and IE Hong Kong etc.

2. Prof. Harry G Poulos

Harry Poulos joined the Department of Civil Engineering at Sydney University in 1965, and was appointed a Professor in 1982, a position which he held until his retirement in 2001. In 1989, he joined the consulting firm of Coffey Partners International, and is currently a Senior Principal with Coffey Geotechnics. He is also an Emeritus Professor at the University of Sydney, and an Adjunct Professor at the Hong Kong University of Science and Technology.

He has published books and technical papers on foundation settlements, pile foundations, and offshore geotechnics, and has been involved in a large number of major projects in Australia and overseas, including high-rise building projects in Hong Kong, Singapore, Dubai and Qatar.

He is a Fellow of the Australian Academy of Science, a Fellow of the Australian Academy of Technological Sciences and Engineering, a Fellow of the American Society of Civil Engineers, an Honorary Fellow of the Institution of Engineers Australia and an Honorary Member of the Japanese Geotechnical Society.

In 1993, he was made a Member of the Order of Australia for his services to engineering, and in 2003 he was awarded a Centenary Medal by the Australian Government for his services to science and geotechnical engineering. He was selected as the Australian Civil Engineer of the Year for 2003 by the Institution of Engineers Australia and as the inaugural Geotechnical Practitioner of the Year by the Australian Geomechanics Society. He was the 1989 Rankine Lecturer of the British Geotechnical Association, the 2004 Terzaghi Lecturer of the American Society of Civil Engineers, and received the 2005 Kevin Gold Nash Medal from the International Society for Soil Mechanics and Geotechnical Engineering.

3. Dr. Sven Hansbo

Dr Sven HANSBO had his civil engineering education at Chalmers University of Technology, Gothenburg, 1945–1949. He was then employed as structural engineer at the Harbour Office in Gothenburg and was, among other things, responsible for the design of the first pre-stressed bridge, type Freyssinét, in Sweden. He was examined Licentiate of Technology in 1956 with a thesis named 'The critical load of rectangular frames analysed by convergence methods'. He was then employed at the Swedish Geotechnical Institute and was mainly engaged in two research projects, one on interpretation of the fall-cone test results and the other on evaluation of results obtained in full-scale field tests. The latter results were published as a Doctoral Thesis, named 'Consolidation of clay, with special reference to influence of vertical sand drains. A study made in connection with full-scale investigations at Skå-Edeby' published in 1960. In 1961, he was employed as head of the new-started geotechnical department at the consulting firm Jacobson & Widmark (J&W), and was elected in 1964 as Professor of Geotechnical and Foundation Engineering at Chalmers University of Technology (CTH).

Dr Hansbo has been one of the leading Swedish consultants in geotechnical engineering during his work as professor at CTH and consultant at J&W. He has published several textbooks, among them 4 in Swedish and 3 in English (Foundation Engineering, 519 pp, Elsevier 75 in 1994; Ground Improvement, 139 pp. Elib. and Fundamentals of Geotechnology, 173 pp. Elib.). He has published more than 100 papers at International Geotechnical Conferences and in Scientific Publications (Géotechnique, Ground Improvement, etc.) and has been engaged as state-of-the-art reporter. He was President of the Swedish Geotechnical Society 1974–1982, Vice President of the Swedish Civil Engineering Society 1980–1982 and President of the Swedish Civil Engineering Society 1982–1985. He was Chairman of the organising committee of the International Conference of Soil Mechanics and Foundation Engineering in Stockholm, 1981.

Dr Hansbo has received the Price of Honour of the Stockholm Building Society for 'A new approach to development of the compensation method applied in foundation on friction piles' and also the Price of Honour of the Swedish Geotechnical Society. He has received 'The golden award of merits of the Academic Senate of the Warsaw Agricultural University' and a Medal for his contribution to the scientific cooperation between Chalmers University of Technology and Polytechnica Gdanska.

4. Dr. Masaaki TERASHI

Dr Masaaki TERASHI of Nikken Sekkei Ltd., Japan has led a career as a researcher, professor and consultant in geotechnical engineering, working on various problems associated with soft ground and ground improvement projects. He graduated from Tokyo Institute of Technology in 1968. He started his career as a researcher at the Port and Harbour Research Institute, Japanese Ministry of Transport. He has been a leading figure in the R&D of a variety of ground improvement technologies especially of deep mixing since 1970. To study the complicated behaviour of structure and improved ground, he initiated geotechnical centrifuge modelling at PHRI in 1980. He received his doctoral degree from Tokyo Tech on his achievement on deep mixing. He was awarded a special prize on the outstanding research contribution from the Ministry of the Japan Science and Technology Agency in 1988. After twenty-two

years service for the government owned institute he moved to Nikken Sekkei Ltd, a leading consulting firm in Japan, to establish a Geotechnical Institute. During 1999 to 2006, he taught graduate students at Tokyo Tech as a Visiting Professor. Along with the research works, he has always been working as adviser and/or consultant for real life projects, covering wide range of infrastructures, domestic and overseas. He is currently a technical advisor to Nikken Sekkei Ltd.

Dr. Terashi has been instrumental in developing technical guidelines to ensure that deep mixing is used properly and effectively throughout the world. He was involved in drafting Eurocode on deep mixing and is currently co-authoring US FHWA technical guide on deep mixing. He contributed to the conceptual design of the deep mixing for the Central Artery in Boston, MA – the largest project of its type outside of Japan. More recently he served as an Independent Technical Reviewer for the US Army Corps of Engineers on the New Orleans canal closure projects for emergent restoration from the disaster caused by Hurricane Katrina.

Dr. Terashi edited, authored and co-authored several books and book chapters and more than a hundred research papers. He has also been active in academic and professional societies. Among them, he served as a Vice President of the Japanese Geotechnical Society from 2003 to 2005. For the International Society, he was a core member of ISSMGE Technical Committee 17 on ground improvement from 1989 to 2001. His academic services have been also for a number of international conferences; among others, he delivered a State of the Art of ground improvement at the International Conference, GeoEng 2000 in Melbourne, a keynote lecture at the 3rd International Conference on Grouting and Ground Treatment in 2003 in New Orleans, and a keynote lecture on design of deep mixing at the International Conference Deep Mixing'05 in Stockholm in 2005.

5. Dr. K Rainer MASSARSCH

Dr. K Rainer MASSARSCH is consultant in foundation and earthquake engineering, as well as soil dynamics, working on assignments world-wide. During his professional career as an academic, researcher, consultant and contractor, he became involved in many aspects of geotechnical and foundation engineering. He was responsible for the design and execution of major foundation projects in Europe, the Far East, Australia, South and North America. Dr. Massarsch is the author of over 170 scientific and technical publications and has lectured at numerous conferences and was invited to more than 40 countries.

Dr. Massarsch received his Masters Degree from the Technical University of Vienna, Austria and the Doctor of Technology Degree from the Royal Institute of Technology (KTH) in Stockholm, Sweden. Thereafter, he was visiting scholar at the University of California, Berkeley and the University of Kentucky in Lexington, respectively. He has been professor of soil dynamics at the Royal Institute of Technology (KTH), Stockholm, technical director of an international foundation company and senior consultant with a leading Swedish consulting group. He works now as a private consultant for major clients on assignments world-wide. He is the inventor of several innovative foundation and soil improvement methods, such as resonance compaction, foundation nailing and ground vibration isolation using gas cushions. He has received

several awards by Swedish and international professional organisations and in 2004, he was nominated “Inventor of the Year” by the Swedish Development Fund.

Dr. Massarsch has been involved in the design, implementation and supervision of many major foundation projects world-wide, such as earth dams, airports, and harbours, tunnels and industrial projects. Recently, he has been involved in the analysis and design of high-speed railway lines and associated problems. He has been actively involved in the development and standardization of several ground improvement methods, such as vibratory compaction, deep mixing, vertical drainage etc. He is an internationally recognized authority in seismic and geophysical testing and has worked with different types of soil dynamics and earthquake engineering projects, associated with soil compaction, pile driving and blasting, vibration isolation solutions etc. He was also responsible for the salvage and remediation efforts for several major historic monuments in Egypt, such as the Tomb of Nefertari and the Memnon Colossi etc. Dr. Massarsch also specialises in risk assessment related to construction projects and forensic work, such as the review and evaluation of effects of earthquakes and blasting damage etc.

Dr. Massarsch has been actively involved in national and international professional societies. He is past Chairman of ISSMGE Technical Committee 10, Geophysical Testing, chairman of the Swedish committee on ground vibrations and Chairman of two European Standardisation Committees (CEN/TC 288), preparing standards on Deep Soil Mixing (WG 10) and Vertical Drainage (WG 11).

6. Dr. Julian SEIDEL

Dr. Seidel is a Melbourne-based geotechnical engineer, specializing in all aspects of deep foundations, with particular expertise in both dynamic pile testing and rock-socketed pile design. During his career he has had periods of employment with both general and specialist geotechnical consultants, the government sector, a deep foundation contractor, a specialist testing agency, and in the higher education sector as lecturer and researcher in geotechnical engineering. Since 2001 Dr. Seidel heads Foundation QA, a specialist foundation engineering consultancy, and has also continued as an honorary Associate of Monash University. Dr. Seidel authored the rock-socket design program ROCKET as the culmination of his PhD studies, and has continued his research interest through international collaborative research programs.

As a result of his wide experience in different sectors, Dr. Seidel is uniquely placed to appreciate both the theoretical and practical aspects of the commissioning, design, installation and testing of deep foundations. He provides expert design and review advice on foundation projects in Australia throughout the Asia-Pacific region, Middle East and United States.

Dr. Seidel has authored in excess of 80 papers to conferences and journals, and has continued his educational role with special lectures in foundation engineering at Monash University, as well as regular international workshops on foundation issues, seminars and invited lectures to the engineering fraternity.

Dr Seidel has a strong commitment to promoting better understanding and proper quality practices in the field of dynamic pile testing. The need for better understanding is at both the level of general engineers and specialist testing engineers, and Dr. Seidel provides educational opportunities for both audiences. He has developed a High Strain Dynamic Pile Testing Certification program which is recognized and endorsed by the US Federal Highways Authority (which recommends the certification as a proficiency requirement for all US State Departments of Transportation) and other international agencies.

7. Dr David Toll (Durham University, UK)

Dr David Toll (Durham University, UK): David Toll is a Senior Lecturer in the School of Engineering at Durham University, UK. He is currently Visiting Professor at the National University of Singapore (on leave from Durham University). He graduated with a BSc in Civil Engineering from Cardiff University before going on to work for Soil Mechanics Ltd and Engineering Resources Consultants (ERCON) in the UK. He then joined Imperial College, London as a Research Assistant where he gained his PhD. He has had two periods working in Singapore, at Nanyang Technological University (1998-2000) and NUS (2006-2007).

David Toll is chair of Joint Technical Committee 2 (JTC2), the international committee responsible for defining standards for geo-engineering data (a joint committee of ISSMGE, ISRM and IAEG). He is a core member of the Technical Committee TC6 on Unsaturated Soils of ISSMGE and has been a member of Commission C18 on Collapsible Soils of IAEG (now renamed Problematic Soils). He is Research Supervisor for the European Research Network Mechanics of Unsaturated Soils for Engineering (MUSE). He was the founding editor of Geotechnical and Geological Engineering and has served on the editorial boards of Geotechnique and Electronic Journal of Geotechnical Engineering.

His work has focused on the behaviour of unsaturated, tropical and bonded soils with applications to rainfall-induced landslides and the use of natural gravels in roadbase construction. He also carries out research into information technology applications including knowledge-based (expert) systems and data exchange via the World Wide Web.

8. J. Nick SHIRLAW

J. Nick SHIRLAW (Golder Associates, Singapore) Nick Shirlaw graduated from Bristol University in 1973, and obtained an MSc degree from the same University in 1990. He is a Chartered Engineer (UK) and a licensed Professional Engineer (Ontario). He has thirty four years of experience in geotechnical and tunnel engineering. The first six years of his career were with geotechnical companies of the Cementation group in the UK and Middle East. He then moved to Hong Kong to work on the construction of the Mass Rapid Transit system there, specializing in chemical grouting and tunnelling. This was followed by senior geotechnical posts on the development of the Singapore and the Taipei Rapid Transit Systems. In 1991 he

moved to Canada, and worked for Golder Associates as the geotechnical project manager for the St Clair River tunnel and the Toronto Rapid Transit Expansion Scheme. In 1997 he returned to Singapore, as Design Manager, then Technical Advisor (Geotechnical and Tunnels) for the Land Transport Authority, involved in all of the subway and road construction in the country. In 2004 he rejoined Golder Associates, opening and managing their Singapore office. He has appeared as an expert witness in a number of civil cases and mediations in Singapore. In addition to his work for Golder Associates, Nick lectures, part-time, on soft ground tunneling at the National University of Singapore and the Nanyang Technological University.

9. Peter Jackson

Peter Jackson has a BSc in Physics and a MSc in Geotechnical Engineering from Surrey University in the UK and works in fields of tunnelling and geotechnics for a major Danish consulting company (COWI). Prior to joining COWI he has worked as a contractor, formerly with Bachy Soletanche where he has been involved in a number of major tunnel projects both in the UK and Scandinavia. These include the Limehouse Link, the Jubilee Line Extension and the Copenhagen Metro. During this time he was manager for the geotechnical works on the Copenhagen Metro for the Contractor and was responsible for the ground treatment works and tunnel face support measures.

He joined COWI in 2001 and since then has been involved in a number of major tunnel projects in Denmark and Sweden including the Malmø City tunnel and the Halandsas tunnel. He is also involved in a number of immersed tunnel projects and is currently involved in immersed tunnels in Ireland, Greece, Norway, the Netherlands and Korea. His major areas of interest are ground treatment for tunnels and soil structure interaction.

In the past two years he has been responsible for the foundation works on the Busan-Geoje Immersed Tunnel project in Busan Korea. This project is the world's deepest and one of the most challenging immersed tunnels to be built and it has required the application on a large scale of deep soil mixing and sand compaction piles to improve the foundation conditions.

10. Dr. Dazhi WEN.

Dr. Dazhi WEN. Dr. Wen obtained his Ph.D. in Geotechnical Engineering from the University of Newcastle upon Tyne, UK in 1988 after graduating from Ho Hai University, Nanjing, China in 1983. He is a Chartered Professional Engineer of Engineers Australia and a registered Professional Engineer in Singapore. Dr. Wen has more than 15 years of experiences in underground construction, specialising in the design and construction of deep excavations and tunnelling in soft ground, soil improvement and foundations. He worked on many underground infrastructure projects in Singapore, including the North East Mass Rapid Transit (MRT) Line, the MRT Circle Line and the Kallang Paya Lebar Expressways and advised on geotechnical and tunnel issues for all MRT and road projects carried out by the Singapore Land Transport Authority. He has published many technical papers on

geotechnical aspects of the projects that he worked on in Singapore. He has joined Golder Associates (Brisbane) since August 2006 and is currently involved in the North South Bypass Tunnel project in Brisbane.

11. Prof. T.F.Fwa

Dr. T. F. Fwa is Professor in the Department of Civil Engineering and Director of the Centre for Transportation Research, National University of Singapore. He received his BEng (First Class Hons) from the then University of Singapore (now known as the National University of Singapore), MEng from the University of Waterloo, Canada, and PhD from Purdue University, USA.

Dr. Fwa's research in the last 25 years covers all aspects of highway engineering, with special emphasis in the areas of pavement design, maintenance and management, and pavement performance evaluation and testing. He has published more than 200 technical papers in journals and conference proceedings, with more than 130 of them in leading international journals. His work has led to three patents in non-destructive pavement testing and evaluation. He is the editor of the recently published Handbook of Highway Engineering by CRC Press.

A widely respected researcher, Dr Fwa has been invited to lecture and make technical presentations in 16 countries, including keynote lectures at a number of international conferences and symposia. He has received a number of awards for his academic and research contributions, including the 1985 Eldon J. Yoder Memorial Award by Purdue University, USA, the 1992 Katahira Award by the Road Engineering Association of Asia and Australasia, the 1992 Arthur M. Wellington Prize by the American Society of Civil Engineers, the 1995 Katahira Award by the Road Engineering Association of Asia and Australasia, the 2000 Engineering Achievement Award by the Institution of Engineers, Singapore, the Enterprise Challenge (TEC) Award 2002, Singapore, and the Frank M. Masters Transportation Engineering Award 2005 by the American Society of Civil Engineers, USA.

Professor Fwa serves the international community in various capacities. He is the Asia Region Editor for the ASCE Journal of Transportation Engineering. He also serves on the editorial board of three other international journals: the International Journal of Pavement Engineering, the International Journal of Road Materials and Pavement Design, and the International Journal of Pavements. He is currently Vice President of the International Society for Maintenance and Rehabilitation of Transport Infrastructure, Board Member of the Eastern Asia Society for Transportation Studies, and Special Advisor to the International Association of Traffic and Safety Sciences. Locally, he has been chairing the Transportation Engineering Technical Committee since 1993. He is the founding President of the Pavement Engineering Society (Singapore).

12. Prof. Kentaro Yamada

Prof. Kentaro Yamada was educated in Nagoya University and University of Maryland, USA. He was also a Post-Doctorate Research Fellow at the University of

Maryland. A full Professor for nearly 20 years at the Nagoya University, Department of Civil Engineering and now at the School of Environmental Studies, Prof. Yamada was also a Visiting Scholar at ICON, EPLF Switzerland and at the Technical University of Denmark at Lyngby. Prof Yamada's lectures will concentrate on Inspection, Evaluation and Maintenance of Bridges; Fatigue of Steel Members; Stress Measurements in Bridges; Corrosion and Anti-Corrosion measures; Bridge Management Systems. Prof. Yamada a well known authority on Bridge Engineering.

13. Prof. Wong Kai Sin

Prof. Wong Kai Sin obtained his Bachelors Degree in civil Engineering from University of Illinois and his masters and Doctoral Degree from University of California, Berkeley. Prof. Wong developed his own program for finite element analysis of deep excavations. He is a Registered Professional Engineer in California USA and also in Singapore. Prof Wong worked in USA before for five years with Harding Lawson Associates. He is now with NTU in Singapore for over 23 years and held the position of the Chairman of Geotechnical Engineering Division of IES Singapore and also the Director of NTU-PWD Research Centre. He is also a Member of the Advisory Panel to LTA which are the clients for all MRT works in Singapore. Prof. Wong expertise include: soil structure interaction problems; deep excavations; building foundations; effect of soil movements on piles and down drag effects; and land reclamation works. Prof Wong was involved in the design and construction of many temporary works for basement excavations in Singapore. The more notable ones are art centre -- Esplanade by the Bay, the Marina Barrage and the Business Financial Centre Complex. He was also on the Independent Investigation Panel for the Land Transport Authority on the Nicholls Highway collapse. He is also a user of popular softwares such as Plaxis and Sage Crisp.

14. Prof Gholamreza Mesri

Gholamreza Mesri, a world authority on the behaviour of soils and a leader in the study of the compressibility and consolidation of soils, is the Ralph B. Peck Professor Civil Engineering at the University of Illinois at Urbana-Champaign. Together with Karl Terzaghi and Ralph B. Peck, he co-authored the Third Edition of Soil Mechanics in Engineering Practice. He is an international scientific advisor on landslides to the Centre of Excellence on Geohazards established by The Norwegian Geotechnical Institute, Oslo, Norway, and an advisor to Harris County Flood Control District in Houston, Texas on stability of drainage way channels and detention basins.

Professor Mesri has served as consultant to government and private organizations in relation to construction projects in North and South America, Europe, Africa, and Asia, including airports, offshore facilities, tunnels, hydroelectric developments and building foundations. He is a member of the International Commission on Restoration of Metropolitan Cathedral of Mexico City, a member of the International Commission on Swelling Rocks, ISSMGE Technical Committee on Soft Soils Foundation Engineering, and a founding member of the International Committee on Coastal Geotechnical Engineering.

Professor Mesri is a member of the American Society of Civil Engineers, the Canadian Geotechnical Society, and International Society of Soil Mechanics and Foundation Engineering. Among his honours Mesri includes the 1988 and 2004 Norman Medal and 1992 Thomas A. Middlebrook Award of the American Society of Civil Engineers.

15. Dr. John Read, CSIRO

Education
PhD, Geotechnical Engineering, Purdue University, USA, 1987
Grad Dip Mgmt, CIAE, Rockhampton, Australia, 1982
MSc (Hons), Geology, University of Canterbury, New Zealand, 1965
BSc, Geology, University of New Zealand, 1962

Professional Experience, Overview
Dr Read has 40 years experience as an engineering geologist in civil and mining engineering. He spent his early years working in Papua New Guinea with the Bureau of Mineral Resources (now Geoscience Australia) as a project engineering geologist on the investigation and construction of hydro-electric schemes, new roads and village water supplies. Back in Australia, in 1968, he worked with the geotechnical engineering consultants Coffey & Partners Pty. Limited on water supply dams, highway investigations and mining infrastructure projects throughout Australia, Papua New Guinea and Indonesia. From 1977 to 1980 he was Superintendent Engineering Geologist at the Melbourne and Metropolitan Board of Works and from 1980 to 1984 the Superintending Engineering Geologist at the Bougainville Copper Mine in Papua New Guinea. In 1984 Dr. Read moved to the USA, to Purdue University, where in 1987 he completed his PhD studies in Geotechnical Engineering. He then worked with the geotechnical engineering consultants Golder Associates Inc on USDOE programs for the underground disposal of nuclear waste in Washington State and Texas, and on slope stability and open pit metalliferous mine design tasks in North and South America.

In 1990 Dr. Read returned to Australia to commence his own geotechnical engineering practice, specialising in slope stability and open pit mine slope design work with projects in Australia, Fiji, Papua New Guinea, North and South America, South Africa, and Zambia. In 1994, he accepted a contract appointment with CSIRO as Deputy Chief, CSIRO Exploration & Mining and Executive Manager and CSIRO spokesperson to government and industry for the Queensland Centre for Advanced Technologies laboratories at Pullenvale, Brisbane. In 2004 Dr Read stepped back from both of these positions to establish a CSIRO mining industry funded research project (the LOP Project), which is directed at improving our ability to predict the reliability of rock slopes in large open pit mines.

16. Dr. Jun Sugawara, Golder Associates

Dr. Jun Sugawara received BEng in mechanical engineering from Meiji University in Japan in 1991, MEng in civil engineering from Carleton University in Canada in 1999,

and PhD in civil engineering from the University of Hong Kong in 2002. Before migrating to Australia in April 2007, he spent his years working on development of civil / geotechnical sensors at Tokyo Measuring Laboratory (TML). He then worked with the slope engineering consultants Institute of Slope Technology (IST) and involved in various landslide projects in Japan. Today he is a geotechnical engineer at Golder Associates.

17. Dr. Ardie Purwodihardjo, Golder Associates

Dr. Ardie Purwodihardjo has more than 15 years experience as a Civil Engineer in many major projects in South-East Asia, Middle East, Europe and Australia. Tunnelling is one of his specialities and he has been involved with tunnels for rails, roads and sewers in France, United Kingdom, Middle East, Hong Kong and Australia. He started his career in Indonesia as a Structural Engineer, then worked in the United Kingdom as a Senior Tunnelling Engineer with Atkins, and moved to Australia in August 2005 to join Golder Associates. He was awarded Master and PhD in Geotechnical Engineering (tunnelling) by the Ecole Centrale de Lyon, Lyon, France, and previously received his BSc, and MEng in Civil and Structural Engineering from the Parahyangan Catholic University, Bandung, Indonesia and University of Indonesia, Jakarta, Indonesia in 1991 and 1999 respectively. He is the author of several papers, mainly in numerical analysis and modelling in tunnelling.

18. Prof. Shunsuke Sakurai

Present Position

President, Construction Engineering Research Institute Foundation (CERIF), Kobe, Japan
Professor Emeritus, Kobe University, Japan
Professor Emeritus, Hiroshima Institute of Technology, Japan

Academic Records

1958 Dept of Civil Engineering, Kobe University, Japan, B.Eng.
1960 Div. of Civil Engineering, Graduate School, Kyoto University, Japan, M.Eng.
1966 Graduate School, Michigan State University, USA, Ph. D in Civil Engineering
1978 Dr. Eng. in Civil Engineering from Nagoya University, Japan

Professional Experiences

1960~1962 Civil Engineer, Transportation Bureau, Osaka City Office, Osaka Japan
1962~1966 Research Assistant, Div. of Engineering Michigan State University, USA
1966~1973 Assistant Professor, Kobe University, Japan
1973~1999 Full Professor, Kobe University
1979~1980 Guest Professor, Swiss Federal Institute of Technology, Zurich (ETH)
1984 Visiting Professor, University of Queensland, Brisbane, Australia
1997 Visiting Professor, Graz Technical University, Graz, Austria
1999 Professor Emeritus, Kobe University
1999~2003 President, Hiroshima Institute of Technology, Hiroshima, Japan
2003 Professor Emeritus, Hiroshima Institute of Technology

2003~Present: President, Construction Engineering Research Institute Foundation (CERIF), Kobe, Japan

Activities in the international societies

1987 ~ 1991 President, Commission on Communication, International Society for Rock Mechanics (ISRM)
1988 ~ 1991 Vice-President at large, ISRM
1995 ~ 1999 President, International Society for Rock Mechanics (ISRM))
1990 ~ 2005 Vice- President. International Association for Computer Methods and Advances in Geomechanics (IACMAG)

Field of Specialty

Rock Mechanics, Rock Engineering, Tunnel Engineering, Slope Engineering, Structural Mechanics, Earthquake Engineering

19. Dr. Harry Asche, Connell Wagner Pty Ltd

Graduating in Civil Engineering from the University of Melbourne in 1979, Harry spent his early years working on bridge and geotechnical design in Melbourne and Sydney. In the 1980s Harry travelled to the UK to work on the Channel Tunnel. Today Harry is a Principal with Connell Wagner and possesses 26 years experience in the design and construction of tunnel, railways, bridge and road projects. Harry is in charge of the Infrastructure Section for the Brisbane office incorporating Transportation, Water and Environment, Urban Development and Advisory groups. Major projects Harry has been associated with include the Airport Link Tunnel ($1.5 billion) a 6km urban road tunnel in Brisbane and the North-South Bypass Tunnel ($1.5 billion) a 5.2km urban road tunnel also in Brisbane. He has also been heavily involved in the Eastlink Project in Melbourne ($2.3 billion) as tunnel design principal advisor for the detailed design of this 1.5km twin 3 lane tunnels and the Cross City Tunnel project in Sydney ($700 million) as tunnel design team leader. Previous Brisbane projects include the Brisbane Rail Tunnels, the South East Bus way tunnels and the S1 Sewer tunnel. Harry completed a PhD at the University of Queensland in 2003 with the topic being numerical prediction of tunnelling induced settlement in weak rock.

20. Peter Burgess, Senior Principal, Coffey Geotechnics

Mr Burgess graduated from Sydney University in 1961 with 1st Class Honours in Geology, specialising in Engineering Geology. After graduation he worked for the Snowy Mountains Hydro-Electric Authority as a Scientific Officer where he carried out geological mapping along proposed tunnel routes, dam foundations, quarries and roads. The site investigations involved overseas work in Thailand, Laos, Malaysia and Cambodia. In these countries the projects involved a major dam site on the Mekong River, and Major Irrigation projects in Cambodia. In 1967 - 1968 he was awarded a Rotary Foundation Fellowship for International Understanding which allowed post graduate study at Grenoble University in France. In 1969 Mr Burgess was engaged as

site engineering geological consultant for the construction of Ord River Dam in WA. From 1971 to 1978 Mr Burgess was Senior Engineering Geologist with Coffeys and was responsible for a large number of site investigations in Australia and Overseas including mining, commercial and Industrial Developments. Between 1978 and 1994 Mr Burgess ran his own geotechnical consultancy, specialising in dam engineering, tailings dam design and construction. Notable projects during this period were the Ranger Uranium Mine Tailings Dam in the NT and the Rum Jungle Mine Rehabilitation project. Both of these projects involved design specification and supervision of construction of environmentally sensitive works in areas of National Park and World Heritage values. A number of other mining and tailings projects were also taken into the Peter J. Burgess & Associates practice. Mr Burgess rejoined Coffeys in 1994 as Senior Principal Engineering Geologist. He is currently primarily engaged in Water Supply, Waste Storage and Tailings Dam design construction projects in Australia and overseas. Peter Burgess is a former chairman of the Sydney Geomechanics Society, and former mining company representative on OECD and IAEA committees on the Long Term Storage of Uranium Mill Tailings. He has worked as an engineering geologist for the Snowy Mountains Hydroelectric Authority and the Western Australian PWD, and subsequently Principal in the following firms of consulting engineers: Coffey Partners, McMahon Burgess and Yeates, and Peter J Burgess and Associates. Peter has been involved in a very large number of major projects as listed below.

Slope Stability: Nearly 20 or more projects in NSW; PLB Malaysia, Malaysia Singapore Second Crossing, Senai North Toll Plaza; Transfield, Malaysia
Dams: Nearly sixty projects in all States of Australia, Cambodia, Indonesia, Philippines and Malaysia
Tunnels: Sixteen or more projects in Australia, Malaysia and Singapore
Dredging & Reclamation: More than six projects
Wharf & Bridge: Six projects
Roads & Highways: Five projects
Foundations: 26 projects
Grouting: Nine projects
Quarry Blasting, Vibration and Excavation: Eight projects
Rock Erodibility: Four projects
Quarry Backfilling & Quarry Remediation: Three projects.

21. Prof. Robert J Whiteley, Senior Principal, Coffey Geotechnics

Dr. Bob Whiteley, a Senior Principal at Coffey Geotechnics started his earl work in Engineering Geophysics with the Bureau of Mineral Resources (now the Australian Geological Survey Organisation). He then worked in the mineral industry as a general manager and senior exploration geophysicist/geologist. Earlier an Academic staff at UNSW, Bob established and directed two consulting and contracting companies specialising in engineering, marine and groundwater geophysics. From 1984 to 1986 he was Associate Professor in the Division of Geotechnical Engineering, Asian Institute of Technology, Bangkok and Senior Lecturer at the University of New South Wales until 1988. Dr. Whiteley has an extensive consulting and research background in engineering, groundwater and environmental geophysics with over 100 published scientific papers and one book. He is

recognised as one of Australia's leading Engineering and Environmental Geophysicist. In 1990 he gave the Keynote address on Remote Sensing and Geophysical Techniques to the 6th Congress of the International Association of Engineering Geology in Amsterdam. In 1991 he received a best paper award at the 8th International Conference of the Australian Society of Exploration Geophysicists in Sydney. In 1994, 1997 and 2004 he presented the Keynote addresses on Engineering and Environmental Geophysics at the 10th, 13th and 17th International Conferences of this Society. He was second vice president of the ASEG from 1974 to 1976 and from 1995-2005 he was a core member of Technical Committee TC10 (Geophysical Site Characterisation) of the International Society of Soil Mechanics and Foundation Engineering. Dr. Whiteley has worked on and managed projects throughout Australia and in Bangladesh, China, Hong Kong, India, Indonesia, Malaysia, The Netherlands, New Caledonia, New Zealand, Pakistan, Philippines, PNG, Singapore, Solomon Islands, Thailand, Vietnam, United Emirates and USA. He has been a consultant to AUSAID, the United Nations and the Asian Development Bank in the Natural Resources Sector.

22. Prof. Thevanayagam

The lectures will be conducted by Prof. S. Thevanayagam (Theva), a renowned research leader in the study of soil liquefaction, screening, and liquefaction mitigation in sands and silty soils. Prof. Theva is an associate professor in Civil Engineering at the State University of New York. He is also the director of education at the Multi-disciplinary Centre for Earthquake Engineering Research at the University at Buffalo, a US National Science Foundation sponsored agency for earthquake engineering research. He was also a key member of the development of the flagship earthquake engineering research facility at the university at Buffalo as part of a network of 15 major state-of-the-art facilities known as the NSF sponsored George E. Brown Network for Earthquake Engineering Simulation, NEES. He is currently engaged in a large scale research involving several US universities on liquefaction-induced lateral spreading and effects on pile foundation using 6m deep laminar box equipment, centrifuge testing, and FEM simulations. Professor Theva is a member of the American Society of Civil Engineers and International Society of Soil Mechanics and Foundation Engineering.

23. Prof. Antonio Gens (Technical University of Catalonia, Barcelona)

Antonio has been at the Technical University of Catalonia since 1983 after a Ph.D. at Imperial College, London. He has been involved in geotechnical research, education and practice for more than 25 years with special reference to the application of numerical analysis to engineering problems. He has consulted in a variety of projects involving deep excavations, tunnels, ground improvement techniques, dams, power stations, foundations and slopes.

24. Prof. Helmut F. Schweiger (Graz University of Technology)

Helmut obtained his Ph.D. form the University College of Swansea, UK and teaches courses on Advanced Soil Mechanics and Computational Geomechanics at the Graz University of Technology, Austria. He has over 15 years experience in development and application of the finite element method in geotechnics. As a member of several international committees Helmut is involved in formulating guidelines and recommendations for the use of finite elements in practical geotechnical engineering.

25. Dr. Wout Broere (Delft University of Technology)

Wout has been with Delft University since 1995. His research interests range from new soil investigation techniques, laboratory and centrifuge testing to various aspects of underground construction. He specialises in face stability and has been involved with several large tunnel boring projects.

26. Mr. Dennis Waterman, MSc. (Plaxis bv)

Dennis obtained a Masters degree in Civil Engineering at Delft University of Technology before he joined Plaxis in 1996 as a programmer. He has been involved for several years in creating the Windows user-interfaces of the new Plaxis products before shifting his main field of activity to user support and lecturing courses in 2002. Since 2006 he is the international course coordinator.

27. Professor Pedro Sêco e Pinto :ISSMGE President (2005-2009)

Pedro S. Sêco e Pinto is Licenciated in Civil Engineer (6 years course) (with honours) in 1971, maintained a link with the industry between 1971-1975, received Master of Engineering (with honours) in 1977. He was awarded two academic degrees Specialist in Geotechnique (Ph.D. Degree), with honours, in 1983 and Principal Research Engineer (Full Professor degree), with high honours, in 1992 at LNEC. He was elected Vice-President for Europe 2001-2005.

He is Full Professor of Geotechnical Engineering of University of Coimbra (since 1994) and Invited Professor of University New of Lisbon (since 1983). He was Invited Lecturer in University of California (1992-1994). He served as Chairman of TC4 “Earthquake Geotechnical Engineering“(ISSMGE) (1994-1999) and President of Portuguese Geotechnical Society (1996-2000). He was Head of Division at LNEC from 1986- 2004.

He has acted as United Nations Consulting for Design, Instrumentation and Surveillance Technology for Dams and other Hydraulic Structures. He is a member of Portuguese Commission on Dams, Portuguese Commission on Dams Codes and Seismic Aspects of Dams Committee of ICOLD. He has been an active consultant working on major projects throughout Europe, Asia, Africa and South America. He is author or co-author of 300 technical reports and more than 100 papers for journals, national and international conferences. He is editor of proceedings for 4 international

conferences on Earthquake Geotechnical Engineering and Environmental Geotechnics and contributed for four books. He has presented special lectures and state-of-the art reports and selected contributions in more than 60 countries in the 6 Regions.

His principal areas of interest include soil dynamics, earthquake engineering, embankment dams, special foundations, tunnelling and environmental geotechnics. He is a member of several national and international Societies, Technical Committees and Editorial Boards and has participated in several European Community Projects. He has been organizer and co-organizer of more than 15 national and international conferences, symposia and seminars. He has received many awards and honours.

28. Malcolm Barker

Malcolm has 33 years experience in the design, construction and safety of dams and canals and their associated works. This work has included Feasibility, Design, Construction, Safety Review and risk analysis of dams in Zimbabwe, South Africa, Canada and Australia.

While working for the Department of Water Affairs in South Africa, he built up six years of experience in the field of dam safety and risk analysis, carrying out inspections and producing reports for 18 dams varying from 12 m to 108 m in height. Risk analysis was carried out for each dam requiring the evaluation of the initiating events, likely failure modes, probabilities and consequences of failure resulting from the dam break to determine the total risk of dam failure. He developed a method of prioritization for remedial works on State dams which relied on ranking obtained from the risk analysis results.

In Canada he was involved in the detailed risk analysis of the B.C. Hydro Seven Mile Dam which is an 80 m high concrete gravity dam located in British Columbia. The risk assessment was to determine whether the dam would meet the current B.C. Hydro risk criteria for financial, societal and individual risk and evaluate remedial options if necessary required for the dam to meet the risk criteria. The risk analysis was for all initiating events and modes of dam failure and required particular attention to the equipment reliability and seismic considerations.

Since arriving in Australia in January, 1998, Malcolm has served on the working group for the preparation of the ANCOLD guidelines for Hazard Assessment and Risk Assessment and the ANCOLD Consequence Guidelines.

He has carried out a number of detailed risk assessments for dams including the following more significant projects:

- Thomson Dam (Melbourne Water) an extreme hazard category dam with a central core rockfill main embankment of 166 m high and 590 m long and a central core rockfill saddle dam of 34 m high and 570 m long, a concrete ogee chute spillway of 30 m long and a twin intake tower leading to a tunnel on the right bank.

- Cairn Curran Dam (Goulburn Murray Water), which is a High A hazard category dam and comprises a zoned earthfill main embankment of height 44m and 660m

in length, a secondary homogeneous earthfill embankment of 14m height and 850m in length, a primary spillway with three radial gates of 8m high, an auxiliary uncontrolled saddle spillway and a wet tower intake leading to a tunnel below the embankment.

- Ross River Dam Design validation model (NQ Water) used to ensure compliance with the Queensland dam safety regulator requirements, which are based on the ANCOLD Risk guidelines. Ross River Dam is an Extreme hazard dam and comprises an embankment dam of maximum height about 20m and length of 7700m with a concrete gravity spillway section of 40m width.

- Rocklands dam risk assessment (Grampians Wimmera Mallee Water Authority) for safety evaluation and identification of potential remedial options. The dam is a concrete gravity structure with central concrete corewall rockfill embankments on both abutments. The spillway is an ogee of 154.5m long and 25m height with adjacent non overflow sections of 117m long and the embankment of about 210m long with height up to 10m.

- Eildon Dam (Eildon Alliance) risk assessment for the embankment design options including spillway gate reliability and the effect on reservoir level and failure probability. Eildon dam is an earth and rockfill embankment of about 940m in length with a maximum height of 80m and a gate concrete gravity spillway with vertical lift gates. Also completed a detailed evaluation of construction risks and appropriate methodology to minimize the risk due to flood failure during the construction.

- Blue Rock Dam (Southern Rural Water) risk assessment for a 74m high central core rockfill dam. Failure modes effects and criticality analysis and initiating event screening was used to focus attention on the most likely failure initiating events and failure modes for event tree calculation of failure frequencies and risk data.

29. Peter Allen

Peter Allen graduated in Civil Engineering from the University of Queensland in 1974 and completed his Master of Engineering Science in 1985.

He has worked for the Queensland Department of Natural Resources and Water and its predecessors since graduation. He has been in a number of roles in NRW ranging from design engineer for such dams as Wivenhoe, Burdekin Falls, Kroombit and Peter Faust through to a role as the Senior Flood Operations Engineer for flood operations at Wivenhoe Dam, Somerset Dam and North Pine Dam.

Peter is currently the Director Dam Safety (Water Supply) and, as such, is the Dam Safety Regulator for Queensland. The regulatory role includes ensuring dam owners establish and maintain appropriate dam safety management programs for their dams.

He was instrumental in establishing Queensland’s Spillway Adequacy Guideline and

was also a member for the ANCOLD Risk Assessment and Dam Safety Management Guideline committees and was convenor of the ANCOLD 2000 conference in Cairns. Peter was the ANCOLD Secretary between 2003 and 2005.

30. Dr Neil Mattes

Dr Neil Mattes is a specialist civil/geotechnical engineer with more than 35 years professional experience, including 25 years in senior geotechnical management roles in the power generation and consulting fields. He is a Senior Principal of URS Australia, based in their Sydney office.

His special areas of expertise are the geotechnical aspects of the development of thermal power stations, large mineral processing plants and surface infrastructure for mines, and the investigation, design, construction, surveillance and rehabilitation of embankment dams for tailings storage and mine water management, and in recent years his tailings dam work has occupied the vast majority of his time.

His current tailings storage projects include investigation, design and construction review responsibility for tailings storages at Cadia, Cracow, Telfer and Gosowong (all Newcrest Mining sites) and Cowal Gold Mine (for Barrick Australia Limited). He is also preparing the conceptual design for tailings storage for the Balla Balla Titanomagnetite project in Western Australia, and was responsible for the tailings aspects of the Bankable Feasibility Studies for the Cibaliung project and for Perseverance Gold Mine in Victoria.

31. Dr. Noppadol Phienwej

Dr. Noppadol Phienwej holds a doctoral degree in Civil Engineering from University of Illinois at Urbana-Champaign, U.S.A. He has 25 years of experience in geotechnical engineering as an academician and consultant; with ample experiences in the various aspects of dam engineering. He has been involved with investigation, design, construction supervision and rehabilitation of more than 20 dams in Thailand as well as a number of trans-basin water diversion projects. Major dam projects that he worked on are for instances, the world longest RCC Tha Dam , Lam Ta Khong Pumped storage project, Kwaenoi dams, Madua dam, Lam Moon Bon dam, Lam Sae dam, Lam Pao dam, etc. Currently, he is participating as geotechnical advisors in the design and construction of a number of major hydropower projects in Indochina and Myanmar, i.e. Nam Ngum 2 project, Nam Ngum 3 project, Nam Bak project, Xaiyaburi project and Hutgyi project. In 2000, he served as one of the four expert members of the panel appointed by Food and Agriculture Organization of the United Nations to conduct dam safety review of major dams in the Chao Phrya River Basin. Currently, he is leading a team in the development of a guideline of dam safety assessment for the greater Mekong countries under the Asian Infrastructure Review Center established at the Asian Institute of Technology.

Dr. Noppodol is the Associate Dean of School of Engineering and Technology of Asian Institute of Technology: He is also the Head of the Geotechnical and

Geoenvironmental Engineering Programs at AIT, within the Civil Engineering School. Dr. Noppodol is heavily involved with professional society and community service activities for instances, twice as advisor to the Minister of Transport of Thailand, and an advisor to a number of state enterprises responsible for infrastructure and utitilities development. He serves as a liaison person of Thailand National Group of the International Tunneling and Underground Space Association and was the past chairman of that group. He is also the editor of the Geotechnical Engineering Journal of the Southeast Asian Geotechnical Society and serve on editorial board members of two leading international journals, i.e. Tunneling and Underground Space Technology and Felsbau. He was also the past chairman of the Geotechnical Committee of the Engineering Institute of Thailand and was also a member of its Executive Committee. He has been involved with a number of major infrastructure development projects in Thailand and Southeast Asian countries (hydropower dams, irrigation dams, power plants, tunnels, airport, and mines). Recently, he served on two important committees for development of the new Bangkok International Airport project (Suvarnabhumi Airport).

32. Dr Gamini Adikari

Dr Gamini Adikari is the Principal Engineer Dams of SMEC Australia and is based in Melbourne. He has over 30 years experience in dam engineering in the water resources industry in Australia, Asia, Africa and Europe. His areas of expertise include safety management, technical assessment, design, investigation and numerical modelling of dams associated with water supply, irrigation, hydropower, mining and recreation projects.

Gamini holds a Bachelor of Engineering degree in civil engineering, a Masters Degree in geotechnical engineering and Ph D in dams engineering. His specialist experience in geotechnical engineering of embankment dams has enabled him to be involved directly in over 100 dam projects across 4 continents. He has managed over 300 different projects involving dams and geotechnical aspects during his professional career to date, most of which in Australia. More recently, he has completed World Bank funded projects to develop a dam safety regulatory framework for Uganda and a dam safety implementation program for Sri Lanka. He is also the Team Leader of the Dam Safety Management Group of SMEC Australia and is directly involved with all aspects of safety review, condition assessment, dam safety inspections and reporting of behaviour of many large and referable dams in Australia and overseas. He has published widely in the field of dam engineering and has conducted numerous seminars, courses and workshops in the fields of numerical modelling, dam safety and rehabilitation, and behaviour of dams.

Gamini is a Fellow of the Institution of Engineers Australia, the Institution of Civil Engineers United Kingdom and a member of five other national and international professional societies. He was the Honorary Secretary of the Australian National Committee on Large Dams (ANCOLD) from 2000 to 2003 and in addition, has served as a member of the ANCOLD Technical Committees that developed the Guidelines on Design of Dams for Earthquake and the Guidelines on Dam Safety Management.

33. Dr. Nihal Vitharana

Dr. Nihal Vitharana is the Principal Dam Engineer of Sinclair Knight Merz (SKM) and received his PhD from University of Canterbury in New Zealand. His earl education was in University of Moratuwa, Sri Lanka and University of Sydney and Deakin University. Nihal has in excess of twenty-four years' professional experience in dams, geotechnical, earthquake, water resources and infrastructure engineering. Nihal is our Practice Leader for Dam Engineering and as such is responsible for the technical quality of dam related engineering services. Nihal is also a specialist in the design of water-retaining, hydraulic and desalination structures with respect to structural, seismic and durability aspects.

Nihal has worked as Principal Engineer/Manager for major dam designs such as Churchman Brook, Hinze, Millbrook, Harvey, Serpentine, Waroona and Wolkalup where is work included task management, design and the supervision of drawings and specifications. His work experience includes assignments in Australia, China, New Zealand, and Sri Lanka, Papua New Guinea, Fiji and Japan.

Nihal has undertaken nearly 40 dam safety assessments covering the spectrum of dam engineering. He has published and presented 50 papers at national and international conferences and a range of journals focussed on dam, structural and geotechnical engineering. He holds post-graduate qualifications in structural, geotechnical, hydraulics and civil engineering. Nihal is familiar with the ANCOLD / ICOLD Guidelines and other dam-related standards such as United States Bureau of Reclamation (USBR), US Army Corps of Engineers (USACE), Canadian Dam Safety Association (CDSA).

34. Norm Himsley

Norm Himsley, a Fellow of Enineers, Australia, has over thirty five years experience in the planning, investigation, design, construction, operation and maintenance of major engineering structures and infrastructure including buildings, dams, roads, bridges, power stations and water and sewage distribution and treatment.

Norm is currently the Executive Engineer of the NSW Dams Safety Committee charged with setting and auditing the safety standards of the 327 prescribed dams in NSW to protect the community from dam failures. As part of this work for the last fifteen years he has set up in the TAFE System, and run, regular training programmes for dam operators and owners both in NSW and throughout Australia and New Zealand. He has also been involved in, or chaired, several working groups in the preparation of ANCOLD Guidelines on various dam management subjects.

Norm has been actively involved for over ten years with Engineers Australia, working in the education and assessment area, and has been Chair of Sydney Division's Education and Assessment Committee since 2000. In 2005, he was President of Sydney Division and represents Sydney Division on National Congress.

35. Ranji Casinader

Ranji Casinader is a water resources engineer of 0ver 50 years experience, for the first 31 years of which period he worked with public utilities and consulting engineering firms, being directly responsible for the design and management of projects for about 12 years. Between 1983 and 2003 he was an Independent Consultant providing review and advisory services particularly on dam projects to owners, consulting engineering firms, contractors and international aid agencies. Since retiring from full-time work in 2003, he has acted when invited on as a review and advisory consultant on dams and water resources.

The dams he has been engaged on have ranged in height from 6 m to 130 m, and include concrete gravity, concrete arch, earthfill and rockfill embankment dams (including a number of concrete faced rockfill dams). His expertise also includes the appurtenant structures to dam projects, including intake and outlet works, spillways, pumping stations, tunnels and pipelines. He also has substantial experience in the monitoring, safety review and rehabilitation of dams.

Ranji was educated at Cambridge University and he is a Fellow of ICE London and EA. He has worked on all types of dams over the last 45 years.

With earth core rockfill dams he has been involved with Llyn Brianne in Wales; Kossou & Taabo in Ivory Coast; Mamak , Sermo, Wadaslintang & Wonorejo in Indonesia; and Bago in Philippines. With concrete faced rockfill dams he has worked on Sugarloaf main dam, Split Rock in Australia; Kotmale in Sri lanka; Tuapeka in new Zealand; Shanxi, Zhejiang Province in China; and Pnre Ponre dam in Indonesia. He was also involved with several earth dams in Sabah, Malaysia and Pengga Indonesia. On the concrete gravity dams, his experiences are in Cluanie, Loyne and Beannachran, Scotland; Ok Menga in Papua New Guyinea and Kali Gandaki in Nepal. Also on a concrete arch dam in Monar Scotland and several tailking storages in the copper mines of Iran.

36. Giovanni Barla

Giovanni Barla was born in Italy and graduated in mining engineering from the Politecnico di Torino in Italy in 1965. For his post-graduate work he specialised in rock mechanics and obtained a master’s degree from Columbia University, New York, USA, in 1967. He was awarded the Doctor of Engineering Science Degree from Columbia University in 1970 for a thesis on stress analysis of underground excavations. He is now Professor of Rock Mechanics and Director of the Department of Structural and Geotechnical Engineering at Politecnico di Torino in Italy.

His research activities are principally connected to laboratory and in situ testing (behaviour of rock discontinuities and weak rocks), rock mass characterisation, numerical modelling and back analysis, performance monitoring, slope stability, rock-structure interaction for underground workings and tunnels, surface and underground mining.

He is Editor of “Rock Mechanics and Rock Engineering”, Springer Wien NewYork. He is member of the “Accademia delle Scienze di Torino”. He has been Vice President of ISRM from 1995 to 1999 and President of AGI (Italian Geotechnical Society) for the period 1997-2003. Editor of Proceedings of International Conferences and Symposia on behalf of ISRM, ISSMGE and IACMAG, he is author of more than 250 papers on various subjects in rock mechanics, rock engineering, geotechnical engineering, tunnel engineering and numerical modelling. He has been active in promoting continuum education courses in Rock Mechanics and Rock Engineering since 1986, which resulted in the publication of 10 books on various subjects including tunnelling, slope stability, performance monitoring, and rock mass characterisation.

He is a member of ISRM, ISSMGE, and IACMAG. He is used to participate in the activities of these societies as General Reporter, Key-Note Speaker, Member of Panels in International Conferences and Symposia. He has coordinated the ISRM Commission on “Tunnelling in squeezing rock” and organised two workshops on the subject in 1995 and 1997 which resulted in the publication of special issues of the Rock Mechanics and Rock Engineering Journal and of the Italian Geotechnical Journal. He has been chairman, on behalf of ISRM, of Eurock96 in 1996, and on behalf of IACMAG of the 11th International Conference in 2005.

He has been associate and member of the International Board of Golder Associates Inc. from 1991 to 1995. He is consultant in rock engineering; in tunnelling and underground excavations, including near surface tunnels (with major interest in squeezing and/or swelling ground), rock reinforcement and support methods, and mechanised tunnelling; in rock slope engineering, including stability assessment of artificial cuts and natural slopes, rock falls, active and passive measures, stabilisation and reinforcement measures; and in dam engineering. He has recently worked on projects in Italy, France, Switzerland, Israel, Ethiopia, Venezuela, China, Taiwan, Thailand, and the Philippines.

37. PAUL G. MARINOS

PROFESSOR OF ENGINEERING GEOLOGY AT THE NATIONAL TECHNICAL UNIVERSITY OF ATHENS
PAST PRESIDENT OF THE INTERNATIONAL ASSOCIATION FOR ENGINEERING GEOLOGY & THE ENVIRONMENT

PAST PRESIDENT OF THE GREEK TUNNELLING SOCIETY
PRESIDENT OF GEOLOGICAL SOCIETY OF GREECE

Academic and Scientific Status : Mining Engineer - National Technical University of Athens, 1966; Engineering Geologist, University of Grenoble, France, 1967; “Docteur Ingenieur”, University of Grenoble, 1969; Lecturer in Engineering Geology and Hydrogeology in the University of Athens, Geological Department and in the National Technical University of Athens, School of Mines, Civil Engineering Department, 1974-77; Professor of Engineering Geology at the University of Thrace, School of Engineering, 1977-87; Vice-Rector at the University of Thrace, 1983; Full Professor at the National Technical University of Athens, (N.T.U.A.) Civil

Engineering Department (since 1987); Director of the Geotechnical Division of the Civil Engineering Department, at N.T.U.A,.1988-89, 1991-92, 1993-96, 1997-99, 2004-06; President of the International Association for Engineering Geology and the Environment (IAEG) (1994-98); Director of the Post graduate programme courses "Design and Construction of underground works", 2001-03, 2006-08; President of the Geological Society of Greece (2004-2008)

Prizes, Medals:"André Dumont" medal. Societé Géologique du Belgique (1997) ; Plaquette from the Chamber of Geological Engineers of Turkey (1997); Hans Cloos Medal. International Association for Engineering Geology & the Environment (2000); 6th Glossop Lecturer and Medal, Geological Society of London (2002); Honorary member of International Association of Hydrogeologists (2003); 19th Manuel Rocha Lecturer, Lisbon (2002); 6th lecturer for the Annual Spanish lecture on Rock Mechanics ; Medal of Committee of Engineering Geology of Geological Society of Greece (2006)

Teaching Assignments in Universities : Besides the regular position as Professor of Engineering Geology in the National Technical University of Athens, Civil Engineering Department, for both under and post graduate studies, other teaching assignments include: Visiting Professor of the University of Grenoble, Geology Dept., France (1987); Visiting Professor in the Ecole Polytechnique Federal de Lausanne, Switzerland (1995-1997); Politechnico di Torino, COREP 1996 (Tunnelling); University of Thrace Civil Engineering Dept; Visiting Professor in the University of Thessaloniki, Geology Dept. (since 1997). Visiting Professor in the University of Patras. Geology Dept. (since 1997); University of Durham. School of Engineering and Computer Sciences; Visiting Research fellow in the University of Kobe, Japan (1998); Visiting Professor in the School of Mines in Paris (2003-2004).

Research and Scientific collaboration or invitations to Universities or other Research Institutions: Ecole Polytechnique Fédérale de Lausanne, Switzerland ; University of Waterloo, Dept of Earth Sciences, Canada ; University of Durham, School of Engineering and Computer Sciences, England; Technical University of Budapest, Civil Engineering Department, Hungary; Ecole Nationale Superieure des Mines de Paris, France; Ecole Nationale Superieure des Mines de Nancy, France; Université Catholique de Louvain, Faculté de Génie Civil, Belgium; Comenius University of Bratislava, Geology Department, Slovakia; Imperial College of Sciences, Technology and Medicine, School of Mines Geology Department, U.K.; Polytecnico di Torino, Continuous Education, Italy; University of Mining and Geology, Sofia; University of Kobe. Civil Engineering Dept., Japan ; International Institute of Aerial Survey and Earth Sciences (ITC), The Netherlands ; University of Belgrade, Faculty of Geology, Yugoslavia ; Geological Survey of Croatia ; The Canadian Geotechnical Society ; Geological Society of Nepal ; Geological Survey of Malaysia ; Black Sea University, Romania ; Technical University of Tirana, Albania ;Mediterranean School on Preservation of Monuments (Bari, Italy) ; Université de Liège, Belgium ; Université de Grenoble, Institut Dolomieu, France; University of Thessaloniki, Department of Geology, Greece; University of Thrace, Department of Civil Engineering, Greece; U.S. Geological Survey. U.S.A.; Technische Universitat Berlin. Germany; University of Coimbra. Department of Civil Engineering, Portugal.

Current Main Research Areas : Geotechnical description and behaviour of weak rock masses with applications to tunnelling and dam construction; Slope stability for heterogeneous rock masses ; Engineering Geology of karstic terrains ; Ground water in karstic environment: Papers Published in Journals or Proceedings of Congresses or Symposia : In English-137; in French:22; in Greek:116.

Congresses and Symposia: Participation since 1966 of more than 140 International and National Congresses and Symposia on Engineering Geology, Soil and Rock Mechanics and Hydrogeology.General reporter in 9 cases: Invited or key lecturer in 30 cases ; Honorary president of the Scientific Committee of the IAEG' s congress in Istanbul ; Member of the scientific committee in 18 cases.

Professional and Consulting Activities of Professor Paul G. Marinos: From 1967 to 1974 Engineering Geologist in big Companies in France and Greece; Since 1974 Consultant and independent expert or Member of panels consulting activities in France, Greece, Portugal, Iran, Jordan, Laos, Nigeria, Saudi Arabia, Spain, Morocco, Sweden, Turkey.

Table of Consulting actions and consultant reports 1968-2006

DAMS	92
TUNNELS	130
ROAD CUTS	60
BRIDGES / FOUNDATION	25
GROUND WATERS	135
EVNIRONMENT	35
Total	477

38. Associate Professor Chu Jian

Dr CHU is an Associate Professor in the School of Civil and Environmental Engineering, Nanyang Technological University, Singapore. He received his Ph.D. from the University of New South Wales, Australia in 1991. He has more than 20 years' research and consulting experiences in geotechnical engineering, in particular in the areas of laboratory and in-situ testing, engineering properties of soils, soil improvement and land reclamation. He is the Chairman of TC39: Geotechnical Engineering for Coastal Disaster Mitigation and Rehabilitation and the Chair of Working Group C in TC17: Ground Improvement, both under the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE). He is a co-author of the book "Soil Improvement – Prefabricated Vertical Drain Techniques" and a co-editor of the book "Ground Improvement – Case Histories". He has published over 190 technical papers in international journals and conferences and has been a keynote or invited speaker at more than 20 local and international conferences. He is a recipient of the prestigious R.M. Quigley Award from the Canadian Geotechnical Society for publishing the best paper in the Canadian Geotechnical Journal in 2003. At the present, he serves as the Co-Editor for Geotechnical Engineering, the Journal

of Southeast Asian Geotechnical Society and an Editorial Board Member for 3 other international journals.

39. Associate Professor Jie Han

Dr. Jie Han is an associate professor at Department of Civil, Environmental, and Architectural Engineering at the University of Kansas in the United States. He received his Ph.D. degree in Civil Engineering from the Georgia Institute of Technology in 1997 and has been a professional engineer in Georgia since 1998. Prior to joining the University of Kansas in August 2004, Dr. Han was an assistant professor at Department of Civil Engineering at Widener University from 2001 to 2004 and a manager of technology development in a world-leading geosynthetic manufacturer from 1997 to 2001. Prof. Han's research and practical experiences have dealt with geosynthetics-reinforced earth structures, ground improvement, pile foundations, and pavement applications. Prof. Han has co-authored three technical books and published more than 100 peer-reviewed journal papers and conference papers. Dr. Han was one of sixteen invited Top Name Speakers for the 1999 ASCE/Pa DOT Geotechnical Seminar. He is a member of the Editorial Board of the ASCE Journal of Geotechnical and Geoenvironmental Engineering, the Advisory Board/Editorial Panel of the International Journal of Geomechanics, the Editorial Board of International Journal of Geomechanics and Geoengineering, ASCE Geosynthetic Committee, ASCE Ground Improvement Committee, and TRB A2K07 Committee on Geosynthetics. He was the Secretary General and Technical Committee Co-Chair for the GeoShanghai International Conference held in Shanghai, China from June 6 to 8 2006; an international advisory board member, session chair, and invited keynote lecturer for a number of international conferences; and a member of the U.S. National Science Foundation and the National Cooperative Highway Research Program review panels. Prof. Han has received several research grants from the National Science Foundation, the Federal Highway Administration, Kansas Department of Transportation, Delaware Transportation Institute, the University of Kansas, Widener University, and industries. The total research expenditure is approximate 2 million dollars. Prof. Han received the Short-Term Invitation Fellowship for Research in Japan from the Japan Society for the Promotion of Science (JSPS) in 2002. He was the recipient of Bellows Scholar Award from School of Engineering at the University of Kansas and several Provost's and Faculty Research and Development awards at Widener University. Recently, he has received two best paper awards from the U.S. Transportation Research Board.

40. Chris Lawson

Chris Lawson is Managing Director of TenCate Geosynthetics Asia-Pacific based in Hong Kong. Chris received his Bachelor of Engineering and Master of Engineering degrees from The University of New South Wales, Sydney. He has worked in the field of geosynthetics for 30 years in Australia, Europe, North America and Asia. During this period he has served on numerous international organizations developing geosynthetics Standards and Codes of Practice. Chris has acted as technical advisor

on many large scale geosynthetics projects in the field of reinforced soil techniques and coastal and hydraulic engineering in Australia, Asia and Europe. He is the author of over 50 technical papers on the subject of geosynthetics, and has been the keynote speaker at numerous conferences and symposia. Chris is an ex-Council Member of the International Geosynthetics Society. In 2006 Chris presented the third Giroud Lecture at the 8th International Conference on Geosynthetics in Yokohama, Japan.

41. Associate Professor Abdelmalek Bouazza

Dr. Bouazza is an Associate Professor in Civil Engineering and Head of the Geomechanics Group at Monash University, Melbourne, Australia. He is also an Adjunct Research Professor at Cardiff University, Geoenvironmental Research Centre, Cardiff, U.K. Dr. Bouazza's research interests are in the fields of Geosynthetics, Ground improvement, Contaminant Transport, Landfills and Environmental Geotechnics He has an international reputation for research in Geosynthetics and Environmental Geotechnics. His general field of interest is in waste mechanics, contaminant transport, gas migration in porous media, thermo-hydro-mechanical behaviour of porous media and design and performance of liner and cover systems. His research has been recognised by a number of awards including, recently the 2006 International Geosynthetics Society Award and Gold Medal for outstanding contribution to advances in the scientific and engineering developments of geosynthetics. His research findings in Geosynthetic Clay Liners have also been recently incorporated into various standards such as *European Committee for Standardization (CEN)* TC189 and *ISO* TC221. In particular, a testing technique he has developed to test the gas permeability of GCLs has been approved by ISO TC221 and CEN189 to form the basis of the new gas permeability standard for GCLs.

Dr. Bouazza is very prominent in technical and professional society activities and serves on a number of international technical committees. Currently, he is a member of the International Geosynthetics Society (IGS) council and chair of the Asian Activities Committee of the International Geosynthetics Society. He is a core member of the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) Technical Committee No5 (TC5) on Environmental Geotechnics, Vice-President of the Australasian Chapter of the International Geosynthetics Society (ACIGS), co-chair of the International Geosynthetics Society Education Committee and a member of the Standard Australia committee C20 on Geosynthetics. He is editorial board member of 5 International Journals and very active as a reviewer for several international journals.

Dr. Bouazza has published widely in international journals and refereed conferences and is the author or co-author of more than 180 refereed publications... His skills and experience in the area of waste containment facilities and geosynthetics are well recognized in Australia and abroad. He has been invited to deliver and contribute to several keynote lectures and state of the art reports in international conferences in Africa, Asia, Europe and North America, and delivers short courses on geosynthetics, and liners and cover systems for waste containment facilities on a regular basis locally and internationally. In addition to his academic commitments, Dr. Bouazza gives specialist advice for the industry both nationally and internationally.

42. Prof. Hocine Oumeraci

Dr. H. Oumeraci is a full professor at the Faculty of Civil Engineering at Technische Universität Braunschweig in Germany. He is also Managing Director of the Coastal Research Center (FZK) in Hanover, a Joint Institute of both universities in Hannover and Braunschweig. He received in 1981 his PhD-degree in Hydraulic Engineering from the Dresden University of Technology, Germany. After many years of engineering practice (in both consulting and contractor companies) he joined the University of Hannover, where he was involved in large research projects on coastal structures up to 1993. He has been teaching Hydromechanics and Coastal Engineering since 1994 in Braunschweig. His research interests encompass a large range of coastal engineering topics, including vertical breakwaters, innovative coastal structures, wave loading and hydraulic performance of coastal and harbour structures, wave overtopping and breaching of sea dikes and coastal structures made of geotextile sand containers. He is the author of more than 200 technical papers, including many papers in the last years on geotextile structures. One of these papers, authored by one of his Phd-students, Mr. J. Recio, and himself was awarded by the Journal “Geotextiles & Geomembranes”, Elsevier, as the Best Paper of the Year 2007. He is a member of the Editorial Board of “Coastal Engineering”, Elsevier.

43. Prof. Ikuo Towhata

Prof. Ikuo Towhata had his engineering education at the prestigious Tokyo University in Japan and is currently a Professor in the Department of Civil Engineering. Tokyo University is traditionally very strong in Soil Dynamics, Machine Foundations and Geotechnical Earthquake Engineering now for several decades. Also recently, Prof. Towhata has written a comprehensive and scholarly book in this discipline. Prof. Towhata is also the Editor in Chief of the well known Journal, Soils and Foundations. He is an active member of several national and international committee on lansldes, earthquake engineering. A recipient of several prestigious awards, Prof. To whata’s interest in Geotechnics is very wide and are on deformation characteristics of sands, dynamic analysis of earth structures, soil improvement by densification and grouting, stability of slopes and seabeds under static and dynamic conditions, landslides and debris flows, seismic performance based design of geotechnical structures. Author of more than 250 publications, Prof. Towhata has lectured in many leading universities in most continents.

44. Prof. Chang-Yu Ou

Prof. Chang-Yu Ou received his Batchelor's Degree in Engineering in 1977 from National Cheng-Kung University in Taiwan and his Masters and Doctoral Degrees from Stanford University in 1984 and 1987 respectively. He is currently the Dean of engineering at the National Taiwan University of Science and Technology, Taipei, Taiwan. He is also the Director of Ecological and Hazard Mitigation Engineering Research Center of the National Taiwan University of Science and Technology, Taipei,

Taiwan. He was also a Visiting Professor at University of California, Berkeley. His areas of interest are deep excavations, soil behaviour, soft ground tunnelling and ground improvement.

Details of the Book by Prof. Ou

The book is divided into twelve chapters, whose contents are summarized as follows: The first chapter introduces the flow of analysis and design of excavations. The second chapter introduces the basic properties of soils and the representative values for various urban soils around the world. Besides, the chapter also explains the principles of drained and undrained strengths of soils and the test methods to obtain them. The third chapter introduces commonly used excavation methods and retaining-strut systems. The excavation of the Taipei National Enterprise Centre (TNEC), referred to many times as an example in the book, is also introduced in this chapter. The fourth chapter introduces the concept of lateral earth pressure and its application to excavation.

The fifth chapter introduces the ultimate analysis, the uplift analysis, and sand boiling analysis for excavations. Also, reasonable factors of safety for these analyses are discussed in this chapter. The sixth chapter introduces the hand calculation for the estimation of excavation-induced deformation, ground settlement, and the stress of the strutting-retaining wall. The method, which is based on hand calculation, is called the simplified method in the book. The seventh chapter introduces deformation and ground settlement analysis by using the beam on elastic foundation method. The eighth chapter introduces deformation and ground settlement analysis by using the finite element method.

The ninth chapter introduces methods of dewatering, well theories and the design of excavation dewatering. The tenth chapter introduces the design of structural components in braced excavations and anchored excavations. These components include the retaining wall, the strut, the wale, the centre post, and the anchor. The eleventh chapter introduces building protection during excavation, including the determination of allowable settlement, commonly used building protection methods, and auxiliary methods. The twelfth chapter introduces the principles of monitoring instruments, items of instruments, determination of alert and action values, and the application of feedback analysis.

45. Dr.Bengt H.Fellenius

Dr.Bengt H.Fellenius, formerly Professor of Civil Engineering at the University Of Ottawa, is an internationally recognized foundation engineering consultant and the author of more than 250 technical papers. His professional experience comes from a wide variety of assignments that encompass foundation design for industrial plants, water and sewage treatment facilities, bridges and highway projects, marine structures, and urban area development, as well as participation in special investigations, instrumented field tests, etc. Dr.Fellenius has given lectures and courses to several universities and international conferences throughout America, Europe, and South-East Asia. He currently lives in Calgary, Canada.

46. Professor Farrokh Nadim

Dr Nadim is the director of the Centre of Excellence, the “International Centre for Geohazards” (ICG), at the Norwegian Geotechnical Institute (NGI). He has a BSc in structural engineering from Sharif University of Technology in Iran, and MSc and ScD degrees in civil engineering from Massachusetts Institute of Technology (MIT). Dr Nadim came to NGI in 1982 on a post-doctoral fellowship and joined NGI as a fulltime employee in 1984. His major fields of work are related to landslides and geohazards, risk and reliability analysis, geotechnical earthquake engineering, behaviour of geotechnical structures under cyclic and dynamic loading, and offshore foundation engineering. He is author or co-author of over 90 scientific publications, and Chair of Technical Committee 32 of ISSMGE: "Engineering practice of risk assessment and management". Since 2003 Dr Nadim has been an adjunct professor at both the Norwegian University of Science and Technology (NTNU) and University of Oslo, Norway. Dr Nadim is on the editorial boards of Georisk and Landslides.

47. Dr Tam Heng-kong

Dr. Tam Heng-kong obtained his M.Eng. and Ph.D. degrees respectively from the Asian Institute of Technology, Bangkok in 1981 and the City University, UK in 1992. He now works as a Senior Geotechnical Engineer in the Public Works Central Laboratory, Geotechnical Engineering Office of the Civil Engineering and Development Department, Government of the Hong Kong Special Administrative Region. He has geotechnical experience in many countries since 1981, including Singapore, UK, Australia before joining the HKSAR Government in 1995. Over the last 13 years, Dr. Tam is most active with the Landslide projects in GEO. The Public Works Central Laboratory is very well equipped for testing of residual soils. Some of the major landslides in Hong Kong are listed below:

18 June 1972 : Sau Mau Ping and Po Shan Road landslides
25 August 1976: Sau Mau Ping landslide
8 May 1992: The Baguio landslide
16 June 1993: Cheung Shan Estate landslide
23 July 1994: The Kwun Lung Lau landslide
13 August 1995: Shum Wan Road and Fei Tsui Road landslides
2 July 1997: Ten Thousand Buddhas’ Monastery landslide
22 August 1999: Sham Tseng San Tsuen debris flow
April 2000: Tsing Shan debris flow
1 September 2001: Lei Pui Street landslide
20 August 2005: Fu Yung Shan landslide
7 June 2008: Tung Chung natural terrain landslide affecting North Lantau Expressway; Tai O natural terrain landslides

48. HUGH T. KELLY, P.E., P.G.

Hugh Kelly has nearly 26 years of active experience on Major Geotechnical Engineering Projects. Educated in New Mexico State University and University of Texas at Arlington, Hugh also hold (or held), adjunct , advisory and industrial co-ordinating positions in Navarro College Texas, Southern Methodist University, Texas, and University of Texas at Austin.

Hugh Kelly is an experienced geotechnical/geological engineer having practiced in Texas since 1986. For more than a decade, he has served as geotechnical project manager/lead on a highly diverse group of projects. His project responsibilities include developing geotechnical programs, managing geotechnical studies, preparing reports, developing specifications, review, and construction support. He has successfully managed and completed geotechnical/geological engineering design programs for small to mega-projects for public and private sector clients providing planning, feasibility, design, construction and technical advisory services. With his strong background in geology and geological engineering, he has special expertise in ground behavior response, ground (soil/rock) structure interaction and computer modeling of ground behavior. He has unique expertise in rock engineering and underground structures within Texas. He has performed geotechnical analysis for new structures, upgrades/additions to existing structures, distressed structures, and failed systems. He is experienced in destructive and non-destructive testing of deep and shallow foundation systems in hard and soft ground conditions, including full-scale load testing of deep foundations. He is experienced in the behavior and design of structures and pavements on expansive soils. His design experience includes deep and shallow foundations, tunnels, shafts, earth structures (dams, levees, and landfills), hydraulic structures, submerged structures, retaining systems, roads, pavements, bridges, towers, retaining walls, and excavations. His geotechnical design experience includes numerous types of soils and a variety of rock types in the U.S. and in Europe, Africa, South American, and Australia.

49. Dr. Peter Mitchell

Dr Peter W. Mitchell has been involved in major geotechnical projects throughout Australia, New Zealand, South-East Asia and the South Pacific. He is currently an Adjunct Professor in the Civil, Environmental and Mining Engineering department at the University of Adelaide, and is a Senior Principal Geotechnical Engineer with URS Australia Pty Ltd. He is a Past Chair of the Australian Geomechanics Society and has contributed over 100 papers, publications and presentations in Geomechanics. He has particular expertise in expansive and collapsing soils, having gained an Engineering Excellence Award from IEAust for his book on this topic, a Churchill Fellowship to study in this field overseas and having served on three international committees. He developed the so called ‘Mitchell Method’ mentioned in AS 2870-1996 “Residential Slabs and Footings,” and this method is used in SLOG for the routine design of residential type footings on expansive soil.

50. Patrick Wong

Patrick Wong joined the Coffey Group in 1979, and has worked as a geotechnical consultant for his entire professional life. He has broad experience in a wide range of geotechnical projects including roads, bridges, dams, buildings, excavations, tunnels, marine structures, and landslip studies. He is a specialist in deep foundations and retaining structures, soft soils and ground improvement, and is widely consulted both in Australia and overseas. He has extensive management experience at the project and office level, and is currently a Senior Principal of Coffey Geotechnics Pty Ltd.

51. Denholm Brown: Geotechnical Engineer - Wagstaff Piling

Denholm has some 37 years experience in geotechnical and foundation engineering throughout Australia and South East Asia. He has participated in geotechnical studies for resource development projects, dams, foundation studies for high rise buildings, reclamation projects, integrated resort developments, infrastructure projects and materials handling facilities, together with village water supply and rural redevelopment projects in developing countries. Denholm has extensive experience in soft soils engineering, slope stability assessment, deep basement support, piling design and management of design teams for geotechnical and associated works.

As Geo-engineering Practice Manager for Woodward Clyde International in the 1990's he consulted on numerous forensic assignments; assessing likely causes of failure and the development of remedial measures. Recently he has been assisting in the development and implementation of deep soil mixing with Wagstaff Piling.

52. Martin Larisch

Martin Larisch is a Project Manager with Piling Contractors in Brisbane. He obtained his University degree in Civil Engineering from University of Applied science Hildesheim in Germany in 2001. He is CP ENG MIE (Aust) and has recently commenced a PhD degree at the Centre of Geomechanics, University of Queensland in Brisbane. In his PhD research he will further investigate the behaviour of displacement piles in soft soil conditions.

Martin has been involved in the Piling and Foundation Industry for about 8 years through positions in Germany and, since 2006, in Australia. He manages the technical, design and tendering aspects of projects and processes as well as contractual and site related activities for a wide range of piling and foundation systems.

53. Stewart Nipperess:

Stewart has 20 years experience in the field of Geotechnical and foundation engineering in both design and construction roles. His background has been in geotechnical consultancy and design works for foundation for bridges, roads and buildings. His construction background involves the investigation and construction

supervision of driven piles and bored piles for rail and road bridges in Sydney, the Philippines and Vietnam.

More recently he has been involved in the pioneering of screw piling in Australia and is currently based in Brisbane as the Engineering Manager for SFL Piletech. Australia's most established company in screw pile technology. Stewart has worked for the last nine years for SFL Piletech as a steel screw piling, sheet piling and Bored piling contractor where he has been involved the engineering design and project management of multiple projects. Particular experience and interest has been in the performance of screw piles were he has carried out more than 200 static loads tests. He has also presented information to the Standards Committee on screw piles for revision to the AS2159-1995 piling code.

54. Philip Vawdrey: Phillip Vawdrey Engineering Pty Ltd, Ballarat, Vic, Australia

Bachelor of Engineering from University of Ballarat. Runs his own practice established in 1996 after many years in local shire engineering, specializing in all forms of civil and structural engineering, but particularly in geotechnical investigations and also failed construction. His main interests are as a committee member of the Foundations & Footings Society Victoria and the Association of Consulting Structural Engineers Victoria. He is also a member of the Institute of Engineers.

55. Paul Robert Williams

Bachelor of Applied Science from Canberra College of Advanced Education, past chairman of the Foundations & Footings Society Victoria and a member of Association of Consulting Structural Engineers Victoria, amongst others. Currently specializing in land use for effluent disposal, soil erosion and foundation investigations for small structures with an emphasis on the failures and in particular "P" and/or "H" sites. Worked with the National Capital Development Commission, Coffey & Partners until employed with his own consultancy, specializing in the above.

56. Russell Ian Brown: Chartered Civil Engineer, currently practicing from Essendon, Victoria.

Russell has been the past Chairman of the Association of Consulting Structural Engineers Victoria and the Foundations & Footings Society twice, plus a member of various industry based committees and advisory bodies. Specialises in failed buildings, particularly in the western suburbs of Melbourne, basically "H" criteria sites. Has assisted in drafting Acts for and on behalf of the Victorian Government and has been the author of six international papers relating to ground reactivity failures in light construction and the repairs of same, some of them in conjunction with other authors.

57. Sandra Houston

Sandra Houston has been a member of the Civil and Environmental Engineering faculty at Arizona State University, Tempe, Arizona, USA, for 25 years. Her primary area of expertise is geotechnical engineering. Sandra Houston's contributions to the field of geotechnical engineering focus on advancement of methodologies for dealing with arid region problem soils, particularly collapsible and expansive soils, as evidenced through her research, numerous publications, professional presentations, and workshops on these topics. Sandra Houston's recent research addresses unsaturated soil mechanics as applied to both collapsible and expansive soils, and includes studies of volume change and shear strength of unsaturated soils with applications to foundation engineering. Sandra is the regular instructor of undergraduate and graduate level foundation engineering classes and has recently developed a graduate level course on Unsaturated Soil Mechanics. A heavy emphasis on the advancement of unsaturated soil mechanics into the practice of geotechnical engineering is evident in Sandra's professional service activities. Sandra has a long history of leadership in professional society organizations, particularly through participation in the American Society of Civil Engineers (ASCE), the Geo-Institute of ASCE, and the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE). Sandra currently serves as the chair of the Unsaturated Soils Committee of the Geo-Institute of ASCE, as a core member of the ISSMGE Committee on Unsaturated Soils (TC6), and as a member of the US National Academies of Science Committee on Geotechnical and Geoenvironmental Engineering.

58. William Houston

William Houston is Professor Emeritus of Arizona State University, Tempe, AZ, USA. He served as a Professor of Geotechnical Engineering at the University of California at Berkeley from 1969 – 1984, and as a Professor of Civil and Environmental Engineering at Arizona State University from 1984 – 2004. Professor Houston has served as consultant on approximately 175 projects in the U.S. and around the world. Most of the consulting work out of California prior to 1984 dealt with shear strength and static and dynamic slope stability, site response analyses for earthquake loading, and liquefaction analyses. Since 1984 his consulting work out of Arizona has dealt heavily with static and seismic slope stability for dams and forensic studies related to collapsible and expansive soils. William Houston has been continuously involved in state and national committee work throughout his career. Past and current committee service includes: American Society for Testing and Materials Committee D-18 on Soil and Rock for Engineering Purposes and American Society of Civil Engineers and Geo-Institute Committees on Publications, Soil Properties, Soil Dynamics, and Earth Retaining Structures. He has served as organizer and instructor for numerous short courses. He has contributed to improvement of the state of practice through his peer review of more than 100 geotechnical engineering consulting reports. He continues to assist in the mentoring of graduate students by providing advice, consultation, and training relative to advanced geotechnical testing.

59. Harianto Rahardjo

Professor Rahardjo is Head of Division of Infrastructure System and Maritime Studies at Nanyang Technological University (NTU). He has conducted extensive research on unsaturated soil mechanics to solve geotechnical problems associated with tropical residual soils. His current research focus is on rainfall-induced landslides, one of the major environmental problems affecting many countries in tropical regions. This research activity has led to the development of unsaturated tropical soil engineering laboratory in NTU. He is the co-author of the first textbook on unsaturated soils "Soil Mechanics for Unsaturated Soils", by Fredlund, D.G. and Rahardjo, H. (1993), John Wiley & Sons, Inc., New York, 517 pages and over 200 technical publications. Prof. Rahardjo has also presented his research works in many keynote / invited lectures and short courses in various countries. He is a Core Member of the TC6 Committee of International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) on Unsaturated Soils and Member of the Asian Technical Committee on Geotechnical Natural Hazards (ATC3). He has served as a consultant on various projects in many countries.

60. Dr. Juan Pestana - University of California in Berkeley

Assistant Professor, University of California, Berkeley (July 1994- Present). Civil & Environmental Engineering, Massachusetts Institute of Technology 1994, M.S. Civil Engineering, Massachusetts Institute of Technology 1988, B.S. Civil Engineering, Universidad Católica Andres Bello (UCAB), Venezuela Numerical modelling of soil-structure interaction, soil property characterization and environmental geotechnics. Professor Pestana's research interests include constitutive modelling of soil behaviour, geotechnical engineering, soil properties characterization, numerical modelling of soil-structure interaction, environmental geotechnics and geotechnical earthquake engineering.

61. Prof. David Muir Wood:

David Muir Wood read Mechanical Sciences at Peterhouse, Cambridge University, graduating in 1970. He received his PhD there in 1974 for research on the true triaxial behaviour of clays. He was a lecturer and Fellow of Emmanuel College, Cambridge from 1975-1987. In 1987 he moved to Glasgow University where he held the Cormack Chair of Civil Engineering.

In 1995 he was appointed to the Chair of Civil Engineering at Bristol University, becoming Dean of the Faculty of Engineering in 2003. He was elected a Fellow of the Royal Academy of Engineering in 1998. He joined the University of Dundee in 2009.

David Muir Wood's current research explores themes concerned with the particle-continuum duality of soils. He is developing constitutive models for soils with breakable particles, for soils whose finer particles are being transported away by internal flow of water, and for soils whose mechanical response is improved by the

addition of short flexible fibres. The ongoing challenge for each of these is to obtain appropriate experimental data to support the modelling hypotheses.

He has written three books: Soil behaviour and critical state soil mechanics (1990), Geotechnical modelling (2004), Soil mechanics: a one-dimensional introduction (2009).

62. Prof. Eduardo Alonso:

Prof. Eduardo Alonso is the Professor of Geotechnical Engineering at the Technical University of Catalunya, Barcelona in Spain. He had his early education in University of Madrid (1963) and Northwestern University (PhD in 1973) in USA. He was also at McGill University as a Research Fellow in early seventies.

An author of more than 300 publications, Eduardo is the recipient of the prestigious Telford Medal of Institution of Civil Engineers London (ICE) on two occasions in 1994 and 2006. He also won the Crampton prize of ICE and the Geotechnical Research Medal of ICE in 2009. Eduardo was also a Buchanan and Sowers Lecturer at Texas A & M and at Georgia Tech.

Eduardo's teaching experience are on Theoretical soil and rock mechanics; foundation design; geotechnical construction; reliability in geotechnical engineering; tunnels and underground excavations. Eduardo's research interests are on Reliability and risk in Geotechnical Engineering; Behaviour of partially saturated soils; expansive soils and rocks; numerical analysis of geotechnical problems (soils and rocks); field measurements and geotechnical back analysis; slope stability. Earth and rockfill dams.

63. Prof. S.Thevanayagam

Prof. S. Thevanayagam (Theva) is a renowned research leader in the study of soil liquefaction, screening, and liquefaction mitigation in sands and silty soils. Theva is a professor in Civil Engineering at the State University of New York. He was also a key member of the development of the flagship earthquake engineering research facility at the university at Buffalo as part of a network of 15 major state-of-the-art facilities known as the NSF sponsored George E. Brown Network for Earthquake Engineering Simulation, NEES in the USA. He is currently engaged in a large scale research involving several US universities on liquefaction-induced lateral spreading and effects on pile foundation using 6m deep laminar box equipment, centrifuge testing, and FEM simulations. Professor Theva is a member of the American Society of Civil Engineers and International Society of Soil Mechanics and Foundation Engineering. He was also the director of education at the Multi-disciplinary Centre for Earthquake Engineering Research at the University at Buffalo, a US National Science Foundation sponsored agency for earthquake engineering research.

64. Prof. Tatsunori Matsumoto

Prof. Matsumoto is now with Kanazawa University in Japan for nearly 32 years. He was educated at the Kanazawa University and received his Doctoral Degree from Kyoto University for his work on steel pipe piles in 1989. He has extensive research and practical experience on piled foundations and piled raft foundations. Prof. Matsumoto has a Shake Table Facility for the study of dynamic and earthquake type of behaviour of piled foundations. He has also worked on the centrifuge with pile groups and piled raft foundations in collaboration with Taisei Corporation.

His research work on piled raft foundations range from the simplified calculation methods of Poulos - Davis and Randolph (PDR Method), Burland's method to approximate computer based methods such as the strip on spring and plate on spring approaches and hybrid methods. He has also worked on more rigorous method using boundary elements and finite elements.

From his vast practical experience, Prof. Matsumoto has selected more than ten case histories involving piled raft foundations in Japan. These foundations are under various soil conditions. These studies involve the long term performance as well.

Prof. Matsumoto also has wide experience in the seismic design of raft and piled raft foundations. Prof. Matsumoto is one of the authors of the computer software PRAB—Piled Raft Analysis with Batter Piles. With this software piled raft foundation can be analyzed with vertical and horizontal loads as well as moment .Prof. Matsumoto has travelled very widely and have lecture red in Piled foundation and Piled Raft Foundations. He has also published his research work in numerous journals and conferences.

65. Dr. Stephen Buttling

Stephen Buttling graduated from Imperial College, University of London, in 1970 and immediately engaged in research at Bristol University leading to award of a PhD in January 1975. He has spent the last 36 years in geotechnical work, initially with Cementation Piling & Foundations for 5 years and then as a consulting engineer in the UK. He has lived in Hong Kong, Singapore, and Thailand, and from these bases has worked in China, Philippines, Malaysia, Indonesia, Taiwan and Burma.

During 16 years in Thailand he designed the foundations for a cable stayed bridge, and also a type of piled raft to support three 70 storey condominium towers. He spent his last 4 years in Thailand supervising the installation of 27,000 piles for the passenger Terminal Complex of the Second Bangkok International Airport, and supervising the civil and structural works of the Underground Train Station at the airport to serve the Airport Express. Since arriving in Brisbane in 2006 he has designed the piles for the Hale Street Link Bridge, and been involved with the Port Botany Expansion. Now he is National Technical Manager for Piling Contractors, where he looks after all technical matters, including design of piles and embedded retaining walls.

66. Dr. Sung-Min Cho

Dr. Cho is a principal research engineer of Korea Expressway Corporation (KEC), a government-related organization whose main missions are planning, construction, operation, and maintenance of the national expressway of Korea.

He received his Ph.D. in 1998 and M.Sc. in 1994 in Geotechnical Engineering from the Seoul National University (SNU), Korea. He graduated from SNU with B.S. in civil engineering.

Dr. Cho has been involved in managements and supervisions of the design and the construction of highways in Korea as well as in establishments of technical specifications. Recently, he accomplished a great project to make the longest and largest bridge of Korea. He completed his task to build the Incheon Bridge, an 18.4 km long sea-crossing bridge which has an 800 m wide cable-stayed span. He was a technical advisory director of the Incheon Bridge Construction Office of KEC for 5 years. He transferred to the research institute of KEC as a research director in January, 2010. At present, he works as a project manager (PM) of the design appraisal consulting for Hanoi-Haiphong Expressway Project in Vietnam. This task will be completed in June, 2010.

Dr. Sung-Min Cho has directed research projects related to geotechnical characterizations of the subsurface, soft ground improvements, bridge foundations, slope stabilities, and reinforcement technologies for the highway maintenance since 1998. He carried out a collaborative research on the application of cone penetration tests with the University of British Columbia, Canada in 2004. He also took part in the preliminary study group to launch the national research project for the super-long-span bridge. He has consulting experience in various technical fields for the design and construction of the highway. And he has been lectured on soil mechanics, geotechnical engineering, bridge engineering, and highway engineering at a number of educational institutions including universities. He has published dozens of academic papers (most of them was written in Korean) and also presented in a number of conferences.

Dr. Cho is currently a member of Korean Society of Civil Engineers (KSCE), Korean Geotechnical Society (KGS), Korean Geosynthetics Society (KGSS), American Society of Civil Engineers (ASCE), and International Society of Soil Mechanics of Geotechnical Engineering (ISSMGE). He is also a board director of KGSS, a Technical Committee Chair of KGS, and the counsel member of several advisory committees to the government and public firms in Korea. He won the Best Researcher Award of KEC in 2003, the Young Engineer Award by KGS in 2004, the Merit Award of KSCE in 2004, the Best Presentation Award of KGS in 2006, 2007, and the Prime Minister’s Commendation (Citation Ribbon for contributions to the success of the Incheon Bridge Project) awarded by the Korean Government in 2009.

67. Greg Hackney

Greg Hackney graduated from the University of NSW in 1995, and joined Coffey Partners International in the Sydney office. During his time in Sydney, Greg worked on many large scale infrastructure projects, and other projects such as the risk

assessment and mitigation for Thredbo Alpine Village following the landslide in 1997. Whilst working with Coffey in Sydney, Greg returned to complete a Masters of Engineering Science degree in Geotechnical Engineering at UNSW. After some nine years in Sydney, Greg moved to the mid-north coast of NSW, to take up the role of managing the Coffs Harbour Office. After three years in Coffs Harbour, Greg moved to Brisbane, where he took on the role of Project Director for Coffey on the Gateway Upgrade Project for a two year period, before moving into the role of a Principal Geotechnical Engineer in the Newstead office. The Project Director's role for the gateway Upgrade Project spanned over the second half stages of the design phase, and throughout the construction phase. During this time, Greg was responsible for leading a team of up to 50 staff in the detailed design and construction monitoring of the geotechnical aspects of the project. Since then, Greg has taken on a design management role for a coffer dam in Papua New Guinea, and a geotechnical design manager role for a consortium bidding the Northern Link tunnel in Brisbane.

68. Jamie Mcllquham

Jamie McIlquham is a Senior Geotechnical Engineer working for Golder Associates in the Sydney Office.

He graduated from the University of Abertay, Dundee in 1999 with a BEng (Hons) in Civil Engineering. After graduation he worked for the respected UK geotechnical contractor Ritchies for three years, gaining experience as a Project Manager on a wide range of geotechnical contracts including installation of ground anchors, slope stabilisation works for roads and railways and grouting of disused mineworkings. These projects were located in the UK and Gibraltar.

In 2002 he joined the Highways Laboratory of Lancashire County Council and completed site investigations, geotechnical design and contaminated land investigation and remediation projects for many sites around Lancashire in the UK. Major projects included investigation and design work for the Lancashire Waste Transfer Network, preliminary investigation and design for the Completion of the Heysham to M6 Link and contaminated land investigations of former ICI chemical works for the REMADE Project.

Since joining Golder in 2007 as a project manager he has completed technical design for a variety of multi-disciplinary projects, focussing on transport and building infrastructure.

He has worked on the Port Botany Expansion project from early 2008, the start of detailed design phase through to providing on-going geotechnical advice during construction. During the design he led design packages for the dredging and reclamation works and design of caisson blockwork units, which will form the outer corners of the new facility and the link to the existing port. Geotechnical analyses and design work included specification of ground improvement for the new reclamation, assessment of the impact of ground improvement techniques on structures and the assessment of berth structure stability and movements.

He is currently working on the Port Botany Expansion site, providing on-going geotechnical advice during construction, including temporary works design and

construction supervision. He has also assessed monitoring results during construction to assess measured performance against design predictions. He is a Chartered Engineer in both the UK (CEng) and Australia (CPEng) and won the Australian Geomechanics Society (AGS) Young Geotechnical Professionals award in 2009.

69. Dr. Chris Haberfield

Dr. Chris HABERFIELD: Chris is a Principal with Golder Associates Pty Ltd in their Melbourne Office and an Adjunct Research Associate of Monash University.

Chris is well known internationally for his work in soft, weak and weathered rocks and in particular the performance of socketed piles in these materials. During the 1990s Chris led the research team at Monash University into the analysis, design and performance of piles in weak rock, from which the analysis program ROCKET is based on. Other innovations during this time were the continued development of advanced constant normal stiffness direct shear testing equipment, development of laser based equipment for automatic measurement of socket roughness and socket inspection (SOCKETPRO) and the use of expansive cements to enhance rock socket and anchor performance. Chris was awarded the 2007 E H Davis Memorial Lecture for his work in foundations in weak rock.

Since joining Golder Associates in 2000, Chris has provided advice on many tall tower projects with respect to the foundation works, one of the most notable of which is the Nakheel Tower in Dubai.

70. Dr. T.H. Seah

Dr. Seah is currently working as a Geotechnical Engineer with MAA Geotechnics, Co., Ltd. and an Adjunct faculty at the Asian Institute of Technology (AIT) in Thailand.

He graduated from King's College, University of London, in 1985 and received his Doctoral degree from Massachusetts Institute of Technology in 1990 under the guidance of Professor Charles C. Ladd. He worked as a geotechnical engineer in Singapore and Malaysia before joining AIT as an assistant professor between 1991 and 1993. At AIT, he conducted experimental research on soils with several publications on testing of soft Bangkok clay, including constant rate of strain consolidation with radial flow, true triaxial testing, simulations of pressuremeter and vane shear modes etc.

After 1993, he worked as a geotechnical consultant in Bangkok, involving in design and construction of the ground improvement at Second Bangkok International airport (with over 400,000 m^2 of vacuum consolidation), design and construction of pile foundation in Taiwan High Speed Rail project, ground improvement design of several highways and expressways in Southeast Asia, and design and construction of ground treatment and foundation for various petrochemical facilities in Thailand and Vietnam. His main specialty includes laboratory and field testing, PVD preloading, vacuum

consolidation and deep mixing methods etc.

At present, he is an advisory committee member of the Engineering Institute of Thailand, and a member of several International geotechnical societies.

71. Peter Boyle

Peter Boyle holds a Queensland University of Technology (QUT) civil engineering degree and is a Fellow of the Institution of Engineers, Australia. He has over 25 years of experience in the public and private sectors covering all facets of port development.

Peter was the Alliance Design Manager for the construction of the Port of Brisbane's FPE Seawall Project. The project involved 4.6km of wall to enclose 230ha footprint, which will enable progressive development of the port. The challenges and risk involved over 25m of soft compressible clay; additionally the project involved some 400,000 m^3 of sand, filter and high strength geotextile of 350,000 m^2 and nearly 700,000 m^3 of rockfill overhauled from long distance. The sea wall project won several awards including the ACEA Design Award.

Peter currently has the lead technical role in the reclamation and development of some 300 hectares of future Port Lands. This partially involved a very large number of fully instrumented test embankments with surcharge and vacuum consolidation with the use of wick drains. This is truly a remarkable set of test embankments carefully instrumented with extensive site investigation works. This ground improvement project recently won the Innovation Award of Engineers Australia (Qld).

72. Trevor Orr

is the Director of the Graduate School of Professional Engineering Studies at Trinity College Dublin. He received his PhD degree from Cambridge University in 1976 for research into the behaviour of tunnels in stiff clay. After first working as an engineer with Sir William Halcrow & Partners in London he has since been at Trinity College Dublin where his research interests include geotechnical design, the use of probabilistic methods in geotechnics and tunnelling. He has spent three half-year sabbatical periods away from Trinity College, one at Karlsruhe University, Germany, another at the Danish Geotechnical Institute, Copenhagen, and the third at the Charles University, Prague, Czech Republic.

He has been closely involved in the development of Eurocode 7, the new European standard for geotechnical design, since work started on this in 1981:
- 1981 – 1987: Member of the committee that produced the model code for Eurocode 7
- 1987 – 1994: Secretary of the drafting panel for the ENV (trial) version of Eurocode 7
- 1996: Reporter for the International Seminar, Eurocode 7 - Towards Implementation
- 1997 – 1998: Member of Working Group 1 established to convert the ENV into an EN

- 2006 – present: Member of the Maintenance Group for Eurocode 7.

He has been chairman of the European Technical Committee for the Evaluation of Eurocode 7 from 2003 to the present time and organised a Workshop on the Evaluation of Eurocode 7 in Dublin in 2005. He has written many papers and given many lectures on Eurocode 7, including invited lectures in Austria, Belgium, Croatia, Germany, Italy, Japan, Latvia, Macedonia, Poland, Taiwan and the UK.

Trevor Orr is the co-author of two books on Eurocode 7; the first book, with E. Farrell and entitled *Geotechnical Design to Eurocode 7*, was on the ENV version of Eurocode7 and was published by Springer in 1999. The second book, with six other co-authors and entitled *Designers' Guide to EN 1997-1*, was on the EN version of Eurocode 7 and was published by Thomas Telford in 2004. This book, which is one of a set of Designers' Guides to the Eurocodes, has proved to be extremely popular and a new, updated, edition is currently being planned

He was a founder member of the Geotechnical Society of Ireland and was secretary of the IX European Conference for Soil Mechanics and Foundation held in Dublin in 1987. He was chairman of the 15th European Young Geotechnical Engineers' Conference held in Dublin in 2002. He was a member of the Advisory panel for the journal *Geotechnique* from 2006 – 2009 and is currently a member of the Advisory panel for the journal Geotechnical Engineering.

73: Prof. Koichi ONO

Prof. Koichi Ono did his Bachelor and Masters Degree in Engineering at Kyoto University back in 1965, 1967. He received his PhD from University of Toronto in Canada in 1972. He worked with Konoike Construction Company and was concurrently a Lecturer at Kobe University. He became a Professor at Kyoto University in 1996 and stayed there until he retired in 2005. He then became a Professor Emeritus of Kyoto University and the President of Maizuru National College of Technology.
Prof. Ono has been very active in tunnelling and underground works now for more than two decades and was a Vice-President of ITA in 2004. He was also the Chairman of the International Conference on shotcrete for rock support. He is an Expert to ITA Executive Council and served in several technical committees.
An author of over t 200 technical publications in the field of Tunnel, Underground, Foundation, Pipeline, Concrete and Concrete structures, Prof. Ono is an active consultant in many of the major tunnelling projects in Japan and abroad.

74: Prof. Mitsutaka Sugimoto

Prof. Sugimoto is currently a Professor in the Department of civil Engineering at the Nagaoka University of Technology in Japan; he is the Head of the Graduate School in Engineering and assistant to the President of that University. Prof. Sugimoto has an active research centre on practice oriented research in all kinds of tunneling and in particular shield tunneling. Among the vast professional activities in tunneling, Prof. Sugimoto was : an active member of the technical committee on tunnel design standard for shield tunneling for the Railway Technical Research Institute in Japan; a

member of the Technical committee on tunnel design standard for mountain tunneling in urban areas; a member of the Technical committee of the Japanese Society of Civil Engineering (JSCE) on standard segments for shield tunneling; Chairman, Technical committee on construction loads during shield tunneling, JSCE.

Prof. Sugimoto was an active member of TC 28 on tunneling of ISSMGE. He has carried out extensive research on shield tunneling including: Evaluation of soil properties based on the in-situ data of the shield driven method; modeling of load acting on shield; shield behavior using 3-D shield simulator; development on ground reaction curve for shield tunneling; ground behavior using 4-centered slurry shield driving method; survey system on shield behavior during excavation; Influence of grout material in shield tail on shield tunneling perform; simulation of shield tunneling behavior along a curved alignment in a multilayered ground; development of kinematic shield model; pipe jacking studies.

Prof. Sugimoto is a member of the editorial committee of several journals including Journal of Tunneling Engineering; Soils & Foundations; Chairman, Editorial board for “Journal of Tunnel engineering; Journal of Construction Engineering and Management. A member of several geotechnical and tunnel engineering societies, Prof. Sugimoto has lectured very widely in Asia, Europe and North America.

Prof. Sugimoto is currently a Professor in the Department of civil Engineering at the Nagaoka University of Technology in Japan; he is the Head of the Graduate School in Engineering and assistant to the President of that University. Prof. Sugimoto has an active research centre on practice oriented research in all kinds of tunneling and in particular shield tunneling. Among the vast professional activities in tunneling, Prof. Sugimoto was : an active member of the technical committee on tunnel design standard for shield tunneling for the Railway Technical Research Institute in Japan; a member of the Technical committee on tunnel design standard for mountain tunneling in urban areas; a member of the Technical committee of the Japanese Society of Civil Engineering (JSCE) on standard segments for shield tunneling; Chairman, Technical committee on construction loads during shield tunneling, JSCE.

Prof. Sugimoto was an active member of TC 28 on tunneling of ISSMGE. He has carried out extensive research on shield tunneling including: Evaluation of soil properties based on the in-situ data of the shield driven method; modeling of load acting on shield; shield behavior using 3-D shield simulator; development on ground reaction curve for shield tunneling; ground behavior using 4-centered slurry shield driving method; survey system on shield behavior during excavation; Influence of grout material in shield tail on shield tunneling perform; simulation of shield tunneling behavior along a curved alignment in a multilayered ground; development of kinematic shield model; pipe jacking studies.

Prof. Sugimoto is a member of the editorial committee of several journals including Journal of Tunneling Engineering; Soils & Foundations; Chairman, Editorial board for “Journal of Tunnel engineering; Journal of Construction Engineering and Management. A member of several geotechnical and tunnel engineering societies, Prof. Sugimoto has lectured very widely in Asia, Europe and North America.

75: Dr. David Oliviera

David has over 10 years geotechnical engineer experience. Before joining Coffey, he worked on a broad range of geotechnical investigation and design for major infrastructure projects in Brazil including ground improvement, slope stabilisation, foundations, dams and earthworks.

He received his PhD in Rock Mechanics from the University of Wollongong in 2009 which was supervised by Prof. Buddhima Indraratna with the collaboration of Prof. André Assis (former president of ITA-AITES) and Prof. E.T. (Ted) Brown. In Australia, David won significant awards for his contribution to geotechnical engineering such as the 2009 David Sudgen Award by the Australasian Tunnelling Society, AGS NSW Research Award (Runner-up) and Young Geotechnical Professional (2nd Prize) both by the Australian Geomechanics Society.

He was recently involved in the Tender Design for the Sydney CBD Metro and the Toronto Egliton Light Rail Tunnel.

76: Prof. Sunil Sharma:

Prof. Sharma from University of Idaho in USA , has conducted slope stability courses for the American society of Civil Engineers (ASCE) on many occasions. These courses are well attended and involve lectures and computations. Prof. Shrama was educated in University of Leeds in UK where he obtained his B Sc in Engineering in 1975. His Masters and Doctoral Degrees are from University of Purdue in USA in 1980 and 1986 respectively. Hid research interests are on : Computer applications in civil engineering, numerical methods for solving static and dynamic geotechnical problems, slope stability, soil dynamics and earthquake engineering, foundation engineering, groundwater and seepage, computer assisted learning (CAL) using multimedia, software development. An excellent teacher, Prof. Sharma taught courses on Fundamentals of Geotechnical Engineering, Geotechnical Engineering Design), Numerical Methods, Engineering Properties of Soils), Seepage and Slope Stability, Soil Dynamics, and Earthquake Engineering.

Prof. Sharma is a co-author of a book on Slope Stability and Stabilization Methods published by John Wiley and sons in 1995 and revised in 2001. He has conducted Workshops for ASCE on:
“Soil and Rock Slope Stability Analysis’ (2001), “Slope Stability and Stabilization” (1997-2001)- Twenty 3-day courses presented nationally for the American Society of Civil Engineers (ASCE). “Advanced Slope Stability Manual and Seminars” (1991-94): Comprehensive slope stability reference manual and presentation of three five-day courses for the Federal Highways Administration (FHWA). This work was jointly performed with Parsons-Brinckerhoff, a consultant from San Francisco, CA.
Prof. Sharma also own copyrights on the Software XSTABL- an Integrated Slope Stability Analysis Program for Personal Computers. This software, originally released in 1991, is used by: Federal Highways Administration (FHWA), used at six national locations; U.S. Bureau of Land Management: adopted for use at eight locations in the Western US; State Departments of Transportation (DOTs): over 40 states; Over 50 universities in the U.S. and overseas for teaching and research; and Consultants in the United States and overseas. He is also the author /co-author of the

design manuals: Micropile Design and Construction Guidelines, Federal Highway Administration, FHWA - SA - 97 - 070, 382 pages; and A Hypermedia Micropile Design Manual - CD Version, Federal Highway Administration, Vancouver, Washington, December.

(77) Professor Charles W.W. Ng is a Professor at the Department of Civil and Environmental Engineering, the Director of Geotechnical Centrifuge Facility and an Associate Dean of Engineering at the Hong Kong University of Science and Technology. He obtained his Ph. D from the University of Bristol, UK in 1992; and subsequently joined the University of Cambridge as a Research Associate before returning to Hong Kong in 1995. He was elected as an Overseas Fellow at Churchill College, Cambridge, in 2005. Professor Ng is a Charted Civil Engineer (CEng) and Fellow of the Institution of Civil Engineers (FICE), the American Society of Civil Engineers (FASCE), the Hong Kong Institution of Engineers (FHKIE) and Hong Kong Academy of Engineering Sciences (FHKEng). Recently he has been elected as Chang Jiang Scholar (Chair Professorship) by the Ministry of Education in China and appointed as a Board Member of the International Society of Soil Mechanics and Geotechnical Engineering. Currently he is Associate Editor of the *Canadian Geotechnical Journal.* He has published widely on slope instability problems, behaviour of saturated and unsaturated soils, soil-structure interaction problems such as tunnels, piles and deep excavations. He is the main author of two reference books including *Soil-Structure Engineering of Deep Foundations, Excavations and Tunnels* and *Advanced Unsaturated Soil Mechanics and Engineering.*

(78) Dr Alex Li is currently the senior geotechnical engineer, heading the Landslip Investigation Section of the Geotechnical Engineering Office (GEO) of the Civil Engineering and Development Department, Government of the Hong Kong Special Administrative Region. He is responsible for investigation of significant landslides. Dr Li obtained his PhD from Manchester University (U.K.) in 1988 and subsequently worked as a geotechnical engineer in Ove Arup & Partners (London), before joining the GEO in 1993. Dr Li is a Chartered Civil Engineer and a member of the Institution of Civil Engineers, and the Hong Kong Institution of Engineers. He has published many papers on investigation of landslides as well as slope greening. Dr Li has also assisted in the formulation of works policy to enhance slope safety in Hong Kong.

(79) Len Johnstone

Mr. Johnstone has thirty years of practical experience in diverse transportation development and planning projects augmented by his Chartered Professional Engineering status in Australia. His professional background includes multi-modal transportation planning (short, medium and long-term), traffic engineering, economic and financial feasibility analyses as well as the optimization and development of public transport strategies (bus, light rail, heavy rail). Projects have focused on the development of analytical tools such as transport models to simulate the mathematical impact of transport infrastructure projects.

Mr. Johnstone has completed assignments in Eastern Europe, Asia, Australia, the Middle East and the United States. He was the professional responsible for the

development of city transport models in Cairo, Dhaka and Bangkok as well as cities in his native Australia. He is considered an expert in the use of major transport planning software packages such as CUBE/TRIPS, STRADA, EMME/2 and UTPS. He is also familiar with other major transport modelling packages such as Saturn and VISUM. In particular, he received an award for an excellent presentation at the CUBE Annual User Conference for his presentation on the Integration of Economic Evaluation into the Transport Model. He is very familiar with the development and implementation of transport models in particular in the evaluation of transport infrastructure projects.
Mr Johnstone also is an Honorary Guest Lecturer in Transport Planning Courses in Thailand.

(80) Nate Chanchareon

Nate Chanchareon is a Regional Director for Citilabs, who leads business operations in the Asia/Pacific region. He has many years of experience in traffic engineering, transportation planning, and model development, and has worked throughout the US, Europe, and Asia. Chanchareon has worked with many of the popular software tools used for traffic and transportation planning, including Cube and ArcGIS, as well as several traffic micro simulation packages. His project work includes advanced traffic operations, highway planning, corridor studies, signal operations, congestion pricing, and multi-modal–transportation planning including bus rapid transit (BRT) and HOV/HOT systems. He has a thorough background in the development and application of transportation models. He has successfully completed transportation projects throughout California, Georgia, and Hawaii. Chanchareon is a member of the Institute of Transportation Engineers (ITE) and serving as the President of the San Francisco Bay Area Section, 2009/2010.

(81) Kali Nepal

Dr. Kali Nepal is a lecturer of traffic and transportation engineering at Griffith University. His research expertise includes transportation network optimisation, transportation system analysis, transport demand modelling, transport economics and behavioural models. He has published a dozen of papers in scientific journals and international conferences over the last five year. In this workshop, Dr Nepal will start with the basic concepts on discrete choice analysis including its applications in traffic and transport modelling. Discrete choice analysis requires both behaviour model and parameter estimation. Behavioural models will be covered next that include Logit model, GEV models, Probit model and Mixed-logit model. Complexity of the parameter estimation process varies from simple statistical estimation to complex estimation by simulation. These processes will be covered in detail. At the end, examples of transportation applications will be discussed.