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1. Highlights in 2008

Staff promotion

- Dr Tim Fletcher was promoted to Associate Professor.
- Associate Professor Ana Deletic was promoted to Professor.

Awards

Emeritus Professor Paul Grundy was made a Member (AM) in the General Division of the Order of Australia on Australia Day 2008, for services to engineering, in particular in the areas of structural stability and fatigue as an academic and researcher and through executive roles with professional organisations.

Three former civil engineering staff also received such honours:

- Professor Peter Darvall, AO, 2007;
- Mr Norm Sneath, OAM, 2007; and
- Professor Russell Mein, AM, 2005.

Professor Ana Deletic received the Dean’s Award for Excellence in Research.

Mr Chris Powell was the winner of the Dean’s Award for Exceptional Performance by a HEW Staff Member.

Professor Xiao-Ling Zhao received the Special Commendation of Vice-Chancellor’s Award for Excellence in Research (Postgraduate Supervision).

Our final year student Mr Christopher Paxino received the 2008 Rod McGee Medal from Engineers Australia.

The Civil Engineering Alumnus of the Year went to Professor Robert Melchers at The University of Newcastle.

Professor William Young’s Portrait Unveiling Ceremony

To honour Professor William Young who stepped down as Head of Department after nine years at the helm and to recognise his great contribution to the success of the department, a Portrait Unveiling Ceremony was conducted on 30 June 2008. The Dean (Professor Tam Sridhar) gave a speech and the VC (Professor Richard Larkins) unveiled the portrait.

Education Program

The Engineers Australia accreditation exercise was carried out in March 2008. The department was successfully re-accredited for another five years. It continued to provide high quality education program to its students.

In the last two years, about 50% of the first year engineering students chose Civil Engineering as their first preference. The department attracted top students. It is also actively promoting international education programs, such as the 2+2 Program with the top Chinese Civil Engineering departments and the PhD program with the best universities in Iraq and India.
External OHS Audit

The department gained outstanding comments from an external OHS audit in December. The departmental OHS committee formed this year played a vital role for this achievement. Monthly inspection was carried out by members of the OHS committee throughout the year. The department established two new awards:

- the Technical Staff Member Award (2008) which went to Mr Long Goh and
- the Postgraduate OHS Award (2008) which went to Mr William Darlington.

Research culture

The research in our department now exceeds the boundary of traditional civil engineering. The department is actively promoting multi-disciplinary research with Science, Materials Engineering, Chemical Engineering, MUARC and Architecture to address the challenges for engineering in the 21st century.

Engagement with industry and community

The Civil Engineering Appreciation Dinner held on 19 November 2008 went very well. The speech by Professor John Thwaites (Chair of the Monash Sustainability Institute) on the impact of climate change on communities was full of challenges. The speech by Mr Colin Jordan (Managing Director and CEO of RACV, our Industry Advisory Committee Chairman) was encouraging.

A water harvesting system was opened by Professor John Thwaites at Syndal South Primary School on Tuesday 28 October 2008 to utilize unique technology co-developed by Monash University ISWR and a private Australian company, Envirostream Solutions. This technology allows for the collection of storm water off all hard surfaces, such as roofs, car parks, walkways and quadrangles. The technology captures and successfully treats the rain runoff to ensure that the water stored can be reused safely on the playing fields and in the toilets of the school. Associate Professor Ana Deletic and her team provided advice and coordination of the project.

One of our graduates in 1994, Mr Marc Colella, is playing a key role in the huge rebuilding project at the World Trade Centre site in New York. Mr Colella is the structural engineer in charge of building the Freedom Tower, a 105-storey building with a 120m spire that will be the biggest of the four towers being built on the World Trade Centre site. Marc visited the department and gave a seminar in July.
Annual Ogden Transport Lecture

The Ogden Transport Lecture was initiated in 2001 by the Institute of Transport Studies (ITS) to recognise Professor Ken Ogden’s role in starting the Transport Program at Monash in 1969. A capacity audience came to hear Sir Rod Eddington, Chair of Infrastructure Australia, deliver the Ogden Transport Lecture at the State Library theatrette on 28 August 2008. Speaking on the topic of ‘Keeping Melbourne on the move: learning from international experience’, he drew on his local and international experience to outline the challenges Melbourne was facing and the actions he regards as crucial to address those challenges. He emphasized that a vibrant central city is essential to support the service economy on which Melbourne’s future depends and he saw that central city area as extending beyond the CBD grid to include the St Kilda Road precinct, Docklands, Parkville and Footscray. If the central city is not supported by adequate transport infrastructure, the consequence can be that firms will relocate. Today that doesn’t simply mean firms moving to the suburbs, since they can easily relocate to another city. Sir Rod noted that global competition between cities had become an ‘elite sport’.

His presentation provided insight into the background to his recommendations for $18 billion of investment in road and rail tunnels to support the central city and why he saw that as higher priority for investment than construction of a rail line to Doncaster. He saw it as essential that the government allow adequate time following the release of his report for the community to make comments, prior to the government making its final decisions on his recommendations. He viewed that opportunity for comment as crucially important while noting that “Democracy is about having your say, it is not about getting your way”.

Left to Right: Sir Rod Eddington, Professor Edwina Cornish (Deputy Vice Chancellor), Associate Professor Geoff Rose and Professor Richard Larkins (Vice-Chancellor) at the 2008 Ogden Transport Lecture
2. Our people

2.1 Management Committee

In 2008, the Management Committee of the department consisted of:

- Professor Xiao-Ling Zhao (Head of Department)
- Associate Professor Ana Deletic (Director of Research, January to June)
- Associate Professor Jayantha Kodikara (Deputy Head and Director of Research, July to December)
- Dr Bill Wong (Director of Teaching)
- Mr Christopher Powell (Director of Resources).

Committee meetings are held once a month.

2.2 Industry Advisory Committee

Meetings of the Department’s Industry Advisory Committee were held on 27 February and 19 November 2008 at the Clayton campus. The membership of the Industrial Advisory Committee was as follows:

Industry members

- Mr Colin Jordan (Chair) Managing Director and CEO, RACV Ltd, Melbourne, Victoria
- Mrs Ann Kollmorgen Consulting Engineer, Sinclair Knight Merz, Malvern, Victoria
- Mr Ross Baldwin Principal, Flagstaff Consulting Group Pty Ltd, Melbourne, Victoria
- Dr Bronwyn Ridgway Environmental Engineering Consultant, Cromer, Victoria
- Mr Murray Cullinan General Manager, Business Dev., Public Transport Section, Department of Infrastructure, Victorian Government, Melbourne, Victoria
- Dr Brian Wrench, Principal, Golder Associates Pty Ltd, Hawthorn, Victoria
- Mr John Sturdy Director, Hudson, Melbourne, Victoria
- Dr Rory Nathan Principal, Sinclair Knight Merz, Armadale, Victoria
- Ms Jenny Strangward Principal, Connell Wagner Pty Ltd, South Melbourne, Victoria
- Mr Ian Pitcher Principal, Maunsell Australia, Melbourne, Victoria
- Mr Ted Vincent Director, Regional Services, VicRoads, Kew, Victoria
- Dr Swee L. Mak Deputy Chief – Industry, CSIRO Manufacturing and Materials Technology, Highett, Victoria
- Mr Chris Chesterfield General Manager, Waterways, Melbourne Water, Melbourne Victoria
- Mr Claude Cullino Director, Assets & Engineering, Manningham City Council, Doncaster Victoria
- Ms Jenny Strangward Principal, Connell Wagner Pty Ltd, South Melbourne, Victoria

Departmental members:

- Professor Xiao-Ling Zhao Head of Department
- Professor Ana Deletic Director of Research (January-June)
- Associate Professor Jayantha Kodikara Director of Research (July-December)
- Dr Bill Wong Director of Teaching
- Mr Christopher Powell Director of Support Services

2.3 Heads of Section Committee

The Heads of Section were as follows:

- Associate Professor Geoff Rose Head, Transport Group
- Associate Professor Riadh Al-Mahaidi Head, Structures Group
- Associate Professor Malek Bouazza Head, Geomechanics Group
- Dr Tim Fletcher Head, Water Group (January-June)
- Professor Ana Deletic Head, Water Group (July-December)

Meetings of the Heads of Section are held every three months.

2.4 Occupational Health and Safety Committee

The Civil OHS Committee was created in 2008. It meets every two months. The membership of the committee was as follows:

- Professor Xiao-Ling Zhao (Chairperson)
- Mr Mike Leach (Deputy Chairperson)
- Mr Chris Powell
- Dr Mike Bambach
- Dr P.G. Ranjith
- Mr Frank Winston
- Mr Don McCarthy
- Mr Hui Lu
- Mr William Darlington

From left to right: Mr Chris Powell, Professor Russell Mein, Professor John Thwaites, Mr Chris Chesterfield and Professor Ana Deletic

Foreground left to right: Mr John Sturdy, Associate Professor Geoff Rose (second right)
2.5 Research groups

The department operates through the following four groups:

2.5.1 The Geomechanics Group

In 2008, the group was led by Associate Professor Malek Bouazza and included:
• Dr Jayantha Kodikara
• Dr Asadul Haque
• Dr P.G. Ranjith
• Dr Will Gates
• Dr Chaminda Gallage
• Dr Aruna Amarasiri.

Research strengths: environmental geotechnics, unsaturated soils, soil and rock stabilisation.

2.5.2 The Structures Group

In 2008, the group was led by Associate Professor Riadh Al-Mahaidi and included:
• Professor Xiao-Ling Zhao
• Associate Professor Jay Sanjayan
• Dr Bill Wong
• Dr Michael Bambach
• Dr Luming Shen
• Dr Frank Collins
• Dr Zhigang Xiao
• Dr Lizi Sironic
• Dr Con Adam
• Dr Wen Hui Duan
• Emeritus Professor Paul Grundy (Honorary staff member).

Research strengths: advanced thin-walled Structures; FRP composites; non-Portland cement based sustainable concrete alternatives; impact and blast; lifetime integrity of structures; timber structures.

2.5.3 The Water Group

In 2008, the group was led by Professor Ana Deletic and included:
• Associate Professor Tim Fletcher
• Dr Grace Mitchell
• Dr Gavin Mudd
• Dr Guangzhi (John) Sun
• Dr Belinda Hatt
• Dr Edoardo Daly
• Mr David McCarthy
• Associate Professor Gary Codner (Acting Dean, Teaching)
• Associate Professor Robert Keller (Associate)
• Ms Katia Bratieres
• Mr Peter Poelsma
• Mr Justin Lewis
• Mr Frank Winston.

Research strengths: modelling and monitoring of stormwater quality and treatment; water filtration and treatment technologies (including biofiltration); water sensitive urban design and integrated urban water management; stormwater harvesting; ecohydrology; groundwater modelling; hydrogeochemistry (water and gas flux modelling); life cycle assessment of water (mining, urban etc.); physical modelling of hydraulic structures; stochastic soil-moisture dynamics and water balance, soil-atmosphere interaction; constructed wetland; wastewater treatment and pollutant degradations.

2.5.4 The Transport Group

(Institute of Transport Studies)

In 2008, the group was led by Associate Professor Geoff Rose and included:
• Professor William Young
• Professor Graham Currie
• Dr Majid Sarvi
• Dr Yibing Wang
• Mr John Clements
• Mrs Astrid De Alwis
• Ms Pauline Forbes
• Ms Alexa Delbosc
• Ms Brenda O’Keefe (Administration Manager).

Research strengths: transport and traffic planning and management; travel demand; transport operations; public transport planning and management; intelligent transportation systems; pedestrian modelling and network optimisation.

Professor William Young’s Portrait Unveiling Ceremony - Transport Group staff members and postgraduate students
2.6 Staff list

Professors

- Xiao-Ling Zhao, EMBA NSW & Syd. PhD Syd. BE ME Shanghai Jiao-Tong MASCE FIEAust CPEng MIIFC [Head of Department]
- William Young, BE(Hons) NSW MSc PhD GradDipMgt Deakin MBA Deakin FIEAust RITE FCIT MPAA MAITPM CPEng [Deputy Head of Department – January to June]
- Graham Currie BSc(Hons) Huddersfield MSc Cranfield MCIT

Associate professors

- Riadh Al-Mahaidi, BSc(Civil Eng)(Hons) Baghdad MSc Cornell PhD Cornell FIEAust MASCE CPEng
- Abdelmalek Bouazza, CEng Algiers PhD GradDipMgt Deakin MBA Deakin FIEAust FITE FCIT MPAA CPEng
- Ana Deletic, BSc(Hons) Belgrade MSc Belgrade PhD Aberdeen GradCertHighEd MIWA
- Jayantha Kodikara, BSc(Hons) Peradeniya PhD FIEAust, CPEng [Deputy Head of Department – July to December]
- Geoffrey Rose, BE(Hons) Queensland i.T. MSc PhD Northwestern MIEAust MITE MAITPM
- Jay G. Sanjayan, BEng(Hons) Peradeniya PhD MIEAust

Senior lecturers

- John Clements, BCom(Hons) DipEd Melb. MEC MADmin FCIT
- Frank Collins, BE Syd. MEngSc Syd. PhD FIEAust
- Tim Fletcher, BForSc(Hons) Melb. PhD Melb. MRBMS
- Asadul Haque, BScEng KBIT MEng AIT PhD Wollongong MIEAust
- Anthony Ladson, BE(Hons) Melb. MSc Minn. PhD Melb. GradCertHighEd
- Ranjith Pathegama Gamage, BSc(Eng) (Hons) Moratuwa PhD Wollongong. MASCE MISMRI MAGS MSSE
- Majid Sarvi, B CivEng(Hons) Tehran MEng (Hons) IUST PhD Tokyo MJSCE MJSTETTSC MCITE
- Yibing Wang, BS Sichuan. MS Chongqing PhD Tsinghua
- Bill M.B. Wong, BSc(Eng) Lond. PhD NSW CEng MICE MIEAust CPEng

Lecturers

- Michael Bambach, BE Syd. PhD Syd.
- Edoardo Daly, M.S. Polyt.Turin PhD Polyt.Turin
- Wen Hui Duan, BEng Tianjin M.Eng Tianjin PhD NUS
- Belinda Hatt, BAppSci(Hons) RMIT PhD
- Gavin Mudd, BEnvEng(Hons) RMIT PhD VUT MIAH MSSEE
- Luming Shen, BE(Building) Tongji M.E.(Structural) Tongji PhD Missouri-Columbia
- Guangzh (John) Sun, BEng(Chem) Tianjin M. Eng(Chem) Tianjin PhD Birmingham GradCertHighEd (Teaching) Queen’s

Assistant lecturers

- Astrid de Alwis, BA Melb. GDip.T&DMgr RMIT MLogMgt MCIT
- Elizabeth Sironic, BE Dic MSc PhD

Senior tutor

- Constantine Adam, BEngSc MEngSc AIWS
- Pauline Forbes
- Alexa Delbosco, BA Lewis & Clark, MA Harvard
- Chaminda Gallage BScEng(Hons) Peradeniya Meng Tokyo PhD Tokyo
- Will Gates, BSc MSU MSc NMSU PhD Illinois
- Justin Lewis, BSc Tas. MSc VUT
- David McCarthy, BSc BE (Hons) PhD
- Alessandra Mendes, BEng(Mat) UFSCar Brazil
- Peter Poelisma, BSc (Environmental) RMIT
- Andre Taylor, BSc(Hons) Tas. MEM Queensland
- Zhigang Xiao, BS StrucEng Tsinghua MSStrucEng Tsinghua PhD Nagoya
Administrative staff

- Jenny Manson, Research and Postgraduate Manager
- Brenda O’Keefe, Administration Manager, ITS
- Helen Parker, Finance Officer, Support Services
- Chris Powell, Director, Support Services
- Irene Sgouras, Undergraduate Studies Administration Manager
- Noi Souvandy, Finance Officer, Support Services
- Dominique Thomson, Personal Assistant to the Head of Department

Technical staff

- Patrick Arias, Technical Officer
- Glenn Davis, Technical Officer
- Jeffrey Doddrell, Technical Officer
- Peter Dunbar, Technical Officer
- Long Kim Goh, Laboratory Manager
- Carl Hemmings, Senior Technical Officer
- Michael Leach, Technical Officer
- Don McCarthy, BAppSc(Pho) RMIT GradDip(Media) Deakin MIPT – Senior Communications Officer
- Kevin Nievaart, Technical Officer
- Binu Stanley, Senior Technical Officer
- Alan Taylor, Technical Officer (Stores)
- Mark Taylor, Senior Technical Officer
- Godwin Vaz, IT Officer
- Frank Winston, BE(Hons) MEngSc – Senior Technical Officer (Hydraulics Lab)

Honorary staff

Emeritus professor

- Paul Grundy, BCE(Hons) MEngSc Melb. PhD Cantab. FIEAust MiSOPE CEng

Associates

- Rahmi Akcelik, MSc Istanbul T.U. PhD Leeds
- Sushil Bhandari, BE(Mining) Jodhpur MSc(Mining) Banaras PhD NSW
- Sing Ki (Xavier) Choi, BE(Hons) PhD GradDip Computing
- Hugh Duncan, BE(Hons), MEngSc, MIEAust, CEng
- Christopher Haberfield, BSc Syd. BE(Civil) Syd. PhD FIAust MAGS MISRM MISSME
- Robert J. Keller, BE(Hons) PhD Cant. NZ MASCE MIEAust MiPENZ
- Anthony R. Ladson, BE(Hons) Melb. MSc Minn. PhD Melb. GradCertHighEd
- Russell Mein, BE(Agr) Melb MEngSc Melb PhD Minn. FIEAust
- Rory Nathan, BE(Agr) Melb. MSc DIC London PhD
- Anthony J. Richardson, BE(Hons) MEngSc UNSW PhD FIEAust MITE
- Rita Seethaler, MEC&PolSc Berne PhD
- Julian Peter Seidel, BE(Hons) PhD MIEAust CEng
- Geoffrey Robert Taplin, BE(Hons) Tas. MEngSc PhD CEng NPR MICE MIStructE MIEAust
- John Tilleard, BE Civil(Hons) Melb. MSc Colorado PhD Melb. CPEng MIEAust MASCE
- Peter Erwin Weinmann, Diplng ETH Zurich MEngSc MIEAust CEng
- Tony H.F. Wong, BE PhD CPEng MIEAust MASCE
2.7 Staff changes in 2008

New staff members
- Ms Alexa Delbosc, Research Fellow, Transport Group
- Dr Wen Hui Duan, Lecturer in Structural Engineering
- Dr Edoardo Daly, Lecturer in Water Engineering
- Dr Aruna Amarasiri, Research Fellow, Geomechanics Group
- Mr David McCarthy, Research Fellow, Water Group
- Ms Katia Bratieres, Research Assistant, Water Group

Promotions
- Associate Professor Ana Deletic (to Professor)
- Dr Tim Fletcher (from Senior Lecturer to Associate Professor)
- Dr Jayantha Kodikara (from Senior Lecturer to Associate Professor)
- Dr Majid Sarvi (from Lecturer to Senior Lecturer)
- Dr Asadul Haque (from Lecturer to Senior Lecturer)

Resignations
- Dr Tony Ladson, Senior Lecturer in Water Engineering
- Dr Luming Shen, Lecturer in Structural Engineering
- Dr Grace Mitchell, Senior Research Fellow
- Dr Nilmini Siriwardene, Research Fellow
- Dr Geoff Taylor, Research Fellow
- Dr James Grove, Research Fellow
- Mr Derek George, Technical Officer

Retirement
- Associate Professor Robert Milner, Structures Group, Director of the Monash Timber Engineering Centre
- Associate Professor Robert Keller, Water Group, Hydraulics
- Mr John Molloy, Business Manager, FAWB

2.8 Visitors to the department

The following visitors came to Civil Engineering at Monash University in 2008:

Occupational trainees
- Mr Clement Desodt from École Normale Supérieure de Cachan (ENS Cachan), France, visited the department between April – August under the supervision of Dr Ranjith.
- Ms Ellen Devauchelle from the National Institute of Applied Sciences (INSA), Lyon, France, visited the department between April and September to work under the supervision of Associate Professor Tim Fletcher.
- Dr Wen-Da Wang, Department of Civil Engineering, Tsinghua University, China, visited the department in July. During the visit, he discussed collaborative research works undergoing on composite frame structures, with Professor Xiao-Ling Zhao.
- Mr Sebastien Wullens from École Normale Supérieure de Cachan (ENS Cachan), France, visited the department between April-August under the supervision of Dr Ranjith.

Visiting academics
- Dr Aoife A’hearn from the College of Engineering, Mathematical and Physical Sciences, University College Dublin, visited the Department between June – November 2008. Dr A’hearn collaborated with Professor Graham Currie and presented a seminar to staff students in the Transport Group during her visit.
- Professor Robert Bertini, Director, Oregon Transportation Research and Education Consortium, at Portland State University, Oregon USA visited the department in November/December. Professor Bertini collaborated with Dr Yibing Wang and Dr Majid Sarvi.
- Ms Fanny Boulaire, a Research Officer at CSIRO, visited the department between October and November to work on a project titled ‘Advanced Statistical Investigation of Data from Melbourne Retail Water authorities’ with Mr Scott Gould.
- Professor Craig Benson, Wisconsin Distinguished Professor, Civil & Environmental Engineering, Geological Engineering, University of Wisconsin-Madison, USA, visited the department in December to present at a GCLS in Waste Containments workshop, organised by Associate Professor Malek Bouazza.
- Mr Don Cameron, Civil Engineering, School of NBE/Biology, University of South Australia, visited the department in August/September to participate in a conference and also had discussions with Associate Professor Jayantha Kodikara with regard to potential industry based research.
- Dr Punchi Bandage Ranjith Dissanayake of the Department of Civil Engineering at the University of Peradeniya, Sri Lanka, visited the department as a 2008 Endeavour Research Fellowship (Sri Lanka) recipient. Dr Dissanayake collaborated with Em. Prof. Paul Grundy and Dr P. D. Dayawansa of MITI (Caulfield Campus).
- Professor André-Gilles Dumont from École Polytechnique Fédérale de Lausanne, visited the department between September 2008 and January 2009 to discuss research collaboration with Dr Majid Sarvi (Institute of Transport Studies).
- Mr Giacomo Firpo, from the Centre of Geotechnologie at the University of Sienna, Italy visited the department between May and October to collaborate with Dr Ranjith on a Slope Stability Problem.
- Professor Sam Frydman from Technion-Israel Institute of Technology visited the department as part of a sabbatical which commenced in October 2007 and ended in March 2008. Professor Frydman held discussions on joint research matters with Associate Professor Malek Bouazza.
- Professor Seyed Assadollah Ghazavi is visiting the department between January and October. Professor Ghazavi is collaborating with Dr Majid Sarvi (Institute of Transport Studies).
- Professor Jie Han of the Department of Civil, Environmental and Architectural Engineering at the University of Kansas, USA, was a visitor in the Department and gave a presentation at a Geosynthetics Reinforcement in Embankment Foundations and Roads workshop in October, organised by Associate Professor Malek Bouazza.
- Professor Lin-Hai Han of the Department of Civil Engineering at Tsinghua University, Beijing China, visited the department to discuss research collaboration with Professor Xiao-Ling Zhao and Dr Frank Collins.
Dr Manoj Khandelwal of the Department of Earth Sciences, Indian Institute of Technology, Bombay, India visited the department as a 2008 Endeavour Research Fellowship (India) recipient. Dr Khandelwal collaborated with Dr Ranjith during his visit between October 2008 and April 2009.

Mr Manfred Kleidorfer from the IUT Unit of Environmental Engineering, at the University of Innsbruck, Austria, was a visiting scholar in the department between November 2007 and February 2008. Mr Kleidorfer collaborated with Associate Professor Ana Deletic and Dr Tim Fletcher during his visit.

Professor Rob Melchers, Professor of Civil Engineering, School of Engineering, University of Newcastle, visited the department in October to receive his 2008 Civil Engineering Alumnus of the Year award.

Professor Ian Moore, Professor and Canada Research Chair in Infrastructure Engineering, Executive Director GeoEngineering Centre at Queen’s – RMIC, Queens University, Canada, visited the department in March to attend a technical seminar titled Performance Prediction and Management of Water and Gas Pipe Infrastructure, organised by the Management and Prediction of Pipe BurstS (MAPPS) group at Monash.

Professor Ennio M. Palmeira, Professor in Civil Engineering at the University of Brasilia, visited the department in October 2008. Professor Palmeira was a presenter at a short course titled Geosynthetics in Filtration and Drainage, held on 15 October and organised by Associate Professor Malek Bouazza.

Dr Balvant Rajani, Principal Research Officer, Buried Utilities, NRC Institute for Research in Construction (IRC), National Research Council, Canada, (NRC), visited the department in March to collaborate with Associate Professor Jayantha Kodikara and attend a technical seminar Performance Prediction and Management of Water and Gas Pipe Infrastructure, organised by the Management and Prediction of Pipe BurstS (MAPPS) group at Monash.

Ms Christelle Schang of the National Institute of Applied Sciences (INSA), Lyon France was a visiting scholar in the department between April and August and for a further period between December 2008 and January 2009. Ms Schang was working with Professor Ana Deletic and members of the water group collaborating on a Porous Pavement project.

Dr Riccardo Salvini an Assistant Professor in Engineering Geology, Department of Earth Sciences, University of Sienna, Italy, visited the department between September and October to collaborate on research matters with Dr Ranjith.

Professor ZuYan Shen, (former Vice-President of Tongji University) and a member of the Chinese Academy of Engineering, visited the department in February. He presented a seminar to the Structures Group staff and students in the Civil Engineering department.

Dr H. S. Thilakasiri of the Department of Civil Engineering, University of Moratuwa, Sri Lanka visited the department during March-April to work with Dr Ranjith.

Dr Tao Yu of the Department of Civil and Structural Engineering, The Hong Kong Polytechnic University (PolyU), visited the department April and July to conduct joint research with Professor Xiao-Ling Zhao in the research area of Bond Behaviour between CFRP and Steel. This visit was part of an International Linkage award.

Dr J. W. C. (Hans) van Lint of Delft University of Technology, visited the department between October 2008 and January 2009. Dr van Lint, an Assistant Professor in the Transport & Planning Department in the Faculty of Civil Engineering and Geosciences at Delft University of Technology, collaborated with members of the Institute of Transport Studies and presented a seminar to members of the group.

Ms Karen Woo from the Department of Civil Engineering, University of Toronto, Canada visited the department between November 2008 and February 2009. Ms Woo collaborated with Professor Graham Currie, Chair in Public Transport.

Ms Camilla Westerlund of the Department of Civil, Mining and Environmental Engineering at Luleå University, Sweden, visited the department between September and December to collaborate with Professor Ana Deletic and members of the water group on a research project titled ‘Towards efficient monitoring of stormwater pollution loads’.

2.9 Alumnus of the Year Award

The winner of the Civil Engineering Alumnus of the Year Award in 2008 was Professor Robert Melchers.

Professor Melchers has an internationally distinguished career that spans from structural engineering through structural reliability and risk analysis to corrosion research. He was leader of the Newcastle Earthquake Study, has advised the Liquefied Petroleum Gas Industry on risk assessment, was part of the risk assessment team for the HIFAR reactor and currently sits on the Nuclear Safety Committee of the Australian Radiation Protection and Nuclear Safety Authority. He has consulted widely to industry. He is a Fellow of the Academy of Technological Sciences and Engineering, Engineers Australia and the Institution of Civil Engineers.

He is a 1968 Monash University Honours 1 graduate in Civil Engineering. In 1972 he obtained his PhD in structural engineering from Cambridge University. After some years in consulting, he returned to Monash as an academic staff member. He was appointed Professor of Civil Engineering at the University of Newcastle in 1986. In 2004 he was awarded a five-year Australian Research Council Professorial Fellowship allowing him to devote himself full-time to cutting-edge research on infrastructure deterioration, focusing on corrosion of steel in marine environments. This work has won him numerous awards in the corrosion science area. In 2009 he has been awarded Visiting Research Fellowships in the UK and is currently part of two Marie Curie European Research Projects.

Professor Melchers has authored the internationally most widely-used text on structural reliability and co-authored, edited or contributed to another 22 books. He has over 200 papers in scientific and engineering journals, numerous conference contributions and given more than 20 keynote lectures at major international conferences. He has been awarded more than $13 million in competitive research grants, some shared with other investigators.
3. Education

3.1 Course offerings
The department offers undergraduate programs in Civil Engineering and Infrastructure Engineering and Management [Bachelor of Engineering and Bachelor of Technology (Infrastructure)].

The Civil program is combined with arts, law, commerce and science to offer double degrees:
- Bachelor of Engineering/Bachelor of Arts
- Bachelor of Engineering/Bachelor of Science
- Bachelor of Engineering/Bachelor of Laws
- Bachelor of Engineering/Bachelor of Commerce.

As part of the undergraduate programs in Civil and Environmental Engineering, ITS (Monash) had responsibility for over 440 subject enrolments in transport/traffic related subjects in 2008. With core units offered in both level two (CIV2282 Transport and traffic) and level three (CIV4283 Road engineering) of the undergraduate civil engineering degree, two electives in final year (CIV4283 Transport planning and CIV4284 Transport systems) and the option to do a final year transport project, the program has proven itself to not only motivate, but also prepare students to pursue careers in the transport and traffic industry.

The department also provides teaching for the Bachelor of Environmental Engineering.

3.2 Undergraduate scholarships and prizes

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<th>Scholarships (Faculty)</th>
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<tbody>
<tr>
<td>Leighton Contractors ‘Keith Rix’ Scholarship</td>
<td>Chris Paxino</td>
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<tr>
<td>Traffic Group Scholarships:</td>
<td></td>
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<tr>
<td>Level 2 (partly funded by Mirabito family)</td>
<td>Sarah Mahmoud</td>
</tr>
<tr>
<td>Level 3</td>
<td>Leigh Furness</td>
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<tr>
<td>McConnell Dowell Scholarship</td>
<td>James Evans</td>
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<th>Prizes (Faculty)</th>
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<tbody>
<tr>
<td>Vice Chancellor’s Undergraduate Research Award</td>
<td>Madeleine Tillig</td>
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<tr>
<td>GHD Top Level 4 graduate for 2008</td>
<td>Tim Canterford</td>
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<tr>
<td>Civil Contractors Federation Prize – the Ian Jacka Award</td>
<td>Jeton Saliu</td>
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<tr>
<td>Golder Associates Prize</td>
<td>Tom Radoicovich</td>
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<th>Prizes (Department)</th>
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<tr>
<td><strong>Level 1 Prizes</strong></td>
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<tr>
<td><strong>Highest achieving single degree student commencing Civil Engineering in 2008, Average 87%</strong></td>
<td>Daniel Jarman</td>
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<tr>
<td><strong>Highest achieving double degree student commencing Civil Engineering in 2008, Average 90%</strong></td>
<td>Nathan Green</td>
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<tr>
<td><strong>Level 2 Prizes</strong></td>
<td></td>
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<tr>
<td>Railand Prize for Water Engineering (Best overall performance in 2nd Year Water supply – CIV2263)</td>
<td>Anna Lintern</td>
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<tr>
<td>SRIA Prize for Concrete Structures (Outstanding achievement in reinforced concrete design)</td>
<td>Peter Bach</td>
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<td><strong>Level 3 Prizes</strong></td>
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<tr>
<td>Australian Steel Institute Prize (Greatest proficiency in the field of steel structures CIV3221)</td>
<td>Chris Paxino</td>
</tr>
<tr>
<td>Douglas Partners Prize for Geomechanics (Greatest proficiency at Level 3 in geomechanics units, CIV3247 and CIV3248)</td>
<td>George Kazantzidis</td>
</tr>
<tr>
<td>Railand Prize of Urban Water Systems (Best overall performance in CIV3264, Urban water and wastewater systems)</td>
<td>Madeleine Tillig</td>
</tr>
<tr>
<td>GHD Highway Design Prize (to the group who submitted the best highway design project in CIV3283)</td>
<td>Chris Paxino, Madeleine Tillig, Nick Manuelpillai</td>
</tr>
<tr>
<td><strong>Level 4 Prizes</strong></td>
<td></td>
</tr>
<tr>
<td>Foundation Industry Prize for Soil Engineering (Best Foundation Design in Soil Engineering – CIV4249)</td>
<td>Tom Radoicovich</td>
</tr>
<tr>
<td>GHD Prize in Water Engineering (Greatest proficiency in the water engineering subjects at level 4)</td>
<td>Matthew Davey</td>
</tr>
<tr>
<td>Richardson Prize in Transport (Greatest proficiency in one transport elective and transport final year project)</td>
<td>Chris Arnott</td>
</tr>
</tbody>
</table>
### Level 4 Prizes

<table>
<thead>
<tr>
<th>Prize Name</th>
<th>Honours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thiess Prize for Civil Engineering Design</strong>&lt;br&gt;(Group who has submitted the Best Design in Civil Engineering Practice 4)</td>
<td>Matthew Burns&lt;br&gt;Tom Radoiovich&lt;br&gt;Dexter Reynolds&lt;br&gt;Jonathan Chi-Wai Chan&lt;br&gt;Myles Alan Chapman&lt;br&gt;Andrew James Chudleigh&lt;br&gt;Chung Ming Chuo&lt;br&gt;Edin Granulo&lt;br&gt;Nathan Lindsay Green&lt;br&gt;Hayden Ivan Greenhill&lt;br&gt;Sheyam Shankar Gunaratnam&lt;br&gt;Zachary Thomas Hankin&lt;br&gt;Alaa Hassan&lt;br&gt;Samantha Henderson&lt;br&gt;David Richard Hyne&lt;br&gt;James Kear&lt;br&gt;Phanuma Kol&lt;br&gt;Anthony Lam&lt;br&gt;Marcus Frank-Santo Lazzaro&lt;br&gt;Michael Andrew Lee&lt;br&gt;Christian Marcello&lt;br&gt;John Maye&lt;br&gt;Stephen Bernard Martin Mellier&lt;br&gt;Chriseyln Meneses&lt;br&gt;Lachlan Leonard Minett</td>
</tr>
<tr>
<td><strong>Foundation QA Prize</strong>&lt;br&gt;(Best final year project in geomechanics)</td>
<td>Tom Radoiovich</td>
</tr>
<tr>
<td>** Traffix Group Prize**&lt;br&gt;(Greatest proficiency in transport engineering)</td>
<td>David Lavoipierre</td>
</tr>
<tr>
<td><strong>Civil Engineering Vacation Work Prize</strong></td>
<td>Clayton Riddle</td>
</tr>
<tr>
<td><strong>Institute of Transport Engineers Aust/NZ Undergraduate Student Prize</strong></td>
<td>Chris Arnott</td>
</tr>
</tbody>
</table>

### 3.3 Graduating Class of 2008 (Undergraduates)

**Bachelor of Engineering (Civil)**
- Paul Martin Constance
- Chun Kin Gordon Hui
- Michael Andrew James
- Zirak Ismail Kakar
- Bryce Leonard James Kemp
- Boris Kozhushnik
- Wiyono Otto Lengkong
- Hongzheng Li
- Ricky John Luke
- Hui Chao Peng
- Paul Anthony Raworth
- Wilson Simon
- Paramvir Singh
- Ryan Slivinski
- Tze Ho Jack So
- Michael Kai Yung Tiong
- Demetrios Triantafyllides
- Niesl Simon Unger
- Chee Hau Vun
- Tao Wang
- Albert Wei
- Yi Xing Darren Yang
- Alan Ka Lun Yeung
- Lim Hui Yih
- Che Wai Terance Yik
- Meng Fei Zhang
- Gong Jian Zheng

**Bachelor of Engineering (Civil) with Honours**
- Christopher Robert Arnott
- Elissa Genevieve Blake
- Clark Charles Briggs
- Jonathan Chi-Wai Chan
- Myles Alan Chapman
- Sarah Chau
- Andrew James Chudleigh
- Chung Ming Chuo
- Daniel Jonathon Cook
- Benjamin Stephen Keith Cornwall
- Matthew James Davey
- Michael Bartlett Davies
- Adam Edward Davis
- Benjamin James Dawe
- Dwain Andrew Dawes
- Trent Wayne Ericksen
- Edin Granulo
- Nathan Lindsay Green
- Hayden Ivan Greenhill
- Sheyam Shankar Gunaratnam
- Zachary Thomas Hankin
- Alaa Hassan
- Samantha Henderson
- David Richard Hyne
- James Kear
- Phanuma Kol
- Anthony Lam
- Marcus Frank-Santo Lazzaro
- Michael Andrew Lee
- Christian Marcello
- John Maye
- Stephen Bernard Martin Mellier
- Chriseyln Meneses
- Lachlan Leonard Minett

**Bachelor of Arts and Bachelor of Engineering (Hons) in the field of Civil Engineering**
- Benny Ho

**Bachelor of Science and Bachelor of Engineering (Hons) in the field of Civil Engineering**
- Nathan Martin Clements
- Patrick John Donlan
- Bradley Charles Gebhardt
- Liam Jared Ingram
- Omaid Kohnesheen
- David John Lavoipierre
- Christopher John Lenthall
- Thomas Peter Radoiovich
- Rowan Thomas Shields
- Christopher Ashley Vinecombe

**Bachelor of Commerce and Bachelor of Engineering (Hons) in the field of Civil Engineering**
- Timothy Robert Canterford
- Katherine Elizabeth Gibson
- Carl Geoffrey Hamilton
- George Jonas Eden Rose
- Jeton Saliu
- Timothy James Suffield
- Matthew James Tynkkynen
Bachelor on Environmental Engineering
Robin Douglas Bishop
Vidhiya Mahendran
Cesar Paolo Nicolas
David Ashley Oglesby
Yi Hou Shen
Kimberley Min-Jue Woon

Bachelor on Environmental Engineering (with Honours)
Jesse Nathan Barrett
Amanda Browyn Bell
Katherine Anne Southwel Brown
Lauren Melissa Burch
Matthew James Burns
Chiu Fung Choo
David Dario Diaz
Anna Glinka
Andrew John Hosken
Finnigan Johnson
David Charles McCartney
Luke Michael McLean
Caitlyn Laura Melia
James Bernard O’Connor
Glenn Thomas Ottrey
Michael Shane Poustie
Lachlan Wallis Smith
Joseph Tartaglia
Peter James Woodman
Yafee Zhu

Bachelor of Technology (Infrastructure – Design, Construction and Management)
Mau Chung Ip
Ka Yiu Lee
4. Research

4.1 Research projects undertaken in 2008

Geotechnical engineering

<table>
<thead>
<tr>
<th>Projects</th>
<th>Investigators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atmosphere and soil interaction modelling</td>
<td>Kodikara</td>
</tr>
<tr>
<td>Modelling of shrinkage cracking</td>
<td>Kodikara</td>
</tr>
<tr>
<td>Deterioration modelling of road pavements</td>
<td>Kodikara</td>
</tr>
<tr>
<td>Study of desiccation cracking of clay</td>
<td>Kodikara</td>
</tr>
<tr>
<td>Particle flow and compaction analysis</td>
<td>Kodikara</td>
</tr>
<tr>
<td>Pipe failures due to ground movement in reactive soils</td>
<td>Kodikara</td>
</tr>
<tr>
<td>Stone columns</td>
<td>Bouazza</td>
</tr>
<tr>
<td>Unsaturated flow behaviour of geotextiles</td>
<td>Bouazza</td>
</tr>
<tr>
<td>Thermo-hydro-mechanical behaviour of GCLs and porous media</td>
<td>Bouazza</td>
</tr>
<tr>
<td>Unsaturated behaviour of GCLs</td>
<td>Bouazza</td>
</tr>
<tr>
<td>Ground Anchors</td>
<td>Bouazza</td>
</tr>
<tr>
<td>Moisture dynamics in GCLs</td>
<td>Bouazza</td>
</tr>
<tr>
<td>Biological applications to geotechnical engineering</td>
<td>Bouazza/Gates/Ranjith</td>
</tr>
<tr>
<td>Railway subgrade improvement</td>
<td>Haque/Kodikara</td>
</tr>
<tr>
<td>Effects of CH4 and CO2 on stress –strain characteristics of coal</td>
<td>Ranjith</td>
</tr>
<tr>
<td>Dynamic behaviour of rock joints</td>
<td>Ranjith</td>
</tr>
<tr>
<td>Behaviour of saturated infilled rock joints</td>
<td>Haque</td>
</tr>
<tr>
<td>Filtration behaviour of capping material under dynamic loading condition</td>
<td>Haque/Bouazza</td>
</tr>
<tr>
<td>Sodium saturation and particle size separation of bentonite</td>
<td>Gates</td>
</tr>
<tr>
<td>Aluminium diffusion in GCLs</td>
<td>Gates</td>
</tr>
<tr>
<td>Clay mineral structure modelling</td>
<td>Gates</td>
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<tr>
<td>Mossbaer analysis of clay minerals</td>
<td>Gates</td>
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<tr>
<td>X-ray diffraction analysis of clay minerals</td>
<td>Gates</td>
</tr>
<tr>
<td>X-ray imaging of clay mineral gels</td>
<td>Gates</td>
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<tr>
<td>Synchrotron-based soft X-ray analysis of clay minerals</td>
<td>Gates</td>
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<tr>
<td>Synchrotron-based Far Infrared analysis of clay minerals</td>
<td>Gates</td>
</tr>
<tr>
<td>Acid and alkaline reactions of clay minerals</td>
<td>Gates</td>
</tr>
<tr>
<td>Stabilisation of soft soils</td>
<td>Haque</td>
</tr>
<tr>
<td>Slope Stability of large deep, open cut mines</td>
<td>Ranjith</td>
</tr>
<tr>
<td>Stability of wellbore analysis</td>
<td>Ranjith</td>
</tr>
<tr>
<td>Underground longwall mining</td>
<td>Ranjith</td>
</tr>
<tr>
<td>Hydro-fracturing and other simulation methods for depleted and tight reservoirs</td>
<td>Ranjith</td>
</tr>
<tr>
<td>Two-phase and multiphase flow in fractured rock media</td>
<td>Ranjith</td>
</tr>
<tr>
<td>Coupled hydro-mechanical behaviour of fractured and porous rocks</td>
<td>Ranjith</td>
</tr>
<tr>
<td>Gas outbursts and groundwater inundation in mines</td>
<td>Ranjith</td>
</tr>
<tr>
<td>Rock physics under high pressure conditions</td>
<td>Ranjith</td>
</tr>
<tr>
<td>Characterization of weathered rocks</td>
<td>Ranjith</td>
</tr>
<tr>
<td>Tunnelling in soft and hard ground</td>
<td>Ranjith</td>
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</tbody>
</table>
## Structural engineering

<table>
<thead>
<tr>
<th>Projects</th>
<th>Investigators</th>
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</thead>
<tbody>
<tr>
<td>Performance of geopolymer concrete in fire</td>
<td>Sanjay</td>
</tr>
<tr>
<td>Performance of alkali activated slag in fire</td>
<td>Sanjay</td>
</tr>
<tr>
<td>Cathodic protection of concrete structures</td>
<td>Collins</td>
</tr>
<tr>
<td>Behaviour of composite beams in fire</td>
<td>Wong</td>
</tr>
<tr>
<td>Temperature prediction and heat transfer in combustion gases</td>
<td>Wong</td>
</tr>
<tr>
<td>Performance of FRP retrofitted concrete structures under thermal loading</td>
<td>Al-Mahaidi/Wong</td>
</tr>
<tr>
<td>Development of epoxy/nanomaterials as adhesives for bonding CFRP to steel plates</td>
<td>Al-Mahaidi/Zhao</td>
</tr>
<tr>
<td>Development of epoxy/nanomaterials as adhesives for bonding CFRP to concrete members</td>
<td>Al-Mahaidi</td>
</tr>
<tr>
<td>Development of inorganic cementitious bonding agents for FRP retrofitting of concrete structures</td>
<td>Al-Mahaidi</td>
</tr>
<tr>
<td>Durability of CFRP repaired structural members under extreme environmental exposure.</td>
<td>Al-Mahaidi/Collins</td>
</tr>
<tr>
<td>Fatigue performance of CFRP-repaired tubular joints</td>
<td>Zhao/Xiao</td>
</tr>
<tr>
<td>Bond characteristics of CFRP strengthened steel members under extreme temperature cycles</td>
<td>Al-Mahaidi/Zhao</td>
</tr>
<tr>
<td>The study of bond behaviour of CFRP reinforced steel plates under high-amplitude cyclic loading</td>
<td>Al-Mahaidi/Zhao</td>
</tr>
<tr>
<td>Bond characteristics between steel members and carbon fibre reinforced polymer ‘CFRP’ composites</td>
<td>Al-Mahaidi/Zhao</td>
</tr>
<tr>
<td>Fatigue performance of steel joints bonded with CFRP fabrics</td>
<td>Zhao/Al-Mahaidi</td>
</tr>
<tr>
<td>Fire resistance of CFDST tubular columns filled with SCC</td>
<td>Zhao</td>
</tr>
<tr>
<td>CFRP (Carbon Fibre Reinforced Polymer) strengthening of steel structures</td>
<td>Zhao</td>
</tr>
<tr>
<td>Fatigue of subsea pipelines</td>
<td>Zhao/Xiao</td>
</tr>
<tr>
<td>Performance of geopolymer concrete in fire</td>
<td>Sanjay</td>
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<td>Performance of Alkali activated slag in fire</td>
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<tr>
<td>Development of epoxy/nanomaterials as adhesives for bonding CFRP to steel plates</td>
<td>Al-Mahaidi/Zhao</td>
</tr>
<tr>
<td>Development of epoxy/nanomaterials as adhesives for bonding CFRP to concrete members</td>
<td>Al-Mahaidi/Duan</td>
</tr>
<tr>
<td>Development of inorganic cementitious bonding agents for FRP retrofitting of concrete structures</td>
<td>Al-Mahaidi</td>
</tr>
<tr>
<td>Steel bollard circular cantilever beams with and without CFRP subjected to impact</td>
<td>Grzebieta/Bambach/Zhao</td>
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</tbody>
</table>
### Transportation engineering

<table>
<thead>
<tr>
<th>Projects</th>
<th>Investigators</th>
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</thead>
<tbody>
<tr>
<td>Investigating transport disadvantage, social exclusion and well being</td>
<td>Currie</td>
</tr>
<tr>
<td>in metropolitan, regional and rural Victoria</td>
<td></td>
</tr>
<tr>
<td>Exploring the transit network effect in Melbourne and Toronto</td>
<td>Currie/Shalaby/Woo</td>
</tr>
<tr>
<td>Review of Australian US and Canadian trends in public transport</td>
<td>Currie/Pucher</td>
</tr>
<tr>
<td>Bus priority research</td>
<td>Currie/Nelson/Mulley</td>
</tr>
<tr>
<td>Regional mobility to remote Aboriginal communities – with University of South Australia for dessert knowledge CRC</td>
<td>Currie</td>
</tr>
<tr>
<td>Social Research in Transport (SORT) Clearinghouse</td>
<td>Currie/Forbes</td>
</tr>
<tr>
<td>Investigating travel time and variability prediction for roads based</td>
<td>Currie/Rose/Sarvi</td>
</tr>
<tr>
<td>public transport</td>
<td></td>
</tr>
<tr>
<td>Rail passenger arrival behaviour and unreliable rail services</td>
<td>Currie/Rose</td>
</tr>
<tr>
<td>Does car ownership contribute to social exclusion – exploring the</td>
<td>Currie/Stanley</td>
</tr>
<tr>
<td>links between arts and cultural participation, transport and</td>
<td></td>
</tr>
<tr>
<td>social exclusion</td>
<td></td>
</tr>
<tr>
<td>Improving methodologies to estimate the economic impacts of</td>
<td>Currie/Gwee/Stanley/Madden</td>
</tr>
<tr>
<td>agglomeration economies in urban rail projects</td>
<td></td>
</tr>
<tr>
<td>Optimising transit priority at the network level</td>
<td>Sarvi/Currie</td>
</tr>
<tr>
<td>Future bus – route bus bodywork design for specification diversity</td>
<td>Currie/Burns/De Bono</td>
</tr>
<tr>
<td>Design strategies for the amelioration of anti-social behaviour on</td>
<td>Currie/De Bono</td>
</tr>
<tr>
<td>public transport</td>
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</tr>
<tr>
<td>Public transport measures for road traffic congestion relief</td>
<td>Currie/Sarvi</td>
</tr>
<tr>
<td>Assessing the impacts and effectiveness of the Melbourne CBD parking</td>
<td>Currie/Young</td>
</tr>
<tr>
<td>levy</td>
<td></td>
</tr>
<tr>
<td>Measuring transfer penalties from revealed preference data</td>
<td>Currie/Hurley</td>
</tr>
<tr>
<td>Setting long bus headways – when less is more?</td>
<td>Currie</td>
</tr>
<tr>
<td>Investigating trip linking behaviour in public transport</td>
<td>Currie/Delbosc</td>
</tr>
<tr>
<td>Exploring trip rates in an ageing population</td>
<td>Currie/Delbosc</td>
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<tr>
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<tr>
<td>Modelling lane changing behaviour of heavy vehicles</td>
<td>Sarvi/Rose</td>
</tr>
<tr>
<td>Modelling of pedestrian behaviour under panic conditions</td>
<td>Sarvi/Rose/Burd</td>
</tr>
<tr>
<td>Predicting driver behaviours</td>
<td>Sarvi</td>
</tr>
<tr>
<td>Road space allocation to public transport at network level</td>
<td>Sarvi/Currie</td>
</tr>
<tr>
<td>EcoDriver training</td>
<td>Rose</td>
</tr>
<tr>
<td>Operational impacts of alternative vehicles</td>
<td>Rose</td>
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<tr>
<td>Motorcycles and transport strategy</td>
<td>Rose</td>
</tr>
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<tr>
<td>Projects</td>
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<tr>
<td>-------------------------------------------------------------------------</td>
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<tr>
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<td>between arts and cultural participation, transport and social exclusion</td>
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<td>Improving methodologies to estimate the economic impacts of agglomeration</td>
<td>Currie/Gwee/Stanley/Madden</td>
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<tr>
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<td>Sarvi/Currie</td>
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</tr>
<tr>
<td>Projects</td>
<td>Investigators</td>
</tr>
<tr>
<td>----------</td>
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</tr>
<tr>
<td><strong>Facility for Advancing water biofiltration projects:</strong></td>
<td></td>
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<tr>
<td>Project 1 – technology</td>
<td>Fletcher/Deletic/Sun/Mudd</td>
</tr>
<tr>
<td>Project 2 – Policy and risks</td>
<td>Deletic/Fletcher</td>
</tr>
<tr>
<td>Project 3 – Design tools and guidelines</td>
<td>Hatt/Deletic/Fletcher/Mudd</td>
</tr>
<tr>
<td>Project 4 – Demonstration and testing</td>
<td>Fletcher/Deletic/Mudd</td>
</tr>
<tr>
<td><strong>eWater CRC projects:</strong></td>
<td></td>
</tr>
<tr>
<td>eWater CRC Water management program</td>
<td>Mitchell/Deletic/Fletcher/Codner</td>
</tr>
<tr>
<td>eWater CRC Urban project E1</td>
<td>Mitchell/Deletic/Fletcher/Codner</td>
</tr>
<tr>
<td>eWater CRC Groundwater project D3</td>
<td>Mudd/Daly</td>
</tr>
<tr>
<td><strong>Other projects:</strong></td>
<td></td>
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<tr>
<td>Developing an improved unified equation for prediction of stormwater treatment</td>
<td>Deletic/Fletcher</td>
</tr>
<tr>
<td>Development of a modular stormwater treatment and harvesting system (water harvesting technologies)</td>
<td>Deletic/Fletcher/McCarthy</td>
</tr>
<tr>
<td>Coping with uncertainty in stormwater models</td>
<td>Fletcher/Fletcher/McCarthy</td>
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<tr>
<td>Investigating improved design of rainwater tanks</td>
<td>Mitchell/Deletic</td>
</tr>
<tr>
<td>Sustainable groundwater resource modelling</td>
<td>Mudd</td>
</tr>
<tr>
<td>Groundwater quality and ASR in Melbourne (New Staff Member Grant)</td>
<td>Mudd</td>
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<tr>
<td>Groundwater recharge modelling under long-term climate change scenarios</td>
<td>Mudd/Ladson</td>
</tr>
<tr>
<td>Quantifying performance of traditional and novel urban stormwater treatment systems for stormwater harvesting (SmartWater funded)</td>
<td>McCarthy/Deletic/Fletcher/Poelsma</td>
</tr>
<tr>
<td>Sustainable mining</td>
<td>Mudd</td>
</tr>
<tr>
<td>Greenscape Planner, including urban microclimate and water balance modelling</td>
<td>Mitchell</td>
</tr>
<tr>
<td>Modelling Pathogen Behaviour in Urban Catchments</td>
<td>Mitchell/Deletic</td>
</tr>
<tr>
<td>Quantifying the Risks and Benefits of Stormwater Recycling</td>
<td>Mitchell/Deletic/Fletcher/Poelsma/Lewis</td>
</tr>
<tr>
<td>Quantifying and coping with uncertainty in stormwater models – French-Australian Science and Technology (FAST) funded project, in collaboration with INSA Lyon, France</td>
<td>Fletcher/Deletic</td>
</tr>
<tr>
<td>Could porous pavements be part of our urban water solutions? – ARC Linkage</td>
<td>Deletic/Fletcher</td>
</tr>
<tr>
<td>Maximum water savings at minimum cost by education &amp; auction (funded through SmartWater)</td>
<td>Fletcher/Ladson/Walsh</td>
</tr>
<tr>
<td>Can dispersed application of WSUD result in the restoration of urban streams</td>
<td>Fletcher/Walsh</td>
</tr>
<tr>
<td>Industry grant; monitoring dry and wet weather urban stormwater flows (EPA Victoria, 90k)</td>
<td>McCarthy/Lewis/Deletic/Fletcher/Poelsma</td>
</tr>
<tr>
<td>Development of a porous pavement treatment and stormwater storage system</td>
<td>Deletic/Fletcher/Al-Mahaidi/McCarthy</td>
</tr>
<tr>
<td>Trialling thin vegetated roofs: are they viable in Melbourne?</td>
<td>Mitchell</td>
</tr>
<tr>
<td>Where is the lead coming from? Identifying the cause of high lead concentrations in urban rain tank water</td>
<td>Mitchell/Ladson/Magyar/O’Connor</td>
</tr>
<tr>
<td>Biofilter media small column trial</td>
<td>Fletcher</td>
</tr>
</tbody>
</table>
4.2. Research grants and income

Research Funding for 2008 was as follows:

<table>
<thead>
<tr>
<th>Investigators</th>
<th>Project title</th>
<th>Amount awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARC Discovery Projects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grzebieta, Bambach et al</td>
<td>Protecting occupants in vehicle rollover crashes</td>
<td>27,385</td>
</tr>
<tr>
<td>Kodikara</td>
<td>Modelling of shrinkage crack development in porous media</td>
<td>46,829</td>
</tr>
<tr>
<td>Ranjith, Kodikara, Bouazza et al</td>
<td>The thermo-hydro mechanical behaviour of geo-materials under carbon dioxide</td>
<td>107,100</td>
</tr>
<tr>
<td>Sanjayan</td>
<td>Investigation of geopolymer based concretes for the construction of high fire risk constructions</td>
<td>90,136</td>
</tr>
<tr>
<td>Shen</td>
<td>Multi-scale model-based simulation of glass fragmentation</td>
<td>6,610</td>
</tr>
<tr>
<td><strong>ARC Linkage funding allocation including industry component</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bouazza</td>
<td>Development of a new technique to improve very soft soils using geogrid wrapped stone columns</td>
<td>18,069</td>
</tr>
<tr>
<td>Bambach, Zhao</td>
<td>High strength steel protection bollards</td>
<td>12,682</td>
</tr>
<tr>
<td>Collins, Forsyth, Sanjayan</td>
<td>Securing longevity of reinforced concrete infrastructure through enhanced cathodic protection design</td>
<td>55,585</td>
</tr>
<tr>
<td>Collins, Birbilis, Molyneaux, Law, Blin and Berndt</td>
<td>Improved management of Australian port infrastructure by development of predictive ageing simulation</td>
<td>26,140</td>
</tr>
<tr>
<td>Currie, Richardson, Smyth, Vella-Broderick, Hine et al</td>
<td>Investigating transport disadvantage, well-being and social exclusion in metropolitan, regional and rural Victoria</td>
<td>346,042</td>
</tr>
<tr>
<td>Deletic, Fletcher</td>
<td>Could porous pavements be a part of the urban water solution?</td>
<td>46,812</td>
</tr>
<tr>
<td>Kodikara, Ranjith P.G.</td>
<td>Improvement of the performance of water-sensitive geomaterials using hydrophobic additives</td>
<td>25,364</td>
</tr>
<tr>
<td>Kodikara, Cull, Zhao, Bouazza, Davis, Burn, Moore</td>
<td>Prediction and controlling of pipe failures in buried water and gas pipe systems</td>
<td>240,361</td>
</tr>
<tr>
<td><strong>Collier Charitable Fund</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kodikara</td>
<td>Languide M4 Thermal Imager</td>
<td>3,000</td>
</tr>
<tr>
<td><strong>Co-Operative Research Centre Funding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haque</td>
<td>Rail CRC</td>
<td>6,859</td>
</tr>
<tr>
<td>Ranjith, Haque</td>
<td>CO2 CRC Scholarship</td>
<td>26,116</td>
</tr>
<tr>
<td>Deletic, Fletcher, Daly, Mudd</td>
<td>eWater</td>
<td>191,728</td>
</tr>
<tr>
<td><strong>CSIRO Flagship</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McCarthy</td>
<td>Scholarship</td>
<td>4,716</td>
</tr>
<tr>
<td>Magyar</td>
<td>Scholarship</td>
<td>21,155</td>
</tr>
<tr>
<td>Mitchell, Fletcher</td>
<td>Water for a healthy country</td>
<td>73,700</td>
</tr>
<tr>
<td>Zhao, Kodikara</td>
<td>Wealth from Oceans – subsea pipeline clusters</td>
<td>75,000</td>
</tr>
<tr>
<td><strong>Faculty of Engineering Small Grant Scheme</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al-Mahaidi</td>
<td>Enhancement of fire resistance of concrete structures strengthened with FRP and cementious bonding agents</td>
<td>8,000</td>
</tr>
<tr>
<td>Bambach</td>
<td>Strengthening metal structures with CFRP (Carbon Fibre Reinforced Polymer) for impact and blast loads</td>
<td>17,500</td>
</tr>
<tr>
<td>Bouazza</td>
<td>Soil improvement by microbiologically-induced mineral transformation</td>
<td>19,500</td>
</tr>
<tr>
<td>Collins</td>
<td>Improving the sustainability of built infrastructure using recycled aggregate from demolition waste to construct tubular structures</td>
<td>15,500</td>
</tr>
<tr>
<td>Mitchell/Fletcher</td>
<td>Trialling thin vegetated roofs: are they viable in Melbourne?</td>
<td>10,500</td>
</tr>
<tr>
<td>Ranjith</td>
<td>An investigation into the long term safe storage of carbon dioxide in coal seams</td>
<td>10,500</td>
</tr>
<tr>
<td>Investigators</td>
<td>Project title</td>
<td>Amount awarded</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Shen</td>
<td>A preliminary study of nanostructured high performance high strength concrete for high temperatures</td>
<td>15,500</td>
</tr>
<tr>
<td>Sun</td>
<td>An integrated and quantitative model for pollutant degradations in wastewater treatment wetlands</td>
<td>10,500</td>
</tr>
<tr>
<td>Forest and wood research and development corporation</td>
<td>Durability of isocyanate-based adhesives in engineered wood products</td>
<td>90,000</td>
</tr>
<tr>
<td>Industry-based research</td>
<td>Glued Laminated Timber Association</td>
<td>11,590</td>
</tr>
<tr>
<td>Adam</td>
<td>Asian Timber Products</td>
<td>16,000</td>
</tr>
<tr>
<td>Adam</td>
<td>Purbond AG (Switzerland)</td>
<td>30,000</td>
</tr>
<tr>
<td>Adam</td>
<td>N.F. McDonnell &amp; Sons</td>
<td>14,000</td>
</tr>
<tr>
<td>Al-Mahaidi</td>
<td>Worley Parsons</td>
<td>94,000</td>
</tr>
<tr>
<td>Al-Mahaidi</td>
<td>ARRB Group</td>
<td>45,091</td>
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<tr>
<td>Bouazza</td>
<td>Geotech</td>
<td>48,000</td>
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<tr>
<td>Bouazza</td>
<td>Golder Associates</td>
<td>38,301</td>
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<tr>
<td>Currie</td>
<td>Metlink</td>
<td>28,000</td>
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<tr>
<td>Currie</td>
<td>Department of Infrastructure</td>
<td>43,500</td>
</tr>
<tr>
<td>Deletic, Fletcher</td>
<td>Water Harvesting Technology Pty Ltd</td>
<td>358,814</td>
</tr>
<tr>
<td>Fletcher, Deletic</td>
<td>Melbourne Water (Biofilter Media)</td>
<td>85,000</td>
</tr>
<tr>
<td>Haque</td>
<td>Powerlink Queensland</td>
<td>21,818</td>
</tr>
<tr>
<td>Keller</td>
<td>Yarra Valley Water – Vortex</td>
<td>54,676</td>
</tr>
<tr>
<td>Keller</td>
<td>Barwon Water Region Corp</td>
<td>74,400</td>
</tr>
<tr>
<td>Kodikara</td>
<td>CSIRO Land and Water (two awards)</td>
<td>14,000</td>
</tr>
<tr>
<td>McCarthy</td>
<td>Environment Protection Authority</td>
<td>90,000</td>
</tr>
<tr>
<td>Mitchell</td>
<td>Melbourne Water – Stormwater</td>
<td>20,000</td>
</tr>
<tr>
<td>Rose</td>
<td>Eco Driver</td>
<td>28,950</td>
</tr>
<tr>
<td>Wong</td>
<td>Zip Innovation Pty Ltd 13935</td>
<td>13,935</td>
</tr>
<tr>
<td>Young</td>
<td>Victorian Government – Public Transport Chair</td>
<td>270,000</td>
</tr>
</tbody>
</table>

**Industry Scholarships**

| Ranjith/Darlington     | BHP Billiton                                                                 | 35,000         |

**New Staff Member Grant**

| Daly                   | Soil texture impact on gas-phase CO2 diffusivity                            | 20,000         |
| Gates                  | X-Ray imaging and far infrared spectroscopy of cation exchange in bentonite gels | 20,000         |
| Hatt                   | Understanding the long-term of phosphorus in biofiltration systems          | 20,000         |
| Shen                   | Characterization modelling and applications of ultra nano-crystalline diamond films | 20,000         |
| Sun                    | Direct treatment and recycle of domestic wastewaters using subsurface flow reed bed systems | 20,000         |
| Wang                   | An innovative approach to automatic freeway traffic incident detection       | 20,000         |

**State Government funding awards**

| Deletic, Fletcher      | Dept of Innovation Industry & Regional Development (FAWB project)           | 122,200        |
|                       | State Government contributors re: FAWB project                               | 5,100          |
| McCarthy, Deletic, Fletcher | Victorian Smart Water Fund (round 5), Project titled Stormwater reuse: Novel technologies and associated risk | 19,929         |
| Deletic, Fletcher, Mitchell | Smart Water Fund                                                              | 169,934        |
| **Total funding awarded in 2008** |                                                                            | **$3,521,127** |
4.3 Research activity in Centres (ITS, ISWR, eWater CRC, FAWB, MAPPS)

Institute of Transport Studies

The research activities of ITS (Monash) continued to grow in 2008 as evidenced by the 45 tier-one international journal and conference papers being published during the year. ITS (Monash) has increased its role in multi-disciplinary sustainability-related research. In conjunction with the Department of Psychological Studies, two projects were undertaken to enhance understanding of the role of driver training in reducing vehicle fuel consumption and emissions.

One of those projects, funded by Sustainability Victoria and the Cement Industry Federation, involved a field trial designed to measure the impact of EcoDriver training on the fuel consumed by 68 tonne B-Double vehicles which transport powdered cement. Over a 30km test circuit, the EcoDriver training enabled the drivers to reduce their fuel consumption, gear changes and brake applications by over 25%. Another project, funded by Austroads and undertaken in conjunction with the Monash University Accident Research Centre (MUARC) and the Industrial Design Department in the Faculty of Art and Design, examined the implications for Australia’s road system of emerging forms of private passenger vehicles. In conjunction with MUARC, ITS Monash researchers are also involved in a multi-million dollar research project concerning intersections. That project involves a fundamental re-assessment of how intersections are designed, and the role that advanced technology could play, to improve not only their operational performance but also to reduce the number and severity of crashes.

Reflecting the growth in the research activities, ITS (Monash) has seen continued increases in the number of students enrolled in research degrees with 17 Higher Degree Research students now enrolled.

Further details about the Institute can be found at its website at: civil.eng.monash.edu/its

Institute for Sustainable Water Resources (ISWR)

The Institute for Sustainable Water Resources within the Faculty of Engineering is located in the Department of Civil Engineering. The Institute is a Centre of Excellence for research, teaching and postgraduate training in areas related to the sustainable management of water resources. Its aim is to conduct research which is of both national and international importance. The Institute brings together relevant expertise from across the Faculty of Engineering and the broader University (particularly the Faculty of Arts and Faculty of Science) with the aim of enhancing collaboration to deliver innovative solutions to sustaining water resources. A number of major research initiatives have developed from within ISWR, such as the Facility for Advancing Water Biofiltration www.monash.edu/fawb.

In 2008, the Institute continued to lead and participate in a number of major research initiatives. It was a leading contributor to the Facility for advancing Water Biofiltration (see www.monash.edu), a joint venture research partnership between Monash University and EDAW (formerly Ecological Engineering) funded through the Department of Industry, Innovation and Training. The Institute’s researchers also developed a new granular stormwater filter, capable of being used for protecting waterways from pollution, and of filtering water for stormwater harvesting. The project involves a $1.6 million research contract with Water Harvesting Industries. Institute researchers are involved in several ARC projects, including an ARC Linkage on long-term sustainability of porous pavements and another on testing whether dispersed applications of water sensitive urban design methods across a catchment can result in a tangible improvement in receiving water health. The Institute was also the recipient of a SmartWater grant, providing funding for the development and testing of a novel granular stormwater filter system, located within the CERES environmental centre.

Further details about the Institute can be found on its website at: iswr.eng.monash.edu/

eWater CRC (Monash Node)

The eWater Cooperative Research Centre (eWater CRC) commenced in July 2005. Its aim is to build and support decision systems and models for total water cycle management in urban and rural catchments, integrating water quality and quantity, stream ecology and economics. This CRC has:

- nine industry partners,
- one local Government partner,
- 24 State Government partners,
- three Australian Government partners, and
- eight university partners (45 in total).

The Department of Civil Engineering is leading the development of the Model for Urban Stormwater Improvement Conceptualisation (MUSIC version 4). This software packages all of the latest research knowledge on stormwater quality and treatment, into a user friendly tool which is widely used across Australia. The new version will include new modules for infiltration and biofiltration, as well as much better analysis and reporting functionality. The Monash Node Director is Associate Professor Tim Fletcher.

Further details about the CRC can be found on its website at: www.ewatercrc.com.au/

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FAWB (Facility for Advanced Water Biofiltration)

The Facility for Advancing Water Biofiltration (FAWB) is a joint venture research facility between EDAW Australia and Monash University. It was established in 2005 with the support of $1.46 million in funding from the third round of the STI Infrastructure Grant Program and almost $1 million from Industry partners. FAWB aims at providing better and safer solutions for the on-site treatment and management of stormwater through improved stormwater biofiltration. In 2008 FAWB received several new grants (approximately $650,000 in funds) to conduct laboratory studies on new media type, monitor two systems in Melbourne and pilot the technology in Israel. FAWB initiated a large proposal on ‘Cities as Water Catchments’ that is now in the last stages of development.

Further details about the CRC can be found on its website at: www.monash.edu/fawb/

4.4 Research seminars

By visitors to the department

<table>
<thead>
<tr>
<th>Presenter</th>
<th>Seminar topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Stephen Foster Centre for Infrastructure Engineering and Safety, School of Civil and Environmental Engineering, University of New South Wales, Australia</td>
<td>Proposed changes to AS3600 and the use of low ductility steel</td>
</tr>
<tr>
<td>Professor Shane Murray, Head of Architecture, Monash University</td>
<td>Architecture and engineering: A fruitful relationship</td>
</tr>
<tr>
<td>Professor Pradip Banerji, Department of Civil Engineering, Indian Institute of Technology, Bombay, India</td>
<td>Structural health monitoring as a viable decision tool</td>
</tr>
<tr>
<td>Professor Christian Jakob, School of Mathematical Sciences, Monash University</td>
<td>Using weather forecasts and climate projections in decision making</td>
</tr>
<tr>
<td>Professor Wang Chien Ming, Director of Engineering Science Programme, National University of Singapore</td>
<td>Very large floating structures</td>
</tr>
<tr>
<td>Mr Marc Colella, WSP Cantor Seinuk Group New York, USA</td>
<td>World Trade Centre Site and General Redevelopment on the WTC site</td>
</tr>
<tr>
<td>Associate Professor Sanjaya Senadheera, Dept of Civil &amp; Environmental Engineering, Texas Tech University, Lubbock (Texas), USA</td>
<td>Bituminous prime coat applied on pavement base: Laboratory investigation and thermomechanics-based numerical modelling</td>
</tr>
<tr>
<td>Professor Rob Melchers, Centre for Infrastructure Performance and Reliability, School of Engineering, The University of Newcastle, NSW, Australia</td>
<td>Marine corrosion of structural steels – Turning data into engineering models</td>
</tr>
<tr>
<td>Professor Ahmed Benallal, Directeur de Recherche au CNRS, Head of the Mechanics &amp; Material Division, LMT – Cachan, France</td>
<td>Heterogeneous behaviour of AA5083 aluminium alloy in presence of dynamic strain ageing</td>
</tr>
<tr>
<td>Professor Rod McClure, Dr Peter Hillard and Ms Nimmi Candappa, Monash University Accident Research Centre (MUARC)</td>
<td>Overview of MUARC and road infrastructure and road safety strategies</td>
</tr>
<tr>
<td>Professor Sukalyan (Suku) Sengupta, Professor of Environmental Engineering, Civil &amp; Environmental Engineering Dept, University of Massachusetts, Dartmouth USA</td>
<td>Autotrophic biological denitrification for complete removal of nitrogen in decentralized wastewater treatment systems</td>
</tr>
<tr>
<td>Dr Craig Giaccio, Associate Director, Faber Maunsell (AECOM), Consulting Engineers in the Transportation Structures Team, London UK</td>
<td>Outline of design challenges specific to bridge and infrastructure engineering in the UK and Ireland</td>
</tr>
<tr>
<td>Derek Oehlers, Professor of Structural Engineering, University of Adelaide, Australia</td>
<td>The hunt for the elusive concept</td>
</tr>
</tbody>
</table>

Pipeline research at Monash Civil Engineering (MAPPS)

Researchers at the Department of Civil Engineering have developed a world-wide reputation for their research into both water and gas pipelines. With the aging of extensive pipeline systems that supply essential services to urban areas, the failures have become common incurring substantial economic, social and environmental losses to the communities. Fuelled by a linkage project within Australian Research Council with seven industry partners of water and gas utilities, Monash researchers have developed MAPPS (Management and Prediction of Pipe Bursts Group) which has undertaken research into issues such as reactive soil and climate effects on reticulation water and gas pipes, reticulation pipe failure prediction, thermography application to pipeline leak detection, and water chemistry effects on cement lined pipelines. More recently, through a CSIRO Cluster Project, they have started working on deep seabed pipelines, particularly on the axial response and fatigue analysis. Currently they are working on expanding this research to large diameter mains.

Further details about MAPPS can be found on its website at: civil.eng.monash.edu/expertise/geomechanics/mapps
By staff and postgraduate students

<table>
<thead>
<tr>
<th>Presenter</th>
<th>Seminar topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soheila Maduliat (Ms)</td>
<td>Behaviour of cold-formed channel sections in bending</td>
</tr>
<tr>
<td>Haydar Faleh (Mr)</td>
<td>A study of nanomaterials enhanced epoxy as adhesives of CFRP steel bonding under elevated temperatures</td>
</tr>
<tr>
<td>Mahmoud Mesbah (Mr)</td>
<td>A new methodology for optimization of transit priority in a transportation network</td>
</tr>
<tr>
<td>Scott Gould (Mr)</td>
<td>Incorporation of climate and soil influences into asset management models for water and gas reticulation pipes</td>
</tr>
<tr>
<td>Ehsan Mazloumi (Mr)</td>
<td>Bus travel time prediction</td>
</tr>
<tr>
<td>Edoardo Daly (Dr)</td>
<td>Jump processes; applications to eco hydrology</td>
</tr>
<tr>
<td>Fern Yong (Ms)</td>
<td>Could porous pavement be part of the urban water solution?</td>
</tr>
<tr>
<td>Dileeka Jasinge (Mr)</td>
<td>Effect of carbon dioxide sequestration on the behaviour of brown coal</td>
</tr>
<tr>
<td>Will Gates (Dr)</td>
<td>(&lt;i&gt;μ&lt;/i&gt;)-XAFS, (&lt;i&gt;μ&lt;/i&gt;)-NEXAFS, STXM, 3DMT, PCXRM, WAXS, SAXS, twenty-first century tongue twisters or simply, everything a nerd likes about synchrotrons</td>
</tr>
<tr>
<td>Mike Shackleton (Mr)</td>
<td>Benefits and impacts of transportation research</td>
</tr>
<tr>
<td>Nirajan Shiwakoti (Mr)</td>
<td>Simulating crowd dynamics under emergency conditions</td>
</tr>
<tr>
<td>Gavin Mudd (Dr)</td>
<td>Peak coal, peak copper, peak water: a fun peak at the sustainability of resources</td>
</tr>
<tr>
<td>Peter Bach (Mr)</td>
<td>CCTV Headquarters, Beijing – a structural design overview</td>
</tr>
<tr>
<td>Mohan Yellishetty (Mr)</td>
<td>Achieving environmental stewardship in iron and steel sector through application of life cycle analysis</td>
</tr>
<tr>
<td>Cintia Dotto (Ms)</td>
<td>Analysis of uncertainty in flow and water quality from a stormwater model</td>
</tr>
<tr>
<td>Ren Zhao (Mr)</td>
<td>Research of spalling of geopolymer concrete following exposure to suddensurface temperature rise</td>
</tr>
<tr>
<td>Richa Shukla (Ms)</td>
<td>Geo-sequestration of carbon dioxide and caprock</td>
</tr>
<tr>
<td>Alessandra Mendes (Ms)</td>
<td>Fire resistance of concrete made with slag blended cements</td>
</tr>
<tr>
<td>Siti Abdullah (Ms)</td>
<td>FRP rehabilitation of alkali aggregate reaction damaged concrete structures</td>
</tr>
<tr>
<td>Paul Grundy (Emeritus Professor)</td>
<td>Disaster reduction on coasts</td>
</tr>
<tr>
<td>Mark Karpovich (Mr)</td>
<td>Transport infrastructure and engineering projects based on transferred technology, financed in China</td>
</tr>
</tbody>
</table>

Structures postgraduate student, Mr Guohui Tan, won the Postgraduate Prize for the Best Departmental Seminar Attendance.

Structures postgraduate student, Mr Hussein Jama, won the Prize for the Best Seminar Presentation.

4.5 Publications

Book editing


Books and book chapters


Journal papers


Xiao, Z.G. , Yamada, K., Ya, S. and Zhao, X.L. 2008, ‘Stress analyses and fatigue evaluation of rib-to-deck joints in
steel orthotropic decks’, Int. J. of Fatigue, 30(8), 1387-1397.


Conference papers


4.6 Postgraduate research projects

<table>
<thead>
<tr>
<th>Student name</th>
<th>Project title</th>
<th>Main supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mahitha Cherukuvada (Ms)</td>
<td>Performance of earthen cover systems under various climatic conditions</td>
<td>Associate Professor J. Kodikara</td>
</tr>
<tr>
<td>Jason Ellerton (Mr)</td>
<td>The influence of plant traits on water and pollutant retention in biofiltration systems</td>
<td>Dr B. Hatt</td>
</tr>
<tr>
<td>Paul Hamer (Mr)</td>
<td>Monitoring the impacts of the Melbourne CBD parking levy</td>
<td>Professor G. Currie</td>
</tr>
<tr>
<td>Young-Sun Heo (Mr)</td>
<td>Fire resistance of high strength concrete</td>
<td>Associate Professor J. Sanjayan</td>
</tr>
<tr>
<td>Mau Chung Ip (Mr)</td>
<td>Filtration behaviour of cohesionless soils under cyclic loading</td>
<td>Dr A. Haque</td>
</tr>
<tr>
<td>Ehteshamul Kabir (Mr)</td>
<td>Filtration behaviour of granular soils under repeated load</td>
<td>Dr A. Haque</td>
</tr>
<tr>
<td>Iqbal Kabir (Mr)</td>
<td>Impacts of major road infrastructures on land use and city development</td>
<td>Professor W. Young</td>
</tr>
<tr>
<td>Harpreet Kandra (Mr)</td>
<td>Risk assessment of stormwater harvesting and recycling systems</td>
<td>Professor A. Deletic</td>
</tr>
<tr>
<td>Zulsam Kifli (Mr)</td>
<td>Urban transport strategies in developing countries</td>
<td>Professor W. Young</td>
</tr>
<tr>
<td>Dua K.S.Y. Klaas (Mr)</td>
<td>Indigenous water management: option for sustainable water conservation in karstic-dominated area in Rote Island, NTT Province, Indonesia</td>
<td>Dr G. Mudd</td>
</tr>
<tr>
<td>Samintha Perera (Ms)</td>
<td>Geomechanical effect of $C_{02}$ sequestration in black coal</td>
<td>Dr P.G. Ranjith</td>
</tr>
<tr>
<td>Tanveer Saeed (Mr)</td>
<td>Treatment and recycling grey water using hybrid constructed Wetlands</td>
<td>Dr Sun</td>
</tr>
<tr>
<td>Amir Sobhani (Mr)</td>
<td>Intersection safety analysis.</td>
<td>Professor W. Young</td>
</tr>
<tr>
<td>Binu Stanley (Mrs)</td>
<td>Improvement of soft Coode Island silt using lime-slag additives</td>
<td>Dr A. Haque</td>
</tr>
<tr>
<td>Guohui Tan (Mr)</td>
<td>Structural crashworthiness performance of vehicle roofs in rollover crashes</td>
<td>Dr M. Bambach</td>
</tr>
<tr>
<td>Ali Zavabeti (Mr)</td>
<td>Predicting driver behaviour</td>
<td>Dr M. Sarvi</td>
</tr>
<tr>
<td>Basim Abbas (Mr)</td>
<td>Durability of CFRP repaired structural members and their cyclic temperature and humidity</td>
<td>Associate Professor R.A. Al-Mahaidi</td>
</tr>
<tr>
<td>Siti Abdullah (Ms)</td>
<td>FRP rehabilitation of alkali aggregate reaction damaged concrete structures</td>
<td>Associate Professor R.A. Al-Mahaidi</td>
</tr>
<tr>
<td>Md Aftabuzzaman (Mr)</td>
<td>Public transport measures for road traffic congestion relief</td>
<td>Professor G. Currie</td>
</tr>
<tr>
<td>Rawa Al-Saify (Ms)</td>
<td>CFRP strengthening of concrete structures using nanomaterials modified adhesives</td>
<td>Associate Professor R. Al-Mahaidi</td>
</tr>
<tr>
<td>Ahmed Al-Shawaf (Mr)</td>
<td>Bond characteristics of CFRP strengthened steel members under extreme temperatures</td>
<td>Associate Professor R. Al-Mahaidi</td>
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<tr>
<td>Haider Al-Zubaidy (Mr)</td>
<td>FRP Strengthening of metal structures for impact and blast loads</td>
<td>Dr M. Bambach</td>
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<tr>
<td>Tao Bai (Mr)</td>
<td>The study of bond behaviour of CFRP reinforced steel plates under high-amplitude cyclic loading</td>
<td>Associate Professor R. Al-Mahaidi</td>
</tr>
<tr>
<td>Dale Browne (Mr)</td>
<td>Predicting and modelling the clogging of stormwater infiltration systems</td>
<td>Professor A. Deletic</td>
</tr>
<tr>
<td>Derek C.C. Chan (Mr)</td>
<td>Prediction and controlling of water and gas pipe failures and ground response using surveying and geophysical testing methods</td>
<td>Associate Professor J. Kodikara</td>
</tr>
<tr>
<td>Wai Loong Chong (Mr)</td>
<td>Lateral and uplift load capacity of single piles socketed into jointed rock mass</td>
<td>Dr A. Haque</td>
</tr>
<tr>
<td>David Kam Wai Choy (Mr)</td>
<td>Developing a framework for assessing the environmental sustainability of aquifer storage and recovery</td>
<td>Dr G. Mudd</td>
</tr>
<tr>
<td>Susanga Costa (Mr)</td>
<td>Modelling of shrinkage crack development in clay soils</td>
<td>Associate Professor J. Kodikara</td>
</tr>
<tr>
<td>Student name</td>
<td>Project title</td>
<td>Main supervisor</td>
</tr>
<tr>
<td>------------------------------</td>
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<td>------------------------------------------------------</td>
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<tr>
<td>Daniel Csikos (Mr)</td>
<td>Identifying measures of public transport reliability performance that are related to passenger perceptions</td>
<td>Professor G. Currie</td>
</tr>
<tr>
<td>Will Darlington (Mr)</td>
<td>Investigating of strength deformability and failure of mechanisms of rock slopes in large open pit mines</td>
<td>Dr P.G. Ranjith</td>
</tr>
<tr>
<td>Cintia Dotto (Ms)</td>
<td>Uncertainties and scale issues in stormwater pollution generation and treatment modelling</td>
<td>Professor A. Deletic</td>
</tr>
<tr>
<td>Haydar Faleh (Mr)</td>
<td>An investigation of the delamination of FRP composites from steel plates using the material point method</td>
<td>Associate Professor R. Al-Mahaidi</td>
</tr>
<tr>
<td>David Flower (Mr)</td>
<td>An integrated approach to modelling urban water systems</td>
<td>Dr V.G. Mitchell</td>
</tr>
<tr>
<td>Matthew Francey (Mr)</td>
<td>Pollutant generation from urban catchments</td>
<td>Professor A. Deletic</td>
</tr>
<tr>
<td>Kumari Gamage (Ms)</td>
<td>Fire resistance of CFRP plated concrete members</td>
<td>Associate Professor R. Al-Mahaidi</td>
</tr>
<tr>
<td>Joel Gnieel (Mr)</td>
<td>Investigation of the use of geogrid encasement for support of stone columns in very soft soils</td>
<td>Associate Professor A. Bouazza</td>
</tr>
<tr>
<td>Scott Gould (Mr)</td>
<td>Prediction and controlling of pipe failures in buried water and gas pipe systems</td>
<td>Associate Professor J. Kodikara</td>
</tr>
<tr>
<td>Maurice Guierrieri (Mr)</td>
<td>Development of an alkali activated slag based construction material for high fire risk infrastructures</td>
<td>Associate Professor J. Sanjayan</td>
</tr>
<tr>
<td>Tat Meng (Evan) Gwee (Mr)</td>
<td>Development of a new methodology to estimate the economic impacts of agglomeration economies in urban passenger rail projects</td>
<td>Professor G. Currie</td>
</tr>
<tr>
<td>Jimmy Haedir (Mr)</td>
<td>Development of high strength bollards</td>
<td>Dr M. Bambach</td>
</tr>
<tr>
<td>Siavash Hashemi (Mr)</td>
<td>Evaluation of the properties of several types of repair concretes</td>
<td>Associate Professor R. Al-Mahaidi</td>
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<tr>
<td>Hussein Jama (Mr)</td>
<td>The behaviour of tubular steel beams subjected to transverse blast loads</td>
<td>Dr M. Bambach</td>
</tr>
<tr>
<td>Dileeka Jasinge (Mr)</td>
<td>Effect of carbon dioxide sequestration on the behaviour of brown coal</td>
<td>Dr P.G. Ranjith</td>
</tr>
<tr>
<td>Victoria Johnson (Ms)</td>
<td>Transport disadvantage and social policy</td>
<td>Professor G. Currie</td>
</tr>
<tr>
<td>Mobashwhera Kabir (Mrs)</td>
<td>Modelling long-term groundwater rebound and recharge at Ranger uranium mine, Kakadu National Park</td>
<td>Dr G. Mudd</td>
</tr>
<tr>
<td>Mark Karpovich (Mr)</td>
<td>Transport, infrastructure and engineering projects based on transferred technology financed in China</td>
<td>Professor W. Young</td>
</tr>
<tr>
<td>Daniel Lean Yew Kong (Mr)</td>
<td>Development of a high fire resistant geopolymer based concrete</td>
<td>Associate Professor J. Sanjayan</td>
</tr>
<tr>
<td>Nurses Kurucuk (Ms)</td>
<td>Multi-scale studies of unsaturated granular geomaterials during one-dimensional compression</td>
<td>Associate Professor J. Kodikara</td>
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<tr>
<td>Sebastien Le Costumer (Mr)</td>
<td>Measurement and modelling of hydraulic and environmental performance of urban stormwater infiltration systems</td>
<td>Professor A. Deletic</td>
</tr>
<tr>
<td>Kok Yun Lee (Mr)</td>
<td>Incorporation of environmental effects into pavement design</td>
<td>Associate Professor J. Kodikara</td>
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<tr>
<td>Yong Li (Ms)</td>
<td>Modelling sediment behaviour in constructed stormwater wetlands</td>
<td>Professor A. Deletic</td>
</tr>
<tr>
<td>Hongbo Liu (Ms)</td>
<td>Fatigue behavior of CFRP sheets reinforced steel plates</td>
<td>Professor X-L Zhao</td>
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<tr>
<td>Hui Lu (Mr)</td>
<td>Fire resistance of composite tubular members</td>
<td>Professor X-L Zhao</td>
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<tr>
<td>David McCarthy (Mr)</td>
<td>Modelling microorganisms in urban stormwater</td>
<td>Dr V.G. Mitchell</td>
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<tr>
<td>Soheila Maduliati (Ms)</td>
<td>Inelastic behaviour of high strength steel channel sections in bending</td>
<td>Dr M. Bambach</td>
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<tr>
<td>Mirela Magyar (Ms)</td>
<td>Determining how the design of residential rainwater tanks affects water quality</td>
<td>Dr V.G. Mitchell</td>
</tr>
<tr>
<td>Timothy Martin (Mr)</td>
<td>Predicting sealed granular pavement deterioration at a road network level</td>
<td>Professor W. Young</td>
</tr>
<tr>
<td>Student name</td>
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<td>Main supervisor</td>
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<tr>
<td>Tony Matacin (Mr)</td>
<td>A rational method of specification of unbound geomaterials in road pavements</td>
<td>Associate Professor J. Kodikara</td>
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<tr>
<td>Ehsan Mazloumi (Mr)</td>
<td>The prediction of on-road public transport travel time and its variability</td>
<td>Professor G. Currie</td>
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<tr>
<td>Alessandra Mendes (Ms)</td>
<td>Fire resistance of concrete made with slag blended cements</td>
<td>Associate Professor J. Sanjayan</td>
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<tr>
<td>Mahmoud Mesbah (Mr)</td>
<td>‘A new methodology for optimisation of transit priority in a transportation network’</td>
<td>Dr M Sarvi</td>
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<tr>
<td>Sara Moridour (Ms)</td>
<td>Modelling the lane changing behaviour of heavy vehicles in congested traffic conditions</td>
<td>Dr M. Sarvi</td>
</tr>
<tr>
<td>Michael Moffatt (Mr)</td>
<td>The influence of multiple axle loads on pavement performance</td>
<td>Professor W. Young</td>
</tr>
<tr>
<td>Hani Nahlawi (Mr)</td>
<td>Unsaturated behaviour of geotextiles</td>
<td>Associate Professor A. Bouazza</td>
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<tr>
<td>Arun Patil (Mr)</td>
<td>Research and development of a scientific model for the accreditation and quality assurance in engineering education.</td>
<td>Associate Professor G. Codner</td>
</tr>
<tr>
<td>Zhu Pan (Mr)</td>
<td>Investigation of geopolymer based concretes for the construction of high fire risk infrastructures</td>
<td>Associate Professor J. Sanjayan</td>
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<tr>
<td>Hussein Sadiq (Mr)</td>
<td>Steel structure - progressive collapse of steel structures in fire</td>
<td>Dr B. Wong</td>
</tr>
<tr>
<td>Matthew Sentry (Mr)</td>
<td>Investigation of Fibre Reinforced Polymer (FRP) strands as an alternative for steel strands in High Capacity Ground Anchors</td>
<td>Associate Professor A. Bouazza</td>
</tr>
<tr>
<td>Mike Shackleton (Mr)</td>
<td>Quality and impact of transportation research</td>
<td>Professor W. Young</td>
</tr>
<tr>
<td>Nirajan Shiwakoti (Mr)</td>
<td>Simulating crowd dynamics under emergency conditions</td>
<td>Dr M. Sarvi</td>
</tr>
<tr>
<td>Richa Shukla (Ms)</td>
<td>Geosequestration of carbon dioxide and caprock integrity</td>
<td>Dr P.G. Ranjith</td>
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<tr>
<td>Jawdat Tashan (Mr)</td>
<td>Non Destructive Tests - Evaluation of concrete structures using non destructive tests (NDT)</td>
<td>Associate Professor R. Al-Mahaidi</td>
</tr>
<tr>
<td>Roger Toleman (Mr)</td>
<td>Parting of the Ways? Toll Roads and Sustainability in Australia</td>
<td>Associate Professor G. Rose</td>
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<tr>
<td>Margot Turner (Ms)</td>
<td>Environmental consequences of water allocation proposals</td>
<td>Associate Professor G. Codner</td>
</tr>
<tr>
<td>Anke Wendelborn (Ms)</td>
<td>Zinc and copper behaviour during stormwater aquifer storage and recovery in sandy aquifers</td>
<td>Dr G. Mudd</td>
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<tr>
<td>Matthew Wightwick (Mr)</td>
<td>Improvement of the performance of water-sensitive geomaterials using hydrophobic additives</td>
<td>Associate Professor J. Kodikara</td>
</tr>
<tr>
<td>Mohan Yellishetty (Mr)</td>
<td>Achieving environmental stewardship in iron and steel sector through application of life cycle analysis</td>
<td>Dr P.G. Ranjith</td>
</tr>
<tr>
<td>Richard Yeo (Mr)</td>
<td>Effects of emerging large road freight vehicles on the performance of typical Australian road pavements</td>
<td>Professor W. Young</td>
</tr>
<tr>
<td>Chui Fern Yong (Ms)</td>
<td>Could porous pavements be a part of the urban water solution?</td>
<td>Professor A. Deletic</td>
</tr>
<tr>
<td>David Young (Mr)</td>
<td>Protecting occupants in vehicle rollover crashes</td>
<td>Dr M. Bambach</td>
</tr>
<tr>
<td>Ren Zhao (Mr)</td>
<td>Investigation of spalling of geopolymer based concrete of high fire risk infrastructures.</td>
<td>Associate Professor J. Sanjayan</td>
</tr>
<tr>
<td>Yaron Zinger (Mr)</td>
<td>Advancing stormwater biofilter technologies</td>
<td>Associate Professor T. Fletcher</td>
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4.7 Theses accepted for Higher Degree in 2008

MEngSc (Research)

<table>
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<tr>
<th>Last name</th>
<th>First name</th>
<th>Supervisor(s)</th>
<th>Thesis title</th>
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<tbody>
<tr>
<td>Carpenter</td>
<td>Lisa</td>
<td>T. Ladson, W. Young</td>
<td>Practicality of the index of stream condition field survey sampling program</td>
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<td></td>
<td></td>
<td>and J. Peterson (Ext)</td>
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<td>Cherukuvada</td>
<td>Mahitha</td>
<td>J. Kodikara</td>
<td>Simulted performance of earthen cover layers under various climatic conditions</td>
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<tr>
<td>Kabir</td>
<td>Ehteshamul</td>
<td>Dr A. Haque</td>
<td>Filtration behaviour of subballast materials under cyclic load</td>
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PhD

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<th>Supervisor(s)</th>
<th>Thesis title</th>
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<tbody>
<tr>
<td>Adam</td>
<td>Constantine</td>
<td>H.R. Milner</td>
<td>Advanced strengthening techniques applied to timber bridges with prefabricated decks</td>
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<tr>
<td>Fawzia</td>
<td>Sabrina</td>
<td>R. Al-Mahaidi/X.L. Zhao</td>
<td>Bond characteristics between steel and carbon fibre reinforced polymer (CFRP) composites</td>
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<tr>
<td>Hatt</td>
<td>Belinda</td>
<td>T. Fletcher/A. Deletic</td>
<td>Filtration technologies for stormwater harvesting</td>
</tr>
<tr>
<td>Khalaf</td>
<td>Hussein</td>
<td>P. Grundy</td>
<td>Risk-based assessment of loading on short span bridges</td>
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<tr>
<td>Le Coustumer</td>
<td>Sebastien</td>
<td>T. Fletcher/ A. Deletic</td>
<td>Clogging and heavy metal removal efficiency of stormwater infiltration systems for stormwater management</td>
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<tr>
<td>Liu</td>
<td>Hongbo</td>
<td>X.L. Zhao/R. Al-Mahaidi</td>
<td>Fatigue behaviour of CFRP reinforced steel plates</td>
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<tr>
<td>Martin</td>
<td>Timothy</td>
<td>W. Young/J. McLean (Ext)</td>
<td>Predicting sealed granular pavement deterioration at a road network level</td>
</tr>
<tr>
<td>McCarthy</td>
<td>David</td>
<td>G. Mitchell/A. Deletic/C. Diaper (Ext)</td>
<td>Modelling micro-organisms in urban stormwater</td>
</tr>
<tr>
<td>Siriwardene</td>
<td>Nilmini</td>
<td>A. Deletic/T. Fletcher</td>
<td>Development of an experimentally-derived clogging prediction method for stormwater infiltration systems</td>
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<tr>
<td>Wilkinson</td>
<td>Alexander</td>
<td>A. Haque/J. Kodikara</td>
<td>Stabilisation of railway subgrades by lime slurry pressure injection</td>
</tr>
<tr>
<td>Wendelborn</td>
<td>Anke</td>
<td>G. Mudd/A. Deletic</td>
<td>Zinc and copper behaviour during stormwater aquifer storage and recovery in sandy aquifers</td>
</tr>
</tbody>
</table>
4.8 Graduating class of 2008 (postgraduate students)

Master of Engineering Science (Research)
- Lisa Carpenter
- Derek Chun Chuen Chan
- Mahitha Cherukuvada
- Ehteshamul Kabir

Master of Infrastructure Engineering and Management
- Dominee June Tydd BE(Civil)
- Jamshid Zareie
- Katherine Robina Browning
- David William Hemmings
- Dipendra Raj Sharma

Master of Traffic
- Goran Robert Bacelic
- Matthew Gardiner
- Lauren Michelle O’Meara
- Andrew James Somers BE(Hons)(Civil) BCom MTrans
- Jun Hyup So
- Sanmugathasan Sooriakumaran
- Melinda Jayne Tickle BE(Civil) Queensland
- Haider Yousif

Master of Transport
- Queenie Hoi Wai Siu
- Knowles Jeffrey Tivendale Burban&RegPlan UNE
- Mark Alexander
- Robert John Darbyshire
- Damien Joel Smith

Master of Transport and Traffic
- Kevin John Flynn

Postgraduate Diploma in Infrastructure Engineering and Management
- Kenneth James Allen
- Thyagie Samika Wettasinghe

Postgraduate Diploma in Transport and Traffic
- Aaron John Gale
- Adam John Cracknell

Graduate Certificate in Transport and Traffic
- David Sykes
- Christopher Keith Weavers

Graduate Certificate in Infrastructure Engineering and Management
- Glen Steven Millott
- Aruna Welgama

PhD
- Dr Constantine Y. Adam
- Dr Matthew Byrne
- Dr Sabrina Fawzia
- Dr Belinda Hatt
- Dr Hussein Khalaf
- Dr Tim Martin
- Dr Nilmini Siriwardene
- Dr Alexander Wilkinson

Postgraduate Diploma in Infrastructure Engineering and Management
- Kenneth James Allen
- Thyagie Samika Wettasinghe

Postgraduate Diploma in Transport and Traffic
- Aaron John Gale
- Adam John Cracknell

Graduate Certificate in Transport and Traffic
- David Sykes
- Christopher Keith Weavers

Graduate Certificate in Infrastructure Engineering and Management
- Glen Steven Millott
- Aruna Welgama

PhD
- Dr Constantine Y. Adam
- Dr Matthew Byrne
- Dr Sabrina Fawzia
- Dr Belinda Hatt
- Dr Hussein Khalaf
- Dr Tim Martin
- Dr Nilmini Siriwardene
- Dr Alexander Wilkinson
5. Services

5.1 Contribution to professional organisations

Al-Mahaidi, Riadh (Associate Professor)
Member, ACI-ASCE Committee 447 ‘Finite Element Analysis of Reinforced Concrete Structures’
Convener, ACI-ASCE 447 subcommittee on ‘Finite element modelling for the repair and rehabilitation of RC and masonry structures’
Member, American Concrete Institute ACI Committee 440 ‘Fibre Reinforced Polymer Reinforcement’
Founding member, Polymer Composites in Construction Steering Committee, Composites Institute of Australia
Member, Organising Committee, Asia-Pacific Conference on FRP in Structures
Member, Standards Australia Committee BD-101, ‘Retrofitting Structures by Plating’
Member, Organising Committee and Int. Scientific Committee, Composites Institute of Australia
Member, Int. Advisory Panel, Int. Symposium on Brittle Matrix Composites to be held in Warsaw Poland, Oct 09
Member, Int. Advisory Committee, GeoCongress-2008, ASCE, New Orleans (USA) (March 2008)
Chair, Session on Environmental Geomechanics: Testing, modelling and simulation, GeoCongress 2008
Co-Chair, Session on Geosynthetics for polluted sub-soils, GeoAmericas08, Cancun Mexico (March 2008)
Chair, Session on Geosynthetics in Mining Applications, GeoAmericas08
Chair, Session on Geoenvironmental Engineering, 12th IACMAG Conf. 2008, Goa India
Member, Scientific Committee, 9th Int. Geosynthetics Conference, Brazil, to be held in 2010
Member, Scientific Committee, 1st African Regional Geosynthetics Conf., Cape Town, South Africa, 2009
Member, Scientific Committee, 7th French National Geosynthetics Conf., Nantes France, 2009
Panel member, Landfill Award for the Waste Management Association of Australia

Bambach, Michael (Dr)
Member, Local Scientific Committee, 5th Int. Conf. in Thin-Walled Structures, held in Brisbane, June
Member, Organising Committee and Int. Scientific Committee for Australian Structural Engineering Conf., July

Bouazza, Malek (Associate Professor)
Member, Int. Geosynthetics Society Council
Vice-President, Australasian Chapter of International Geosynthetics Society (IGS)
Chair, Education and Asian activities committees, IGS

Currie, Graham (Professor)
Member, Transport and Social Inclusion Committee, Melbourne
Member, Minister for Public Transport’s Victorian Road-Based Public Transport Advisory Group, Melbourne
Member, Academic Network, Union Internationale des Transports Publics (UITP), France
Member, US Transportation Research Board – Committee AP050-Bus Transit Systems, Committee AP975-Light Rail Transit Systems, Committee AP025-Public Transportation Planning and Development, USA
Member, Australian Capital Territory Light Rail Reference Group
Member, Scientific Committee, Transportation Research Board Annual Meeting 2008, held in Washington DC, USA, January
Member, Organising Committee, 9th Int. Transport Survey Methods Conference 2011

Deletic, Ana (Professor)
Chair, UNESCO IHP-VI Data for Integrated Urban Water Management
Chair, Int. Working Group on Data and Models (under JCUD of IWA/IAHR)
Australian Representative, Committee of Sewer Systems and Processes Working Group, working under Joint Urban Drainage Committee of IWA and IAHR
Member, Data and Modelling Working Group, Joint Committee on Urban Drainage of IWA and IAHR
Elected Member, Joint Committee on Urban Drainage (under IWA and IAHR)
Member, Scientific Committee, 11th Int. Conference on Urban Drainage, held in Edinburgh, Scotland, August
Member, Scientific Committee, 8th Int. Conference on Urban Drainage Modelling held in Tokyo, Japan, April

Codner, Gary (Associate Professor)
Chair, IEAust College of Environmental Engineers

Collins, Frank (Dr)
Member, ACI Committee 222 on ‘Corrosion of metals in concrete’
Member, ACI Committee 207 on ‘Mass concrete’
Member, RILEM (Reunion Int. des Laboratoires et Experts des Materiaux), TC-217-PRE
Fletcher, Tim (Associate Professor)
Member, Water Sensitive Urban Design Working Group, Joint Committee on Urban Drainage of IWA and IAHR
Member, Data and Modelling Working Group, Joint Committee on Urban Drainage of IWA and IAHR
Member, Scientific Committee, 9th Int. Conf. on Computing and Control for the Water Industry, to be held in Leicester, UK in September 2009
Member, Scientific Committee, 7th International Conference on Sustainable Techniques and Strategies for Urban Water Management (NOVATECH 2010), to be held in Lyon, France, in July 2010

Gates, Will (Dr)
Founder Member, Soft X-ray Beamline Advisory Panel to develop microspectroscopy and imaging capabilities on the soft X-ray beamline at the Australian Synchrotron
Chair, Clay Minerals Society Nominations Committee
Co-Chair, Clay Minerals Society Annual Meetings, Session on ‘Spectroscopic Insight of Reactions of Iron in Clays and Clay Minerals’, Billings Montana, USA, June

Kodikara, Jayantha (Dr)
Member, Council of the Centre for Pavement Engineering Education
Member, Austroads Committee on Road Stabilisation
Member, Australian Standard Committee on Soil Stabilisation
Member, AGS, Victorian Chapter Committee
Member, Council on Pavement Education Inc
Member, Int. Advisory Committee, 12th IACMAG Conference held in Goa, India

Mitchell, Grace (Dr)
Member, Committee of the Victorian Water Engineering Branch, Engineers Australia
Corresponding member, National Committee for Water Engineering of Engineers Australia
Member, Data and Modelling Working Group, Joint Committee on Urban Drainage of IWA and IAHR
Member, National Working Group for National Stormwater Recycling Guidelines

Mudd, Gavin (Dr)
Elected member, Victorian Committee of the Society for Sustainability and Environmental Engineering (SSEE) Branch, Engineers Australia
Representative, Working Group for new booklet on Leading Practice Sustainable Development for Risk Assessment and Management (under the auspices of Commonwealth DITR).
Member, Peer Review Committee, 3rd Int. Conference on Sustainability Engineering and Science, held in Auckland, NZ, December
Member, Scientific Committee, Int. Conf. on Sustainability and Environmental Engineering, to be held in Melbourne VIC Australia, in November 2009

Ranjith, P.G. (Dr)
Member, American Society of Civil Engineers (ASCE)
Member, Award Panel for Victorian Construction Award
Member, International Advisory Committee, 12th IACMAG Conference held in Goa, India

Rose, Geoff (Associate Professor)
Member, Advisory Committee for the ‘Bicycle Research Centre’ established by Bicycle Victoria
Member, IEAust National Committee on Transport
University Representative, US Transportation Research Board
Member, US Transportation Research Board, Committee ABE50 Travel Demand Management
University Representative, US Transportation Research Board

Sanjayan, Jay (Associate Professor)
President, Concrete Institute of Australia, Victoria Branch
Member, Permanent Committee of the International Association of Bridge and Structural Engineers
Member, Concrete Structures (WC3) of the International Association of Bridge and Structural Engineers
Member, Committee 233 – Ground Slag in Concrete (voting member), American Concrete Institute
Member, Committee 216 – Fire Resistance and Fire Protection of Structures (voting member), American Concrete Institute

Sarvi, Majid (Dr)
Member, Engineers Australia, Transport Branch
Chair, Organizing Committee of the Third Int. Symp. on Transport Simulation, Australia

Sun, Guangzhi (Dr)
Member, Constructed Wetland Association

Wang, Yibing (Dr)
Member, Institute of Electrical and Electronic Engineers (IEEE)
Member, IEEE Society of Intelligent Transportation Systems
Member, Paper Review Sub-Committee, Freeway Operation Committee,
Transportation Research Board of the National Academies (USA)
Member, Scientific Committee, Transportation Research Board Annual Meeting, held in Washington DC, USA, January
Member, Int. Program Committee, 3rd Int. Symp. of Transport Simulation, held in Gold Coast QLD, August
Member, Scientific Committee, IEEE Int. Conf. on Vehicular Electronics and Safety, held in Columbus Ohio, USA, September
Member, Int. Program Committee, IEEE Int. Conf. on Intelligent Transportation Systems 2008, held in Beijing, China, October

Wong, Bill (Dr)
Member, Engineers Australia Structural Branch Committee, Victoria
Member, Organising Committee for the Aust. Structural Engineering Conference, Melbourne
Member, Organising Committee and Int. Scientific Committee, Australian Structural Engineering Conference held in Melbourne, June

Young, William (Professor)
Member, Standards Association of Australia, Parking Committee
Member, Scientific Committee, 23rd ARRB Conference held in Adelaide SA, July
Member, Scientific Committee, 2008 Australian Transport Research Forum (ATRF) held in Gold Coast, October

Zhao, Xiao-Ling (Professor)
Chairman, IIW Subcommission XV-E on Tubular Structures
Chairman, IIIC (International Institute for FRP in Construction) working group on FRP-strengthened metallic structures
Member, Int. Scientific Committee, 12th Int. Symposium on Tubular Structures, held in Shanghai, China, October
Member, Int. Scientific Committee, 10th Int. Symposium on Structural Engineering for Young Experts, held in Changsha, China, October
Member, Int. Scientific Committee, 5th Int. Conf. on Advanced Composite Materials in Bridges and Structures, held in Winnipeg Canada, September

Member, Int. Scientific Committee, The Fourth Int. Conf. on FRP Composites in Civil Engineering (CICE 2008), held in Zurich, Switzerland, July
Member, Int. Scientific Committee, Asia-Pacific Conf. on FRP in Structures (APIFS 2009), to be held in Korea, December 2009.

5.2 Editorial services

Al-Mahaidi, Riadh
(Associate Professor)
Member, Editorial Advisory Board, Open Construction and Building Technology Journal, Bentham Science Publishers
Member, Editorial Advisory Board, Open Materials Science Journal, Bentham Science Publishers
Reviewer of the following journals: J. of Engineering Mechanics; J. of Structural Engineering; ACI Structural Journal; ASCE Composites in Construction Journal; Composites Part B Journal; Open Construction and Building Technology Journal; Advances in Structural Engineering Journal; J. of Thin Wall Structures
Reviewer, Grants for the Qatar National Research Fund (QNRF), Qatar Foundation

Bambach, Michael (Dr)
Reviewer of the following journals: J. of Engineering Mechanics (ASCE); J. of Structural Engineering (ASCE); Advances in Structural Engineering; Journal of Thin Walled Structures

Bouazza, Malek (Associate Professor)
Member, Editorial Board of the International Journal of Geotextiles and Geomembranes
Member, Editorial Board of the International Journal of Lowland Technology
Member, Editorial Board of Geosynthetics International
Member, Editorial Board of the Journal of Geotechnical & Geoenvironmental Engineering
Member, Editorial Board of the Journal of Geotechnical and Geological Engineering
Panel Member, Landfill Award, Waste Management Association of Australia
Panel Member, Awards from IGS
Examiner, Doctoral thesis at University Joseph Fourier, Grenoble France, September

Collins, Frank (Dr)
Reviewer for the following journals: ACI Materials Journal; Int. J. of Advances in Structural Engineering; Fire Safety J.; Corrosion and Materials J.; Cement and Concrete Composites J.
Reviewer, RILEM TC-217-PRE ‘Progress of recycling in the built environment’
Member, ACI Committee 222 on Corrosion of metals in concrete
Member, ACI Committee 506.1 on Shotcrete for underground support
Member, ACI Committee 207 on Mass Concrete
Member, ACI Committee 365 on Service life prediction of concrete structures
Member, Australian Standards Committees: CE-018-00-01 on Piling Code AS2159 and AS3600; Building Code of Australia
OzReader, ARC for Discovery projects for funding commencing in 2009

Currie, Graham (Professor)
Member, Editorial Board, Road and Transport Research Journal
Guest Editor, Journal of Transport Geography (Special Issue on Thredbo 10th Conf.)
Member, Editorial Advisory Board, Institution of Civil Engineers (UK), Transport Journal
Deletic, Ana (Professor)
Reviewer for the following journals: Water Research, Chemosphere, Journal of Environmental Management, Urban Water
ARC, OzReader

Fletcher, Tim (Associate Professor)
Member, Editorial Board of Urban Water, UK
Reader, ARC Discovery and Linkage projects

Gates, Will (Dr)
Associate Editor, Clay and Clay Minerals
Member, Editorial Board, J. of Applied Clay Science
Special Publications Editor, Clay Minerals Society
Reviewer of the following journals: Applied Clay Science, J. of Near Infrared Spectroscopy; Geosynthetics International; Geotextiles and Geomembranes; J. of Geotechnical and Geoenvironmental Engineering; Clays and Clay Minerals; Molecular Modeling; Colloids and Interface Science; Vibration Spectroscopy

Haque, Asadul (Dr)
Reviewer, Canadian Geotechnical Journal

Kodikara, Jayantha (Associate Professor)
Associate Editor, Canadian Geotechnical Journal
Reviewer of the following journals: Canadian Geotechnical Journal; Geotechnical Testing Journal; Computer and Geotechnics

Mitchell, Grace (Dr)
Associate Editor, Australian J. of Water Resources, Engineers Australia
Reviewer of the following journals: J. of Environmental Management, Landscape and Urban Planning, Environmental Management, Water Resources Management

Mudd, Gavin (Dr)
Reviewer of the following journals: Environmental Science and Technology, Journal of Hazardous Materials, Geochimica and Cosmochimica Acta, Environmental Science and Technology

Ranjith, P.G. (Dr)
Reviewer, PhD Thesis from University of Queensland
Reviewer, Grant Proposal by European Commission (Cordis)

Rose, Geoff (Associate Professor)
Reviewer of the following journals: IEEE Journal of Intelligent Transport Systems; ASCE J. of Transportation Engineering; Transport Policy, Transportmetrica, Intelligent Transport

Shen, Luming (Dr)
Reviewer of the following journals: AAIA Journal, Int. Journal of Solids and Structures

Sun, Guangzhi (Dr)
Reviewer of the following journals: Ecological Engineering, Journal of Hazardous Materials, Engineering in Life Sciences, Chemosphere, Desalination, Process Biochemistry

Wang, Yibing (Dr)
Associate Editor, IEEE Transactions on Intelligent Transportation Systems
Associate Editor, Int. J. of Vehicle Information and Communication Systems
Member, Editorial Board, the Open Transportation Journal and Transportation Research Part C
Reviewer of the following journals: Transportation Research Part C-Emerging Technologies, Transportation Research B, Transportation Research Record, The Open Transportation Journal, IEEE Transactions on Control Systems

Wong, Bill (Dr)
Grant Referee, Australian Research Council (Discovery Grant Applications)

Young, William (Professor)
Grant Referee, Australian Research Council
Grant Referee, Research Council of the University of Kuwait

Zhao, Xiao-Ling (Professor)
Member, Editorial Board, Thin-Walled Structures
Member, Editorial Board, International Journal of Structural Stability and Dynamics
Member, Editorial Board, Advanced Structural Engineering
5.3 Services to expert bodies and expert advice

Al-Mahaidi, Riadh (Associate Professor)
Consultant, Iraq Higher Education Committee, London UK

Fletcher, Tim (Associate Professor)
Research Expert Representative, Melbourne Water Waterways Advisory Committee

Mudd, Gavin (Dr)
Advisor, Mining issues
Environment representative on Working Group, Federal DITR, for two new booklets – Leading Practice Sustainable Development for Tailings – Acid Mine Drainage

Ranjith, P.G. (Dr)
Consultant, adsorption and desorption testing, Aachen University, Germany

Rose, Geoff (Associate Professor)
Advisor, Transport for London – meetings and site visits, June
Research Project Reviewer for the Oregon Transportation Research and Education Consortium, USA

Wang, Yibing (Dr)
Examiner, PhD Defence at the Delft Technical University, Delft Netherlands, October

5.4. External seminars, courses, workshops and special presentations

Al-Mahaidi, Riadh (Associate Professor)
Special teaching sessions for 2+2 Program students at Central South University, School of Civil Engineering and Architecture, Changsha China, June

Bouazza, Malek (Associate Professor)
IGS Short course on Geosynthetics, in Shanghai, China, June
Short course on Geosynthetics in Environmental Engineering, at Griffiths University, Gold Coast, October

Currie, Graham (Professor)
Seminar on ‘New Advances in Transit Planning’ and Industry training course on ‘Public Transit Planning’ at the University of Toronto, Ontario Canada, June
National Workshop on Urban Transport Modelling, Australian Government, Dept of Infrastructure, Transport, Regional Development and Local Government, March
External Expert Course Presentation, UITP Int. Course on Management for Public Transport, on ‘Conflicting Objectives in Transit Planning – Applying the analytical hierarchy process to achieve consensus’
Industry Short Course on Public Transit Planning, University of Toronto, Canada, June
Industry Short Course in Public Transport Planning, Sydney NSW and Auckland NZ, November
Presentations on ‘Olympic Games Transport, Lessons for London’, at the Transport Operations Research Unit, University of Newcastle Upon Tyne, England UK and at the School of Geosciences, University of Aberdeen, Scotland UK, January-February
Presentation, Research Project entitled ‘Olympic Games Travel Demand Management Approaches and Experience’, to the London 2012 Olympic Games Delivery Authority, UK, January
Key Note Presentation, ‘Investigating Links between Transport Disadvantage, Social Exclusion and Well Being in Melbourne, Australia – Preliminary Results’ to the Norwegian Institute of Transport Economics, Oslo Norway, January
Presentation on ‘Approaches on a European Union FL7 project bid – Mobility Access’ at the University of Newcastle Upon Tyne, England UK, June
Presentation to the Garnaut Climate Change Review Public Forum 5: Transport, Planning and the Built Environment Presentation ‘Equity Issues in Climate Change Responses’
Presentation to the World Bank and World Resources Institute Conference on ‘Bus Rapid Transit and Transit Oriented Development’, Washington DC USA
Presentation to the Western Transport Alliance-Passenger Rail Forum, Melbourne Public Transport – Beyond MOTC, Melbourne VIC, February
Presentation to the Federal Standing Committee on Transport – Workshop on Transport Modelling ‘Public Transport’, Canberra ACT
Presentation to the Planning Institute of Australia – Transport Planning Chapter, on Challenges for the Transport Planning Profession
Presentation on ‘Modelling Travel Demand Management’, National Workshop on Urban Transport Modelling convened by the Bureau of Infrastructure, Transport and Regional Economics, Canberra ACT
Seminar on ‘Cities of the Future’ to the Williamson Community Leadership Program, May
Presentation on ‘Melbourne Public Transport Reforms’ to a delegation of the Land Transport Authority of Singapore, May
Seminar on ‘Growing Melbourne Bus Services’ to the Transport Branch of Engineers Australia, March
Seminar to the Transport Committee of Cabinet, Victorian Government, on ‘On-Road Public Transport and the Management of Congestion’, June
Workshop on ‘Sustainable Transport and Canberra’ for ACT Planning and Land Authorities Sustainable Communities Program, September
Presentation on ‘Congestion Tax: A solution?’ to the Committee for the Economic Development of Australia, October
Presentation on ‘Transport on the Edge – Transport Needs and Nillumbik’ to the Nillumbik Shire Council Transport Forum, October
Presentation on ‘Sustainable Transport and Canberra’ to the ACT Light Rail Round Table, October
Presentation on ‘From Incrementalism to Transformational Change’ to the Australian Davos Connection Infrastructure 21 Summit, Brisbane, October

Deletic, Ana (Professor)
FAWB Biofiltration workshops, Adelaide SA, June

Workshop on design guidelines for biofiltration
Presentation at Imperial College, Civil Engineering, London UK, September
University Workshops at Wuhan, Changsha and Shanghai, China, November

Fletcher, Tim (Associate Professor)
FAWB Biofiltration workshops, Adelaide SA, June

Short courses in Design and Construction of biofiltration and infiltration systems
Workshop on design guidelines for biofiltration

Hatt, Belinda (Dr)
Workshop on design guidelines for biofiltration
FAWB Biofiltration workshops

Mitchell, Grace (Dr)
Invited Presentation, Innovation and Utilities Conference, Siemens and South East Water, May

Mudd, Gavin (Dr)
Invited Presentations on Mining and Water issues for Pacific Economic Cooperation Council (PECC) Int. Project on Water in the Pacific, in Noumea, New Caledonia, May

Sarvi, M. (Dr)
Presentation of research at Tokyo University, Tokyo Metropolitan University (Intelligent Transport Lab), December
Presentation of research at the American University of Sharjah and American University of Dubai, UAE, January

Ranjith, P.G. (Dr)
Presentation of research on Adsorption and Desorption at Shell Netherlands and Delft University, Netherlands, November

Rose, Geoff (Associate Professor)
National Workshop on Urban Transport Modelling, Australian Government, Dept of Infrastructure, Transport, Regional Development and Local Government, Canberra ACT, March
Seminar, Engineers Australia on ‘Sustainable Transport: What is achievable’, March
Presentation to Transport Subcommittee meeting of Cement Industry Federation, on ‘EcoDriver Training: Results from the Cement Industry Pilot Field Trial’, May
Seminar on ‘Alternative Vehicles and their implications for the Road Transport System’, at Imperial College and Transport for London Authority, London UK, June
Seminar on ‘Appraisal and evaluation of travel demand management measures’, at the Centre for Transport and Society, University of West England, Bristol UK, June

Wang, Yibing (Dr)
Seminars on ‘Freeway Network Traffic Modelling, Surveillance and Control’ at the College of Transportation Engineering in Beijing, Jiaotong University and Tongji University, the National Intelligent Transportation Centre, China, April
Seminar on ‘Real-time freeway network traffic surveillance and local ramp metering in the case of distant downstream bottlenecks’ for the Monash-City Link-Westgate Update Project Team, VicRoads, May
Seminar on ‘A joint state and parameter estimation approach to real-time freeway network traffic state estimation and incident detection’ at the Department of Transport Planning and Management, Technical University of Delft, Netherlands, October

Zhao, Xiao-Ling (Professor)
Presentation on Civil Engineering at the Careers Night of Scotch College, Hawthorn VIC, April

5.5 Consulting and contract research
Al-Mahaidi, Riadh (Associate Professor)
Investigation of damages caused by alkali-aggregate reaction on prestressed concrete bridge decks for ARRB, RTA, VicRoads and Queensland Main Roads
Experimental Investigation of the Performance of Steel-Grout-Concrete Interfaces under Shear and Normal Stress, Kipper Tuna Gas Project, Worley Parsons and ESSO Australia

Bouazza, Malek (Associate Professor)
Tall Tower, Dubai
Al-Quds Tower, Abu Dhabi

Currie, Graham (Professor)
Land Transport New Zealand (Peer Review of Projects)
Office of the Commissioner for Environmental Sustainability ‘Public Transport Role in Reducing Greenhouse Emissions’ (Peer Review)
Report on Sustainable Transport for the Australian Capital Territory ‘Sustainable Communities Program’

Mitchell, Grace (Dr)
Desktop evaluation of technologies for treatment of intermittent sewage overflows for CRC Water

Mudd, Gavin (Dr)
Environmental management of tailing at Ranger uranium mine, for Gundjeihmi Aboriginal Corporation
Groundwater – Catchment status reporting, for Port Phillip and Westernport CMA
Groundwater-surface water interaction, urban site, for Melbourne Water

Wang, Yibing (Dr)
Local ramp metering in the presence of random downstream bottlenecks (Contract Research, VicRoads)
5.6 Professional development

Al-Mahaidi, Riadh (Associate Professor)
Promoted to the rank of Fellow of Engineers Australia, Civil College

Bouazza, Malek (Associate Professor)
Promoted to the rank of Fellow of Engineers Australia, Civil College

Fletcher, Tim (Associate Professor)
Outside Study Program, September 2008 to February 2009

Gates, Will (Dr)
Senior Leadership Program (initiated Group of Eight "Future Leaders Program")

Kodikara, Jayantha (Associate Professor)
Outside Study Program, January to July 2008

Rose, Geoff (Associate Professor)
Leadership in Action, Monash University Leadership Program

Sanjayan, Jay (Associate Professor)
Outside Study Program, December 2007 to June 2008

Sarvi, Majid (Dr)
Outside Study Program, October 2007 to June 2008

Young, William (Professor)
Outside Study Program, July 2008 to February 2009

Wong, Bill (Dr)
Technical tour of the Olympic sites, Beijing China

Zhao, Xiao-Ling (Professor)
Monash Academic Heads Induction Program, February
Technical tour of Olympic Precinct in Beijing China (Bird’s Nest, Water Cube and CCTV Tower), October

5.7 Conference attendance

Al-Mahaidi, R. (Associate Professor)
3rd Int. Conf. on Applications of Traditional and High Performance Materials in Harsh Environment, American University of Sharjah, United Arab Emirates, January
Convention of the American Concrete Institute, Los Angeles, USA, March-April
5th Int. Conf. on Advanced Composite Materials in Bridges and Structures (ACMBS-V), University of Manitoba, Winnipeg, Canada, September
6th Australasian Structural Engineering Conference (ASEC), Melbourne VIC, June

Bambach, Michael (Dr)
5th Int. Conf. on Thin Walled Structures (ICTWS2008), Gold Coast QLD, June
5th Int. Conf. on Coupled Instabilities in Metal Structures (CIMS2008), Sydney NSW, June

Bratieres, Katia (Ms)
11th Int. Conference on Urban Drainage, Edinburgh, Scotland, August

Bouazza, Malek (Associate Professor)
International Geosynthetics Society Council meeting, Cancun, Mexico, March
1st Pan-American Conference on Geosynthetics, Cancun, Mexico, March
USA-Japan Workshop on Geoenvironmental Engineering, New Orleans, USA, March
ASCE-GeoCongress 2008 on Sustainability in the GeoEnvironment, New Orleans, USA, March
4th Asian Geosynthetics Conference, Shanghai, China, June
4th European Geosynthetics Conference, Edinburgh, Scotland, September

Currie, Graham (Professor)
Transportation Research Board Annual Meeting, Washington DC USA, January

De Alwis, Astrid (Ms)
Australasian Transport Research Forum (ATRF), Gold Coast QLD, October

Deletic, Ana (Professor)
11th Int. Conference on Urban Drainage, Edinburgh, Scotland, August

Fletcher, Tim (Associate Professor)
11th Int. Conference on Urban Drainage, Edinburgh, Scotland, August

Gates, Will (Dr)
Mid European Clay Conference, Zapokane Poland, September

Haque, Asadul (Dr)
National Conference of Railway Engineering (CORE2008), Perth WA, September

Hatt, Belinda (Dr)
11th Int. Conference on Urban Drainage, Edinburgh, Scotland, August

Kodikara, Jayantha (Associate Professor)
12th Int. Conference of the Int. Association of Computer Methods and Advances in Geomechanics (IACMAG), September
ITB Symposium, Mumbai India, November

Lewis, Justin (Mr)
11th Int. Conference on Urban Drainage, Edinburgh, Scotland, August

McCarthy, David (Mr)
11th Int. Conference on Urban Drainage, Edinburgh, Scotland, August

Mitchell, Grace (Dr)
11th Int. Conference on Urban Drainage, Edinburgh, Scotland, August

Mudd, Gavin (Dr)
5th Int. Conference on Uranium Mining and Hydrogeology, Freiberg Germany, September
HydroPredict 2008 Int. Conference, Prague Czech Republic, September
PECC Int. Workshop on Water Management in the Pacific, Honolulu Hawaii USA, December
3rd Int. Conference on Sustainability Engineering and Science, Auckland NZ, December

Poelsma, Peter (Mr)
11th Int. Conference on Urban Drainage, Edinburgh Scotland, August
Ranjith, P.G. (Dr)
Indian Institute of Technology Bombay
Symposium and IITB-Monash Academy
Opening Ceremony, Mumbai India,
November

Rose, Geoff (Associate Professor)
Third Int. Symposium on Transport
Simulation, Gold Coast QLD, August
Australasian Transport Research Forum
(ATRF), Gold Coast QLD, October
Infrastructure 21 Summit, Demand
Management Theme Group/Transport
Working Group, Brisbane QLD Australia,
October

Sanjayan, Jay (Associate Professor)
20th Australasian Conf. on the Mechanics
of Structures and Materials (ACMSM20),
Toowoomba QLD, December

Sarvi, Majid (Dr)
Third Int. Symposium on Transport
Simulation, Gold Coast QLD Australia,
August
Transportation Research Board Annual
Meeting, Washington DC USA, January

Shen, Luming (Dr)
2nd Int. Conference on Heterogeneous
Materials Mechanics (ICHMM2008),
Huangshan China, June

Sun, Guangzhi (Dr)
Int. Symposium on Sanitary and
Environmental Engineering, Florence Italy,
June
Symposium on Current Development and
Future Perspectives of Wetland Science,
at Chinese Academy of Science, National
Key Laboratory of Environment and
Wetland Ecology, Changchun China,
July-August
11th Int. Conference on Wetland Systems
for Water Pollution Control, Indore India,
November

Wong, M.B. (Dr)
Fifth Int. Conference on Advances on
Steel Structures (ICASS’07), Singapore,
December
6th Australian Structural Engineering
Conference (ASEC 2008), Melbourne VIC,
June
12th Int. Symposium on Tubular
Structures (ISTS12), Shanghai China,
October

Wang, Yibing (Dr)
87th Transportation Research Board
Annual Meeting, Washington DC USA,
January
IEEE 2008 Conference on Intelligent
Transportation Systems, Beijing China,
October
30th Annual Conference of Australian
Institutes of Transport Research, Perth
WA, December

Young, William (Professor)
ISTS08 Conference, Gold Coast QLD,
July
ARRB Conference, Adelaide SA Australia,
August
87th Transportation Research Board
Annual Meeting, Washington DC USA,
January

Zhao Xiao-Ling (Professor)
5th Int. Conference on Coupled
Instabilities in Metal Structures
(CIMS2008) and Gregory Hancock
Symposium, Sydney NSW, June
Int. Institute of Welding (IIW) Annual
Assembly, Graz, Austria, July
12th Int. Symposium on Tubular
Structures (ISTS12), Shanghai China,
October
Indian Institute of Technology Bombay
Symposium and IITB-Monash Academy
Opening Ceremony, Mumbai India,
November