

Materials
Structure
Traffic
Geotechnics
Hydrology
Hydraulics
Environmental
Information
Technology
Construction
Management

Some of
**PROMINENT
RESEARCHERS**
in the Faculty

Research & Publications 2000-2005



Name : Professor Dr. Salihuddin bin Radin Sumadi
Date of Birth : 18 October 1958
Place of Birth : Sungai Sumum, Perak, Malaysia
Position : Professor at Faculty of Civil Engineering, UTM

In Brief

Prof. Dr. Salihuddin bin Radin Sumadi was born in Sungai Sumun, Perak on the eighteen of October 1958. He received his secondary education at Sekolah Menengah Sains Kedah, Sungai Petani, Kedah. He then further his study at Loughborough Technical College, United Kingdom in A-level and finishing his first degree at Sheffield University, England. He then further his study in master degree at University of Strathclyde, Scotland and completing his PhD study in Universiti Teknologi Malaysia. He then joins Universiti Teknologi Malaysia as Assistance Lecturer A in December 1987.

He is active in research and has involved in more than thirteen research projects, both internationally and locally. Prof. Dr Salihuddin has led fifteenth projects amounting to more than RM 500,000.00. His main areas of expertise are on concrete materials and industrialized building constructions. He was involved in many professional memberships, such as fellow of Institute of Materials, Malaysia (IMM), International Ferro Cement Society and Concrete Society of Malaysia (PERKOM). Since he active in building construction works at international level, he appointed as Deputy Chairman of IBS Steerin Committee (CIDB) from 2000 - 2002. His vast experience in construction materials was led more than ten postgraduate degrees in achieving their researches with flying colours. Therefore, no doubt he was chosen as Head of Structures and Material Department (1995 - 1999), Deputy Dean of Civil Engineering Faculty (1999 - 2001' and Deputy of Bureau of Innovation and Consultancy (BIP) in 2002. In addition, he was also published his research works at many seminar, conference and workshop levels. Therefore, he was selected to lead the administration of Coordinator of Disaster Management & Mitigation Team (DMT) from 1998 till present. His prominent expertise in industrialized building material has been proven to attract many researchers from outside to collaborate with University Technology of Malaysia.

Research & Publications 2000-2005



Name : Professor Ir Dr. Mohd. Warid bin Hussein
Date of Birth : 22 December 1951
Place of Birth : Kelantan, Malaysia
Position : Professor at Faculty of Civil Engineering, UTM

In Brief

Professor Dr. Mohd Warid's field of expertise is in concrete technology of which he specialises in fibre-reinforced concrete and blended cement concrete. His involvement in these areas started in 1980 and since then his success in this field was acknowledged worldwide and he is now a renowned expert at both national and international level. This recognition has paved the way for his appointment as an expert consultant to many organizations including Construction Industry and Development Board (CIDB) of Malaysia, Institut Kerja Raya Malaysia (IKRAM), Jabatan Kerja Raya Malaysia (JKR) and International Ferrocement Information Center (IFIC) of Bangkok and the British Council.

Professor Dr. Mohd Warid's key interest of research is on new innovation using alternative materials and modern technology for the development of the construction industry. His achievements in the area of fibre reinforced concrete (FRC), focus in the use of new materials in concrete namely steel, glass, polypropylene, and other natural fibres Whilst in the field of blended cement concrete his research priority is on the use of cement replacement materials such as pulverised fuel ash (PFA), palm oil fuel ash (POFA), timber industrial ash (TIA) and granulated blast furnace slag (GGBFS). These research products on FRC were patented in 2001. His invaluable contributions in this field have significantly improved the quality and performance of concrete with respect to durability, strength and cost. He is also a keen researcher on ferrocement, another alternative material in concrete technology and has successfully accomplished several programmes such as organising international courses and community development projects in the country

Professor Dr. Mohd Warid is currently active in research on new materials for concrete repairs and has acquired two rewarding research grants from the Construction Industry and Development Board (CIDB) of Malaysia. His success in this research has won him a patent for the new innovative products for concrete repairs and he has successfully commercialised these products with the trade names of UR Grout, UR Sand, UR Plastcrete and UR Chem.

Professor Dr. Mohd Warid has contributed enormously in the field of modern concrete technology. Besides being a dedicated lecturer, as a professor in the university, he had tirelessly work in search of new materials for the growth of the construction industry, which is crucial for a developing country like Malaysia. His perseverance and dedication should entitle him to be known as a Modern Concrete Technologist of this era.

Research & Publications 2000-2005



Name : Professor Hadibah bte Ismail
Date of Birth : 10 October 1954
Place of Birth : Muar, Johor
Position : Professor at Faculty of Civil Engineering, UTM

In Brief

Professor Hadibah Ismail is a Director of Coastal and Offshore Engineering Institute, at City Campus, Universiti Teknologi Malaysia, Kuala Lumpur. She obtained her Diploma in Civil Engineering at Universiti Teknologi Malaysia and B.Sc in Civil Engineering at University of Glasgow. Then, Prof. Hadibah pursued her study in Master of Engineering at Southern Illinois University, U.S.A.

Professor Hadibah Ismail joining UTM as a lecturer in 1983. She is a member of several international and national associations such as International Erosion Control Association (IECA), USA, International Association for Hydraulic Research (IAHR), Delft, The Netherlands, Malaysian National Committee for Irrigation and Drainage (MANCID) and Chairman of Training Committee, Malaysian Chapter of the International Erosion Control Association for year 2001 – 2002 and many more.

Her research interests are in Coastal Sediment Transport and River Mouth Sedimentation, Soft-engineering and Bio-technical Methods offshore Protection, Innovative Design of Floating and Submerged Porous Breakwaters, Coastal Hazard Mitigation, Tsunami Run-up Experiments and Modeling and Coastal Vulnerability Assessments. Her involvement in research projects started from 1987, which was funded by IRPA RM5. Until now six researches were successfully completed namely Hydraulic Study of Thermal Discharges from Coastal Power Plant, Study of Flex-Slab for Malaysian Coasts, Sine-Slab for Erosion Control, Use of Artificial Seagrass for Coastal Protection and Scour Control, Development, Design and Construction of Composite Material Breakwater System and Commercialisation of Sine-Slab which worth almost RM1.5 million Ringgit Malaysia.

One of the research projects, Sine-Slab for Erosion Control had won the gold medal at 27th International Exhibition on New Techniques, Innovation and Product at Geneva in 1999. She also received World Intellectual Property Organisation (WIPO) for "Best Woman Inventor" at the Geneva International Design in 1999. Two of the research projects were patented namely Sine-Slab™, and STEPFLOAT™. Recently, Professor Hadibah involved in three on-going projects and five future research projects for year 2006 until 2008.

Research & Publications 2000-2005



Name : Professor Dr. Nor Aieni bt. Mokhtar
Date of Birth : 10 March 1957
Place of Birth : Benut, Terengganu
Position : **Professor, UTM**

In Brief

Dr. Nor Aieni is a Professor at the Hydraulics & Hydrology Department of Faculty of Civil Engineering since year 2000. Initially, in 1980, she joined Universiti Teknologi Malaysia (UTM) as an academia in the Faculty of Science being a major in Physics. She was born in Kg. Raja, Besut, Terengganu on 10th March 1957 and studied at Sekolah Tun Fatimah Johor Bahru from 1970-1975. She obtained her BSc from SUNY-Binghamton New York, USA and MSc in Swansea, UK. For her undergraduate work, she had received Physics Honorary Award, Sigma Pi Sigma ($\Sigma\pi\Sigma$), which was awarded by American Institute of Physics. Upon graduation with PhD from UTM in 1992 she joined the Coastal & Offshore Engineering Institute as R & D Manager and later was absorbed into Civil Engineering Faculty. Her research training in Lasers, Opto-Electronics instrumentation, physical and computer modeling of fluid flows around structures have also sparked her interest in research related to hydraulics and coastal engineering.

Prof. Dr. Nor Aieni was appointed UTM Senate member since 2001. In 2002-2005 she was attached to the Bureau of Innovation & Consultancy and managed the Entrepreneurship and Commercialisation Portfolio. Presently, she is the Deputy Dean for Research Management Centre (RMC) responsible for Corporate Services Unit, i.e managing the Intellectual Property, Strategic, Human Resource, Finance, R & D Promotion and Commercialisation.

Prof. Dr. Nor Aieni had supervised Post-Graduate and Undergraduate thesis (PhDs, MScs and BScs), especially ??????. Her R & D work on *Sine-Slab system for coastal erosion control system* has won her many prestigious awards at the National and International level including World Intellectual Property Organisation (WIPO), Geneva Gold Medal, International Khwarizmi Award, National Inventor Award and Gold Medal for UTM Discovery Award. She had published and presented about 100 technical, concept and policy papers at the national and international level. Her recent writings and lectures to students and staff focus more on the Research Methodology, Management of Intellectual Property, Knowledge Management, University-Industry Collaboration, Management of Intellectual Property, Innovation and Creativity, Technology Management, R & D Collaboration, R & D Commercialisation and Entrepreneurship. She had been involved in some consultancy projects related to Physical modeling studies, Islands and Marine Environment Studies as well as policy studies. She has led and coordinated international collaborative programs from agencies such as CICHE/British, JICA, USNaval Office and EU, also research contracts and R & D collaboration and commercialisation with private sectors.

Prof. Dr. Nor Aieni is a member of Int. Association of Hydraulic Research, National Panel for Oceanographic Research, Panel for Approval Committee for CRADLE/MAVCAP, Exco Committee member for Confederation of Scientific Association Malaysia (COSTAM), Vice President of Malaysian Society of Marine Science (MSMS), former School Parents-Teachers Association President and active member of Terengganu born individuals (PESAT).

Research & Publications 2000-2005



Name : Professor Ir. Dr. Zaini bin Ujang
(DNS, PPT, B. Eng., M.Sc., Ph.D., CEng (UK),
CSci (UK), P.E. (M), MCIWEM (UK), MIWA (UK),
MIEM, EPRM, MICHem, MMIM)

Date of Birth : 3 March 1965

Place of Birth : Negeri Sembilan, Malaysia

Position : Dean of Faculty of Chemical and Natural
Resource Engineering

In Brief

Professor Ir. Dr. Zaini Ujang is Director of the Institute of Environmental & Water Resource Management (IPASA), professor of environmental bioengineering, and member of UTM Senate. He has extensive experience and involvement in formulating strategies towards positioning UTM as a world class university and enhancing research profile. He has shown outstanding contribution as strategic planner and team player to the overall management of UTM, particularly the Faculty of Civil Engineering. He also heads UTM Environmental Technology Focus Group since 2002, a research alliance of professors and researchers on environmental engineering and applied sciences. The Group was widely recognised in promoting high quality research and innovation, and in 2005 won a special award from UTM for excellence achievement in R&D. Prof. Zaini is also very instrumental in outsourcing research and academic funding, both from local and international agencies. In the year 2003, he has commercialized two innovations i.e. Storm Water Filter and software for wastewater treatment plant design advisor (WASDA), and at the moment in the process to register his innovation on hybrid membrane bioreactor, river bank infiltration system and software on environmental health risk assessment (RISKAS) and costing for water and wastewater facilities (COWAS).

He is Vice President of International Water Association (2004-2006) and Vice President of the Malaysia Water Association (2005-2007). He is a Chartered Engineer (Engineering Council, UK), Chartered Scientist (UK Science Council), Chartered Water and Environmental Manager (CIWEM, UK) and Professional Engineer (BEM). Born in Negeri Sembilan, Malaysia, and educated in UTM and Newcastle, United Kingdom, started his academic career in UTM since 1988. He is noted as an innovative, energetic, versatile, high profile professor, particularly in academic leadership, research and development, postgraduate teaching, policy formulation and project management. He has served the Malaysian Minister of Education (Dato' Seri Mohd Najib) as special officer (2-year-contract, 1997-1998) on higher education policy, particularly on corporatization of public universities, formulation of private universities and R&D development. Prior to Vice Presidency of the IWA, he has served the IWA Strategic Council and Chairman of IWA Specialist Group on Developing Countries, and chairing two international conferences organised by IWA.

His professional opinions have been regularly cited in many mass media and professional publications. He was the recipient of the prestigious Malaysia Water Award 2004 and the Outstanding Young Malaysian Award 2004 (Academic Leadership). He was nominated for the prestigious Langkawai Award 2004 to mark his significant contribution to environmental management and education. He was awarded Darjah Setia Negeri Sembilan (DNS) in 2005, and Pingat Pekerti Terpilih (PPT) in 1998 by the DYMM Yang Dipertuan Besar Negeri Sembilan.

Research & Publications 2000-2005

He has published more than 180 technical papers, books, chapters, monographs and technical reports. He co-authored a book with Prof. Mogens Henze on Municipal Wastewater Management for Developing Countries (IWAP, London, 2005). He was the Chairman of the IWA Conference & Exhibition on Water & Wastewater Management for Developing Countries (October 2001), and IWA Conference on Environmental Biotechnology (Dec 2003), IWA Conference on Small Water and Wastewater Systems (2008, Kuala Lumpur) and serving as member of many technical committees, both at national and international levels. In May 2002, he was appointed IWA Publishing book series editor (co-editor Prof. Mogens Henze, Denmark) on Sustainable Technology for Developing Countries.

Research & Publications 2000-2005



Name : Prof. Dr. Muhd. Zaimi bin Abd. Majid
Date of Birth : 15 April 1957
Place of Birth : Negeri Sembilan, Malaysia
Position : Director of Construction Technology and Management Centre

In Brief

Associate Professor Dr. Muhd. Zaimi area of expertise is in construction management and his vast experience in this field was accumulated from his early career as an engineer in the industrial sector and also from the academic training he obtained at Masters and PhD level.

Associate Professor Dr. Muhd. Zaimi is an enthusiastic researcher and to date he has secured a substantial amount of RM1,503,900 of research grant funded by IRPA and CIDB in effecting two long term projects. These long-term projects have been successfully completed and the first product developed through this research is an Artificial Intelligent forecasting demand of Low-Cost house, which has achieved a copyright status and won a gold medal award at an International Exhibition (ITEX 2004). This special innovation has also won him the prestigious award by the Korean Invention Academy (2004). His latest research funded by CIDB (RM 1.1 million) is expected to produce another useful IT application software for construction.

Associate Professor Dr. Muhd. Zaimi has written more than 70 technical papers and his work have been published in many international journals. With regard to this achievement he was given the assurance to referee more than 10 international journals including five for AEC (Architecture, Engineering and Construction) Journal of the United Kingdom. Besides publication, he has successfully supervised many postgraduates pursuing their PhD and masters degree.

Associate Professor Dr. Muhd. Zaimi's success in the field of research and education has been recognized internationally and due to this he was appointed as board members in several international organizations. He serves in the scientific Committee for several international conferences such as in Dubai (2006) and Rotterdam (2005).

Research & Publications 2000-2005



Name : Associate Professor Dr. Khairul Anuar bin Kassim
Date of Birth : 3 September 1962
Place of Birth : Alor Setar, Kedah, Malaysia
Position : Head Department of Geotechnique and
Transportation, Faculty of Civil Engineering, UTM

In Brief

Associate Profesor Dr. Khairul Anuar Kassim was born in Alor Setar, Kedah on the third of September 1962. He received his early education at Sekolah Rendah (Inggeris) Telok Chengai and Sekolah Menengah Telok Chengai before moved to a Technical School in Alor Setar. Dr. Khairul then further his study at Universiti Teknologi Malaysia in Kuala Lumpur before finishing his first degree at Middlesex Polytechnic, London in 1986. After returning from London he was employed by GKM Berhad as Assistant Project Engineer. He then joins Universiti Teknologi Malaysia as Assistance Lecturer A in December 1987. As a young lecturer he was encouraged to further his study to a higher level and managed to gain a Master Degree in 1991 and PhD in 1998 from the University of Newcastle upon Tyne, United Kingsom.

He is active in research and has involved in more than thirteen research projects. Dr. Khairul has lead seven projects amounting to more than RM 500,000.00. His main area of expertise is on soil stabilization particularly using lime as an active additive. He has invented consolidation equipment that can measure the consolidation characteristics of a stabilized soil within one day, thus eliminate the effect of age of a stabilized soil. This equipment has gained several recognitions from research organization, national and international bodies such as the Institution of Highway and Transportation (IHT), the Construction Industry Development Board, CIDB and invention competitions. The competitions that he has won are gold and silver medals at the Geneva International Exhibition of Invention for the year 2001 and International Invention, Innovation, Industrial Design & Technology Exhibition, I.TEX 2000 respectively.

The consolidation equipment for the stabilized soil was than modification to make it more universal for the application on hard and soft clayey soils. With the improved pressure applications and saturation mechanism, the new rapid consolidation equipment RACE was developed. With this innovation, he won gold medal at the Malaysian Technology Expo 2006 and was again selected to participate at the Geneva International Exhibition of Invention 2006. He was again awarded a gold medal.

Research & Publications 2000-2005



Name : Associate Professor Ir. Dr. Mahmood bin Md Tahir
Date of Birth : 7 May 1962
Place of Birth : Johor Bahru, Johor, Malaysia
Position : Director of Steel Technology Centre.
Faculty of Civil Engineering, UTM

In Brief

Ir. Dr. Mahmood Md. Tahir is an Associate Professor in Faculty of Civil Engineering, Universiti Teknologi Malaysia, one of the renowned public higher education institutions in Malaysia. Ir. Dr Mahmood was born and grew up in Johor. After the Sijil Rendah Pelajaran examination, he attended the Technical School in Johor Bharu. There, he began his interest in the field of engineering. In 1980, after obtaining a Grade 1 in the Sijil Pelajaran Malaysia examination, he entered the University of Iowa, United States pursuing a Bachelor of Science degree in Civil Engineering. He then continued his study for a Master Degree in Structural Engineering at the University of Nebraska, United States, which he completed in 1989. He later continued his study at the University of Warwick, United Kingdom where he received a Doctor of Philosophy degree in 1997 with a research titled "Structural and Economic Aspects of the Use of Semi-Rigid Joints in Steel Frames".

He joined the Universiti Teknologi Malaysia in 1985 as an Assistant Lecturer. In 1987, he was appointed as a Lecturer. Subsequently, he was promoted to an Associate Professor of Civil Engineering in 2000. Currently, he is the Director of Steel Technology Centre, one of the excellent centres of Faculty of Civil Engineering focussing on the research and development of steel technology.

He is actively involved in research and management at Steel Technology Centre, and plays an important role in the technical development of the structurally use of steel. Many research grants have been received of which had contributed significantly to the outstanding performance of the Universiti Teknologi Malaysia.

In term of publications, he has written and co-written more than 50 papers in various journals and conferences. He is also on the process of producing books on the design of steel with several colleagues. Professionally, Ir. Dr. Mahmood has also been awarded as professional engineer licences from the Board of Engineer and the Institution of Engineers, Malaysia. For that, he has involved in more than 35 structurally related design projects

Being actively involved in research and with the outstanding performances in work, Ir. Dr. Mahmood has been recognised locally and internationally through several awards and achievements. *****

In addition to all of the above, Ir. Dr. Mahmood are also actively involved in many educational related works such as being the examiners for post-graduate students, chairmen and committee members of conferences, seminars and short courses, evaluation panels, and some other community services.

Research & Publications 2000-2005



Name : Associate Professor Dr. Azlan bin Adnan
Date of Birth : 18 April 1963
Place of Birth : Selangor, Malaysia
Position : Deputy Dean in the Department of Consultancy,
Bureau of Innovation and Consultancy

In Brief

Dr. Azlan bin Adnan is an Associate Professor at the Structural and Material Department, Faculty of Civil Engineering, Universiti Teknologi Malaysia. Besides holding a position as the Research Head for a research group, "Structural Earthquake Engineering Research" or SEER, he is now attached to the Bureau of Innovation and Consultancy as the Deputy Dean in the Department of Consultancy. He was born in Kuala Lumpur and had a high school education from Victoria Institution, Kuala Lumpur. He pursued his B.Sc in Civil Engineering at California State University, Long Beach and his M.Sc in Structural Engineering at Universiti Teknologi Malaysia (UTM). His Ph. D. degree was obtained through a joint program between UTM and Illinois Institute of Technology, Chicago.

Before joining UTM in 1989, Dr. Azlan Adnan had been working with several organizations in the government and private sectors for more than three years. He is a member of several international associations such as the Earthquake Engineering Research Institute (EERI) of United States and the Seismological Society of America (SSA).

Since the setting up of SEER in 1998, the group has successfully obtained research funds for more than RM 4 million through the Ministry of Science, Technology, and Innovation (MOSTI) and Construction Industry Development Board (CIDB) with 8 research projects. All projects funded are related to earthquake studies; namely, "Development of Seismic Design Code for Malaysia", "Development of Earthquake Hazard Reduction Material Using Steel and Natural Rubber", "Bridge Conditional Rating Using Artificial Neural Network Considering Earthquake Effects", and "Seismic Hazard and Risk Analysis for Malaysia".

Recently, Dr. Azlan has received two international awards for his invention, "Digital Triaxial Seismo Accelerograph using Single Mass and Hall Sensors"; a gold medal in the 2005, 33rd International Exhibition on New Techniques, Innovation and Product at Geneva, Switzerland, and a bronze medal in the IENA 2004, International Trade Fair "Ideas-Inventions-New Products" at Nuremberg, Germany. Recently, he has received the Malaysian Construction Industry Excellence Awards 2005 under the category "R&D Project of the Year Award". His hope is to see more local engineers to incorporate the use of the instruments as well as the seismic design and analysis concepts into their structural design procedures in Malaysia.



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