# SINGAPORE'S INVITATION TO HOST THE

### INTERNATIONAL CONFERENCE ON ENGINEERING EDUCATION (ICEE) 2005

### "Engineering Education in a Borderless and Global Environment"

Proposal

Submitted by



Founded 1905

Faculty of Engineering
National University of Singapore
July 2001



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### PROPOSAL TO HOST THE

### International Conference on Engineering Education (ICEE-2005)

#### A. Name of Conference

International Conference on Engineering Education ICEE-2005

### **B.** Proposed Conference Emphases/Themes

Education has gone through rapid changes recently and more broad based and multidisciplinary subjects have been introduced to undergraduate engineering curricula worldwide. Rapid growth in Internet and communications technology has opened up challenges in education. Borderless and virtual universities and inter-university degree programs are emerging.

The theme for ICEE-2005 is therefore proposed as "**Engineering Education in a Borderless and Global Environment**". To address the theme, the following conference topics are proposed for ICEE-2005:

- Broad based engineering education
  - > Innovative Approaches to first-year Engineering Education
  - > Innovative Degree Programs
  - New Approaches to Curricula
  - Profiles of a new Engineer
  - > Research in Curriculum Development
  - Social Sciences in Engineering & Technology Education
  - > Teaching the Art of Teaching
  - > Engineering Ethics
- Pedagogical Issues
  - > Teaching Methodology and Assessment
  - Problem Based Learning
  - Student-Centered Learning
  - Active Learning in Professional Education
- Virtual Classroom and e-Learning
  - Virtual Classroom
  - Asynchronous Learning
  - Distance Learning
  - Virtual Student Laboratories
  - ➤ Intelligent Training Technology
  - Small and Medium-Scale Enterprises and the Use of New Technology in their Training Programs



- Institution Relationships
  - > Double and Joint Degree Programs
  - Universities, Research Units & Industry Relationships
  - Virtual Universities
- Instructional Technology
  - Virtual Learning Environment
  - Smart Classrooms

Eminent scholars in engineering education will be invited to deliver keynote lectures related to the above topics. Exhibition booths showcasing the latest advancement in education methods, technologies and tools will be arranged. Booths will also be arranged for the conference sponsors and donors.

### C. Date & Location of Conference

The tentative dates for the Conference are from 30 July 2005 to 1 August 2005. It is proposed that the ICEE Conference to be held in a prominent city hotel in Singapore. Please refer to Section K below for conference facilities in Singapore.

### D. Post-Conference International Workshops

The Conference Committee proposes to hold the Post-Conference International Workshop(s) from 2 to 3 August 2005. The workshop would be held at Sentosa, a resort island in the Republic of Singapore, with a specially designed itinerary to discuss the following:

- Engineering Education in a Knowledge-Based Society
- Virtual Universities

The arrangement, responsibilities and timeline for the Drafting Report and recommendations for the workshop would be ready by the end of 2003.

### E. Publication of Proceedings

The proceedings for the Conference would be provided in the CD-ROM. It would also be made available on the World Wide Web.

### F. Proposed Schedule

Mid-2004 Mail out First Call for Paper

August 2004 Distribute brochures about

(at ICEE-2004 Gainesville, USA) conference on site

Mail out Second Call for Paper

November – December 2004
 Mail our Reminders/Third Call

for papers

information mailed

2 January 2005 Abstracts due

15 February 2005
 Notice of Acceptance

1 April 2005
 Camera-ready Manuscripts due

2 May 2005 Registration Materials and Hotel

• 15 June 2005 Early-Registration deadline

30 July – 1 August 2005 Conference
 2 – 3 August 2005 Workshop

### G. Hosting Institution

The hosting institution for ICEE 2005 is the Faculty of Engineering, National University of Singapore (NUS). Enclosed together with this proposal is the letter of support from the Vice Chancellor of the University. (Please refer to Appendix A).

### H. Proposed Conference Chair

Chairman : Dean, Faculty of Engineering, NUS

Co-Chairmen: Vice-Dean (Academic), Faculty of Engineering, NUS

Chairman, Professional Activities Centre (PAC),

Faculty of Engineering, NUS

Prof WJ Ng is the current Dean of Engineering,

Prof PY Kam is the current Deputy Dean and Vice-Dean (Academic) of Engineering,

and A/Prof C F Leung is the current Chairman of PAC.

Their Curriculum Vitae are given below:



### Prof NG Wun Jern

### **Biography**

Prof <u>NG</u> WUN JERN graduated from Queen Mary College, London University with BSc (Civil Engrg) in 1977. He then graduated from Birmingham University with MSc (Water Resources Engineering) in 1978 and thereafter completed his PhD dissertation on chemical regeneration of activated carbon in 1980.

Prof Ng is currently a professor in the Department of Civil Engineering at the National University of Singapore and director of BIOTREAT International. He is currently the Dean of the Faculty of Engineering since June 2000 and the former Vice-Dean (Administration) of the Faculty.

Prof Ng's research interests have been in the area of water and wastewater management. The focus of the effort has been investigations into and development of technologies suitable for water and wastewater treatment. These investigations have ranged from technologies for ultra-pure water production for the electronics industry at one extreme to treatment of high strength and potentially biologically inhibitory or toxic wastewater from the chemical and pharmaceutical industries at the other end of the spectrum.

Prof Ng interacts closely with the environmental industry in the Asian region in his role as technical advisor. He has also seen his R&D brought from the laboratory to full-scale applications. Prof Ng's designs have been applied in almost 100 full-scale installations, the largest of which is an 80000ep sewage treatment plant with nutrients removal capability. To further promote application of Dr Ng's R&D, a university spinoff company, BIOTREAT International, was formed. BIOTREAT has since moved beyond Singapore and presently has project interests in Australia, Brunei, China, Malaysia, and Vietnam.



### Prof KAM Pooi Yuen

### **Biography**

Professor <u>KAM</u> Pooi Yuen is a professor in the Department of Electrical and Computer Engineering at the National University of Singapore. He obtained his B.Eng, M.Sc and PhD degrees in Electrical Engineering from MIT in 1972, 1973 and 1976 respectively.

Professor Kam, who is currently the Deputy Dean and Vice-Dean (Academic) of the Faculty of Engineering, oversees the development of engineering education at the university. Prior to this, Professor Kam was the Graduate Program Manager of the Faculty's Graduate Studies Office.

Prof Kam's research interests are digital communications covering modulation, detection, and synchronization, and mobile wireless communications. He has been a Senior Member of IEEE since 1987. Since 1996, Professor Kam has been the Editor for Modulation and Detection for Wireless Systems, IEEE Transactions on Communications, USA.



### A/Prof LEUNG Chun Fai

### **Biography**

Professor <u>LEUNG</u> CHUN FAI is an associate professor and the Head of Geotechnical Engineering Division in the Department of Civil Engineering at the National University of Singapore. He has been a staff member of the department since April 1981. Professor Leung graduated from the University of Liverpool with B Eng in 1977 and Ph.D in 1981.

Professor Leung is a registered professional engineer in Singapore and a chartered civil engineer in UK. He has served as a geotechnical consultant for many government and private organisations involving projects in Singapore and the region on pile foundations, land reclamation, seafront wharf structures, anchored retaining wall, centrifuge model testing, slope stability, soil settlement and erosion studies.

Professor Leung is actively involved in promoting continuing engineering education and professional development. Since 1997, he has been the Chairman of the Professional Activities Centre (PAC) of the Faculty of Engineering. Under his leadership, the Faculty has firmly established itself as a leading continuing engineering education provider in Singapore. Over the past 15 years, the PAC has successfully organised, coordinated and/or financially supported over 50 international conferences in various disciplines of engineering. Professor Leung was the Chairman of the Organising Committee of 2 major international conferences and a key organising committee member of several international conferences, notably one on engineering education in 1993.

Professor Leung has taught courses in geotechnical engineering, pile foundations, rock mechanics and foundation analysis. He has published many technical papers in international journals and conferences covering topics such as centrifuge modeling of geotechnical problems, pile foundations, land reclamation and excavation in jointed rocks.

### I. Introduction to the National University of Singapore

The National University of Singapore (NUS) was formally established in August 1980 with the merger of the University of Singapore and Nanyang University. Its history, however, can be traced back to 1905, when Singapore's first centre of higher education, King Edward VII College of Medicine, was established.

A comprehensive university, NUS offers undergraduate and graduate studies in the Arts and Social Sciences, Business Administration, Computing, Dentistry, Design and Environment, Engineering, Law, Medicine and Science. Student enrolment for academic year 2000/2001 presently more than 23,784, comprises 15,278 undergraduates and 7,766 postgraduates.

Forward-looking and fast moving, the University is strongly committed to its realization as a global knowledge enterprise dedicated to the imparting, creation and utilization of knowledge. It enjoys a high academic reputation amongst its peers and its standards are internationally benchmarked.



The University's curriculum is broadunderscored based by multidisciplinary courses and cross-faculty enrichment. Programs are dynamic, tailored to offer students a wide range of opportunities to maximize their potential and aspirations. Classrooms are borderless connecting students with the best teaching and knowledge resources in the world through the latest distance learning technologies. NUS graduates develop life-long learning skills that serve them well in the rapidly changing world of global knowledge-based economies.

NUS is classified as a Class One research university under the Carnegie Classification System. The University is particularly noted for it multi-disciplinary research at the cutting-edge. It enjoys a close teaching-research nexus with 10 national-level institutes and focuses its research excellence in 14 University-level research institutes and more than 50 faculty-based research centres. As one of Singapore's technology powerhouses, NUS actively promotes innovation and entrepreneurship both in the classroom and research facilities.

Learning and research at NUS are carried out in conducive physical surroundings enhanced by quality resources. High portability of IT resources, wireless and mobile-enabled, makes learning a 24-hour anytime, anywhere convenience that is student-centered.

The University is actively engaged with the wider community through extensive collaborations with industry partners and an expansive network of alliances with established institutions worldwide.

The campus community is cosmopolitan. Faculty members, researchers and students come from all over the world to experience the total experience that NUS offers -- the best of eastwest scholarship at the cutting edge of knowledge.

The Faculty of Engineering is the biggest faculty in NUS, with 5650 Undergraduate and 2928 Postgraduate Students, supported by 340 Academic Staff, 164 Research Staff and 348 Non-Academic Staff.

### J. Introduction to Singapore

Situated at one of the most important crossroads of the world, Singapore is a vibrant and cosmopolitan city-state where tradition and modernity, East and West, meet and mingle most agreeably and harmoniously. When you meet in *New Asia - Singapore*, you are at the centre for business and pleasure.

The various luxury hotels, offering impeccable standards of Asian service and hospitality, and modern shopping malls dotting this tropical island are well-connected by the efficient Mass Rapid Transit (MRT) network, and Singapore's bustling port, world-renowned Changi Airport, and thriving business, are all testimonies to Singapore's standing as one of the leading financial, economic and trading centres in the region. As Asia's convention and exhibition capital, Singapore offers superb facilities and excellent support in every aspect of event planning and co-ordination.



When it comes to fun, Singapore is your tropical playground, where there is so much to discover and experience. To whet your appetite there is a wide choice of cuisine from all over the world found right here in this gourmet paradise. Besides this, a wide choice of leisure experiences awaits you, from spa treatments to pub-hopping, sightseeing, trishaw rides, non-stop shopping and attractions galore. And for your entertainment pleasure, there is an array of cultural and modern dance, theatre concerts and world-class musicals

found in this City for the Arts. This trendy city keeps you entertained non-stop, where the world comes together for pure enjoyment. So come live it up in *New Asia - Singapore*.

The climate in Singapore is warm and welcoming all year round with temperatures ranging between 31 C in the day and 23 C in the night. English is a widely spoken language and the common business language of all. And you'll be able to experience Singapore to the fullest, especially since Singapore is known to be one of the safest cities in the world.

Economic progress has given Singapore a 21<sup>st</sup> century façade and outlook. Yet the country's essence is very much steeped in age-old Asian mores, cultures and traditions. Whether you're here for business or pleasure, Singapore has everything to make your stay a most memorable experience. Discover the magic of *New Asia - Singapore -* a place that is so easy to enjoy.

Endorsement has been granted from the Singapore Tourism Board to host the conference. Please refer to the support letter in Appendix A.

#### K. Conference Facilities

One of the possible venue for ICEE-2005 is the **Singapore International Convention and Exhibition Centre (SICEC)** which is about 20 minutes' drive from Singapore's Changi International Airport and it is located within the city centre. SICEC is the latest purpose-built convention and exhibition facility in Singapore. Covering 100,000 square metres, the Centre is one of the largest and most sophisticated convention & exhibition centres in South East Asia, set to facilitate Singapore's aim of becoming the regional convention and business hub.



### The facilities in SICEC

- Columnless Convention Hall with a seating capacity of 12,000 delegates. This hall can be divided into 3 smaller halls with each having a seating capacity of 2,500 to 3,200 delegates. In these halls, the retractable seating system may be used.
- Exhibition Hall of 12,000 square metres
- Ballroom with a seating capacity of 1,800 delegates. This ballroom can be divided into 3 smaller ballrooms with each having a seating capacity of between 530 to 950 delegates.
- Auditorium with a seating capacity of 596 delegates.



- 26 multi-purpose meeting rooms with a seating capacity ranging from 50 to 200 delegates. Some of the meeting rooms can be merged as one thus accommodating up to 400 delegates.
- 1,000 IDD phone lines
- 12-language simultaneous interpretation system, teleconferencing facilities and more

There are other large conference venues such as the Raffles City Convention Centre, Shangri-La Hotel and Singapore EXPO. The venue for ICEE-2005 will be confirmed in late 2003 upon site inspection and availability. A glimpse of choices of accommodation is given in Appendix C.

### L. Proposed Technical Visits and Social/Cultural Programs

The Organising Committee plans to present the Conference Delegates with an insight of the efforts undertaken by the University as well as local research institutions and companies in hope of establishing an independent yet comprehensive academic and research environment. The proposed venues for the technical visitation are as follows:

#### **NUS Academic Resources**

- Centre for IT & Application (CITA)
- Centre for Development of Teaching & Learning (CDTL)

#### National Research Institutes

- Institute of High Performance Computing
- Data Storage Institute
- Centre of Wireless Communication

### **Companies**

- Creative Technology
- Kent Ridge Research Laboratory

Singapore has many places of interest to keep the delegates and their accompanied persons entertained. **An interesting accompanied person program will be arranged for ICEE-2005.** A glimpse of the probable sightseeing, cultural and nightlife, shopping and food-sampling events is given in Appendix D.

### M. Estimated Budget

# 30 July - 1 August 2005 ESTIMATED REVENUE AND EXPENDITURE FOR CONFERENCE (All amounts in US\$)

ESTIMATED INCOME	Registration Fee	No. of Pax	Income
Registration Fees for delegates	550	300	165,000
Subsidised Reg Fees for Under representative Countries	250	50	12,500
Complimentary Delegates (eg. Organising Committee member, iNEER Chair and Secretary)	FOC	30	0
Estimated Total Income	Total no. of pax	380	177,500
ESTIMATED EXPENDITURE Item Postage, Brochures and Publicity	Unit Cost	Qty	Expenditure 10,000
CD-ROM Proceedings (@\$30 per pax) Conference secretariat Reception Banquet	30 30 50	500 380 380	15,000 20,000 11,400 19,000
Hotel Seminar package (3 days @\$50/day) Other Hotel Charges Re-imbursement for Invited	150	380	57,000 5,000
speakers Stationery/Fax Transport Contingency 25% fee to iNEER	137.50	300	10,000 7,000 3,000 3,000 41,250
Estimated Total Cost			201,650
— Net Surplus (Loss)			<del>(24150)</del>

A shortfall of US\$24150 is expected. Donations and sponsorships will be sought from the Government (e.g. Ministry of Education, Information Development Authority), tertiary education institutes (e.g. Nanyang Technological University, Singapore Polytechnic), industry (e.g. publishers), non-profit organisation (e.g. Lee Foundation of Singapore) and other sponsors to cover this shortfall.

Heavy discounts would be arranged for participants from under representative countries. The Organising Committee intends to lower the conference registration fee if more donations for ICFF-2005 are received.

### N. International Steering Committee Meeting

The International Steering Committee Meeting for ICEE-2005 is proposed to be held in Singapore in October 2004, so as to allow the Steering Committee members to inspect the conference venues and facilities, accommodation, as well as the technical and social visits sites.

### O. Commitment by the Organising Committee

The conference will be organised and financially underwritten by the Faculty of Engineering, National University of Singapore (NUS). Organisations from the government and private sectors will be sought as supporters/sponsors of ICEE-2005. It is proposed that 25% of the registration fees (excluding donations) will be given to iNEER/ICEE to cover their expenses incurred in the promotion and dissemination of information regarding ICEE-2005. Conference Organising Committee is committed to adhere to the ICEE guidelines given in the iNEER/ICEE Proposal Guide, including any reasonable future The Vice Chancellor of NUS has agreed in principle to sign the modifications. Memorandum of Understanding with the iNEER/ICEE Chair, if the proposal to host ICEE-2005 in Singapore is approved.

#### P. **Proposed Call for Papers**

Mid - 2004 First call for Papers Second call for Papers August 2004 November – December 2004 Third call for Papers

### Q. Track Record of NUS hosting Engineering Conferences

The Professional Activities Centre (PAC), Faculty of Engineering, NUS has successfully organised, coordinated and/or financed a large number of international conferences in various disciplines of Engineering. Please refer to Appendix B for the list of conferences that has been organised by PAC.



### • Support Letter from Vice-Chancellor, NUS



## THE NATIONAL UNIVERSITY of SINGAPORE

Ref:

Vice-Chancellor's Office

6 July 2001

Dr Win Aung iNEER/ICEE-ISC Secretary-General iNEER/ICEE General Secretariat c/o College of Engineering New Jersey Institute of Technology University Heights Newark, NJ 07102-1982 USA

Dear Dr Win Aung,

### PROPOSAL TO HOST INTERNATIONAL CONFERENCE ON ENGINEERING EDUCATION (ICEE)

Thank you for your letter of 11 June 2001 inviting the National University of Singapore to make a proposal to host ICEE in Singapore in the future.

I am pleased to inform you that our Faculty of Engineering is keen to organise the conference in Singapore and I strongly support the Faculty's proposal to host the conference in the year 2005 or beyond.

With Best Wishes

Professor SHIH Choon Fong

Vice-Chancellor

### Support Letter from Singapore Tourism Board

5 July 2001



INEER/ICEE Secretariat c/o Newark College of Engineering New Jersey Institute of Technology University Heights Newark, NJ 07102-1982 USA

### INTERNATIONAL CONFERENCE ON ENGINEERING EDUCATION (ICEE) 2005

The Singapore Tourism Board takes great pleasure in inviting you to consider Singapore's bid for the International Conference on Engineering Education 2005.

Singapore has developed a fine reputation as a leading convention city not only in Asia but internationally. According to the 1999 survey from the Unions des Association Internationales (UAI), a world body based in Brussels, Singapore is Asia's number one meeting place, and fifth in the world.

For the 17<sup>th</sup> consecutive year, Singapore has won high honors in the UAI annual rankings of top meeting destinations. And the Republic's notch up to the fifth place ranking internationally is the highest placing ever achieved by an Asian city. The Lion City now joins Paris, Brussels, London and Vienna as the world's best meeting venues.

Located at the crossroads of Asia, Singapore is serviced by major international airlines and is accessible from virtually all parts of the world. A cosmopolitan city, with an exquisite blend of East and West, Singapore can assure organisers and delegates of state-of-the-art convention facilities, matched by the traditional superb service for which we are renowned. Singapore also offers excellent shopping, a fascinating variety of exotic and international cuisine, colorful festivals, and a wealth of sights and sounds, the product of our multi-cultural society and heritage.

We trust that this proposal will provide you with adequate information to decide in favour of Singapore as the location for the International Conference on Engineering Education 2005.

We look forward to having the pleasure of seeing you in Singapore soon!

Yours faithfully

Lee Loong Koon

Director, Exhibitions & Conventions

Singapore Exhibition & Convention Bureau

### **APPENDIX B**

### List of Conferences Organised/ to be organised by Faculty of Engineering

S/No	Date	Conference Title	No of	No of	Co –
			<b>Participants</b>	Country	Organisers
1.	02/07/87	1987 International Symposium on Small Systems for Water Supply and Waste Water Disposal	150	NA*	EES, SNC & IAWPRC
2.	25/07/87	R & D in Manufacturing Processes & Automation in Singapore	282	NA	SCS & SME
3.	14/10/87	Holographic Non-Destructive Testing	28	NA	CSIRO (Aust)
4.	06/04/88	Second IGUG Seminar: Innovative Users of CAD/CAM Systems	100	NA	IGUG
5.	01/06/88	On the Identification of Continuous Time Dynamic Systems	13	NA	
6.	31/10/88	International Conference on Communication Systems	300	NA	IEEE
7.	20/02/89	5 <sup>th</sup> Asian - American Environment Conference	45	NA	Environmental Engineering Society
8.	17/07/89	Singapore International Conference on Networks	430	NA	IEEE
9.	05/09/89	International Conference on Image Processing	350	NA	IEEE
10.	23/10/89	International Conference on the Safety & Loss in the Chemical & Oil Processing Industries	354	NA	ARC,IES
11.	09/11/90	Singapore International Conference on Communications Systems	320	NA	IEEE
12.	06/12/90	6 <sup>th</sup> International Conference on Biomedical Engineering	220	NA	NUS - Faculty of Medicine
13.	03/04/91	International Conference on Structural Failure	120	NA	S'pore Concrete Institute
14.	22/05/91	International Conference on Steel & Aluminium Structures	200	NA	IABSE, ICE, IES & I. Struc. E.
15.	08/91	FEFG / ICF Fracture Conference	200	24	Int. Congress of Fracture
16.	03/06/92	International Conference on Optimization	210	15	NUS - Faculty Of Science & Faculty. Of Business Administration
17.	23/09/92	Second International Conference on Die & Mould Technology	152	15	SPETA
18.	11/11/92	International Conference on Computational Methods in Engineering	190	19	
19.	23/02/93	Asia Pacific Conference on Material Processing	94	21	NTU, ARC
20.	04/05/93	11 <sup>th</sup> SEA Geotechnical Conference	296	22	

2.1	06/06/02	21d   1 Off   1 D 1	450	20	CCCC NITH
21.	06/06/93	3 <sup>rd</sup> International Offshore and Polar Engineering Conference ( ISOPE )	450	20	SSSS, NTU, ISOPE
22.	14/07/93	4 <sup>th</sup> International Conference on Structural Failure Durability & Retro-fitting	200	20	S'pore Concrete Institute
23.	06/09/93	SICON / ICIF	200	25	IEEE & NTU
24.	08/09/93	Manutech 1993	100	2	NTU, SP, NP, NVP, TP, EDB & NSTB
25.	10/11/93	AEESEAP Mid Term Conference	178	24	AEESEAP
26.	11/11/93	First International Conference on Laser & Optoelectronic Technology & Applications	100	2	
27.	21/08/94	CIRP 94 Conference	270	32	NTU, GIMT, NP & CIRP
28.	24/08/94	9 <sup>th</sup> Congress IAHR – APD	200	16	
29.	31/08/94	Centrifuge'94	166	19	IES
30.	15/11/94	Second Asia Pacific Conference on Material Processing	113	20	NTU, ARC
31.	27/02/95	International Power Engineering Conference IPEC'95	168	21	NTU, IEE, IES & NUS
32.	22/05/95	6 <sup>th</sup> Asian Congress of Fluid Mechanics	320	30	NUS, NTU
33.	03/07/95	Singapore International Conference on Networks / International Conference on Information Engineering SICON / ICIF'95	196	31	IEEE, NTU
34.	25/06/96	9 <sup>th</sup> International Sym on Transport Phenomena in Thermal – Fluids Engineering ISTP - 9	200	20	
35.	26/11/96	Polymer Processing Regional Meeting PPS – RM 96	NA	NA	PPS
36.	04/12/96	International Conference on Experimental Mechanics	150	NA	
37.	14/04/97	SICON'97	150	NA	IEEE, NUS- Dept of Information Systems & Computer Science
38.	05/97	3 <sup>rd</sup> Asian Young Geotechnical Engineers Conference	110	10	
39.	14/07/97	5 <sup>th</sup> Asia-Pacific Symp on Wind Engineering	100	NA	
40.	08/04/98	Asia – Pacific Conference on Environmental Technology	NA	NA	ETE, ISE, SLE, NUS – Chemical Engineering

41.	11/05/98	International Manufacturing Conference W /	NA	NA	NUS, Warick
		China IMCC'98			University (UK), Hong Kong Poly
					(HK), NUAA (China)
42.	02/12/98	2 <sup>nd</sup> International Conference on Thin Walled	NA	NA	(Cimita)
		Structures			
43.	07/12/98	3 <sup>rd</sup> International Symp on Impact Engineering	NA	NA	NUS – MPE Dept
44.	30/6/98	IEEE SICON'98	NA	NA	IEEE
45	15/12/99	4 <sup>th</sup> Asia-Pacific conference in Computational Mechanics	150	NA	
46	1/12/99	5 <sup>th</sup> International Symp. on Field Measurement in Geomechanics FMDM99	230	19	NUS-Centre for Soft Ground Engineering
47	2000	APORS 2000	200		NUS, KRDL &
					Operational Research
					Society of
					Singapore
48	5/9/00	8 <sup>th</sup> IEEE International Conf. on Networks(ICON2000)	115	NA	IEEE
49	29/11/00	2 <sup>nd</sup> Int. Conf. On Experimental Mechanics(ICEM 2000)	110	NA	ME dept of NUS in collaboration with Sensors &
					Actuators Programme, School of MPE
50	6/12/2000	10 <sup>th</sup> Int Conf. On Biomedical Engineering	420	NA	of NTU Faculty of Engr
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					Biomedical
					Engineering Society of
					Singapore
51	6–8 June	Robotics & Mechatronics Congress 2001	150	NA	NTU Gintic
	2001	-4 <sup>th</sup> Asian Conference on Robotics & its			
		applications -5 <sup>th</sup> Int'l Conf. On Mechatronics			
52	25–27	5 <sup>th</sup> Asia Pacific Conference on Materials	150	NA	KAIST, NUS &
32	June 2001	Processing (APCMP) in Korea	150	1471	NTU
53	27-29	7 <sup>th</sup> International Symposium on Ferrocement	60	NA	CCMT
	June 2001	& Thin Reinforced Cement Composites (FERRO 7)			
54	6-8 Aug	9 <sup>th</sup> Int'l Group for Lean Construction	50#		NUS
	2001	Conference			

55	29-31 Oct		400#		MPA, NUS
	2001	R&D and Technology			
56	6-8 Aug	13 <sup>th</sup> APD-IAHR Congress	200#		
	2002				
57	3-6 Sept	5 <sup>th</sup> Annual IEEE Conference on Intelligent	220#	With	IEEE, CTR
	2002	Transportation Systems (ITSC 2002)		exhibition	
58	25-27	Asian Controllers' Conference	400#		CIC
	Sept 2002				
59	Nov 2002	International Workshop on Characterisation	100#		CSGE
		and Engineering Properties of Natural Soils			
60	2-4 Dec	2 <sup>nd</sup> International Conference on Advanced	150#		NUS, NTU
	2002	Materials Processing (ICAMP)			
61	Dec 2002	International Conference on Biomedical	450#		NUS(FOE &
		Engineering			FOM) & BES
62	16–18	2 <sup>nd</sup> International Conference on Structural	200#		NUS Civil
	Dec 2002	Stability & Dynamics (ICSSD)			
63	May 2003	7 <sup>th</sup> Asian Symposium on Visualization	200#		ASME; NUS
64	Aug 2003	12 <sup>th</sup> Asian Regional Conference on	500#	With	CSGE
		Geotechnical Engineering		exhibition	

<sup>\*</sup> NA - Not available, i.e. data not provided by organiser or not yet provided by organiser. # - Expected Figure

### **Convention Hotels**

### Hotels Located within the Marina Bay Area and in the vicinity of SICEC

A multi-functional, fully integrated commercial development comprising three world-class luxury hotels (Marina Mandarin, The Pan Pacific and The Oriental) is located directly opposite to The Singapore International Convention and Exhibition Centre (SICEC). In addition, directly opposite to SICEC, there is another world-class hotel, The Conrad International Centennial.

A few minutes away from the Singapore International Convention and Exhibition Centre (SICEC) stands The Ritz Carlton Millennia Singapore and the Fullerton Hotel. Together these six world class hotels will be able to accommodate more than 5,000 guests, suggesting that delegates will have no difficulty with accessing the convention facility. These hotels have in addition convention rooms and function rooms which can also be used for Satellite symposia or meetings for special interest groups.

#### Marina Mandarin

The Marina Mandarin, distinguished by its unique curvilinear façade, has 603 rooms spread over 22 floors, commanding a spectacular, unimpeded view of the city, waterfront and Marina Bay. It has a ballroom with a seating capacity of 800 and nine other function rooms seating up to 470, all equipped with the latest technical facilities for meetings.

### Pan Pacific Singapore

The tallest and largest hotel in Marina Square, the Pan Pacific Singapore is 37-storey high and with 794 rooms. A choice of excellently equipped rooms of varying sizes is available for conferences and exhibitions, with the largest room seating 1,000 delegates. A wide variety of audio-visual and technical equipment – six-language simultaneous interpretation facilities, microcomputers, video desks, and facsimile transmission – are available to ensure a highly rewarding convention and exhibition experience.

### • The Oriental Singapore

The distinctive 21-storey triangular-shaped hotel with 521 rooms is superbly positioned on a waterfront site overlooking the harbour and city of Singapore. The Oriental is less than five minutes by car from the main banking and business area. The Oriental ballroom, built without pillars, can accommodate 700 people. There are seven other purpose-built banquet rooms providing function space for between 30 and 100 delegates

#### Conrad International Centennial

Conrad International Centennial Singapore with 25 suites and 484 guestrooms is ideally located with all of downtown Singapore within easy reach. It is adjacent to the new Singapore International Convention & Exhibition Centre. It has a ballroom with a seating capacity of 500 and other multi-purpose meeting rooms seating up to 100.

### • The Ritz-Carlton, Millenia Singapore

Designed by Prtizker Prize-winning architect Kevin Roche, it occupies the centrestage of this dramatic Marina Bay. The Ritz-Carlton, Millenia Singapore is accessible from all parts of the city and is within walking distance from the Singapore International Convention and Exhibition Centre. The Grand Ballroom is large enough to accommodate 1000 guests and facilities include a permanent stage, state-of-the-art audio-visual and light equipment and special provisions for ceiling and cable trunking. The hotel has well-equipped meeting and function rooms which can accommodate 8-150 delegates.

#### • The Fullerton Hotel

The Fullerton Hotel is Singapore's latest masterpiece of simplicity, comfort and elegance. Transformed from the Fullerton building, which was built in 1928, its rich heritage, neo-classical architecture and strategic location make it an inspiration to all in the heart of Singapore. Lying at the forefront of Raffles Place, Singapore's financial and business district, it also enjoys close proximity to the cultural venues of Victoria Theatre and Concert Hall, The Esplanade – Theatres On The Bay and the Asian Civilisation Museum.

Design that is residential as it is functional; the stylish and chic accommodations exude a sense of warmth and comfort. Views from the 400 rooms and suites at The Fullerton are unrivalled in Singapore. Rooms overlook the sunlit atrium courtyard, or have verandahs that open out to sweeping views of the city skyline, the river promenade or the bustling harbour. Cutting edge technology and high speed Internet access provide each guest global connectivity through the wire. Distinctive and simple Philippe Starck fittings symbolise contemporary elegance with functionality. The Fullerton Fundamentals - a range of customised amenities grace the bathrooms.

### The Westin Stamford & Westin Plaza Located at The Raffles City Convention Centre

The Westin Hotels, comprises the Westin Stamford and Westin Plaza, are located at The Raffles City Convention Centre. The Westin Hotels have a combined room total of 2,049 rooms and are less than a 10-minute walk from SICEC.

### **Social Programmes**

Singapore's wide variety of attractions ranges from legacies of the island's colonial past and multi-cultural heritage to internationally known performing and visual arts. All these are easily available, as attractions of the similar theme are located near one another. From Chinatown to the Singapore River, each area provides its own distinctive view into the soul of *New Asia – Singapore*.

### **Metropolitan Attractions**

Singapore has many places of interest to keep delegates and their spouse entertained nonstop. Singapore's compact size allows one to see a lot without needing to travel too far.

### City Tours

**City Tours**, which include walks through Little India and Chinatown, take just over three hours and provide a glimpse of Singapore's best-known ethnic areas.

An 1819 tour takes you to Singapore's **colonial heart**, while river cruises bring you past old godowns and warehouses. Junk cruises enable you to see Singapore from the harbour.

You can take an air-conditioned coach to Singapore's famous open-plan zoo, the Singapore Zoological Gardens, where natural barriers replace bars to give visitors a unique view of the animals. A bonus addition is a visit to Singapore's largest commercial orchid farm.



Discover tiny back street workshops in **Chinatown** where carvers still fashion temple idols from sandalwood. Visit century old temples where a plethora of gods have a faithful following and wander through a wet market, taking in the sights and sounds of vendors selling everything from fresh fish to flowers.

In **Little India**, you can pick up a 4.5 metre long sari in fine Kashmiri silk for around S\$150, bargain with goldsmiths for a traditional Indian-style necklace in 24-carat gold, or admire the layers-upon-layers of cast images of the Hindu gods which form the tall tower at the entrance of every southern Indian temple.

**Arab Street** recalls the tales of a 1001 Nights, with merchants selling carpets and cane, mosques calling the faithful to prayer and the once-great home of a sultan with its walled garden.



In addition, there are many exciting tourist attractions, such as the highly popular Night Safari at the zoo, outdoor dining by the Singapore River and thrilling experiences at Fantasy Island and Volcano-Land, on the resort island of Sentosa.

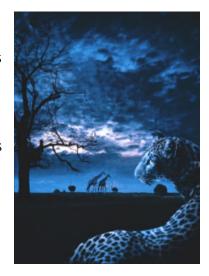


### Sentosa Island

A playground for people of all ages, Sentosa is an island situated about 10 minutes away from Singapore and is easily accessible by ferry, cable car and coach. On the island, a list of attractions, including Underwater World, Fort Siloso, Fantasy Island and many more, awaits you to explore.

### Night Safari

An award-winning attraction not to be missed – the world's first night zoo which allows you to have a close encounter with 1200 nocturnal animals! Experience night wildlife on a 45-minute tram ride or take one of the three Walking Trails to experience the park in eight geographical zones. In the cool of the night, catch the twice-nightly "Creatures of the Night" show, or take a stroll through the Mangrove Walk, a free-ranging bat enclosure along the Leopard Trail. End your visit with a bite at the two restaurants located near the entrance or shop for animal themed souvenirs at the gift-shop.



### Jurong Bird Park

Visit the largest bird park in all of Southeast Asia. Not-to-be missed attractions in the park include the Waterfall Aviary with the world's highest man-made waterfall towering 30 metres; the interesting Penguin Parade, where penguins live and play in an environment similar to that of the South Pole; the South-east Asian Bird Aviary where a thunderstorm is simulated everyday at noon; and the highly entertaining Fuji World of Hawks show & JBP All Stars Birdshow. Take flight only after having refreshments at the new "Lodge on Flamingo Lake".

### Cruising

As regional hub for numerous luxury cruise liners, Singapore offers a range of cruise experiences around the South East Asian region and beyond. The rich cultural mix; exotic customs and scenic beauty coupled with year-round summer make the region a cruise haven.



Cruising in South East Asia is like an enchanting dream where every port holds new adventures and experiences. Each stop provides ample time and opportunity to find the best shopping deals, take in the scenic beauty, sample the local cuisine or capture some ethnic entertainment.

#### **Food Paradise**

Singapore is well known as a food paradise. Good food is not confined to restaurants alone. There are the traditional open-air food centres where your meal is cooked right in front of you. Themed dinner parties can be arranged at some of these attractions to add that extra special touch to your event.

Being a multi-racial society, Singapore offers a wide array of choices for a delightful gastronomical experience. Speaking of good food, Chinese food comes in eight regional styles ... Indian food ranges from the mild and subtle North Indian to the fiery South Indian styles ... Malay delicacies ... three spicy varieties of Indonesian food ... Singapore's homegrown Nonya cooking - a combination of Chinese and Malay styles ... plus Japanese, Korean, Taiwanese and Thai food - they can all be had in Singapore! As for western cuisine, you'll find places serving English, French, American, German, Swiss, Spanish, Mexican, Italian and even Russian food.



### **Shopping**

Singapore is one place where you can literally 'shop till you drop!'

Singapore is an undisputed shopper's paradise, with an endless variety of modern shopping centres standing alongside the fascinating streets and bazaars of Chinatown and Little India. World-renown brand names in electronics, clothing and accessories are all readily available from a host of modern shopping centers located along Orchard Road as well as in satellite towns.

Singapore is also an excellent place to seek out fine examples of jade, batik, cloisonné, lacquer ware, silks, porcelain, gold, gemstones and pewter.

Shops are open seven days a week, with most opening at 10am and closing at 9pm. Most major shopping centres have an adjacent taxi stand, making it easy to get back to the hotel with that armload of parcels.

### Nightlife

As the lights go down, the excitement goes up. The city comes alive as Singaporeans take advantage of the cooler evening temperatures.

In Singapore, the need for sleep is the visitor's only excuse for staying put in a hotel room.

• Orchard Road is alive with nightlife from sundown to the early hours, with many entertainment outlets tucked away in its shopping malls. The various bars, discos and

pubs here offer music and action late into the night.

• **Boat Quay** offers alfresco dining at riverside tables. This is a favourite spot for both locals and visitors seeking good food and a cool breeze. The waterfront shop houses are also home to a blues bar, karaoke lounges and pubs. Here you will find watering holes offering a wide variety of music and live entertainment from jazz to Tamil rock.



- Situated by the Singapore River, **Clarke Quay** has something to offer for everyone from eating, shopping to entertainment. Over 200 shops, food & beverage and entertainment outlets are housed in five main blocks of restored godowns and shop houses Merchants' Court, The Foundry, The Cannery, Shop house Row and Traders' Market. Dining alfresco by the waterfront and along the streets is popular among the local and expatriate communities.
- Evenings are the best time to take advantage of Singapore's tropical climate and sample local food at an outdoor hawker centre. The recently restored Bugis Street and Lau Pa Sat, both a must for visitors, are two places where hawker food can be enjoyed. They



are in their own right, tourist attractions and form part of the history of Singapore. Go in a group for an evening of experimenting with Asian cuisine, or go alone, and capitalise on the practice of sharing tables as a way to meet the locals.

• Pubs, bars, discotheques, karaoke lounges, music lounges, cinemas, theatres ... there is something for everyone. And our safe environment means you can stay out as late as you like.

### New Asia - Singapore Tours

### Flavours of New Asia – Singapore Tour

Pepper, cloves, cinnamon and saffron filled the bowels of ancient trading ships and fuelled the lucrative spice trade that brought a steady stream of immigrants from as far as India, China, the Middle East and the Malay Archipelago. Today, much of the culinary delights of Singapore are infused with these spices, a mouth-watering fusion of the traditional cuisine of its various immigrant population.

The tour begins with a walk through a spice garden at Fort Canning Park. Then an introduction to a typical Peranakan house and fascinating nonya culture. Then move on to Little India where you will explore narrow streets overflowing with gold and spices, pots and pans, saris and jasmine garlands. Allow your senses to be assailed by the exotic smell of curries and aromatic spices.

The tour continues at a "wet" market where you will find intensive haggling being the order of the day. See housewives hone their bargaining skills as they scout for the best and freshest produce to put on their dining tables. Capping off this multi-sensory experience is a visit to an herbalist in Chinatown where you will gain an insight into the traditional concepts of "yin" and "yang" and how Chinese people keep themselves healthy.

### • Heartlands of New Asia – Singapore

Discover life in Singapore in the old days when fishing villages and "kampong" living thrived and community spirit ran high amongst the villagers. Today, this community spirit and traditional lifestyle lives on, albeit in a more modern setting.

Start the day with a leisurely drive along the East Coast Parkway towards Changi. As you approach the eastern part of the island, you will notice a complete change of scene. The hustle and bustle of the city will give way to a quiet, laid back atmosphere of a village setting. From here, you will hop onto a boat, and head towards Pulau Ubin, an island many still regard as our last "wild frontier".

On your return to main island of Singapore, experience the amazing contrast as you are driven through typical modern housing estates – providing an insight into the vivid transformation that has occurred and affected our lives over the years.

Explore the town centre before venturing back to the city on a leisurely MRT train ride.



### Painted Faces (evening tour)

The colour of the face, the swish of a sleeve, the flick of a finger, the rhythmic movement of the torso – fans of Chinese opera range from Emperors in Imperial Chinese Courts, to merchants and the man-in-the-street.

The tour starts with a visit to a quaint little shop that stocks props and costumes used in Chinese opera. Marvel at the magnificently embroidered opera costumes and brilliantly coloured headgear. This is followed by a visit to a clan association where the unique, astounding visual art form is still being kept alive. Here, each movement and gesture is explained in detail.

The tour experience continues at Clarke Quay where you can witness behind the scene preparation of an opera. Watch how the actors' faces are carefully painted to signify their roles as a prince or scholar, a villain or a general.

The tour culminates in the opera itself – a mesmerizing performance that captures the imagination of its audience with clashing cymbals, the graceful twirl of silken lobes and passionate actors whose every expression is accentuated by the strains of traditional opera music.

### • Spirit of New Asia - Singapore

Where else but in *New Asia* – Singapore would you be able to discover the surprising co-existence of modern and traditional ways, the blending of East and West, old and new. This tour allows you to experience the essence of multi-cultural Singapore right to the heart of the city centre. Begin the tour marveling at the impressive modern cluster of buildings within Suntec City and observe, when you arrive at Albert Mall, how a street filled with the buzzing activities of fortune-tellers and flower sellers sweetly co-exist with these modern developments. A place where the air is filled with the exotic smell of

burning incense and where Hindu and Buddhist devotees co-worship at two temples situated side by side!

A drive through the heart of the colonial and commercial district will lead you to the lifeline of the city, the Singapore River. Interesting stories about the rejuvenated shop houses along the "belly of the carp" will keep your enthusiasm high, as you stroll by this historic river with its impressive skyscrapers in the background. Then enjoy an artistic experience at one of Singapore's finest art venues, the Asian Civilisations Museum. Round off your discovery of *New Asia* – Singapore with an impressive photo shot of the city skyline from Marina Bay – lasting impressions of this vibrant city captured forever on film.

### • The City Experience

The energy of *New Asia* – Singapore is best experienced through a tour of the city centre, where you will be able to discover the harmonious co-existence of the modern and the traditional, old and new, East and West.

Immerse yourself into the history, culture and lifestyle of multi-racial Singapore, as you take a walk along colourful, spice-scented street in Little India and join in the bustling activity of Chinatown. The buzzing activities of fortune-tellers, flower sellers and exotic incense, surrounding one of Singapore's most famous Chinese temples along Waterloo Street are a contrast to the calm, cool serenity of its neighbouring Indian temple. The tour also brings you to the Civic district, the heart of Singapore's colonial past.

Then, a visit to the Singapore River to enjoy the beauty of its quaint waterfront shophouses, skillfully restored and rejuvenated. Sitting in the shadow of the majestic towering buildings of the Financial District, these buildings showcase the contrast of *New Asia* – Singapore and allow for a great photo opportunity.

At a gem factory, wonder at the best of Asian craftsmanship before driving down Orchard Road, Singapore's equivalent to Champs Elysee in Paris and Fifth Avenue in New York.

### In Harmony with Feng Shui

Feng Shui or Geomancy is the ancient Chinese practice of harnessing the powers of nature to promote business and one's general well being. A combination of science and art with a dash of common sense, this practice is very much alive in cosmopolitan Singapore.

The tour kicks off with a visit to a feng shui establishment where valuable information on feng shui is imparted and where some interesting artifacts may be viewed. Then as you take in the breathtaking view of the city atop one of the tallest buildings in Singapore, find out how feng shui concepts have played a part in the design and shaping of some prominent buildings. A walk along historical streets will reveal that this practice of keeping harmony with nature dates back to the days of our forefathers. Stumble upon signs that suggest the ancient roots of this practice.

Moving on to Suntec City, Singapore's main exhibition and convention centre, experience the influence of feng shui. As you "stand' in the World's Largest Fountain, listen to tales of people who have found success after visiting the fountain. Fact or Fiction? Only time will tell...





#### Milestones

This is a tour where interesting milestones in Singapore's history are revealed. The tour begins with a visit to the Urban Redevelopment Authority, where you can peek into how the city of Singapore in this millennium.

After sneaking a peek into Singapore's future, it is time to step back into Singapore's past. You will visit Far East Square, the very place where the pioneering Chinese immigrants landed on Singapore's shores, some 170 years ago.

A little movie magic always fires up the imagination. The next experience is exactly such an adventure. The Singapore Story chronicles the life and times of Singapura (the original romantic name of the city state), charting the many trials, tribulations and milestones encountered from the date of her historic founding in 1819 right up till today.

The classic experience of Singapore is to view her skyline from afar and admire the buildings of various styles, tastes and ages. Catch this exquisite view from Marina Bay, one of the many parks in the garden city.

As a round up to the tour, stand in the square aptly named Millenia Singapore and surround yourself with cutting-edge architecture and Roy Liechtenstein's last commissioned work of avant-garde sculptures, whilst you paint your own picture of Singapore in the new millennium.