

The Fifth International Symposium on

Advances in Abrasive Technology

15-17 November 2002

Academic Building, Hong Kong University of Science and Technology, Kowloon
Hong Kong



ISAAT 2002

Organized and Sponsored by



Mechanical Engineering Department
Hong Kong University of Science and Technology



Japan Society for Abrasive Technology

Invitation

On behalf of the Organizing Committee of the Fifth International Symposium on Advances in Abrasive Technology, the ISAAT 2002, jointly organized and sponsored by the Hong Kong University of Science and Technology and the Japan Society for Abrasive Technology, and to be held in Hong Kong during 15-17 November 2002, we cordially invite you to attend the symposium to share and to exchange your research experiences with other delegates, who are from many other countries and regions around the world.

ISAAT 2002 is the fifth one in the series. The purpose is to facilitate exchanges between researchers of the field from Japan and other countries and regions, to promote and to advance abrasive technology, which is a very important engineering subject. It is also aimed to promote friendly relations between researchers and engineers of the field world wide. We will have keynote speeches on the subjects of MEMS design and fabrication, and precision optical surface manufacturing.

During the symposium, the formation of the International Committee for Abrasive Technology, the ICAT, will be finalized to support the symposium series.

In terms of weather, November is one of the best months of a year in Hong Kong. The local temperature in the month of a year is typically around 20°C, based on the record of year 2000. The campus of HKUST is located at a scenic site along the Clear Water Bay peninsular of Hong Kong. The campus is equipped with modern facilities and is about 20min travel distance from the city center, which is conveniently connected to the Hong Kong International Airport.

Totally 70 papers will be presented during the symposium. The topics include micro machining, grinding and turning for brittle materials, measurement and surface quality assessment, cooling and coolant, polishing, grinding wheels, advances in truing and dressing for grinding, novel abrasive techniques, mechanics and control of grinding processes, and novel machining techniques. On these topics, novel designs in systems and machine tools, and novel techniques and processes will be reported. Modeling and investigations on the characteristics and performances of abrasive processes will also be presented. The selection of papers for inclusion in this symposium was based on the recommendations in the preliminary review of abstracts and the ones in the final review of full length papers, which were conducted based on originality and quality. While emphasizing the practice techniques to improve precision and efficiency, theoretical examinations of abrasive processes and systems are also welcome. We believe that the newest applicable information will be presented. The symposium should be suitable for active researchers and engineers.

For your hotel reservation, please respond to the local travel agency PC Tour directly. This travel agency has helped many conferences held in HKUST in the past. PC Tour is providing special offers and the details are in the hotel information and reservation form.

After registering for the symposium, you will receive a confirmation. You may also contact Miss Ronnie Tse at mertse@ust.hk for confirmation. Upon arrival at the symposium, you will receive a receipt for your payment, a name tag, and symposium handouts. Registration will be open starting from 6:00pm on 15 November 2002.

We look forward to seeing you in Hong Kong for ISAAT 2002.



Organizing Committee

Y. Gao, Chairman, Hong Kong University of Science and Technology, Hong Kong
J. Tamaki, Co-chairman, Kitami Institute of Technology, Japan
M. Takano, Co-chairman, Engis Japan Cooperation, Japan
B. C. Chen, Co-chairman, Industrial Technology Research Institute, Taiwan
H. Z. Choi, Co-chairman, Korea Institute of Industrial Technology, Korea
H. M. Pollicove, Co-chairman, University of Rochester, USA
T. R. A. Pearce, Co-chairman, Bristol University, UK
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M. M. F. Yuen, Hong Kong University of Science and Technology, HK
S. C. Salmon, Next Generation Tech. Group Inc., USA
Pei-Lum Tso, Tsing Hua University, Taiwan
H. D. Jeong, Pusan National University, Korea
Seiji Hirai, Tokyo Metropolitan College of Technology, Japan
Takeshi Tanaka, Ritsumeikan University, Japan
Noboru Morita, Chiba University, Japan
Hwa-Soo Lee, Nihon University, Japan
Koichi Kitajima, Kansai University, Japan
Tsunemoto Kuriyagawa, Tohoku University, Japan
Toshiji Kurobe, Kanazawa University, Japan
Zhou Libo, Ibaraki University, Japan
Katsuhiro Maekawa, Ibaraki University, Japan
Hitoshi Ohmori, Institute of Physical and Chemical Research, Japan
Shigeki Okuyama, National Defense Academy, Japan
Hiromichi Onikura, Kyushu University, Japan
Shoichi Shimada, Osaka University, Japan
Shinji Shimizu, Sophia University, Japan
Hitoshi Suwabe, Kanazawa Institute of Technology, Japan
Hirofumi Suzuki, Toyohashi University of Technology, Japan
Kiyoshi Suzuki, Nippon Institute of Technology, Japan
Jun-ichiro Takagi, Yokohama National University, Japan
Katsutoshi Tanaka, Toshiba Machine Co. , Japan
Tetsutaro Uematsu, Toyama Prefectural University, Japan
Junji Watanabe, Kumamoto University, Japan
Hitomi Yamaguchi, Utsunomiya University, Japan
Masato Yoshioka, Yamanashi University, Japan

Symposium Secretariat

Ronnie Tse, Hong Kong University of Science and Technology, Hong Kong
Ellie P. S. Ho, Hong Kong University of Science and Technology, Hong Kong
J. Yan, Kitami Institute of Technology, Japan

Schedule

		Academic Concourse	
15 Nov. 2002	18:00-20:00	Registration Reception	
16-17 Nov. 2002	09:00-18:00	Registration and helpdesk	

		Lecture Theatre F (A Windows 2000 PC will be available. A video projector is connected to the PC)	Classroom 1402 (A Windows 2000 PC will be available. A video projector is connected to the PC)
16 Nov. 2002	09:00-10:30	Registration Opening session Keynote speech I	
16 Nov. 2002	10:40-13:00	Micro machining	Brittle material machining I
16 Nov. 2002	14:00-15:40	Surfaces I	Cooling and coolant
16 Nov. 2002	16:00-17:40	Surfaces II	Polishing I

		The Clearwater Bay Golf and Country Club	
16 Nov. 2002	Evening	Banquet	

		Lecture Theatre F (A Windows 2000 PC will be available. A video projector is connected to the PC)	Classroom 1402 (A Windows 2000 PC will be available. A video projector is connected to the PC)
17 Nov. 2002	09:00-10:00	ICAT Keynote speech II	
17 Nov. 2002	10:10-12:30	Brittle material machining II	Grinding wheels
17 Nov. 2002	14:00-15:40	Mechanics and control Novel abrasive processes I	Truing and dressing Polishing III
17 Nov. 2002	16:00-18:00	Novel abrasive processes II Polishing II	Novel machining processes

Further Information

For further information, please write to

Dr. Y. Gao
ISAAT 2002
MECH ENG DEPT, HKUST
Clear Water Bay, Kowloon
Hong Kong
China

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The Fifth International Symposium on

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Academic Building, Hong Kong University of Science and Technology, Kowloon, Hong Kong

Program

15-17 November 2002	Academic Concourse	
15 November 2002 18:00-20:00	Registration Reception	
16-17 November 2002 09:00-18:00	Registration and helpdesk	
16 November 2002	Lecture Theatre F (A Windows 2000 PC will be available. A video projector is connected to the PC)	Classroom 1402 (A Windows 2000 PC will be available. A video projector is connected to the PC)
09:00-09:30	Registration	
	Opening session Chairman: Y. Gao, HKUST, Hong Kong	
09:30-09:40	Address Otto C. C. Lin, Vice-President for Research and Development, HKUST, Hong Kong	
09:40-09:50	Address J. Shibata, President, JSAT, Japan	
09:50-10:00	Address M. M. F. Yuen, Director, Technology Transfer Center, HKUST, Hong Kong	
	Keynote speech I Chairman: T. Kuriyagawa, Tohoku University, Japan	
10:00-10:30	MEMS Design and Fabrication M. Wong, HKUST, Hong Kong	
	Break	
	Micro machining Chairmen: L. Zhou, Ibaraki University, Japan H. Z. Choi, Korea Institute of Industrial Technology, Korea	Brittle material machining I Chairmen: H. S. Lee, Nihon University, Japan J. Wang, Queensland University of Technology, Australia
10:40-11:00	Development of a Multifunctional Micro-Machining System and its Applications L. Zhou, Y. Yaguchi, T. Fujii, J. Shimizu and H. Eda	Development of a Novel Ductile-Machining System for Fabricating Axisymmetrical Aspherical Surfaces on Brittle Materials J. Yan, J. Tamaki, K. Syoji and T. Kuriyagawa
11:00-11:20	Fabrication of Electroplated Micro Grinding Wheels and Manufacturing of Microstructures with Ultrasonic Vibration H. Onikura, R. Inoue, K. Okuno and O. Ohnishi	Ultraprecision Fabrication of Glass Ceramic Aspherical Mirrors by ELID-Grinding with a Nano-Level Positioning Hydrostatic Drive System T. Suzuki, H. Ohmori, Y. Dai, W. Lin, K. Katahira, A. Makinouchi, H. Tashiro, H. Yokota, M. Suzuki, T. Abe and T. Shimasaki
11:20-11:40	Experimental Investigation of Micro Scratching of Two-Phase Steel: Plastic Flow Mechanisms of the Ferrite and Cementite Phases H. Taniyama, H. Eda, L. Zhou, J. Shimizu and J. Sato	The Effects of the Jet Impact Angle on the Cutting Performance in AWJ Machining of Alumina Ceramics J. Wang

	Lecture Theatre F	Classroom 1402
11:40-12:00	A Study of the Fabrication of Multi-Layer Microstructures Using ELID Grinding and the Thick Photoresist Lithography Technology J.W. Kim, Y. Yamagata, S. Morita, S. Moriyasu, H. Ohmori and T. Higuchi	High-Precision Low-Damage Grinding of Polycrystalline SiC L. Yin, E.Y.J. Vancoille, L.C. Lee, Y.C. Liu, H. Huang and K. Ramesh
12:00-12:20	An ELID Grinding System with a Minimum Quantity of Liquid Y. Pan, T. Sasaki, N. Ito, H. Ohmori, Y. Yamagata, Y. Uehara and W. Lin	Force Characteristics and Deformation Behaviors of Sintered SiC during an ELID Grinding Process H. Ohmori, Y. Dai, W. Lin, T. Suzuki, K. Katahira, N. Itoh, A. Makinouchi and H. Tashiro
12:20-12:40	Micro-Hole Machining Using Ultrasonic Vibration H. Z. Choi, S.W. Lee and B.G. Lee	High Efficiency ELID Grinding of Alumina Ceramics F. Zhang, G. Kang, Z. Qiu, Y. Yang and X. Shi
12:40-13:00	A Study of Micro-Tool Machining Using Electrolytic In-Process Dressing and an Evaluation of its Characteristics S.W. Lee, H.Z. Choi, H.W. Lee, J. Choi and H. Jeong	Development of Grinding Technology for the Film of Diamond Coated Cutting Tool Y. Murakami, M. Sakurai, S. Yui, H. Matuhashi, H. Liu and R. Kawai
	Lunch at the Ground Floor Restaurant	Lunch at the Ground Floor Restaurant
	Surfaces I Chairman: M. Morgan, Liverpool John Moores University, UK	Cooling and coolant Chairman: S. C. Salmon, Next Generation Technology Group Inc., USA
14:00-14:20	Nano-Topography Characterization of Axisymmetrical Aspherical Ground Surfaces T. Kuriyagawa, N. Yoshihara, M. Saeki and K. Syoji	An Improved Technique to Determine Coolant Flow Patterns for In-Process Measurement S. Tse, Y. Gao, Y. Kuen and Z. Tao
14:20-14:40	Three-Dimensional Shape Modeling of Diamond Abrasive Grains Measured by a Scanning Laser Microscope T. Mahmoud, J. Tamaki and J. Yan	Grinding Performance Improvement by a Special Coolant Superimposed with Megasonic Vibration K. Suzuki, H.B. Qun, S. Mishiro, K. Tanaka, T. Imai, A. Sharma, T. Uematsu and M. Iwai
14:40-15:00	Improvement of Machined Surface Quality in Ultra-Precision Plane Honing T. Kuriyagawa, K. Nishihara, S. Suzuki, Y. Guo and K. Syoji	Effects of Megasonic Coolant on Cylindrical Grinding Performance H. Sakamoto, S. Shimizu, K. Suzuki, T. Uematsu and A. Shimotokube
15:00-15:20	Improvement in the Ground Surface Roughness of Fused Silica X-Fay Mirror with ELID-Grinding W. Lin, H. Ohmori, Y. Yamagata and S. Moriyasu	Effects of the Supplied Cold-Air Condition on Grinding Temperature in Cold-Air Jet Grinding S. Ohmori, M. Tateno and K. Kokubo
15:20-15:40	A New Longitudinal Mode Ultrasonic Transducer with an Eccentric Horn for Micro Machining A. Sharma, S. Mishiro, K. Suzuki, T. Imai, T. Uematsu and M. Iwai	Behavior of the Coolant in Grinding with a Floating Nozzle S. Ninomiya, S. Tooe, K. Suzuki and T. Uematsu
	Break	Break
	Surfaces II Chairman: P. L. Tso, National Tsing Hua University, Taiwan	Polishing I Chairman: S. W. Lee, Korea Institute of Industrial Technology, Korea
16:00-16:20	Development of an On-Machine Observation and Profile Measurement System with an AFM and its Properties Y. Watanabe, S. Moriyasu, K. Katahira, W. Lin, H. Ohmori, A. Makinouchi and H. Tashiro	Application of an Oscillating Spindle to Machining Processes H.S. Lee, S. Sasaki, T. Yamada, K. Mizukawa and Y. Ono
16:20-16:40	Experimental Investigation of the Characteristics of Laser Beam Passing through the Coolant Fluid of Various Concentrations for Surface Profile Measurement Y. Gao, Z. Tao and S. Tse	Ultra Precision Polishing with Oscillation Speed Control: an Analysis of the Pressure Distribution and Profile K. Yoshitomi, A. Une and M. Mochida
16:40-17:00	Computational Investigation of Coolant Flow Patterns Using CFX Y. Gao, S. Tse, W. Li, S. Chan and Z. Tao	Physical and Chemical Characteristics of the Ceramic Conditioner in Chemical Mechanical Planarization J.Y. Park, D.H. Eom, S.H. Lee, B.Y. Myung, S.I. Lee and J.G. Park
17:00-17:20	B-Spline Based Wavefront Reconstruction for Lateral Shearing Interferometric Measurement of Engineering Surfaces X. Liu and Y. Gao	Kinematic Analysis of Chemical Mechanical Polishing and its Effect on Polishing Results H. Kim, H. Kim, H. Jeong, S. Lee and D. Dornfeld

	Lecture Theatre F	Classroom 1402
17:20-17:40	Evaluation of Surfaces of Single SiC Crystal Polished with Various Kinds of Particles J. Watanabe, M. Fujimoto, Y. Matsumoto, N. Kuroda and O. Eryu	Material Removal Mechanism in Dynamic Friction Polishing of Diamond K. Suzuki, M. Iwai, T. Uematsu and N. Yasunaga
16 November 2002	The Clearwater Bay Golf and Country Club (Near the tip of the Clear Water Bay peninsular of Hong Kong)	
18:00	Coach to the venue Boarding at the semi-circular entrance piazza	
18:30-22:00	Banquet Address M. Morgan, UK L. Yin, Singapore F. Zhang, China	
22:00	Coach back from the venue	
17 November 2002	Lecture Theatre F (A Windows 2000 PC will be available. A video projector is connected to the PC)	Classroom 1402 (A Windows 2000 PC will be available. A video projector is connected to the PC)
	ICAT session Chairman: K. Suzuki, Nippon Institute of Technology, Japan	
09:00-09:30	Discussion on the International Committee for Abrasive Technology	
	Keynote speech II Chairman: J. Tamaki, Kitami Institute of Technology, Japan	
09:30-10:00	Deterministic Manufacturing Processes for Precision Optical Surfaces H. Pollicove, University of Rochester, USA	
	Break	
	Brittle material machining II Chairmen: L. Yin, Singapore Institute of Manufacturing Technology, Singapore C. Y. Wang, Guangdong University of Technology, China	Grinding wheels Chairmen: H. Ohmori, RIKEN, Japan X. Chen, University of Nottingham, UK
10:10-10:30	Grinding Characteristics of Solid Immersion Mirrors with the ELID Grinding Method Y. Uehara, H. Ohmori, Y. Yamagata, S. Moriyasu, T. Suzuki, K. Ueyanagi, Y. Adachi, T. Suzuki and K. Wakabayashi	Development of an Ultra-High Speed Cutting Wheel S. Yamazaki, K. Syoji, T. Kuriyagawa, Y. Ogura, T. Fukunishi and M. Miyake
10:30-10:50	A Basic Study of the Behavior of Slurry Action at Multi-Wire Saw K. Ishikawa, H. Suwabe, S. Itoh and M. Uneda	Development of Grinding Wheels by Stereolithography and Investigation of their Characteristics T. Tanaka and K. Okushima
10:50-11:10	A Fundamental Study of Dry Blasting: Effects of Abrasive Grains on Surface Roughness K. Kitajima, T. Yamamoto and M. Izawa	The Effects of Hard Lubricant Coatings on the Performance of Electro-Plated Superabrasive Grinding Wheels S.C. Salmon
11:10-11:30	Processes for the Generation of Glossiness on Ground Granites and Ceramics X.P. Xu, H. Huang, Y. Gao and H.J. Xu	Effectiveness of Laser Cleaning for Grinding Wheel Loading X. Chen and Z. Feng
11:30-11:50	Force and Energy Characteristics in Grinding of Ceramics J.Y. Shen, Y. Li, X.P. Xu and Y. Gao	The Effect of Porosity on the Grinding Performance of Vitrified CBN Wheels R. Cai, W.B. Rowe and M.N. Morgan
11:50-12:10	A Study of the Process of Granite Belt Grinding C. Wang, Z. Qin, X. Wei and Y. Wu	Measurement of Vitrified CBN Grinding Wheel Topography R. Cai, W.B. Rowe, M.N. Morgan and B. Mills

	Lecture Theatre F	Classroom 1402
12:10-12:30	The Anchoring Force in the Electrodeposition Type Diamond Abrasive Wire Sawing H. Ohne, K. Kono and K. Uno	Friction and Wear Properties of an ELID-Grinding Wheel based on CCD Microscope Observation T. Kato, H. Ohmori, K. Katahira, N. Itoh, N. Mitsuishi and A. Nemoto
	Lunch at the UC Bistro	Lunch at the UC Bistro
	Mechanics and control Novel abrasive processes I Chairman: X. Xu, Huaqiao University, China	Truing and dressing Polishing III Chairman: T. Uematsu, Toyama Prefecture University, Japan
14:00-14:20	Deformation Patterns of a Micropositioning Table under a Moving Force Y. Gao, S. Tse, S. Ko and W. Chan	ELID Grinding with a Tape Type Electrode N. Itoh, H. Ohmori, N. Mitsuishi, W. Lin and A. Nemoto
14:20-14:40	A Study of the Form Error Compensation for Aspherical Lens Machining P.L. Tso and H.C. Chuang	A Study of the Machining Accuracy of the Round-Off Truing Method: Effects of the Set-Up Angle for the Brake Truer S. Okuyama, K. Yamashita, T. Kitajima, A. Yui and S. Hanasaki
14:40-15:00	A Self-Tuning Based Fuzzy-PID Approach for Grinding Process Control Z. Yang, Y. Gao, D. Zhang and T. Huang	Electrocontact Discharge Dressing of a Resin-Bonded CBN Grinding Wheel and its Grinding Performance J. Tamaki, A. Kubo, J. Yan and K. Narita
15:00-15:20	Finishing of Tiny Nozzles by a Gyration Flow Finishing Method H. Sugimori, T. Kurobe and Y. Yamada	Process Characterisation of Grinding AISI 52100 with Vitrified CBN S. Ebbrell, W.B. Rowe and M.N. Morgan
15:20-15:40	High Speed Slurry Flow Finishing of the Inner Wall of a Stainless Steel Pipe T. Kurobe, Y. Yamada and H. Sugimori	Autonomous Tool Path Generation in Robotic Polishing of an Aluminum Alloy A.A. Akbari and S. Higuchi
	Break	Break
	Novel abrasive processes II Polishing II Chairman: J. Watanabe, Kumamoto University, Japan	Novel machining processes Chairman: T. Kato, Institute of Physical and Chemical Research, Japan
16:00-16:20	Development of an Ultrasonic Torsional Vibration Tool Utilizing the 3rd Order Wave Mode S. Mishiro, H.B. Qun, T. Imai, A. Sharma, K. Suzuki, T. Uematsu and M. Iwai	Development of a Micro Machining Technology for Fabrication of Micro Parts T. Je, J. Lee, D. Choi, E. Lee and B. Shin
16:20-16:40	A New Centerless Grinding Technique without Employing a Regulating Wheel Y. Wu, Y. Fan, M. Kato, J. Wang, K. Syoji and T. Kuriyagawa	Development of a Desktop Micro Injection Molding Machine M. Asami, K. Yoshikawa, Y. Ohi, H. Ohmori, Y. Yamagata, Y. Uehara, W. Lin, T. Sasaki and Y. Pan
16:40-17:00	An Analysis of the Pad Deformation for Improved Planarization T.L. Horng	Diamond Turning of Single Crystal Germanium with an Oscillating Rotary Tool O. Horiuchi, R. Itabashi, Y. Mitoma, H. Shibutani and H. Suzuki
17:00-17:20	A Study of Nano-Polishing of Injection Molds Using a Fixed Abrasive Pad J. Choi, H. Kim, J. Park, H. Jeong and H. Seo	Rapid Manufacturing of 3D Shaped Products by Multi-Face High-Speed Machining B.S. Shin, D.Y. Yang, D.S. Choi, E.S. Lee, T.J. Je and K.H. Whang
17:20-17:40	Development of New Mica Abrasives Suitable for High Performance Mechanochemical Polishing of Si Wafers N. Yasunaga and S. Okada	Selective Removal of Carious Dentine with the Micro Abrasive Jet Technology T. Kuriyagawa, O. Kinbara, S. Horiguchi, J. Tagami, T. Yamada and K. Syoji
17:40-18:00	Development of a Polishing Disc Containing Granulated Fine Abrasives H. Nakamura, J. Yan, K. Syoji and Y. Wakamatsu	

ISAAT 2003

Thank you for your participation. See you at ISAAT 2003 in UK.

ISAAT 2002

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The Hong Kong University of Science and Technology and
The Japan Society for Abrasive Technology

Mechanical Engineering Department, Hong Kong University of Science and Technology
Clear Water Bay, Kowloon, Hong Kong
Homepage: <http://ihome.ust.hk/~meygao/ISAAT2002/> or <http://www.jsat.or.jp/>
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REGISTRATION FORM

A separate form is required for each delegate. Please photocopy the form if necessary.

Please send your completed registration form to **Miss Ronnie Tse** of the address on next page. You may fax your completed registration form to her at **(852) 2358-1543**. For confirmation, please send her an e-mail at the address of **mertse@ust.hk**.

A. GENERAL INFORMATION

Title and name of delegate (Please use CAPITAL letters for your surname)	
Affiliation	
Address	
Telephone Fax E-mail	
Paper Number(s)	
Hotel name	
Accompanying person's name(s) (Please use CAPITAL letters for your surname)	

B. REGISTRATION FEES

	Registration Fee	Qty
For delegates from Japan	US\$450	
For other delegates	US\$350	
For students ^a	US\$250	
For students who want a copy of the hard cover official conference proceedings and a banquet ticket	US\$350	
For each accompanying person ^b	US\$80	
Each extra banquet ticket	US\$70	
Each extra copy of the hard cover official conference proceedings, the special volume of the periodical KEM of TTP	US\$110	
Total payment in US\$ ^{c,d}		

^a Without **the official conference proceedings and banquet ticket**. Please attach a photocopy of university full-time PG student ID. The ID will be required to present at the registration desk.

^b The accompanying person's fee covers the reception and the banquet.

^c Our cancellation policy – any cancellation must be notified to **Miss Ronnie Tse** of the address on next page in writing. Refund of the registration fee will be given in a cheque in US\$, with remittance charge deducted if involved in your way of payment. Before 20 October 2002, 70% refund will be offered. After 20 October 2002, no refund will be offered.

^d Please note that the registration fees do not cover any personal insurances. Please secure your own insurance policies in case of necessity and prior to your trip for ISAAT 2002.

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Mechanical Engineering Department, Hong Kong University of Science and Technology
Clear Water Bay, Kowloon, Hong Kong
Homepage: <http://ihome.ust.hk/~meygao/ISAAT2002/> or <http://www.jsat.or.jp/>
TEL: 852-2358-8649 FAX: 852-2358-1543 E-mail: meygao@ust.hk

C. PAYMENT METHODS *(Please use one of the three methods to pay your registration fees)*

1) Bank transfer _____

Name of bank: _____ Hang Seng Bank Limited UST Branch
Bank address: _____ Room G030, The HKUST, Clearwater Bay, Kowloon, Hong Kong
Bank account name: _____ The Hong Kong University of Science and Technology
Bank account number: _____ 024-361-008071-669 SWIFT Code: _____ HASE HKHH
Payment details: _____ Please provide your name, your paper number(s), your institution, and state that the payment is for ISAAT 2002 by the MECH ENG DEPT of HKUST. These are important to help our staff to identify your payment.

Please also fax a copy of the note of the above bank transfer to **Miss Ronnie Tse** at **852-2358-1543** for record.

2) Cheque _____

Please make your cheque in US dollar and payable to **The Hong Kong University of Science and Technology** and mail the cheque together with your completed registration form to

Miss Ronnie Tse
ISAAT 2002
Department of Mechanical Engineering
The Hong Kong University of Science and Technology
Clear Water Bay, Kowloon
Hong Kong

3) Credit card _____

Credit card type: _____ Visa _____ / Master _____ / AMEX _____
Card holder's name: _____
Card number: _____
Expiry date (mm/yy): _____
Authorized amount in US\$ _____
Card holder signature: _____

D. MISCELLANEOUS INFORMATION

1) Your diet habit (vegetarian or others):

2) Audio/visual support needed for your presentation (please print yes or no)

a) Overhead projector: _____ b) Slide projector: _____ c) Double slide projector: _____
d) Video projector and PC for using MS PowerPoint 2000/2002 *: _____

* The video projector with PC option is preferred for better visual effects.

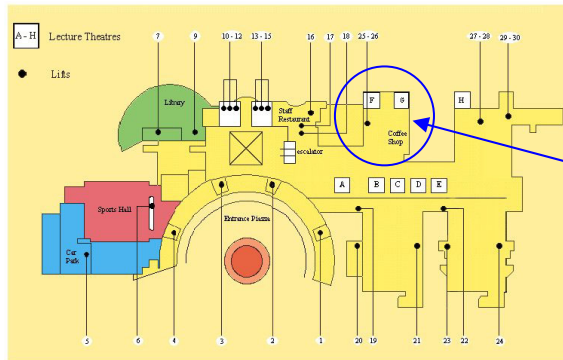
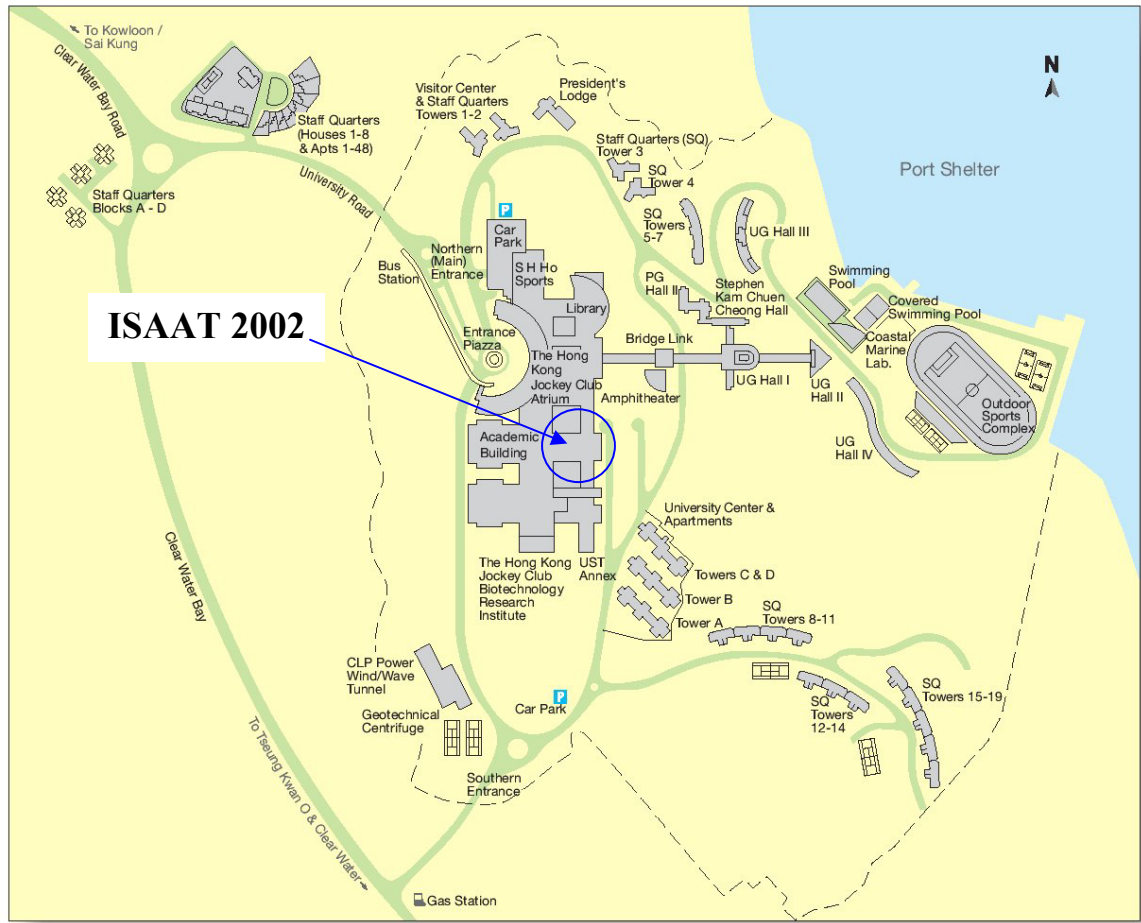
E. BREIF INTRODUCITON OF DELEGATES *(Please provide a brief introduction for yourself)*

Your name:
Paper number(s):
Brief introduction:

Date _____

Signature of delegate _____

CAMPUS MAP
 THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY



ISAAT 2002 Homepage

<http://ihome.ust.hk/~meygao/ISAAT2002/>
<http://www.jsat.or.jp/>

LOCATION MAP
THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY



Hints for transportation from airport to HKUST:
For passengers with bulky luggage, taking a taxi to HKUST direct is recommended.
Those with simple luggage may take Airport Bus A22 to Lam Tin, and change for taxi to HKUST.

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Picture inserts initiated by Dr. Gao of ME, HKUST in 2002.