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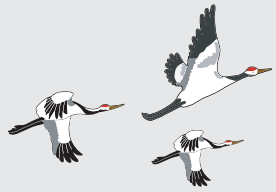
INVITATION



Invitation to IFAC World Congress 2008 in SEOUL

The IFAC World Congress to be held in Seoul, Korea in 2008 is the 17th of the triennial IFAC World Congress series.

The International Program Committee is pleased to report that the response to our Call for Papers has been record-setting. That is, a record number of more than 3700 papers have been submitted and approximately 2700 have been accepted. All of these papers will be presented in 397 oral sessions and 7 poster sessions over the five day period, all in one conference venue of COEX, Seoul, Korea.

In recent years, numerous new concepts and approaches and development methodologies and tools have emerged that enrich the current status in theory, technology and applications of automatic control, thus facilitating the advancement of future research and developments in an accelerated manner.

In an effort to reflect all of these subject areas this World Congress features nine plenary talks; three from Europe, three from US, and three from Asia. Three of them are from industries, one from each continent. The Congress also introduces highlight programs in industrial areas such as semiconductor, electronics, shipbuilding, steelmaking, intelligent robots, automobile, and education. Six milestone sessions are prepared by Coordinating Committees of IFAC. Two panel discussion sessions are arranged to provide a forum to exchange ideas between researchers.

With 41 proposals, the reaction to the Call for Tutorials and Workshops was also very positive. Among these 18 Tutorials and Workshops were selected and will be held on Saturday and Sunday, just prior to the main Congress opening. Many technical tours are arranged for providing more opportunity to show Korean industries. The

IFAC President
Wook Hyun Kwon

General Chair
Hyungsuck Cho

IPC Chairman
Dongil "Dan" Cho

IPC Co-Chairman
Shinji Hara

Congress provides also special events such as robot demonstrations and special social programs such as learning of Korean language, experience of Korean economy and culture, and movie night.

As in the previous Congresses, there will be the IFAC best Application Paper Prize and IFAC Young Author Prize. Also prizes offered by the National Organizing Committee will be awarded to the best Poster Papers and best Video Presentations.

We would like to extend our sincere appreciations and thanks to International Program Committee members and National Organizing Committee members, and Chairs of Technical Committees of IFAC for their tremendous contributions toward the success of this Congress. We also would like to extend our thanks to plenary speakers, Coordinating Committee members of IFAC and the organizers of Panel Discussions for their willingness to help make the Congress technically rich and fruitful.

Seoul is a city of infinite discoveries. With a history of 600 years, Seoul is a city, where the 5000-year Korean traditional and the modern technologies co-exist in a perfect harmony. We invite you to experience the “Dynamic Korea” in Seoul.

The 17th Congress promises to be the largest IFAC World Congress ever, building on the successful sixteen previous Congresses. We sincerely hope good tradition of Congresses continues for a long time.

We look forward to seeing you in Seoul at the 17th IFAC World Congress. You will see Korean Hospitality.

CONGRESS ORGANIZATIONS

IFAC President — **Wook Hyun Kwon (KR)**
General Chair — **Hyungsuck Cho (KR)**

International Program Committee

IPC Chairman — **Dongil "Dan" Cho (KR)**
IPC Co-Chairman — **Shinji Hara (JP)**

IPC Advisors

Peter Fleming (UK), **Alberto Isidori** (IT), **Sirkka-Liisa Jamsa-Jounela** (FI), **Vladimir Kucera** (CZ), **Wook Hyun Kwon** (KR)

IPC Vice-Chairs

Sergio Bittanti (IT), **Jin Young Choi** (KR), **Petr Horácek** (CZ), **Tohru Katayama** (JP), **Anibal Ollero** (ES), **Hyungbo Shim** (KR)

Congress Publication Editors (CPE)

Myung Jin Chung (KR), **Pradeep Misra** (US)

Congress Coordinating Editors (CCE)

Ruth Bars (HU), **Serge Boverie** (FR), **Xi Ren Cao** (HK), **Ewart R. Carson** (UK), **Gheorghi Dimirovski** (TR), **Denis Dochain** (BE), **Wolfgang Halang** (DE), **Lars Nielsen** (SE), **Shimon Y. Nof** (US)

Congress Highlight Program Editors (CHE)

Chul-Goo Kang (KR), **Choong Dong Lee** (KR), **Jae-Bok Song** (KR), **Ji Oh Song** (KR), **Sangchul Won** (KR), **Woong-Chul Yang** (KR), **Bum-Jae You** (KR)

Pre-Congress Tutorials and Workshop Editors (TWE)

Kwang Soon Lee (KR)

Congress Technical Editors (CTE)

Frank Allgőwer (DE), **Robert Babuska** (NL), **Marco Campi** (IT), **Patrizio Colaneri** (IT), **Luc Dugard** (FR), **David Feng** (AU), **Florin G. Filip** (RO), **Gerard. L. Gissinger** (FR), **Leyla Goren** (TR), **Aarne Halme** (FI), **Hideki Hashimoto** (JP), **Roberto Horowitz** (US), **Petros Ioannou** (US), **Michel Kinnaert** (BE), **Anatoli F. Kleimenov** (RU), **Peter Kopacek**

(AT), **Om Malik** (CA), **Wolfgang Marquardt** (DE), **Frédérique Mayer** (FR), **Arturo Molina** (MX), **Laszlo Monostori** (HU), **Reinhard Neck** (AT), **Brett Ninness** (AU), **Carlos Eduardo Pereira** (BR), **Marie-Noëlle Pons** (FR), **Maria Isabel Ribeiro** (PT), **Ricardo Sanz** (ES), **Carsten W. Scherer** (NL), **Rodolfo Soncini Sessa** (IT), **Houria B. Siguerdidjane** (FR), **Gerrit Van Straten** (NL), **Robert Sutton** (UK), **Masayoshi Tomizuka** (US), **Sandor M. Veres** (UK), **Ljubo B. Vlacic** (AU), **Wei Wang** (CN), **Sangchul Won** (KR), **Sandro Zampieri** (IT), **Janan Zaytoon** (FR), **Detlef Zuehlke** (DE)

Congress Technical Associate Editors (CTAE)

Mazen Alamir (FR), **Erwei Bai** (US), **Kanat Camlibel** (NL), **Mo-Yuen Chow** (US), **Chung Choo Chung** (KR), **Wan Kyun Chung** (KR), **Guiseppe Conte** (IT), **Sylviane Gentil** (FR), **Laszlo Gerencser** (HU), **Gerard. L. Gissinger** (IT), **Alessandro Giua** (IT), **Francisco Gordillo** (ES), **Thierry Marie Guerra** (FR), **Juergen Hahn** (US), **Didier Henrion** (FR), **Hakan Hjalmarsson** (SE), **Paul van den Hof** (NL), **Keum-Shik Hong** (KR), **Karl H. Johansson** (SE), **Peter Korondi** (HU), **Lorenzo Marconi** (IT), **Yoshihiko Miyasato** (JP), **Reza Moheimani** (AU), **Martin Monningmann** (DE), **Marco Münchhof** (DE), **Romeo Ortega** (FR), **Hitay Ozbay** (TR), **Youngjin Park** (KR), **Poogyeon Park** (KR), **Gianfranco Rizzo** (IT), **Rodolphe Sepulchre** (BE), **Jakob Stoustrup** (DK), **Sophie Tarbouriech** (FR), **Paul Valckenaers** (BE), **Masaki Yamakita** (JP), **Kyoungsu Yi** (KR), **Cheng-Ching Yu** (TW), **Argyrios Zolotas** (UK)

National Organizing Committee

Hyungsuck Cho	General Chair
Jae Weon Choi	International Relations Chair
Jin Young Choi	General Secretary
Chung Choo Chung	Publicity Chair
Myung Jin Chung	Publication Chair
Wan Kyun Chung	Video Session Chair
Hyoun Jin Kim	Human Resource & Special Events Chair
Oh Kyu Kwon	Finance Chair
Kwang Soon Lee	Tutorial/Workshop Chair
Boo Hee Nam	Exhibition Chair
Chan Gook Park	Local Chair
Jaehyun Park	Congress Operation Chair
Hyungbo Shim	IT Support Chair
Jae-Bok Song	Special Task Force Chair
Sangchul Won	Industrial Support Chair
Kyongsu Yi	Finance Co-Chair

CONGRESS ORGANIZATIONS

Host Organization

IFAC

Organizing Institutes

ICROS

ERC-ACI of SNU

Supporting Organizations

Asian Control Association

KAIST Valufacture
Institute of Mechanical Engineering

Ministry of Education,
Science and Technology

교육과학기술부

Seoul Metropolitan Government

Korea Tourism Organization

Seoul Convention & Visitors Bureau

Main Sponsor Industries

Humax

Samsung Electronics

Korea Electric Power Corporation

Korea Power Exchange(KPX)

Hyundai Motors

POSCO

LS Industrial Systems

Hyundai Heavy Industries

Hyundai Mobis

Poscon

Topfield

Fine Digital

Sanion

Suprema

Sponsor Industries

Samsung Heavy Industries

AutoEverSystems

Hyundai Autonet

KEFICO

Piolink

Maxian

WITCOM

CR Systems

Woori Tech.

Xeline

Realgain

Bando MPS

Venue

The venue for the 17th World Congress is **COEX Convention Center** which is located within the World Trade Center Seoul Complex in the central business area of Seoul, Korea.

Over 150 exhibitions, conventions, and special events are held at the center each year. Its spacious exhibition halls and various meeting rooms are ideal for the conferences of small companies as well as for world-class summit meetings and international conventions.

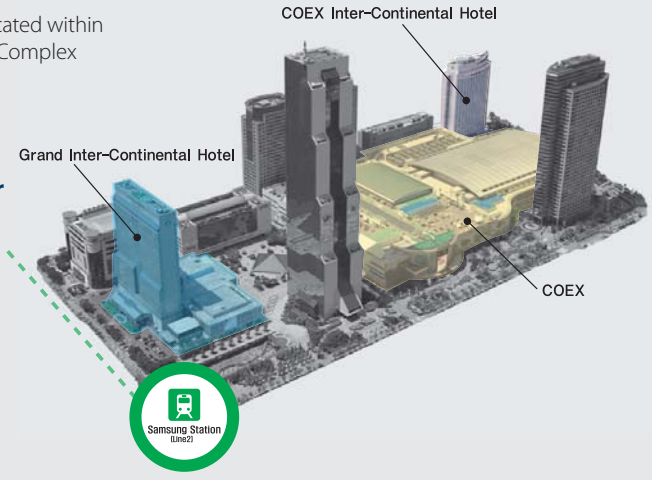
COEX Convention Center boasts Korea's best facilities and equipment for meetings and exhibitions: state-of-the-art simultaneous interpretation systems, audio-visual systems, lighting capabilities, electrical infrastructure, and telecommunications systems. These facilities and equipment are installed in all its meeting rooms and exhibition halls.

World Trade Center Seoul Complex
Samseong-dong, Gangnam-gu, 135-731, Seoul, Korea
Phone: 02-6000-0114
Fax: 02-6000-1303
http://www.coex.co.kr

Venue Map

COEX Convention Center is located within the World Trade Center Seoul Complex which is shown below.

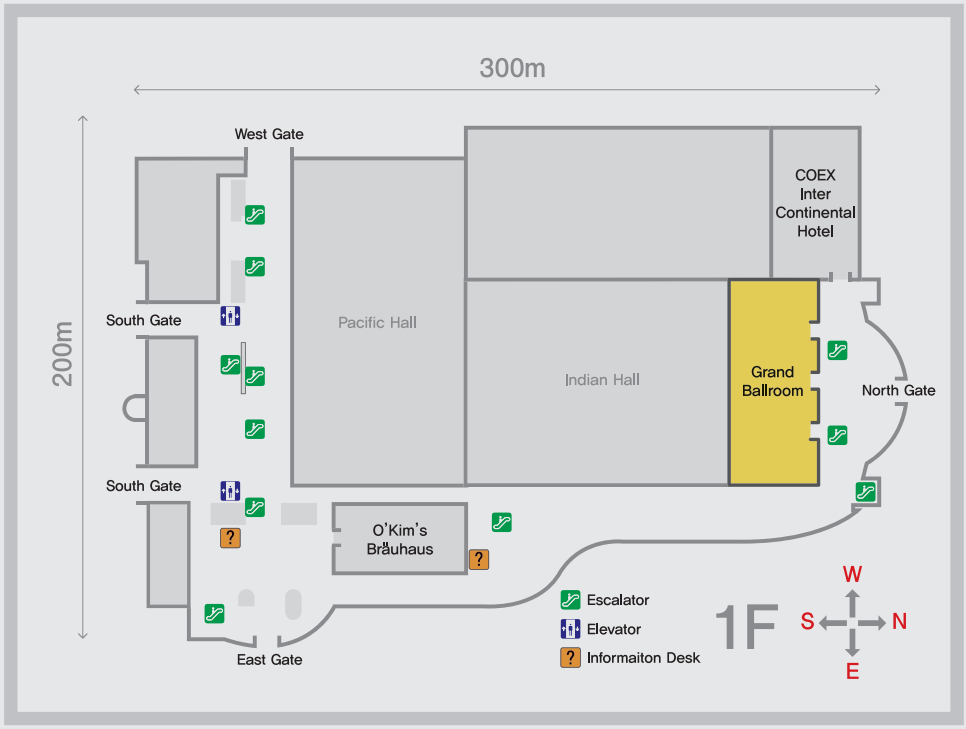
World Trade Center Seoul Complex
(Satellite View)



World Trade Center Seoul Complex (Plan View)

COEX Convention Center is composed of four floors and boasts numerous facilities where world-class conventions can be held.

COEX Convention Center: 1st Floor

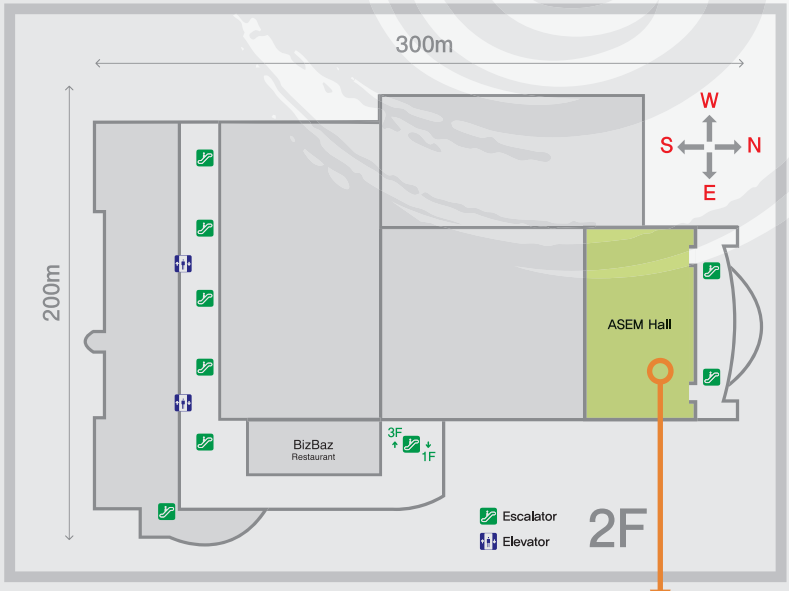


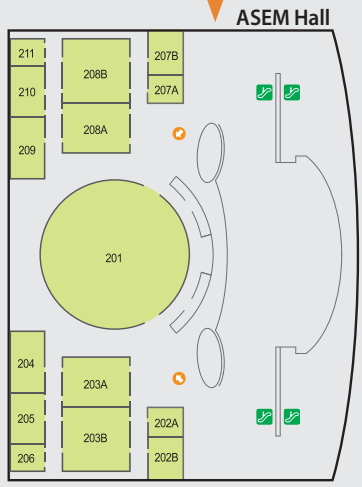
Grand Ball Room

- Welcome Reception
- Farewell Party

The Congress will hold a welcome reception and a farewell party in the Grand Ballroom.

COEX Convention Center: 2nd Floor





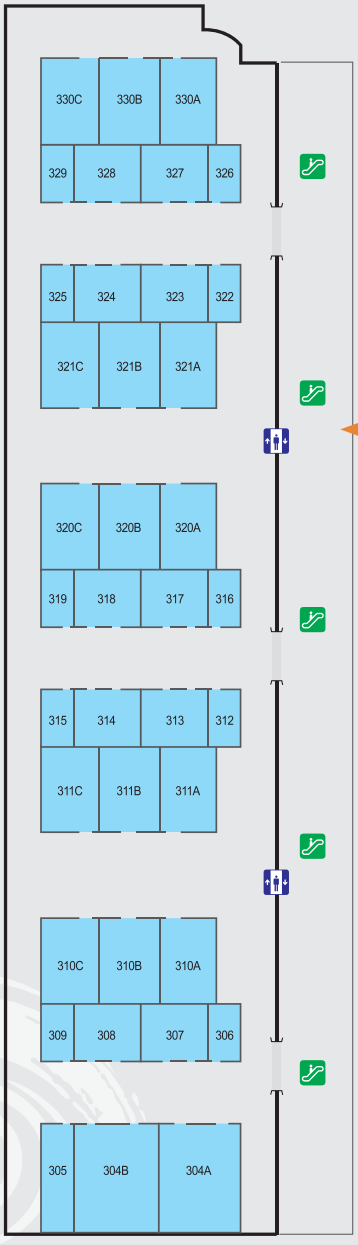
ASEM Hall

- TC/CC. meetings
- IFAC council meetings
  Outgoing & Incoming council meetings
- TB/EB meetings
  Outgoing & Incoming TB/EB meetings
- Meeting Lounge
- IFAC Secretariat Room

ASEM Hall will hold various meetings including IFAC council and board meetings. VIP Room and IFAC Secretariat Room will also be located in ASEM Hall.

CONGRESS INFORMATION

Rooms of Conference Center



Conference Center
- Oral Sessions
- Video Sessions
- Pre-Congress Tutorials & Workshops
- Special Control Education Workshop
- Speaker's Ready Rooms

Convention Hall
- Congress Banquet

Atlantic Hall
- Congress Registration & Information
- Poster Sessions
- Exhibition
- Robot Demonstrations
- Internet Lounge
- Snack Bar

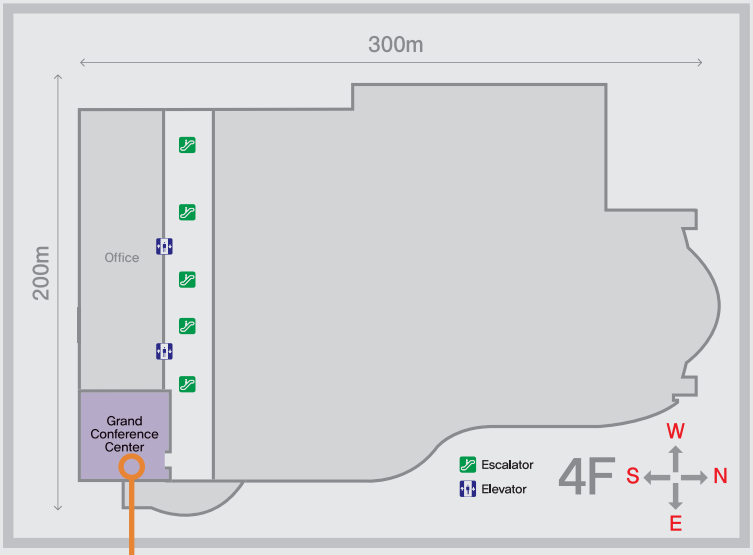
Auditorium
- Plenary Sessions
- Congress Opening Ceremony
  IFAC Awards
- Closing Ceremony
  Congress Awards

COEX Convention Center: 3rd Floor

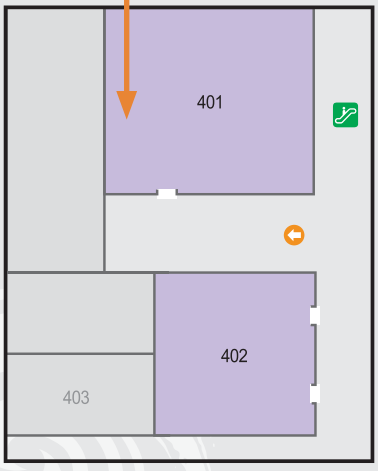
The Conference Center has been designated as the venue for all oral sessions, video sessions, tutorials and workshops. Speakers' Ready Rooms will also be located in the Conference Center.

Atlantic Hall will be the venue of the poster sessions, exhibitions, and robot demonstrations. It will also be the site of the Registration Desk, Information Desk, Snack Bar, Internet Lounge, Congress Secretariat Room, and the IFAC President's Room. Convention Hall will be the venue of the Congress banquet. The opening ceremony, closing ceremony, and plenary sessions of the Congress will be held at the auditorium.

COEX Convention Center: 4th Floor



Rooms of Conference Center



Conference Center
- Milestones
- Panel Discussions
- Special Social Programs
- IFAC Journal Awards
- IFAC Fellow Award

The Conference Center on the 4th floor has been prepared for the milestone sessions as well as for panel discussions and various social events.

World Trade Center Seoul Complex

World Trade Center Seoul Complex is a prominent landmark in Seoul. Located in the central business area, it is a destination for business, shopping, entertainment, and more. It boasts the world-class COEX Convention Center, the 55-story Trade Tower, the 41-story ASEM Tower, COEX Intercontinental Hotel, Grand Intercontinental Hotel, City Air Terminal, COEX Mall, COEX Aquarium, Kimchi Museum, as well as restaurants and entertainment facilities.

Major Attractions of the Complex

COEX Mall

A great place where you can be entertained could be found within the complex. COEX Mall features a multiscreen movie theatre, a major bookstore, an aquarium, restaurants serving various food fares, and entertainment galore.
www.coexmall.com

Megabox
Megabox is a mega-popular 17-screen multiplex cinema with over 4,000 seats. It is one of Asia's largest movie theatre complexes.

COEX Aquarium
Escape to the undersea world at COEX Aquarium, featuring all kinds of sea creatures. Watch cute otters frolicking, and observe sharks and manta rays from a 72 meter long underwater tunnel. It's exciting AND educational.

Kimchi Museum
This is the best place to learn about Korea's #1 staple: Kimchi. Discover the history of Kimchi, how it is made, and the different kinds of Kimchi that are available. Become a Kimchi expert by visiting Kimchi Museum.

City Air Terminal

You can find convenient bus transfers to the Incheon and Gimpo airports in this terminal. Depending on your airline, you can check in and go through expedited immigration procedures. City Air Terminal is like an airport in downtown Seoul.

Congress Facilities

Internet Lounge

Free high-speed Internet connection will be provided to all the IFAC participants in the whole COEX Convention Center. All the participants can bring laptops so they can check their e-mail and surf the Web. The wireless Internet login information can be found in the registration package or will be provided at the Registration Desk.

Date	July 6 - 11 (Sun - Fri)
Time	08:00 - 18:00
Location	Atlantic Hall, 3rd Floor

Snack Bar

The Snack Bar will be open for the entire duration of the Congress for those with a tight schedule and/or are on a break. Drinking water and light snacks will be available for purchase.

Date	July 6 - 11 (Sun - Fri)
Time	09:00 - 17:00
Location	Atlantic Hall, 3rd Floor

Speaker's Ready Rooms

This room will be provided to the speakers so that they can prepare for their respective presentations. Computers and projectors will be made available therein for use by the speakers. There will also be quiet spaces where the speakers could relax before and after their presentation.

Date	July 7 - 11 (Mon - Fri)
Time	09:00 - 18:00
Location	Rooms 305, 315 & 325, Conference Center, 3rd Floor

Meeting Lounge

Snacks and refreshments will be served for meetings or while resting.

Date	July 6 - 11 (Sun - Fri)
Time	09:00 - 18:00
Location	Room 202A, ASEM Hall, 2nd Floor

Congress Secretariat Room

The Congress Secretariat Room will be moved from the Conference Center to the Atlantic Hall. Please check the venue according to the date.

Date	July 3 - 5 (Thu - Sat)
Time	08:00 - 20:00
Location	Room 312, Conference Center, 3rd Floor

Date July 6 - 11 (Sun - Fri)
Time 07:30 - 20:00
Location Atlantic Hall, 3rd Floor

IFAC Secretariat Room

Date July 3 - 11 (Thu - Fri)
Time 08:00 - 18:00

Date July 12 (Sat)
Time 08:00 - 12:00
Location Room 209, ASEM Hall, 2nd Floor

Oral Session Room Facilities

Beam projectors and laptop computers with Windows XP Professional (U.S. version) and Microsoft Office XP2007 (U.S. version) will be provided in all the presentation rooms, which will be equipped with 220V electric currents and 60Hz ACs. Speakers who are using a special format or file are requested to check for compatibility at the Speakers' Ready Rooms. All speakers are requested to bring their presentation on a CD or a USB flash disk.

Poster Session Room Facilities

The poster sessions will be held simultaneously with the oral presentations. All materials should be posted 20 minutes before the start of each poster session. At least one author should stand next to a poster to answer questions. After the session, the posters must be removed to prepare the room for the subsequent sessions.

Date July 7 - 10 (Mon - Thu)
Time 10:30 - 12:30 I 16:30 - 18:30
Location Atlantic Hall, 3rd Floor

Bank and Cash Dispenser

You can withdraw cash in Korean won, using your ATM or credit card, from the Foreign Exchange Bank (02-551-7979) ATM machines located right before the Megabox cinema or outside of the World Trade Center Seoul Complex (Samseong subway station exit #5 or #6). Make sure that the ATM machine displays the global ATM mark (Plus mark, VISA mark, etc.). These ATM machines are open only from 09:30 to 16:30 on weekdays.

Medical Facilities

The medical clinic, which can treat simple injuries or medical problems, is located

on the 1st floor of the COEX Convention Center. All its services are free of charge (02-6000-1119). The nearest hospital is ASEM Clinic, located at the west gate (02-6002-0022). If you or anyone near you needs medical attention, please feel free to ask any volunteer or IFAC WC '08 personnel for assistance.

Car Parking

Underground fee-charging parking spaces are available in the COEX Convention Center.

Lunch and Restaurants

There are many restaurants within the complex. The COEX mall has many restaurants from fast food to classic traditional restaurants. The COEX mall food court also has a variety of international styles to choose from. O'kim's Brauhaus and BizBaz restaurants are located on the first and second floor of COEX Convention Center, respectively. Take advantage of the complex facilities during Congress. For more information, a leaflet for lunch and restaurants is included in the conference bag.

Congress Registration

Registration for the 2008 Congress can be done online, at ***http://www.ifac2008.org***
The online registration will be open until the end of the Congress.

Registration Desk & Information Desk

The Registration & Information Desk will be open from July 5 to 11, 2008. You may obtain printing materials when you come to register with your badge and other conference-related materials. There are trained volunteers who will assist you in all Congress-related matters as well as other local matters, to make you feel at home.

Date	July 5 (Sat)
Time	08:00 - 18:00
Location	Bridge, In front of Atlantic Hall, 3rd Floor

Date	July 6 - 11 (Sun - Fri)
Time	08:00 - 21:00 (Sun), 07:30 - 18:00 (Mon - Wed), 08:00 - 18:00 (Thu - Fri)
Location	Atlantic Hall, 3rd Floor

Registration Information

You may register for the Congress onsite. The regular registration fee has been changed from USD 550 to USD 650 since April 10, 2008. Welcome Reception, Farewell Party, DVD, Banquet, Special Social Programs, and Coffee Breaks are included with the registration fee.

The student and retiree registration fees have also been changed from USD 250 to USD 300 since April 10, 2008. It already includes, though, the fees for the Welcome Reception, Farewell Party, DVD, Special Social Programs, and Coffee Breaks.
Guest registration fee of USD 100 will remain the same throughout the Congress and the fee includes access to Welcome Reception, Farewell Party, Special Social Programs, and Coffee Breaks, but not to technical sessions.

Badges

All the registered participants and their companions will receive a personal badge upon registration. You are requested to wear your name badge when attending a meeting or social event in the Congress. Only those participants who are wearing their name badge will be admitted to the lecture halls.

Refund Policy

Once a paper has been uploaded, the registration fee can no longer be refunded even if the paper is withdrawn. Those who were not able to upload their papers on or before the final registration paper upload deadline of March 8, 2008 are required to pay a USD 50 processing fee. All refunds requested between March 8, 2008 and the advance registration deadline of April 10, 2008 will be charged 50% of the registration fee. No requests for refund made after April 10, 2008 will be accepted.

Disclaimer

Neither the Organizing Committee nor the Congress Secretariat will accept liability for any damage and/or loss that may be incurred by a Congress participant or his/her companion during the official activities of the Congress, or the scheduled excursions. All the participants are to take part in all the tours and events in the Congress at their own risk. The participants are advised to charge any loss or damage they may incur during the Congress to their insurance. Verbal agreements will not be binding unless they are confirmed in writing, and such agreements shall be applicable only in Korea.

Insurance

The organizers of the Congress shall not accept responsibility for the individual medical, travel, or personal insurance of the participants of the Congress. All the participants are strongly advised to obtain a personal insurance before attending the conference. The organizers will not be responsible for the loss or damage of the participants' personal belongings.

Force Majeure

In the event that the entire Congress is cancelled due to force majeure, the organizers shall not accept liability for any claim for damages and/or losses.

CONGRESS CEREMONY

Congress Opening Ceremony & Welcome Reception

Congress Opening Ceremony

Program: Opening Remarks | Welcome Address by IFAC President | Congratulatory Address by Minister of Education, Science, and Technology | Reports from IPC Chair | IFAC Awards | Performance

Date July 6 (Sun)
Time 17:30 - 18:30
Location Auditorium, 3rd Floor

Welcome Reception

Date July 6 (Sun)
Time 18:30 - 20:00
Location Grand Ballroom, 1st Floor

Congress Banquet

Program: Opening Remarks | Dinner | Keynote Addresses | Performance

Date July 10 (Thu)
Time 19:30 - 21:00
Location Convention Hall, 3rd Floor

Closing Ceremony & Farewell Party

Closing Ceremony

Program: Closing Speech by General Chair | Summary of Academic Program by IPC Chair | IFAC Congress Awards | IFAC Presidency Transfer | New IFAC President Remarks | Welcome Address to the 18th IFAC World Congress | Closing Music

Date July 11 (Fri)
Time 16:30 - 18:00
Location Auditorium, 3rd Floor

Farewell Party

Date July 11 (Fri)
Time 18:00 - 19:30
Location Grand Ballroom, 1st Floor

Note: Welcome Reception and Farewell Party are open to all registered and accompanying persons free of charge. Please present your tickets at the entrance.

IFAC & CONGRESS AWARDS

IFAC Awards at Opening Ceremony

Giorgio Quazza Medal to Prof. Graham Goodwin
Nathaniel B. Nichols Medal to Prof. Gerd Hirzinger
In addition, IFAC advisors will be appointed during this ceremony.

Date July 6 (Sun)
Time 17:30 - 18:30
Location Auditorium, 3rd Floor

IFAC Journal Awards

Automatica Prize Paper Award
Control Engineering Practice Prize Paper Award
Journal of Process Control Prize Paper Award
Engineering Applications of Artificial Intelligence Prize Paper Award
Mechatronics Journal Prize Paper Award

Date July 8 (Tue)
Time 18:30 - 19:30
Location Room 402, Conference Center, 4th Floor

IFAC Fellow Award

Fellows elected in 2008.
Bittanti, Sergio / Braatz, Richard / Camacho, Eduardo / Cao, Xi-Ren / Cassandras, Christos / Chai, Tian-You / Cheng, Dai-Zhan / Edgar, Thomas / Gottzein, Eveline / Haddad, Abraham / Krstic, Miroslav / Kurzhanski, Alexander / Lewis, Frank / Morari, Manfred / Safonov, Michael / Vicino, Antonio

Date July 10 (Thu)
Time 18:30 - 19:30
Location Room 401, Conference Center, 4th Floor

Congress Awards at Closing Ceremony

IFAC Congress Young Author Prize

This prize consists of a certificate and a monetary award of USD 1,000. The criteria include high technical quality and good presentation of results. All authors must be under 35 years of age.

Final Candidates:

- Mamoun Abdel-Hafez,
  The Autocovariance Least Squares Technique for GPS Interference/Jamming Detection, WeB13.2

- Takenori Atsumi, *Disturbance Suppression beyond Nyquist Frequency in Hard Disk Drives,* MoA21.2
- Lachlan Blackhall & Michael Rotkowitz, *Recursive Sparse Estimation using a Gaussian Sum Filter,* WeC09.4
- Marcello Colledani, *Integrated Analysis of Quality and Production Logistics Performance in Asynchronous Manufacturing Lines,* WeA24.6
- Tao Li, *Asymptotically Unbiased Average Consensus Under Measurement Noises and Fixed Topologies,* MoC13.4

IFAC Congress Application Paper Prize

This prize consists of a certificate and a monetary award of USD 1,000. The criteria include high technical quality and good presentation of the results in the area of control applications. A nomination form from a colleague or the author himself/herself should be submitted to IFAC CMMS. It is also possible for the reviewer to recommend during the reviewing process.

Final Candidates:

- Takenori Atsumi, *Disturbance Suppression beyond Nyquist Frequency in Hard Disk Drives,* MoA21.2
- Christian Benatzky, Martin Kozek, Alexander Schirrer, & Anton Stribersky, *Vibration Damping of a Flexible Car Body Structure Using Piezo-Stack Actuators,* WeA22.3
- Emery N. Brown, Ming Cheng, Emad Eskandar, Sridevi V. Sarma, & Ziv Williams, *Modeling Neural Spiking Activity in the Sub-Thalamic Nucleus of Parkinson's Patients and Healthy Primates.,* WeB15.5
- Tianyou Chai, Jinliang Ding, & Fenghua Wu, *Hybrid Intelligent Control for Optimal Operation of Shaft Furnace Process,* MoB26.6
- Tomohiko Jimbo & Yoshikazu Hayakawa, *Physical-Model-Based Control of Engine Cold Start via Role State Variables,* MoA28.1

IFAC Congress Poster Paper Prize

This prize consists of a certificate and a monetary award of USD 1,000. The criteria for the selection of the recipient include high technical quality of the paper, and overall presentation.

Best Video Award

This prize consists of a certificate and a monetary award of USD 1,000. A selection committee will nominate candidates for the award recipient. The criteria for the selection of the recipient include high technical relevance, quality, contributions, and video and audio quality of the work.

Date	July 11 (Fri)
Time	16:30 - 18:00
Location	Auditorium, 3rd Floor

Outstanding Service Award

The 2008 Outstanding Service Award will be presented to IFAC officials who have served and contributed substantially to IFAC in various capacities, based on a criterion set by the Council. The award consists of a certificate and a lapel pin will be presented to the candidates during the IFAC World Congress.

Pre-Congress Tutorials & Workshops

Tutorials and workshops are presented at the COEX Conference Center during on July 5 - 6, 2008 by renowned professors and engineers in conjunction with the 17th IFAC World Congress as a Pre-Congress program on eighteen selected topics. The topics include well-established techniques, and new and emerging issues in control and related areas that will draw keen interests from industries and academia.

Pre-Congress Tutorials & Workshops Schedule

Saturday, July 5 & Sunday, July 6

Advances in Three Term Control **TT1**

L.H. Keel, Center of Excellence in Information Systems, Tennessee State University
Y.C. Kim, Chungbuk National University
S.P. Bhattacharyya, Texas A&M University

09:00 - 17:30, Room 314, Conference Center, 3rd floor

Complex Embedded and Networked Control Systems **WS1**

Alexander Fradkov, Laboratory of Control of Complex Systems, IPME, Russian Academy of Science
Francoise Lamnabhi-Lagarrigue, CNRS and European Embedded Control Institute

09:00 - 17:30, Room 313, Conference Center, 3rd Floor

Saturday, July 5

Modeling and Control of Roll-to-Roll Material Processing Systems **TT4**

Prabhakar R. Pagilla, Mechanical & Aerospace Engineering, Oklahoma State University
Dominique Knittel, Department of Mechatronics & Systems Design, University of Strasbourg and INSA
Kee-Hyun Shin, Department of Mechanical Engineering, Konkuk University

09:00 - 17:30, Room 315, Conference Center, 3rd Floor

Observers for Systems with Unknown Inputs: A Practical Guide to Design and Applications **TT5**

Stanisław H. Żak, School of Electrical and Computer Engineering, Purdue University

09:00 - 17:30, Room 318, Conference Center, 3rd Floor

Chance Constrained Process Optimization and Control under Uncertainty **TT6**

Pu Li, Institute of Automation and Systems Engineering, Technical University of Ilmenau

09:00 - 17:30, Room 317, Conference Center, 3rd Floor

Identification & Control of Unstable Systems **WS2**

M. Chidambaram and A. Seshagiri Rao,
Department of Chemical Engineering, National Institute of Technology
R. Padma Sree, Andhra University

09:00 - 17:30, Room 319, Conference Center, 3rd Floor

Sunday, July 6

Convex Optimization **TT2**

Stephen Boyd, Information Systems Laboratory,
Department of Electrical Engineering, Stanford University
Lieven Vandenberghe, University of California, Los Angeles
Michael Grant, Stanford University

09:00 - 17:30, Room 304B, Conference Center, 3rd Floor

Robustness in Systems Biology: Methods and Applications **TT7**

Eric Bullinger, Industrial Control Centre, University of Strathclyde
Hong Yue, Industrial Control Centre, University of Strathclyde
Frank Allgöwer, Institute for Systems Theory and Automatic Control,
University of Stuttgart
Rolf Findeisen, Institute for Systems Theory and Automatic Control,
University of Stuttgart
Pablo A. Iglesias, Department of Electrical Engineering,
The Johns Hopkins University
Elling Jacobsen and Camilla Trané, Department of Electrical Engineering,
KTH Sweden
Rick Middleton and Oliver Mason, The Hamilton Institute,
National University of Ireland Maynooth
Jongrae Kim and Declan Bates, Department of Engineering, University of Leicester

09:00 - 17:30, Room 305, Conference Center, 3rd Floor

Biological Control Systems **TT8**

Babatunde A. Ogunnaike, Department of Chemical Engineering,
University of Delaware

09:00 - 17:30, Room 309, Conference Center, 3rd Floor

Emerging Networked Sensing and Actuation Technologies: State of the Art, System Design and Applications **TT9**

Elena Gaura, Cogent Computing Applied Research Centre, Faculty of Engineering and Computing, Coventry University
James Brusey, Cogent Computing Applied Research Centre, Faculty of Engineering and Computing, Coventry University

09:00 - 17:30, Room 306, Conference Center, 3rd Floor

Variable Structure Systems with Sliding Modes and Their Applications **TT12**

Xinghuo Yu, Platform Technologies Institute, RMIT University
Jian-Xin Xu, Department of Electrical and Computer Engineering, National University of Singapore

09:00 - 17:30, Room 312, Conference Center, 3rd Floor

Analysis and Design of Distributed Adaptive Networks **WS3**

Ali H. Sayed, Department of Electrical Engineering, University of California, Los Angeles

09:00 - 17:30, Room 315, Conference Center, 3rd Floor

Embedded Control Systems: From Design to Implementation **WS4**

Pedro Albertos, Systems Engineering and Control, Institute of Industrial Control and Informatics, Polythecnic University of Valencia
Karl-Erik Arzen & Anton Cervin, Lund University
Martin Törngren, KTH - Royal Institute of Technology Stockholm
Alfons Crespo & José Simó, Instituto de Automática e Informática Industrial, UPV Zdenek Hanzalek, Czech Technical University

09:00 - 17:30, Room 319, Conference Center, 3rd Floor

Cooperative Control of Multiple Autonomous Vehicles **WS5**

Pedro Aguiar, Institute for Systems and Robotics, Instituto Superior Técnico, Technical University of Lisbon
Antonio M. Pascoal, Institute for Systems and Robotics, Instituto Superior Ténico, Technical University of Lisbon
João P. Hespanha, Department of Electrical and Computer Engineering, University of California, Santa Barbara
Isaac Kaminer, Department of Mechanical and Astronautical Engineering, Naval Postgraduate School
Wei Ren, Department of Electrical and Computer Engineering, Utah State University

09:00 - 17:30, Room 308, Conference Center, 3rd Floor

Continuous-time Model Identification from Sampled Data **WS6**

Liuping Wang, School of Electrical and Computer Engineering, RMIT University
Hugues Garnier, Centre de Recherche en Automatique de Nancy, Nancy-University, CNRS, Faculté des Sciences et Techniques

09:00 - 17:30, Room 318, Conference Center, 3rd Floor

Delays, Feedbacks and Interconnections: From Simple Structures to Complex Networks **WS7**

Silviu-Iulian Niculescu, Laboratory of Signals and Systems, CNRS-Supelec
Joono Cheong, Department of Control and Instrumentation Engineering, Korea University

09:00 - 17:30, Room 317, Conference Center, 3rd Floor

Stochastic Model Predictive Control **WS8**

Mark Cannon and Basil Kouvaritakis, Department of Engineering Science, University of Oxford

09:00 - 17:30, Room 307, Conference Center, 3rd Floor

Self-Optimizing Control: Theory and Applications **WS9**

Vinay Kariwala, Division of Chemical & Biomedical Engineering, Nanyang Technological University
Sigurd Skogestad, Department of Chemical Engineering, Norwegian University of Science and Technology

09:00 - 17:30, Room 316, Conference Center, 3rd Floor

Exhibitions

A technical exhibition on control & automation is organized in conjunction with the Congress. Its main purpose is to showcase education and research equipments, software, books and periodicals. There are 18 exhibitors, which are well-known internationally with up-to-date technologies. You may visit the exhibition booths during your break.

Exhibition Schedule

Date	July 7 - 10 (Mon - Wed) I (Thu)
Time	09:00 - 18:00 I 09:00 – 17:00
Location	Atlantic Hall, 3rd Floor

Exhibitors

Bando MPS

Hagisonic

INNO Metal IZI Robot

INTECO

Kimhua Technologies

Korea Water Resources Corporation

MicroInfinity

Quanser Jone

Realgain

Robomation

Robotis

Springer

Sysbrain

The Institution of Engineering and Technology

Taylor & Francis

The MathWorks

Virtual Laboratories

WOOJOO Hi-Tech

Technical Tours

Some of Korea's top companies have agreed to be a part of the technical tours. These tours provide participants with the opportunity to visit selected facilities of these companies in the automobile, steel, shipbuilding, LCD displays, semiconductor, electronics, IT industries and more. Technical tours are available at low fees thanks to the generous support from the participating organizations. Participants can sign up for these tours at the online registration site. Each tour has a limited number of spaces, which will be reserved on a first-come, first-served basis. Please note that the itineraries of the tours are subject to change. If canceled by the organizer, those who have made payments will be fully refunded. The gathering location is right outside the Northgate of COEX Convention Center.

TT1: Humax Village (HQ) July 7 | 13:00 - 18:30 10,000 KRW
Human Village - Samsung Raemian Open House

TT2: Hyundai Motor Company July 7 | 13:00 - 18:00 10,000 KRW
ASAN Plant

TT3: Samsung Electronics July 8 | 13:00 - 18:30 10,000 KRW
Suwon Visitor Center

TT4: Hynix Semiconductor July 8 | 13:00 - 18:30 10,000 KRW
Icheon Plant - Icheon World Ceramic center

TT5: POSCO & Hyundai Heavy Industries July 9 | 07:00 - 23:00 50,000 KRW
Hyundai Complex - Hyundai Heavy Industries Ulsan Plant – POSCO Mill

TT6: KAIST & Daedock Valley July 9 | 09:00 - 18:00 20,000 KRW
KAIST - Daedock Valley Research Center

TT7: KT Media Center July 10 | 13:00 - 17:30 10,000 KRW
KT Media Center - Ubiquitous Dream Hall

TT8: LG Electronics July 10 | 13:00 - 17:30 10,000 KRW
LG Electronics - Pyeongtaek Visitor Center & Plant

TT9: Seoul National University July 11 | 13:00 - 16:00 Free
Seoul National University Campus Tour

Social Tours

The Congress has organized specialized social tours for the participants and their accompanying persons to enjoy Korea to the fullest. Daily, evening and night tours have been prepared for those seeking short tours for a day. Seoul has beautiful sceneries for those seeking memorable moments. Post-Congress tours have also been prepared for those wanting to travel outside of the city limit. You'll have heart warming moments at calm but impressive sites. The gathering location is outside the Northgate of COEX Convention Center.

Daily Tours

DT1: Half-Day Seoul City Tour (I) July 6 | 13:30 - 17:30 45,000 KRW
Price includes private bus, English speaking guide & admission fee
Meeting at COEX | Tour desk - Gyeongbokgung Palace & Nat'l Folk Museum - Insadong - Back to COEX

DT2: Korean Folk Village & Icheon Ceramics Village July 7 | 09:00 - 17:30 76,000 KRW
Price includes Lunch, private bus, English speaking guide & admission fee
Meeting at COEX | Tour desk - Korean Folk Village - Icheon Ceramics Village - Back to COEX

DT3: Half-day Seoul City Tour (II) July 8 | 13:30 - 17:30 51,000 KRW
Price includes private bus, English speaking guide & admission fee
Meeting at COEX | Tour desk - Seoul Tower - Changdeokgung Palace & Huwon Garden - Back to COEX

DT4: Seat-In-Coach Tour of DMZ (Panmunjeom) July 9 | 08:30 - 17:10 70,000 KRW
(Participants must be at the DMZ departure place on their own with a passport which is about 50 minutes from COEX by subway)
Price includes lunch, seat-In-coach tour, English speaking guide, & admission
Meeting at Panmunjeom Co-Op Center on the 2nd floor at Lotte Hotel Seoul | Camp Bonifas - Joint Security Area - Back to Lotte Hotel Seoul
Panmunjeom tour is subject to change due to military circumstances.

DT5: Filming Place of Winter Sonata July 10 | 09:00 - 17:30 78,000 KRW
Price includes lunch, private bus, English speaking guide, & admission fee
Meeting at COEX | Tour desk - Nami Island - Garden of Morning Calm - Back to COEX

DT6: Daejanggeum Theme Park July 11 | 09:00 - 17:00 82,000 KRW
Price includes lunch, private bus, English speaking guide, & admission fee
Meeting at COEX | Tour desk - Daejanggeum Theme Park - Wold Cup Park - Han River Cruise - Shopping - Back to COEX

Evening & Night Tours

NT1: Seoul Tower & Itaewon July 7 | 19:30 - 23:00 40,000 KRW
Price includes private transfer, English guide, & admissions fee
Meeting at COEX | Tour desk - Seoul Tower - Itaewon - Back to your hotel

NT2: Chong-Dong Theater(Korean Traditional Performing Arts)
July 11 | 19:00 - 21:45 67,000 KRW
Price includes private transportation, English guide, & admissions fee
Meeting at COEX | Tour desk -
Chong Dong Theater (Korean Traditional Performing Arts) - Back to your hotel

NT3: Dong-Dae-Mun Night Market July 9 | 19:30 - 22:30 32,000 KRW
Price includes private transfer, English guide, & admissions fee
Meeting at COEX | Tour desk - Dong Dae Mun Night Market - Back to your hotel

Post-Congress Tours

PC1: Cheongpung & Gyeongju Tour July 12 – 14 (3 days & 2 nights)
480,000 KRW (Twin room sharer) | 605,000 KRW (Single room user)
Price includes hotel, meal, private bus & English speaking guide

Itinerary:

July 12: Meet a tour guide at hotel (9am) | Moka Museum -
Chungjuho Lake Sightseeing Cruise-
Cheongpung Cultural Properties Complex (Lunch)

July 13: Depart for Gyoengju-Gyeongju Nat'l Museum |
Tumuli Park - Cheomseongdae Pavilion (Breakfast/Lunch)

July 14: Bulguksa Temple - Seokguram Grotto -
Return to Seoul & finish the tour (Breakfast/Lunch)

PC2: Jeju Island Tour July 12 - 14 (3 days & 2 nights)
600,000 KRW (Twin room sharer) | 720,000 KRW (Single room user)
Price includes hotel, meal, domestic airfare (Seoul/Jeju/Seoul),
private bus & English speaking guide

Itinerary:

July 12: Meet a tour guide at hotel (9am) | Fly to Jeju Island -
Dogaebi Road - Jusangjeolli Cliff-Seongsan Sunrise Peak (Lunch)

July 13: Yongmeori Coast - O'Sulloc Tea Museum & Plantation - Hallim Park -
Seokmulwon Sculpture Park (Breakfast/Lunch)

July 14: Fly back to Seoul - Transfer to Incheon Int'l Airport and
finish the tour (Breakfast)

PC3: Mt. Sorak Tour July 12 - 14 (3 days & 2 nights)

440,000 KRW (Twin room sharer) | 580,000 KRW (Single room user)

Price includes hotel, meal, private bus & English speaking guide

Itinerary:

July 12: Meet a tour guide at hotel (9am) | Chamsori Sound Museum- Free time at Mt. Seorak Nat'l Park (Lunch)

July 13: Gwongeumseong Fortress - Goseong Unification Observatory (Breakfast/Lunch)

July 14: Transfer to Incheon Int'l Airport and finish the tour (Breakfast)

PC4: Mt. Geumgang in North Korea July 12 - 15 (3 nights and 4 days)

612,000 KRW (Twin), 862,000 KRW (Queen)

Price includes hotel, meals (breakfast only), charter bus, English guide & admissions fees

Itinerary:

July 12: Meet a tour guide at COEX (7:30 am) | Transfer to departure place to Mt. Geumgang - Leave Seoul for Hwajinpo - Arrive at Asan Resting Place - South Korea Immigration Office - Pass through DMZ - North Korea Immigration Office - Check In at Hotel - Free time

Optional Items:
Hot spring (USD 12); North Korean Music Show (USD 10); Dinner (USD 10)

July 13: Breakfast - Kuryong Waterfall - Free Time

Optional Items:
Samilpo Lake tour (USD 10); Acrobatic show (USD 30); Lunch (USD 10); Dinner (USD 12)

July 14: Breakfast - Manmulsang or Samilpo/Haekumgang seashore - North & South Korea Immigration Office - Return to Seoul - Overnight at Seoul

Optional Items:
Lunch (USD 10)

July 15: Breakfast - Incheon Airport (Transfer to Incheon Airport not provided)

Special Control Education Workshop

The workshop aims to inspire the interest of undergraduate students in automatic-control studies. The excitement of choosing a career in control engineering will be highlighted, and a live interaction between the presenters and the audience will be featured.

Title The Power, Beauty and Excitement of the Cross-Boundaries Nature of Control
Coordinators Ljubo Vlacic (AU), Jonghyung Kim (KR)
Organizers Ljubo Vlacic (AU), Bozenna Pasik-Duncan (US)
IFAC TC on Education and IEEE-CSS Technical Committee on Education.

Date	July 6 (Sun)
Time	10:00 - 15:00
Location	Room 304A, Conference Center, 3rd Floor

Robot Demonstrations

Schedule

Date	July 7 - 10 (Mon - Wed) I (Thu)
Time	09:00 - 18:00 I 09:00 - 17:00
Location	Atlantic Hall, 3rd Floor

Each one of the following robots will be demonstrated for one or two days of the Congress week. The detailed schedule will be announced onsite.

Participating Robots

Hubo of KAIST
HUBO was developed based on KAIST humanoid robot platform - 2 (KHR-2) under the sponsorship of the MOCIE (Ministry Of Commerce, Industry and Energy), and introduced to the public in January, 2005. It has hybrid features: those of a suit worn in taekwondo, the Korean national sport, and of a space suit. Hubo's hybrid features show KAIST's intention to follow tradition while at the same time aiming to be future-oriented.

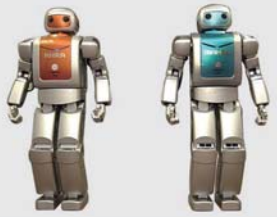
EveR-1 of KITECH
The performance of the android, EveR-1, developed in KITECH (Korea Institute of Industrial Technology) will be demonstrated. The appearance of EveR-1 is based on Korean female. EveR-1's name is derived from the Biblical 'Eve' and the letter 'R' of robot. EveR-1 is not bipedal, but is capable of motion from her torso up.

POMI of ETRI
POMI (Penguin rObot for Multimodal Interaction) is a five-senses-mounted emotional-expression robot that has been endowed with artificial intelligence and active reaction modules. POMI was developed by the U-Robot Research Division of ETRI and the hardware platform company GrandPort.

Guardian/REMbot of Korea University
Guardian is a portable two-wheeled guard robot capable of jumping. It can jump the stairs step-by-step by sensing the distance and height of the step and adjusting its jumping direction and height. REMbot (Recoverable Multi-tracked robot) is a small field robot with four tracks. It is able to overcome various obstacles, climb stairs autonomously and recover from the upside-down position.

Seropi of KITECH
SEROPI (SErvice RObot Platform Initiative) has a human-friendly shape and working space for visitor guidance, running errands, and guarding in an official environment. SEROPI has three DOFs (Degree Of Freedom) for the neck, waist, six DOFs for the two arms, and one DOF for the knee.

MAHRU of KIST
MAHRU is the world's first network-based humanoid. It has been endowed with artificial intelligence through a network. Unlike other famous humanoids, such as ASIMO, MAHRU focuses on network-based intelligence by using the network infrastructure, where Korea has world-class strengths.



Robot Soccer Demonstration Game of FIRA
There are several game categories for FIRA Cup including MiroSot, RoboSot, SimuroSot, and HuroSot under HuroCup. In a demonstration game, two middle-league teams will complete: Sung Kyun Kwan University vs. KAIST. The 13th FIRA RoboWorld Cup 2008 will be held in Qingdao, China on July 22 - 25, 2008.
www.FIRA.net

(Figure shows HanSaRam-VI for HuroSot)

Special Social Programs

The following events will take place throughout the week, promising to make this year's IFAC Congress one of the most memorable event ever. Limited seating is available for these first-come, first-served events, so please make your reservations promptly online, or inquire at the registration desk, if you are interested to participate in any of the events. Additional seating may be made available, but only if the space would allow it. All the following events except Gaeseong trip are free for participants. Light refreshments and a brown-bag lunch will be served.

Master to Read Korean in 50 Minutes

The Korean alphabet (Hangul) is very scientific, unique, and straightforward, which allows people (especially researchers in the control community) to quickly learn to read texts in Korean. "Invented" about 600 years ago, it helped the literacy level in Korea soar. Enjoy this 50-minute lesson to make your stay in Korea more comfortable. The same lecture will be offered twice for your convenience.

Date	July 7 (Mon), July 9 (Wed)
Time	12:30 - 14:00
Location	Room 402, Conference Center, 4th Floor

Korea's Economic Development in the Post-War Period

In 1963, following the devastating World War II and Korean War, Korea's GDP per capita was only USD 100. It soared, however, to record-breaking USD 10,000 in 1995, in less than 40 years, and to fully-developed USD 20,000 in 2007. With growing economy, the nation welcomed the inception of democracy in 1987. This lunchtime lecture will present an overview of how South Korea's economy grew, especially in the heavy industries and automotive industry, with the development of today's global companies: Samsung, Hyundai, POSCO, and LG.

Date	July 8 (Tue)
Time	12:30 - 14:00
Location	Room 402, Conference Center, 4th Floor

Korean Movie Night

The Congress participants can relax and enjoy a Korean movie at COEX Megabox, one of Asia's biggest movie theatres, with 17 screens and 4,300 seats. The movies to be screened will be announced during the Congress.

Date	July 9 (Wed)
Time	20:30 - 22:30
Location	Megabox, COEX Mall

Experience Korean Culture (Paper Craft)

Make your own souvenir during this lunch workshop on paper crafts (hanji art). You will also have an opportunity to try on Hanbok, traditional Korean garments. Made from the mulched bark of the mulberry tree, hanji paper can be used to create boxes, small chests, lanterns, and other artistic items. Light refreshments will be served.

Date	July 10 (Thu)
Time	12:30 - 14:00
Location	Room 402, Conference Center, 4th Floor

Day Trip to Gaeseong, North Korea

Gaeseong, once the capital of the Goryeo dynasty (918 - 1392 AD), is now home to a budding industrial complex that is fueling the economic cooperation between the two Koreas. About 50 South Korean companies have set up factories in the industrial complex, which produces mainly clothing, shoes, industrial parts, cookware, and watches. This will be a very unique and precious opportunity to visit North Korea, one of the most secluded countries in the world. The price of the tour is 258,000 KRW per person.

Date	July 8 (Tue)
Time	05:00 - 19:30
Departure	Northgate, 1st Floor, COEX Convention Center

Bongeun Temple Life

Bongeunsa is a very rare temple in Korea because it is situated at the hillside of the city downtown near the COEX preserving and developing Korean traditional culture and artifacts in mid skyscraper with some 1,200 years of the historical background and temple ground.

Time	Starts at 2pm to 4pm
Location	Bongeun Meditation Center (Temple Stay Information Center)
Participation fee	KRW 10,000
Contact	02-3218-4820~7

LOCAL INFORMATION

General Information

Smoking Policy

Smoking is not allowed inside the COEX complex. Participants who wish to smoke should go outside the complex for such purpose. There are some restaurants and bars that allow smoking or that have a designated smoking area. Please check before lighting a cigarette.

Tipping

Not required in Korea.

Time Zone

Korean time is nine hours ahead of Greenwich Mean Time.

Useful Telephone Numbers

IFAC WC '08 Secretariat Office	02-885-3930 02-887-0040
SOS Korea	02-3140-1700
Emergency	119

Voltage, Sockets, and Plugs

The standard voltage in Korea is 220 volts, but outlets for 110 volts are available in most hotels. Please check the power supply specifications in the hotel where you intend to stay before bringing your electronic devices.

Congress Official Language

The official language for IFAC WC 2008 is English. All presentations will be presented in English, without simultaneous interpretation.

Weather

Korea has four distinct seasons. In July, the average monthly temperature ranges from 18 to 27°C (64 - 82°F), and the weather is hot and humid. Humidity peaks in July, reaching 70 - 80% nationwide. Nonetheless, it is advised that a light sweater or jacket be brought for cool evenings. For more information, please visit the Korea Meteorological Administration Web site (www.kma.go.kr).

Currency Exchange

The currency unit in Korea is the Korean won (KRW). Convertible foreign currencies can be exchanged at airports and other authorized money exchangers. The exchange rate is subject to fluctuation. For the current exchange rate, please refer to

the website. (www.xe.net/ucc/)
Major international credit cards are accepted at most hotels, department stores, restaurants, and shops. Generally, restaurants and shops display the cards they honor at the entrance.

Korean Language

Hangul, the Korean alphabet, was invented in 1443, during the reign of King Sejong. It is composed of 10 vowels and 14 consonants. Hangul has 11 compound vowels and five glottal sounds. Hunminjeongeum, a historical document that provides instructions regarding the use of Hangul, is registered with UNESCO. UNESCO awards a "King Sejong Literacy Prize" every year in memory of the inventor of Hangul.

ENGLISH	KOREAN	KOREAN PRONUNCIATION
How are you?	안녕하세요?	Annyeong-haseyo?
Thank you.	감사합니다.	Gamsa-hamnida.
Yes.	예.	Ye.
No.	아니요.	Aniyo.
I am sorry.	미안합니다.	Mian-hamnida.
I enjoyed the meal.	잘 먹었습니다.	Jal meogeot-sseumnida.
Please give me some more of this.	이것 더 주세요.	Igeot deo juseyo.
The check, please.	계산서 주세요.	Gyesanseo juseyo.
Do you take credit cards?	카드로 계산할 수 있습니까?	Kadeuro gyesan halsu isseumnikka?
How much is it?	얼마입니까?	Eolma-imnikka?
It is _____ won	_____ 원 입니다.	_____ won imnida.
5,000	오천	O-cheon
10,000	만	Man
15,000	만오천	Man-o-cheon
20,000	이만	I-man
30,000	삼만	Sam-man
Where is the rest room?	화장실 어디입니까?	Hwajangsil oedi-imnikka?
Goodbye.	안녕히 계세요.	Annyeonghi gyeseyo.
Excuse me	실례합니다.	Silre-hapnida

"Koreans invented the solely creative and amazing alphabetic writing system called Hangul for the Korean people. Hangul is perhaps the most scientific system of writing in general use in any country."
E.O. Reischauer, 1960, Professor, Harvard University, USA, an historian in East Asian Affairs

**** Korean Language Learning Website (www.interedu.go.kr)**

Legend to Program Pages

Session code

01 ~ 30 : Track Number
PL# : Plenary Talk #
CC : CC Milestone

A (10:30 ~ 12:30)
B (14:00 ~ 16:00)
C (16:30 ~ 18:30)

Mo : Monday
Tu : Tuesday
We : Wednesday
Th : Thursday
Fr : Friday

Examples

MoA01 : Monday, 10:30 - 12:30, Track # 01
MoBCC : Monday, 14:00 - 16:00, CC Milestone

Note: Plenary Talks do not include time slots A, B, or C such as MoPL1.

TECHNICAL PROGRAMS

Congress Program Table

	July 5 Saturday	July 6 Sunday	July 7 Monday	July 8 Tuesday	July 9 Wednesday	July 10 Thursday	July 11 Friday
7							
			Coffee and Doughnuts				
8			Plenary Session 1 8:00 - 9:00				
9	Pre-Congress Tutorials & Workshops 9:00 - 10:30		Plenary Session 2 9:00 - 10:00				
10			Coffee Break				
	Coffee Break		Technical Sessions (Oral & Poster) 10:30 - 12:30			Technical Sessions (Oral & Poster) Panel Discussion 1 10:30 - 12:30	Technical Sessions (Oral) 10:30 - 12:30
11	Pre-Congress Tutorials & Workshops 11:00 - 12:30						
12							
13	Lunch 12:30 - 14:00						
14	Pre-Congress Tutorials & Workshops 14:00 - 15:30		Technical Sessions (Oral) CC Milestone Sessions 14:00 - 16:00			Technical Sessions (Oral & Video) 14:00 - 16:00	Technical Sessions (Oral) 14:00 - 16:00
15							
	Coffee Break						
16	Pre-Congress Tutorials & Workshops 16:00 - 17:30		Coffee Break				
			Technical Sessions (Oral & Poster) CC Milestone Sessions 16:30 - 18:30			Technical Sessions (Oral & Video) Panel Discussion 2 16:30 - 18:30	Closing Ceremony 16:30 - 18:00
17							
18		Opening Ceremony 17:30 - 18:30					Farewell Party 18:00 - 19:30
19		Welcome Reception 18:30 - 20:00					
						Banquet 19:30 - 21:00	
20							

Plenary Talks

Plenary Session is composed of nine plenary speeches addressing new concepts/approaches, development methodologies/tools, and current status/future direction in theory, technology and applications of automatic control. They are delivered by the world most eminent scholars chosen among sixty nine nominees recommended by an ad hoc Plenary Board and CC/TC Chairs of IFAC. The Plenary speech fields cover key control subjects, industry-related control applications and emerging control issues such as nonlinear control system, commercial transport airplane, and robust control in biology, stochastic learning and optimization, system identification, automation and control systems technology in Korean shipbuilding industry, control-theoretic approach to model-based medicine, rough-terrain robot, and smart factory.

Reduced Complexity Control Systems **MoPL1**

Roger Brockett, Harvard Univ. (US)

Date July 7 (Mon)
Time 08:00 - 09:00
Location Room 301, Auditorium, 3rd Floor

CHAIR Wook Hyun Kwon (KR)

Overview of Potential Evolutions of Technologies Applied in Commercial Transport Airplanes **MoPL2**

Etienne Tarnowski, AIRBUS (FR)

Date July 7 (Mon)
Time 09:00 - 10:00
Location Room 301, Auditorium, 3rd Floor

CHAIR Alberto Isidori (IT)

Robust Control in Biology: From Genes to Cells to Systems **TuPL1**

Francis Joseph Doyle III, Univ. of California at Santa Barbara (US)

Date July 8 (Tue)
Time 08:00 - 09:00
Location Room 301, Auditorium, 3rd Floor

CHAIR Dong-il "Dan" Cho (KR)

Stochastic Learning and Optimization - A Sensitivity-Based Approach **TuPL2**

Xi-Ren Cao, Hong Kong Univ. of Sci. & Tech

Date July 8 (Tue)
Time 09:00 - 10:00
Location Room 301, Auditorium, 3rd Floor

CHAIR Vladimir Kucera (CZ)

TECHNICAL PROGRAMS

Perspectives on System Identification **WePL1**

Lennart Ljung, Linköping University (SE)

Date July 9 (Wed)
Time 08:00 - 09:00
Location Room 301, Auditorium, 3rd Floor

CHAIR Shinji Hara (JP)

Automation and Control Systems Technology in Korean Shipbuilding Industry: The State of the Art and the Future Perspectives **WePL2**

Keh-Sik Min, Hyundai Heavy Industries Co., Ltd. (KR)

Date July 9 (Wed)
Time 09:00 - 10:00
Location Room 301, Auditorium, 3rd Floor

CHAIR P.J. Fleming (UK)

A Control-Theoretic Approach to Model-Based Medicine **ThPL1**

Hidenori Kimura,
The Institute of Physical and Chemical Research (JP)

Date July 10 (Thu)
Time 08:00 - 09:00
Location Room 301, Auditorium, 3rd Floor

CHAIR Sirkka-Liisa Jamsa-Jounela (FI)

BigDog, the Rough-Terrain Robot **ThPL2**

Marc Raibert, Boston Dynamics (US)

Date July 10 (Thu)
Time 09:00 - 10:00
Location Room 301, Auditorium, 3rd Floor

CHAIR Hyungsuck Cho (KR)

SmartFactory - From Vision to Reality in Factory Technologies **FrPL1**

Detlef Zuehlke, TU Kaiserslautern (DE)

Date July 11 (Fri)
Time 09:00 - 10:00
Location Room 301, Auditorium, 3rd Floor

CHAIR Shimon Y. Nof (US)

Milestone Reports

Milestone Reports serve as background materials for future research, development, and education relevant to technical fields led by the Coordinating Committees of IFAC indicated below. They contain current state of the art of the technologies such as key problems and recent accomplishments and future perspectives that address forecasting needs, challenges, and new trends.

The followings are six 2008 Reports prepared by six Coordinating Committees (CC):

Milestone Report by IFAC Coordinating Committee on Design Methods (CC2) **MoBCC**

Trends in Theory of Control System Design - Status report by the IFAC Coordinating Committee on Design Methods

Ruth Bars (HU), Patrizio Colaneri (IT), Luc Dugard (FR), Frank Allgőwer (DE), Anatolii Kleimenov (RU), Carsten W. Scherer (NL)

Date	July 7 (Mon)
Time	14:00 - 16:00
Location	Room 401, Conference Center, 4th Floor

Milestone Report by IFAC Coordinating Committee on Bio and Ecological Systems (CC8) **MoCCC**

Bio- and Ecological Systems: Challenges, Accomplishments and Forecasts

Ewart Carson (UK), David Dagan Feng (CN), Marie-Noelle Pons (FR), Rodolfo Soncini-Sessa (FR), G. van Straten (NL)

Date	July 7 (Mon)
Time	16:30 - 18:30
Location	Room 401, Conference Center, 4th Floor

Milestone Report by IFAC Coordinating Committee on Manufacturing and Logistics Systems (CC5) **TuBCC**

Advances in E-manufacturing, E-logistics, and E-service Systems

Shimon Y. Nof (US), Florin Gheorghe Filip (RO), Arturo Molina (MX), Laszlo Monostori (HU), Carlos Eduardo Pereira (BR)

Date	July 8 (Tue)
Time	14:00 - 16:00
Location	Room 401, Conference Center, 4th Floor

Milestone Report by IFAC Coordinating Committee on Power and Process systems (CC6) **TuCCC**

Monitoring and Control of Process and Power Systems: Adapting to Environmental Challenges, Increasing Competitively and Changing Customer and Consumer Demands
Denis Dochain (BE), Wolfgang Marquardt (GE), Sangchul Won (KR), O.P. Malik (CA), Michel Kinnaert (BE), Jan Lunze (GE)

Date	July 8 (Tue)
Time	16:30 - 18:30
Location	Room 401, Conference Center, 4th Floor

Highlight Round-table Presentation by IFAC Coordinating Committee on Transportation and Vehicle Systems (CC7) **WeBCC**

Lars Nielsen (SW), Lino Guzzella (CH), Gerard Gissinger (FR), Jae-Kyun Jang (KR), Heung-Soo Kim (KR)

Date	July 9 (Wed)
Time	14:00 - 16:00
Location	Room 401, Conference Center, 4th Floor

Milestone Report by IFAC Coordinating Committee on Mechatronics, Robotics and Components (CC4) **WeCCC**

Mechatronics, Robotics and Components for Automation and Control - IFAC Milestone Report
Serge Boverie (FR), Dong-il "Dan" Cho (KR), Hideki Hashimoto (JP), Masayoshi Tomizuka (US), Wei Wang (CN), Detlef Zuehlke (DE)

Date	July 9 (Wed)
Time	16:30 - 18:30
Location	Room 401, Conference Center, 4th Floor

Highlight Sessions

Highlight Sessions are primarily designed for stressing the relevancy of IFAC Activities to industry and the importance of industry participation in IFAC. Highlighted in this Congress are the current developments and practices in control and automation in Korean industries which have shown world strong competitiveness in recent years.

Automation in Semiconductor, Display and Electronics Industry

CHE: Ji Oh Song, Samsung Electronics Co., Ltd.

Automation in the Semiconductor, Display, and Electronics Industry **WeA18**

Date	July 9 (Wed)
Time	10:30 - 12:30
Location	Room 320B, Conference Center, 3rd Floor

Robotics for LCD & Semiconductor Industry **TuC18**

Date	July 8 (Tue)
Time	16:30 - 18:30
Location	Room 320B, Conference Center, 3rd Floor

Automation in Shipbuilding

CHE: Choong Dong Lee, Executive Vice President, Hyundai Heavy Industries Co., Ltd.

Recent Automation Technologies in Shipbuilding Industry I **MoC17**

Date	July 7 (Mon)
Time	16:30 - 18:30
Location	Room 320A, Conference Center, 3rd Floor

Recent Automation Technologies in Shipbuilding Industry II **TuA17**

Date	July 8 (Tue)
Time	10:30 - 12:30
Location	Room 320A, Conference Center, 3rd Floor

Recent Automation Technologies in Shipbuilding Industry III **TuB17**

Date	July 8 (Tue)
Time	14:00 - 16:00
Location	Room 320A, Conference Center, 3rd Floor

Automation in Steel Industry

CHE: Sangchul Won, Department of Electronic and Electrical Engineering, Steel Processing Automation Research Center, Pohang University of Science and Technology (POSTECH)

Steel Making **MoA17**

Date	July 7 (Mon)
Time	10:30 - 12:30
Location	Room 320A, Conference Center, 3rd Floor

Hot Rolling **MoB17**

Date	July 7 (Mon)
Time	14:00 - 16:00
Location	Room 320A, Conference Center, 3rd Floor

Measurement **TuC17**

Date	July 8 (Tue)
Time	16:30 - 18:30
Location	Room 320A, Conference Center, 3rd Floor

Automation **WeB18**

Date	July 9 (Wed)
Time	14:00 - 16:00
Location	Room 320B, Conference Center, 3rd Floor

Future Industrial Development **WeC18**

Date	July 9 (Wed)
Time	16:30 - 18:30
Location	Room 320B, Conference Center, 3rd Floor

Control Education

CHE: Chul-Goo Kang, Department of Mechanical Engineering, Konkuk University

New Trials for Control Education **WeB17**

Date	July 9 (Wed)
Time	14:00 - 16:00
Location	Room 320A, Conference Center, 3rd Floor

Virtual-Remote Labs in Control Education: Real Experiences **WeA17**

Date	July 9 (Wed)
Time	10:30 - 12:30
Location	Room 320A, Conference Center, 3rd Floor

Life Care Intelligent Robot

CHE: Jae-Bok Song, Department of Mechanical Engineering, Korea University

Recent Development of Intelligent Robots I: Navigation **MoB18**

Date	July 7 (Mon)
Time	14:00 - 16:00
Location	Room 320B, Conference Center, 3rd Floor

Recent Development of Intelligent Robots II: Mobility **MoC18**

Date	July 7 (Mon)
Time	16:30 - 18:30
Location	Room 320B, Conference Center, 3rd Floor

Recent Development of Intelligent Robots III: Vision & HRI **TuA18**

Date	July 8 (Tue)
Time	10:30 - 12:30
Location	Room 320B, Conference Center, 3rd Floor

Recent Development of Intelligent Robots IV: Architecture & Applications **TuB18**

Date	July 8 (Tue)
Time	14:00 - 16:00
Location	Room 320B, Conference Center, 3rd Floor

Ubiquitous Robotic Companion

CHE: Bum-Jae You, Center for Cognitive Robotics, Korea Institute of Science and Technology (KIST)

Ubiquitous Robotic Companion **MoA18**

Date	July 7 (Mon)
Time	10:30 - 12:30
Location	Room 320B, Conference Center, 3rd Floor

Control Technology in Automotive Industry

CHE: Woong-chul Yang, Hyundai Motor Co., Ltd.

Several highlight sessions were organized by Korean industrial researchers. They were reviewed by TC7.1 and reorganized with other papers to the total of 19 sessions.

Panel Discussions

In this Congress, we have selected two important key subjects for panel discussion: one is Micro/Nano Manipulation which will deal with the cutting edge technology needed for nano instrumentation and fabrication, and development of future nano devices. The other one is IFAC Control Resources Initiative that will treat generation of reputable control system database, a one-stop Internet shopping point in order to provide services to teach and research needs of the IFAC community members.

Title	**Micro/Nano Manipulation**	**ThAPD**
Organizer	Toshio Fukuda (JP)	
Panelists	Sergej Fatikow (DE), Stephanus Buttgenbach (DE), Ning Xi (CN), YoungHo Cho (KR)	

Micro and Nano manipulation is the cutting edge technology for the advanced technology, such as the precision engineering and manufacturing and medical bio life science. It can play important roles of the nano instrumentation, fabrication and assembly. There will be a lot of potentials to create many nano devices, such as sensors and actuators as well as nanomaterials and nanostructure also. It needs also nano imaging and nano scale precise control in real time. Thus the Micro and Nano manipulation will be the key technology for the R&D of the micro and nano related tasks and projects.

Date	July 10 (Thu)
Time	10:30 - 12:30
Location	Room 401, Conference Center, 4th Floor

Title	IFAC Control Resources (ICR) Initiative Discussion and Sharing Session at the 08 IFAC World Congress	ThCPD
Organizer	Ljubo Vlacic (AU), Sebastien Dormido (ES), Anthony Rossiter (UK)	
Panelists	Frank Allgöwer (DE), Anthony Rossiter (UK), A. Ramakalyan (IN), Victor Becerra (UK), Li Qiu (CN), Graham Goodwin (AU), James Whidbourne (UK), Liu Guoping (CN), Ljubo Vlacic (AU), Sylviane Gentil (FR)	

Recently, IFAC has introduced the IFAC Control Resources initiative which is envisaged to gradually generate a reputable control systems database, a one-stop Internet shopping point able to provide a quality response to web-based enquiries about control systems, their underpinning theories and applications.
To kick start this initiative, within this session at the 2008 IFAC World Congress, we will provide opportunities for attendees to share and discuss educational resources with each other.

Date	July 10 (Thu)
Time	16:30 - 18:30
Location	Room 402, Conference Center, 4th Floor

Session Keynotes

Invited Sessions may include keynote papers whose presentation time is 40 minutes. These papers deal with survey of certain technical areas, state-of-the-art technologies, in-depth reviews, and detailed information of current advances. There are 17 keynote papers in the Congress.

Servo Control for Storage Systems and Precision Devices I **MoA21**

HDD Servo Control Technologies - What We Have Done and Where We Should Go
Takashi Yamaguchi, Hitachi Global Storage Technologies,
Takenori Atsumi, Hitachi, Ltd.

Date	July 7 (Mon)
Time	10:30 - 11:10
Location	Room 321B, Conference Center, 3rd Floor

Advances in Higher Order Sliding Mode Control **TuA03**

Homogeneous High - Order Sliding Modes
Arie Levant, Tel - Aviv University

Date	July 8 (Tue)
Time	10:30 - 11:10
Location	Room 304B, Conference Center, 3rd Floor

Radio Frequency Identification (RFID) Technology in Supply Chain Management I **TuA23**

RFID Technology in Supply Chain Management: State of the Art and Perspectives
Alexandre Dolgui, Ecole des Mines de Saint Etienne,
Jean-Marie Proth, INRIA

Date	July 8 (Tue)
Time	10:30 - 11:10
Location	Room 323, Conference Center, 3rd Floor

Advances in Higher Order Sliding Mode Observation and Estimation **TuB03**

High-Order Sliding-Mode Observation for Systems with Unknown Inputs
Leonid M. Fridman, Univ. of Mexico
Arie Levant, Tel - Aviv University,
Jorge Angel Davila Montoya, Unversity of Mexico
(Universidad Nacional Autonoma de Mexico)

Date	July 8 (Tue)
Time	14:00 - 14:40
Location	Room 304B, Conference Center, 3rd Floor

Systems and Control Sciences in Social Systems Applications **TuB16**

Applied System and Control Sciences to Social Systems: Globalization Age Paradigms
Georgi Marko Dimirovski, Dogus Univ of Istanbul

Date	July 8 (Tue)
Time	14:00 - 14:40
Location	Room 316, Conference Center, 3rd Floor

Hammerstein-Wiener System Identification **WeA09**

Nonlinear System Identification under Various Prior Knowledge
Przemyslaw Sliwinski, Wrocław University of Technology,
Zygmunt Hasiewicz, Wroclaw University of Technology,
Grzegorz Mzyk, Wroclaw University of Technology

Date	July 9 (Wed)
Time	10:30 - 11:10
Location	Room 311C, Conference Center, 3rd Floor

Dynamics and Control of Micro- and Nano-Scale Systems I **WeA21**

Architectures for Tracking Control in Atomic Force Microscopes
Jeffrey Austin Butterworth, University of Colorado,
Lucy Y. Pao, University of Colorado at Boulder,
Daniel Y. Abramovitch, Agilent Labs

Date	July 9 (Wed)
Time	10:30 - 11:10
Location	Room 321B, Conference Center, 3rd Floor

Industrial Applications of Real-Time Distributed Embedded Systems **WeA23**

It's Time for a Change: The Sun Java Real-Time System for Automation Systems
Gregory Bollella, Sun Microsystems

Date	July 9 (Wed)
Time	10:30 - 11:10
Location	Room 323, Conference Center, 3rd Floor

Reachability Computations for Hybrid Systems **WeB12**

Safety Verification and Reachability Analysis for Hybrid Systems
Herve Gueguen, SUPELEC,
Marie-Anne, SUPELEC,
Lefebvre and Othman Nasri, SUPELEC,
Janan Zaytoon, Univ of Reims

Date	July 9 (Wed)
Time	14:00 - 14:40
Location	Room 313, Conference Center, 3rd Floor

Dynamics and Control of Micro- and Nano-Scale Systems II **WeB21**

Review of Feedforward Approaches for Nano Precision Positioning in High Speed SPM Operation
Santosh Devasia, University Of Washington

Date	July 9 (Wed)
Time	14:00 - 14:40
Location	Room 321B, Conference Center, 3rd Floor

New Trend in Decentralized Control **WeB24**

Stabilization of Nonlinear Switched Continuous - Time Complex Systems
Lubomir Bakule, Academy of Sciences of Czech Republic
Manuel de la Sen, University del Pais Vasco

Date	July 9 (Wed)
Time	14:00 - 14:40
Location	Room 324, Conference Center, 3rd Floor

Dynamics and Control of Micro- and Nano-Scale Systems III **WeC21**

Control and Systems Approaches to Atomic Force Microscopy
Murti V. Salapaka, University of Minnesota, Twin Cities,
Pranav Agarwal, University of Minnesota, Twin Cities

Date	July 9 (Wed)
Time	16:30 - 17:10
Location	Room 321B, Conference Center, 3rd Floor

Recent Advances in Intelligent Autonomous Systems **ThA19**

A Tutorial Introduction to Autonomous Systems
Kevin L. Moore, Colorado School of Mines

Date	July 10 (Thu)
Time	10:30 - 10:50
Location	Room 320C, Conference Center, 3rd Floor

Semantic-Based Solutions for Enterprise Integration and Networking **ThA24**

The Unified Enterprise Modelling Language - Overview and Further Work
Victor Anaya, Universidad Politecnica de Valencia,
Giuseppe Berio, University of Torino,
Mounira Harzallah LINA -University of Nantes,
Patrick Heymans, University of Namur (FUNDP)
Raimundas Matulevicius, University of Namur
Andreas L Opdahl, University of Bergen,
Herve Panetto, Nancy-University,
Maria Jose Verdecho, Universidad Politecnica de Valencia

Date	July 10 (Thu)
Time	10:30 - 11:10
Location	Room 324, Conference Center, 3rd Floor

Modeling and Control in the Behavioral Framework **ThB06**

Linear Differential Behaviors Described by Rational Symbols
Jan C. Willems, K.U. Leuven,
Yutaka Yamamoto, Kyoto University

Date	July 10 (Thu)
Time	14:00 - 14:40
Location	Room 310A, Conference Center, 3rd Floor

Fractional Differentiation and Its Applications I **FrA06**

An Overview of the CRONE Approach in System Analysis, Modeling and Identification, Observation and Control
Alain Oustaloup, Jocelyn Sabatier, Patrick Lanusse, Rachid Malti, Pierre Melchior, Mathieu Moze
Universite Bordeaux

Date	July 11 (Fri)
Time	10:30 - 11:10
Location	Room 310A, Conference Center, 3rd Floor

Non-Intrusive Human Monitoring **FrA30**

Human Monitoring-Based Driving Support
Makoto Itoh, University of Tsukuba

Date	July 11 (Fri)
Time	10:30 - 11:10
Location	Room 330C, Conference Center, 3rd Floor

Video Sessions

Video Sessions are organized for the first time in IFAC World Congress in order to provide a forum to vividly demonstrate recent results and accomplishments in the field of automatic control. Control education, experimental works related to control implementation and industry-oriented control applications will be included in such video demonstration activities. In this Congress, robotics fields are highlighted.

Guidance, Navigation and Control **ThB31**

Date	July 10 (Thu)
Time	14:00 - 16:00
Location	Room 306, Conference Center, 3rd Floor

Intelligent Robotics **ThC31**

Date	July 10 (Thu)
Time	16:30 - 18:30
Location	Room 306, Conference Center, 3rd Floor

IFAC WC 2008 Technical Program Monday July 7, 2008

Plenary | Video | CC1 | CC4 | CC7
Highlight | Panel Discussion | CC2 | CC5 | CC8
Milestone | CC3 | CC6 | CC9

Track 1	Track 2	Track 3	Track 4	Track 5	Track 6	Track 7	Track 8	Track 9	Track 10
Atlantic Hall	304A	304B	308	307	310A	310B	310C	311C	311B

Track 11	Track 12	Track 13	Track 14	Track 15	Track 16	Track 17	Track 18	Track 19	Track 20
311A	313	314	318	317	316	320A	320B	320C	321C

Track 21	Track 22	Track 23	Track 24	Track 25	Track 26	Track 27	Track 28	Track 29	Track 30	Milestone
321B	321A	323	324	328	327	326	330A	330B	330C	401

08:00-09:00 **MoPL1** Auditorium (301)
Reduced Complexity Control Systems

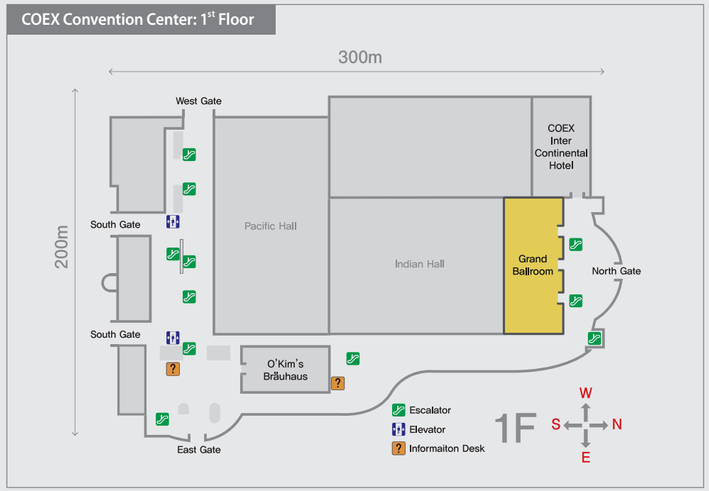
09:00-10:00 **MoPL2** Auditorium (301)
Overview of Potential Evolutions of Technologies Applied in Commercial Transport Airplanes

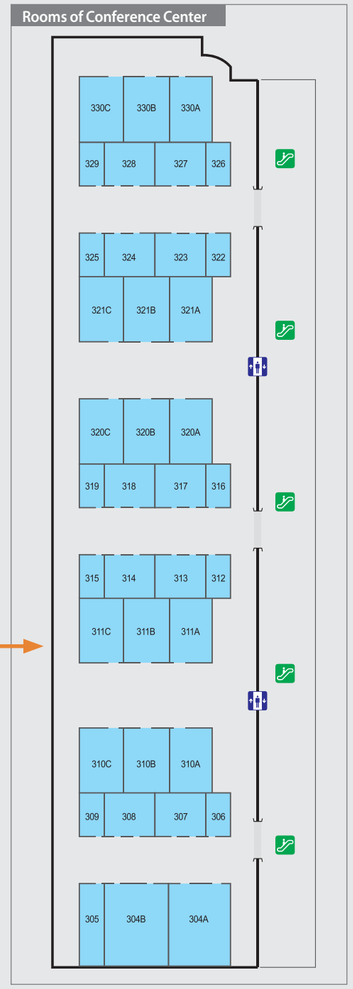
10:30 - 12:30	Poster **MoA01** Automotive & Manu - facturing Systems	Regular **MoA02** Nonlinear H_∞ Control and Disturbance Rejection	Regular **MoA03** Geometric Control	Invited **MoA04** Time Delay Systems	Invited **MoA05** Identification in Systems Biology: Methods and Applications	Regular **MoA06** Plug and Play Process Control	Regular **MoA07** Control of Time Invariant Linear Systems	Invited **MoA08** Probabilistic Robustness	Regular **MoA09** Identification of Dynamic Errors-In-Variables Models	Regular **MoA10** Prediction, Filtering and Smoothing I
14:00 - 16:00	**MoB01**	Regular **MoB02** Stability Analysis	Regular **MoB03** Control of Constrained Systems I	Regular **MoB04** Applications of Nonlinear Control I	Regular **MoB05** Fault-Tolerant Control I	Invited **MoB06** Tools and Methods in Time-Delay System Theory and Control	Regular **MoB07** Linear Systems Analysis	Invited **MoB08** LMIs and Algebraic Methods in Control	Regular **MoB09** Errors in Variables Identification	Regular **MoB10** Prediction, Filtering and Smoothing II
16:30 - 18:30	Poster **MoC01** Mechatronics & Computers	Regular **MoC02** Stability of Nonlinear Systems	Regular **MoC03** Control of Constrained Systems II	Regular **MoC04** Applications of Nonlinear Control II	Regular **MoC05** Fault-Tolerant Control II	Regular **MoC06** Time Delay Systems: Stability Analysis	Regular **MoC07** Control Problems under Conflict or Uncertainties	Regular **MoC08** Observer and Robust Estimator Synthesis	Regular **MoC09** Nonlinear System Identification I	Regular **MoC10** Prediction, Filtering and Smoothing III

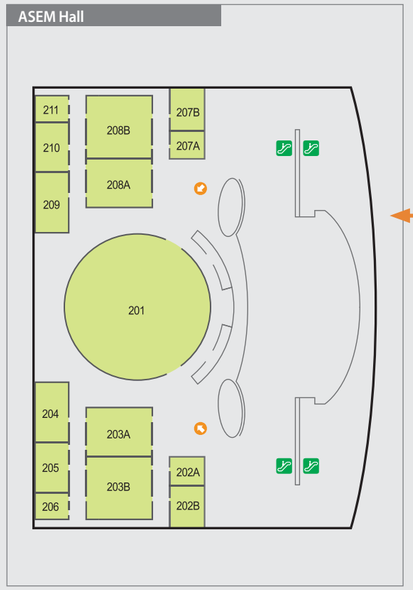
Regular **MoA11** Nonlinear Systems I	Regular **MoA12** Discrete Event Systems and Petri Nets	Regular **MoA13** Distributed Control and Coordination	Invited **MoA14** Networked Systems: Sensing, Estimation, Consensus and Control Over Networks	Regular **MoA15** Monitoring & Sensing in Agriculture	Regular **MoA16** Economic and Management Systems I	Highlight **MoA17** Steel Making	Highlight **MoA18** Ubiquitous Robotic Companion	Regular **MoA19** Robotic Mechanism I	Regular **MoA20** Flying Robot I
Regular **MoB11** Nonlinear Systems II	Regular **MoB12** Iterative Learning Control I	Regular **MoB13** Distributed Estimation and Consensus I	Regular **MoB14** Control and Synchroni zation of Networks	Regular **MoB15** Mechatronics in Agriculture	Regular **MoB16** Economic and Management Systems II	Highlight **MoB17** Hot Rolling	Highlight **MoB18** Recent Development of Intelligent Robots I: Navigation	Regular **MoB19** Robotic Mechanism II	Regular **MoB20** Flying Robot II
Regular **MoC11** Nonlinear Systems III	Regular **MoC12** Iterative Learning Control II	Regular **MoC13** Distributed Estimation and Consensus II	Regular **MoC14** Control of Networks	Regular **MoC15** Greenhouses and Controlled Agricultural Production	Regular **MoC16** Economic and Management Systems III	Highlight **MoC17** Recent Automation Technologies in Shipbuilding Industry I	Highlight **MoC18** Recent Development of Intelligent Robots II: Mobility	Invited **MoC19** Control of Cooperative, Mobile Minirobots – Robotsoccer	Invited **MoC20** Latest Development in Mobile Machines

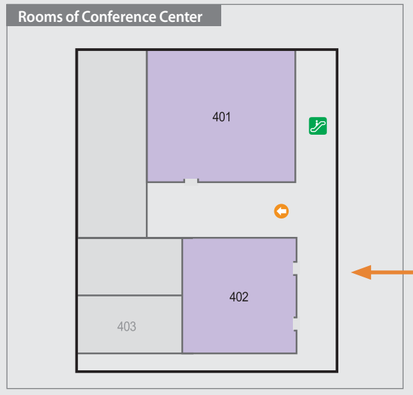
Invited **MoA21** Servo Control for Storage Systems and Precision Devices I	Regular **MoA22** Design and Control of Mechatronic Machines	Regular **MoA23** Large Scale and Complex Systems: Applications I	Invited **MoA24** Control and Monitoring of Semi conductor Manu facturing	Invited **MoA25** Applications of Nonlinear Optimization Based and Predictive Control	Regular **MoA26** Cold Rolling and Tension Control	**MoA27**	Invited **MoA28** Benchmark for Engine Cold Start	Invited **MoA29** Model-Based Develop- ment for Automotive Control Systems	Invited **MoA30** Low Altitude Flight and Landing Control	**MoBCC**
Invited **MoB21** Servo Control for Storage Systems and Precision Devices II	Regular **MoB22** Control Methods for Mechatronic Systems	Regular **MoB23** Large Scale and Complex Systems: Applications II	Invited **MoB24** Fault Detection and Accommod ation for Nonlinear Systems	Invited **MoB25** New Theoretical Results and Numerical Methods in Optimization Based Control	Regular **MoB26** Furnace Control	Regular **MoB27** Precision Systems and Friction Modeling / Control	Invited **MoB28** Engine Modeling, Diagnostics and Control	Invited **MoB29** New Trends in Chassis Control and Supervision	Invited **MoB30** Formation Flight	Milestone **MoBCC** Milestone Report by IFAC Coordinating Committee on Design Methods (CC2)
Invited **MoC21** Servo Control for Storage Systems and Precision Devices III	Regular **MoC22** Control of Mechanical Systems	Regular **MoC23** Large Scale Complex Systems: Theory	Invited **MoC24** Fault Tolerant Control	Regular **MoC25** Model Reduction and Realtime Optimization and Control	Regular **MoC26** Separation Control	Invited **MoC27** Power Electronics Applications	Invited **MoC28** Automotive Control and Estimation Using Look-Ahead Road Information	Regular **MoC29** Active Suspension	Invited **MoC30** Guidance and Robust Control of Information Spacecraft	Milestone **MoCCC** Milestone Report by IFAC Coordinating Committee on Bio and Ecological Systems (CC8)

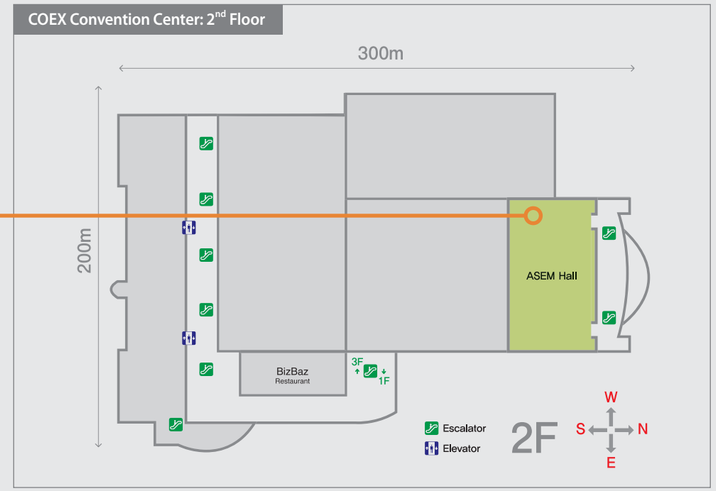
World Trade Center Seoul Complex

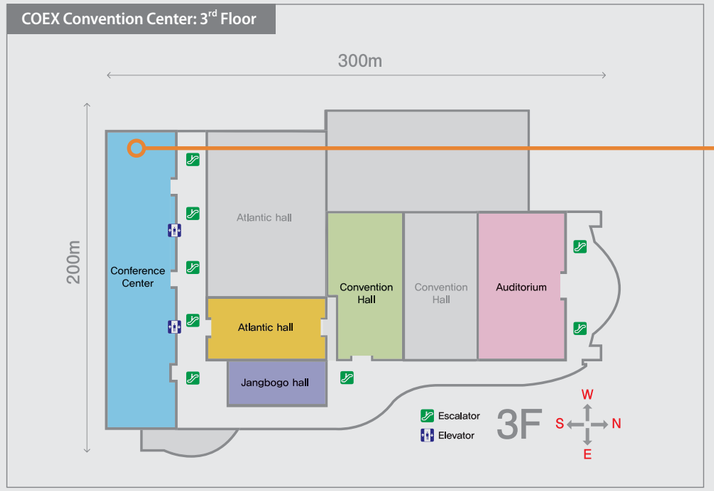


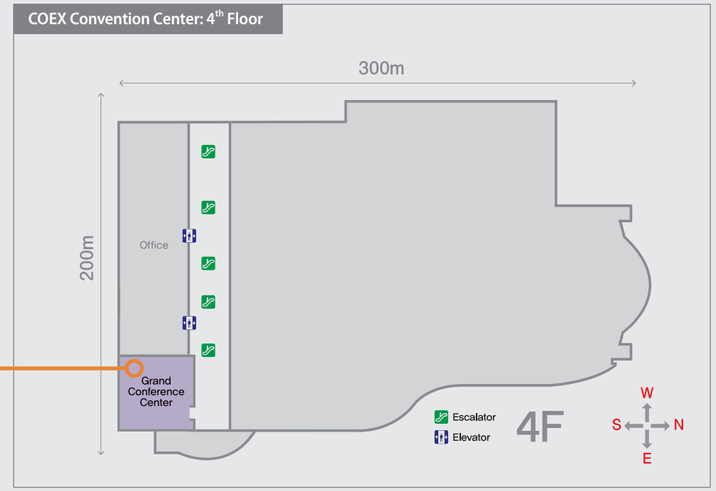












IFAC WC 2008 Technical Program Tuesday July 8, 2008

Plenary | Video | CC1 | CC4 | CC7
Highlight | Panel Discussion | CC2 | CC5 | CC8
Milestone | CC3 | CC6 | CC9

Track 1	Track 2	Track 3	Track 4	Track 5	Track 6	Track 7	Track 8	Track 9	Track 10	Track 11	Track 12	Track 13	Track 14	Track 15	Track 16	Track 17	Track 18	Track 19	Track 20	Track 21	Track 22	Track 23	Track 24	Track 25	Track 26	Track 27	Track 28	Track 29	Track 30	Milestone
Atlantic Hall	304A	304B	308	307	310A	310B	310C	311C	311B	311A	313	314	318	317	316	320A	320B	320C	321C	321B	321A	323	324	328	327	326	330A	330B	330C	401

08:00-09:00 **TuPL1** Auditorium (301)
Robust Control in Biology: From Genes to Cells to Systems

09:00-10:00 **TuPL2** Auditorium (301)
Stochastic Learning and Optimization - a Sensitivity-Based Approach

	Track 1	Track 2	Track 3	Track 4	Track 5	Track 6	Track 7	Track 8	Track 9	Track 10	Track 11	Track 12	Track 13	Track 14	Track 15	Track 16	Track 17	Track 18	Track 19	Track 20	Track 21	Track 22	Track 23	Track 24	Track 25	Track 26	Track 27	Track 28	Track 29	Track 30	Milestone
10:30 - 12:30	Poster **TuA01** Atlantic Hall Systems and Signals I	Regular **TuA02** Stabilization of Nonlinear Systems I	Regular **TuA03** Advances in Higher Order Sliding Mode Control	Regular **TuA04** Applications of Nonlinear Control III	Regular **TuA05** Switching Stability and Control I	Regular **TuA06** Time Delay Systems: Stabilisation and Control	Invited **TuA07** Dynamic Games and Applications	Regular **TuA08** Robust Controller Synthesis I	Regular **TuA09** Nonlinear System Identification II	Regular **TuA10** Identification Algorithms and Applications	Regular **TuA11** Adaptive Control of Systems I	Invited **TuA12** Dependable Control of Discrete Event Systems I	Regular **TuA13** Sensor Networks	Regular **TuA14** Control Over Networks I	Invited **TuA15** Artificial Pancreas: Novel Applications of Modeling and Control in Biomedical Systems	Regular **TuA16** National and Regional Economies	Highlight **TuA17** Recent Automation Technologies in Shipbuilding Industry II	Highlight **TuA18** Recent Development of Intelligent Robots III: Vision & HRI	Regular **TuA19** Robot Manipulators I	Regular **TuA20** Mobile Robot Control I	Invited **TuA21** Low-Cost, High-Performance Sensor Technologies for Robotic and Consumer Applications	Regular **TuA22** Design and Development Tools for Mechatronic Systems	Invited **TuA23** Radio Frequency Identification (RFID) Technology in Supply Chain Management I	Regular **TuA24** Statistical and Parameter Estimation Based Methods	Regular **TuA25** Process Modeling, Identifcation, and Estimation	Regular **TuA26** Modeling, Operation and Control of Power Systems I	Invited **TuA27** Comput ational Intelligence Approach in Modeling and Control	Regular **TuA28** Hybrid Vehicle I	Regular **TuA29** Semi-Active Suspension and Roll-Over Prevention	Invited **TuA30** Satellite Navigation	**TuBCC**
14:00 - 16:00	**TuB01**	Regular **TuB02** Stabilization of Nonlinear Systems II	Invited **TuB03** Advances in Higher Order Sliding Mode Observation and Estimation	Regular **TuB04** Applications of Nonlinear Control IV	Regular **TuB05** Switching Stability and Control II	Regular **TuB06** Time Delay Systems: Robust Control	Regular **TuB07** Linear Parameter-Varying Systems	Regular **TuB08** Robust Controller Synthesis II	Regular **TuB09** Nonlinear System Identification III	Regular **TuB10** Estimation Error Quantification	Regular **TuB11** Adaptive Control of Systems II	Invited **TuB12** Dependable Control of Discrete Event Systems II	Regular **TuB13** Coordination of Multiagent Systems	Regular **TuB14** Control Over Networks II	Regular **TuB15** Biosignals Analysis and Interpretation	Invited **TuB16** Systems and Control Sciences in Social Systems Applications	Highlight **TuB17** Recent Automation Technologies in Shipbuilding Industry III	Highlight **TuB18** Recent Development of Intelligent Robots IV: Architecture & Applications	Regular **TuB19** Robot Manipulators II	Regular **TuB20** Mobile Robot Control II	Regular **TuB21** Measure-ment & Actuation	Regular **TuB22** Neural Network Based Control	Regular **TuB23** Radio Frequency Identification (RFID) Technology in Supply Chain Management II	Regular **TuB24** Applications of Process Supervision and Fault Tolerant Control	Regular **TuB25** Process Modeling and Identification	Regular **TuB26** Modeling, Operation and Control of Power Systems II	Regular **TuB27** Fuzzy Systems and Control: Stability Analysis and Design	Regular **TuB28** Hybrid Vehicle II	Regular **TuB29** Vehicle Dynamics	Invited **TuB30** Guidance, Control & Navigation for Unmanned Air Vehicles	Milestone **TuBCC** Milestone Report by IFAC Coordinating Committee on Manu facturing and Logistics Systems (CC5)
16:30 - 18:30	Poster **TuC01** Design Methods	Regular **TuC02** Asymptotic Stabilization of Nonlinear Systems	Invited **TuC03** Applications of Higher Order Sliding Mode Control	Regular **TuC04** Applications of Nonlinear Control V	Regular **TuC05** Analytic Design of Control Systems	Invited **TuC06** Delays in Inter-connected Systems	Regular **TuC07** Robustness Analysis	Regular **TuC08** Robust Control Applications	Regular **TuC09** Nonlinear System Identification IV	Regular **TuC10** Particle Filtering and Monte-Carlo Methods	Regular **TuC11** Adaptive Control by Neural Networks	Invited **TuC12** Dependable Control of Discrete Event Systems III	Invited **TuC13** Recent Trends in Multiagents Formation Control	Regular **TuC14** Control Over Networks III	Invited **TuC15** Image-Based Biological and Medical Systems Modeling	Invited **TuC16** Automation for Improving International Stability	Highlight **TuC17** Measurement	Highlight **TuC18** Robotics for LCD & Semi-conductor Industry	Regular **TuC19** Robot Manipulators III	Regular **TuC20** Mobile Robot Control III	Invited **TuC21** Low-Cost Safe Embedded Control System	Regular **TuC22** Fuzzy Logic Control Systems	Invited **TuC23** Industrial Applications of Distributed Real-Time Object-Computing	Regular **TuC24** Reliability & Safety Analysis: Fault Diagnosis by Discrete Event Systems	Regular **TuC25** Model Predictive and Optimization - Based Control	Regular **TuC26** Modeling, Operation and Control of Power Systems III	Regular **TuC27** Modeling and Identification with Fuzzy and Neural Techniques	Regular **TuC28** New Trends in Powertrain Control	Regular **TuC29** Sensors, Virtual Sensors and Observers	Regular **TuC30** Navigation	Milestone **TuCCC** Milestone Report by IFAC Coordinating Committee on Power and Process Systems (CC6)

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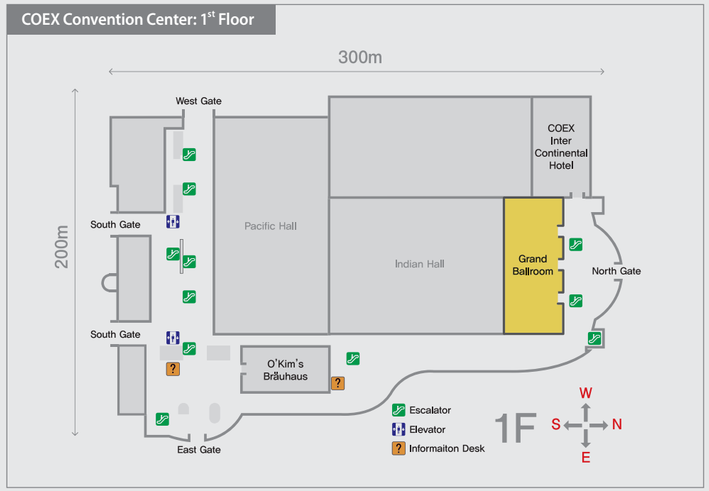

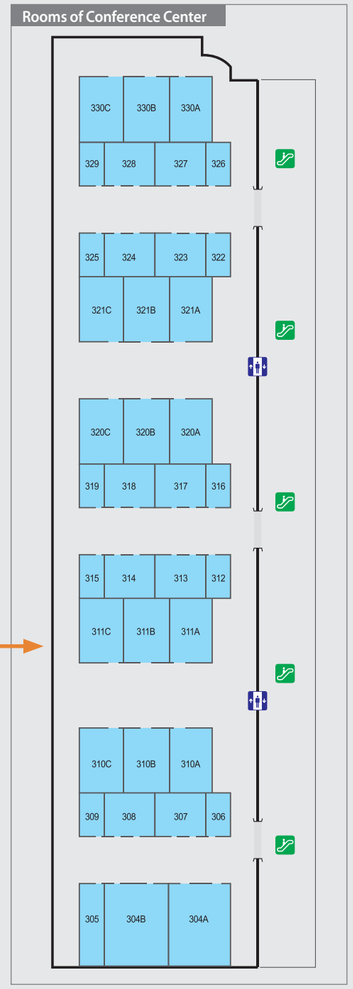

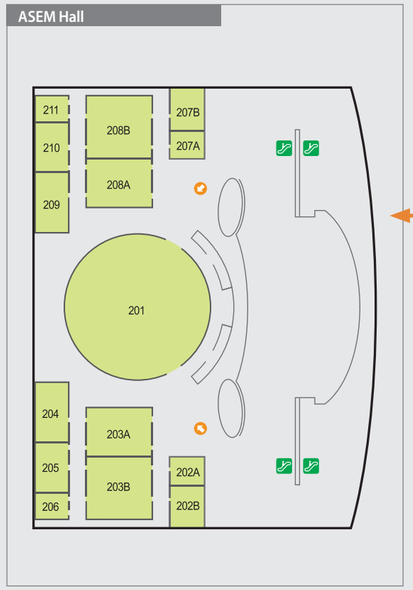

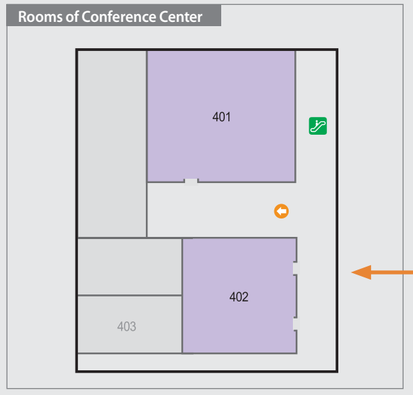

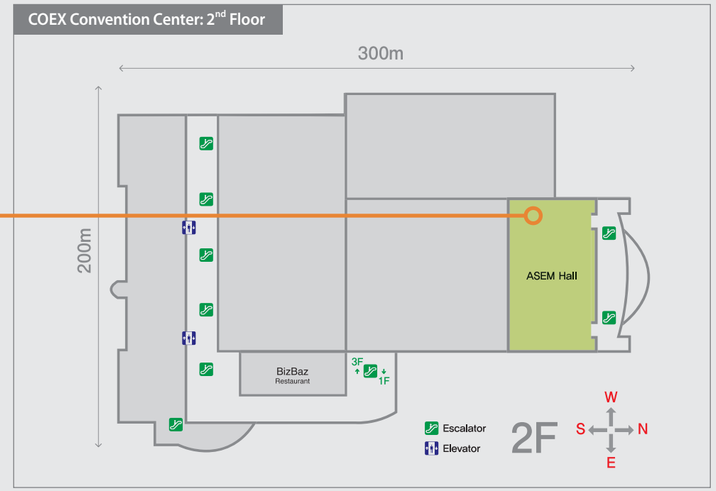

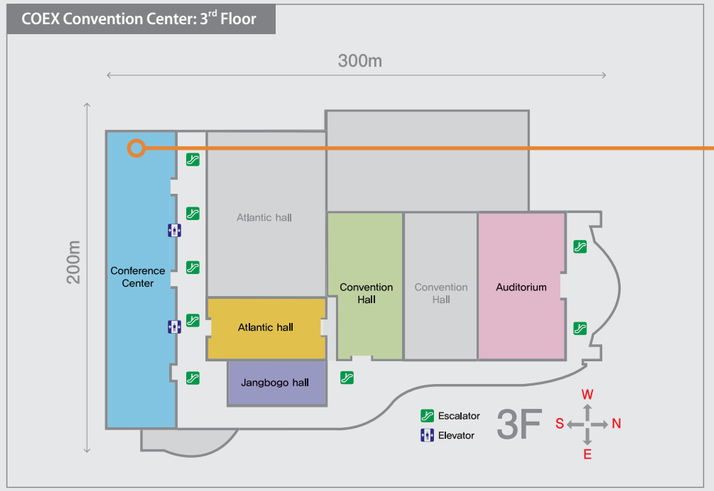

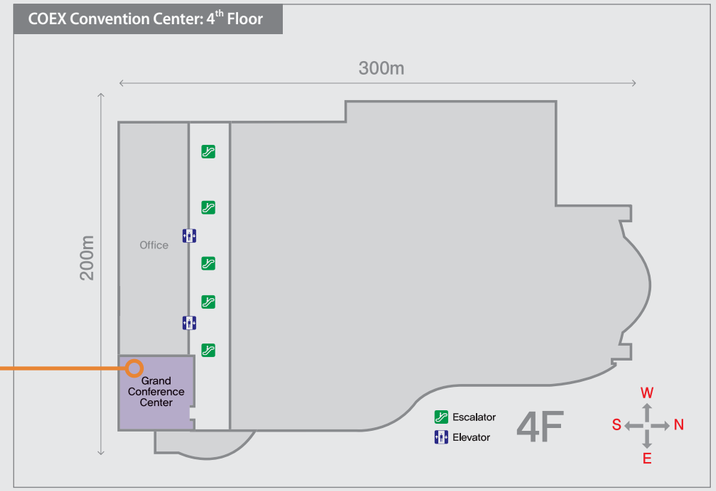

IFAC WC 2008 Technical Program Wednesday July 9, 2008

Plenary | Video | CC1 | CC4 | CC7
Highlight | Panel Discussion | CC2 | CC5 | CC8
Milestone | | CC3 | CC6 | CC9

Track 1	Track 2	Track 3	Track 4	Track 5	Track 6	Track 7	Track 8	Track 9	Track 10
Atlantic Hall	304A	304B	308	307	310A	310B	310C	311C	311B

Track 11	Track 12	Track 13	Track 14	Track 15	Track 16	Track 17	Track 18	Track 19	Track 20
311A	313	314	318	317	316	320A	320B	320C	321C

Track 21	Track 22	Track 23	Track 24	Track 25	Track 26	Track 27	Track 28	Track 29	Track 30	Milestone
321B	321A	323	324	328	327	326	330A	330B	330C	401

08:00-09:00 **WePL1** Auditorium (301)
Perspectives on System Identification

09:00-10:00 **WePL2** Auditorium (301)
Automation and Control Systems Technology in Korean Shipbuilding Industry: The State of the Art and the Future Perspectives

	Track 1	Track 2	Track 3	Track 4	Track 5	Track 6	Track 7	Track 8	Track 9	Track 10
10:30 - 12:30	Poster **WeA01** Systems and Signals II	Regular **WeA02** Nonlinear Observers I	Regular **WeA03** Control of Switched Systems	Regular **WeA04** Nonlinear Pendulum Control	Regular **WeA05** Controller Constraints and Structure I	Regular **WeA06** Infinite Dimensional Systems: Distributed Parameter Systems	Regular **WeA07** Optimal Control Theory I	Regular **WeA08** Optimization Based Controller Synthesis I	Invited **WeA09** Hammerstein-Wiener System Identification	Regular **WeA10** Fault Detection I
14:00 - 16:00	**WeB01**	Regular **WeB02** Nonlinear Observers II	Regular **WeB03** Output Feedback Sliding Mode Control	Invited **WeB04** Polynomial Design Methods	Regular **WeB05** Controller Constraints and Structure II	Regular **WeB06** Infinite Dimensional Systems: Stabilization and Control	Regular **WeB07** Optimal Control Theory II	Regular **WeB08** Optimization Based Controller Synthesis II	Regular **WeB09** Subspace-Based System Identification	Regular **WeB10** Fault Detection II
16:30 - 18:30	Poster **WeC01** Bio & Social Systems	Regular **WeC02** Nonlinear Observers and Observability	Regular **WeC03** Sliding Mode Control	Regular **WeC04** Linear Matrix Inequalities and Their Applications	Regular **WeC05** Decentralized Control	Regular **WeC06** Descriptor Systems	Regular **WeC07** Industrial Applications of Optimal Control	Regular **WeC08** Convex Optimization and Relaxations	Regular **WeC09** Recursive Identification	Regular **WeC10** Fault Detection III

	Track 11	Track 12	Track 13	Track 14	Track 15	Track 16	Track 17	Track 18	Track 19	Track 20
10:30 - 12:30	Regular **WeA11** Nonlinear Adaptive Control I	Regular **WeA12** Hybrid Systems Modeling	Regular **WeA13** Stochastic Control	Invited **WeA14** Networked Systems: Rate Constraints, Quantization and Unreliable Communi-cation	Invited **WeA15** Modeling Methods and Clinical Applications in Medical and Biological Systems I	Regular **WeA16** Perspectives for an Human Centred Systems Engineering: Trends and Issues	Highlight **WeA17** Virtual-Remote Labs in Control Education: Real Experiences	Highlight **WeA18** Automation in the Semi-conductor, Display, and Electronics Industry	Invited **WeA19** Automated Optical Inspection Systems for Electronics Manu-A Industry	Invited **WeA20** Infor-mationally Structured Environments for Robotics
14:00 - 16:00	Regular **WeB11** Robust Adaptive Control	Invited **WeB12** Reachability Computations for Hybrid Systems	Regular **WeB13** Applications of Stochastic Systems Theory	Invited **WeB14** Networked Systems: Consensus of Multi-Agent Systems and Related Results	Invited **WeB15** Modeling Methods and Clinical Applications in Medical and Biological Systems II	**WeB16**	Highlight **WeB17** New Trials for Control Education	Highlight **WeB18** Automation	Regular **WeB19** Robotics Interaction	Regular **WeB20** Robotics Estimation I
16:30 - 18:30	Regular **WeC11** Adaptive, Nonlinear and Robust Control	Regular **WeC12** Analysis and Control of Hybrid Systems	Regular **WeC13** Stochastic System Identification	Invited **WeC14** Advances in Networked Systems : Asynchronous Control, Estimation and Syn-chronization Problems	Regular **WeC15** Modeling Methods and Clinical Applications in Medical and Biological Systems III	**WeC16**	Regular **WeC17** Control Education: Curricula	Highlight **WeC18** Future Industrial Development	Regular **WeC19** Networked Robotic Systems	Regular **WeC20** Robotics Estimation II

	Track 21	Track 22	Track 23	Track 24	Track 25	Track 26	Track 27	Track 28	Track 29	Track 30	Milestone
10:30 - 12:30	Invited **WeA21** Dynamics and Control of Micro and Nano-Scale Systems I	Invited **WeA22** Mechatronic Trends in Trains	Regular **WeA23** Industrial Applications of Real-Time Distributed Embedded Systems	Regular **WeA24** Production Planning & Control	Regular **WeA25** Model Predictive and Optimization - Based Control : Applications	Regular **WeA26** Control of Power Systems I	Regular **WeA27** Control Software Technology	Regular **WeA28** Engine Modelling	Regular **WeA29** Accident Reduction and Fault Tolerant Systems	Regular **WeA30** Intelligent Vehicles Navigation and Control I	**WeBCC**
14:00 - 16:00	Invited **WeB21** Dynamics and Control of Micro and Nano-Scale Systems II	Regular **WeB22** Estimation and Control of State and Disturbance in Mechatronic Systems	Invited **WeB23** Industrial Applications of Real-Time Embedded and Distributed Systems	Invited **WeB24** New Trend in De-centralized Control	Regular **WeB25** Process Control Applications	Regular **WeB26** Control of Power Systems II	Regular **WeB27** Networked Control	Regular **WeB28** Engine Control	Regular **WeB29** Intelligent Vehicle, Safety and Body Systems	Regular **WeB30** Intelligent Vehicles Navigation and Control II	Milestone **WeBCC** Highlight Round-Table Presentation by IFAC Coordinating Committee on Trans-portation and Vehicle Systems (CC7)
16:30 - 18:30	Invited **WeC21** Dynamics and Control of Micro and Nano-Scale Systems III	Regular **WeC22** Identification and Diagnosis of Mechatronic Systems	Regular **WeC23** Discrete Event Systems in Manu-facturing	Regular **WeC24** Supply and Logistics Networks	Invited **WeC25** Industrial Application of Process Control	Regular **WeC26** Control of Power Systems III	Regular **WeC27** Real-Time Systems	Regular **WeC28** Powertrain Control	Regular **WeC29** Chassis Control and Supervision	Regular **WeC30** Multi-Vehicle Systems I	Milestone **WeCCC** Milestone Report by IFAC Coordinating Committee on Mechat-ronics, Robotics and Components (CC4)

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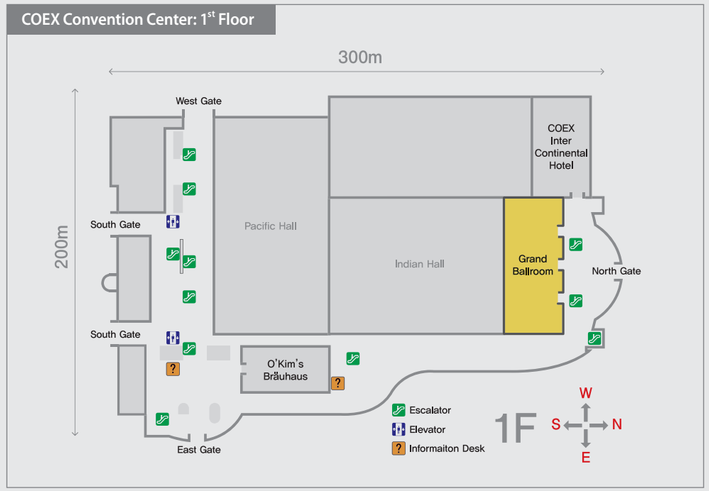

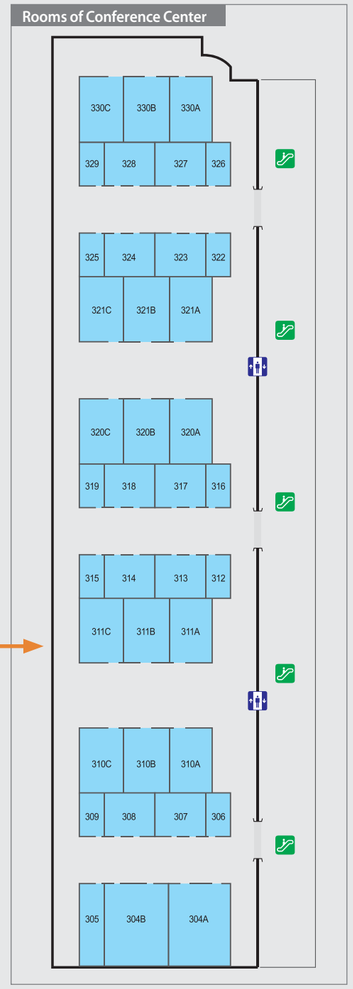

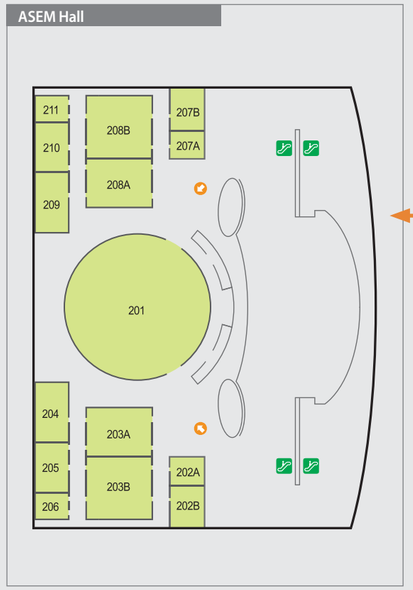

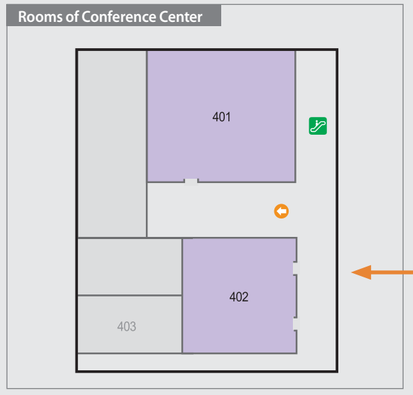

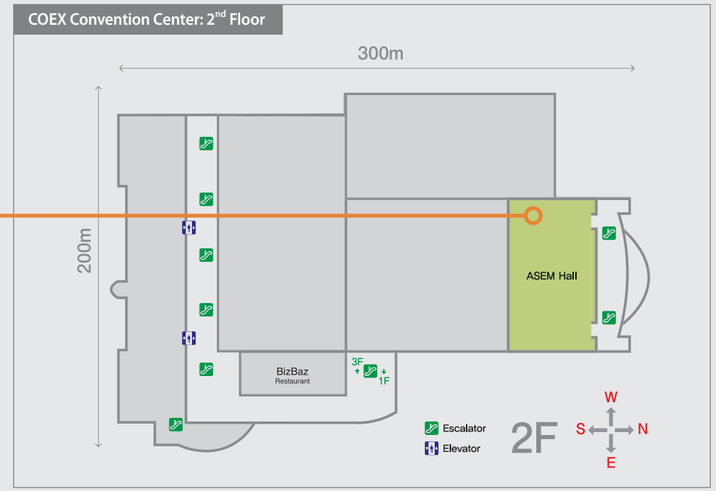

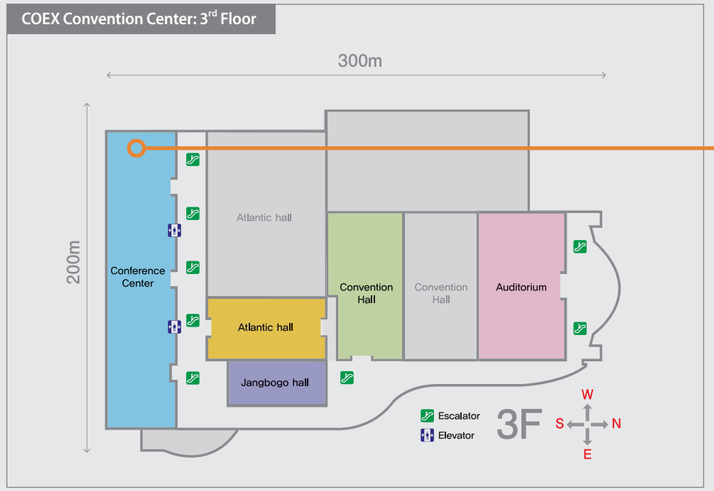

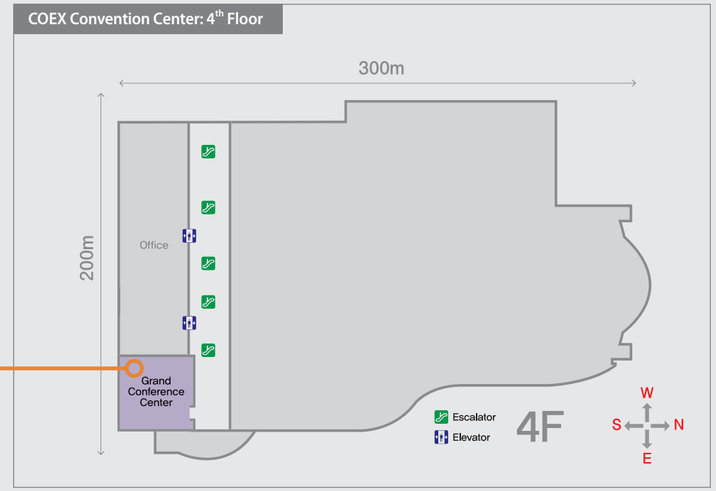

IFAC WC 2008 Technical Program Thursday July 10, 2008

Plenary | Video | CC1 | CC4 | CC7
Highlight | Panel Discussion | CC2 | CC5 | CC8
Milestone | | CC3 | CC6 | CC9

Track 1	Track 2	Track 3	Track 4	Track 5	Track 6	Track 7	Track 8	Track 9	Track 10	Track 11	Track 12	Track 13	Track 14	Track 15	Track 16	Track 17	Track 18	Track 19	Track 20	Track 21	Track 22	Track 23	Track 24	Track 25	Track 26	Track 27	Track 28	Track 29	Track 30	Track 31	Panel Discussion
Atlantic Hall	304A	304B	308	307	310A	310B	310C	311C	311B	311A	313	314	318	317	316	320A	320B	320C	321C	321B	321A	323	324	328	327	326	330A	330B	330C	306	402
08:00-09:00 **ThPL1** Auditorium (301) **A Control-Theoretic Approach to Model-Based Medicine**																															
09:00-10:00 **ThPL2** Auditorium (301) **BigDog, the Rough-Terrain Robot**																															
10:30 - 12:30	Poster **ThA01** Industrial Control Systems	Regular **ThA02** Faults and Estimation	Regular **ThA03** Predictive Control	Regular **ThA04** Tracking Control	Regular **ThA05** Adaptive Control I	Regular **ThA06** Disturbance Rejection and Control	Invited **ThA07** Control Problems for Dynamical Systems under Conflict and Uncertainty	Regular **ThA08** Robust Linear Matrix Inequalities	Regular **ThA09** Grey Box System Identification	Regular **ThA10** Excitation and Experiment Design	Regular **ThA11** Linear Parametrically Varying (LPV) Methodologies	Regular **ThA12** Stability of Hybrid and Switched Systems	Regular **ThA13** Learning and Estimation	Regular **ThA14** Networks and Control	Invited **ThA15** Control and Regulation in Biological Systems	**ThA16**	Regular **ThA17** Control Education: Teaching Tools and Methods	Regular **ThA18** Control Methods in Robotics	Invited **ThA19** Recent Advances in Intelligent Autonomous Systems	Regular **ThA20** Flexible Robots	Invited **ThA21** Dynamics and Control of Micro and Nano-Scale Systems IV	Regular **ThA22** Vibration Control and Flexible Systems	Invited **ThA23** R2R System Technology for Printed Electronics	Invited **ThA24** Semantic-Based Solutions for Enterprise Integration and Networking	Regular **ThA25** Applied Process Control	Regular **ThA26** Dynamic Interaction of Power Plants	Regular **ThA27** Flow Control in Internet	Regular **ThA28** Flexible Structure Diagnosis and Health Monitoring	Regular **ThA29** Automotive Systems Control	Regular **ThA30** Multi-Vehicle Systems II	**ThB31**	Panel **ThAPD** Micro/nano Manipulation
14:00 - 16:00	**ThB01**	Regular **ThB02** Nonlinear Output Regulation	Regular **ThB03** Nonlinear Predictive Control	Regular **ThB04** Tracking Control Applications	Regular **ThB05** Adaptive Control II	Invited **ThB06** Modeling and Control in the Behavioral Framework	Regular **ThB07** Evolutionary Algorithms	Regular **ThB08** Robust Time-Delay Systems I	Regular **ThB09** Identification for Control	Regular **ThB10** Stochastic Modelling and Control	Invited **ThB11** Recent Advances in Iterative and Repetitive Learning Control I	Regular **ThB12** Quantized Systems and Model Predictive Control of Hybrid Systems	Regular **ThB13** Kalman Filtering Techniques	Invited **ThB14** Design and Analysis of Networked Control Systems	Regular **ThB15** Control Issues in Metabolic Engineering	**ThB16**	Regular **ThB17** Control Education: E-Learning	Invited **ThB18** Embedded Component Technology for Network Robot System	Regular **ThB19** Tele Robotics	Invited **ThB20** Automation in Micro and Nano-Handling I	Invited **ThB21** Soft Computing / Computational Intelligence in Mechatronics	Regular **ThB22** Estimation, Detection and Diagnosis	Regular **ThB23** Production & Logistics Over Manufacturing Networking	Regular **ThB24** Architectures and Software Tools for Enterprise Integration and Networking in Manufacturing	Regular **ThB25** Design and Control	Regular **ThB26** Constraint and Security Monitoring and Control	Regular **ThB27** Congestion Control in Internet	Regular **ThB28** Guidance, Navigation and Control of Aerospace Vehicles	Regular **ThB29** Modeling and Control of Transportation Systems	Regular **ThB30** Transportation Logistics	Video **ThB31** Guidance Navigation and Control	**ThAPD**
16:30 - 18:30	**ThC01**	Regular **ThC02** Output Feedback Control	Regular **ThC03** MPC for Constrained Systems	Regular **ThC04** Fuzzy Control	Regular **ThC05** Applications of Adaptive Control Methods	Regular **ThC06** Complex Systems	Regular **ThC07** Methods in Optimal Control Design	Regular **ThC08** Robust Time-Delay Systems II	Regular **ThC09** Closed Loop Identification	Regular **ThC10** Vibration and Modal Analysis	Invited **ThC11** Recent Advances in Iterative and Repetitive Learning Control II	Regular **ThC12** Switching and Hybrid Stochastic Systems	Regular **ThC13** Robust and Nonlinear Estimation	Invited **ThC14** Fault Tolerance and Coordination in Networked Control Systems	Invited **ThC15** Control Issues in Biological Wastewater Treatment	**ThC16**	Regular **ThC17** Control Education: Remote Laboratories	Regular **ThC18** Robotics Vision	Regular **ThC19** Intelligent Robotics Systems	Invited **ThC20** Automation in Micro and Nano-Handling II	Regular **ThC21** Human Cognition, Speech and Decision-Making	Regular **ThC22** Sensing, Fault Detection and Control of Hydraulic Systems	Invited **ThC23** Production and Logistics Structures As Complex Adaptive Systems (CASs)	Invited **ThC24** Internet of Services	Regular **ThC25** Industrial Application Results of Process Control	Invited **ThC26** Intelligent Control of Power Plants	Invited **ThC27** Virtual Automation Networks	Regular **ThC28** Launch Vehicle and Missile Autopilot	Invited **ThC29** Small Satellites and Propulsion Systems	Regular **ThC30** Automatic Control, Optimization, Real-Time Operations in Transportation	Video **ThC31** Intelligent Robotics	Panel **ThAPD** IFAC Control Resources (ICR) Initiative Discussion and Sharing

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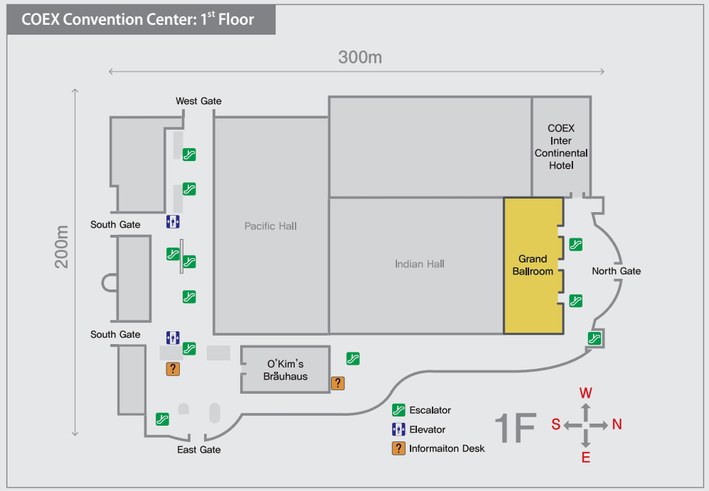

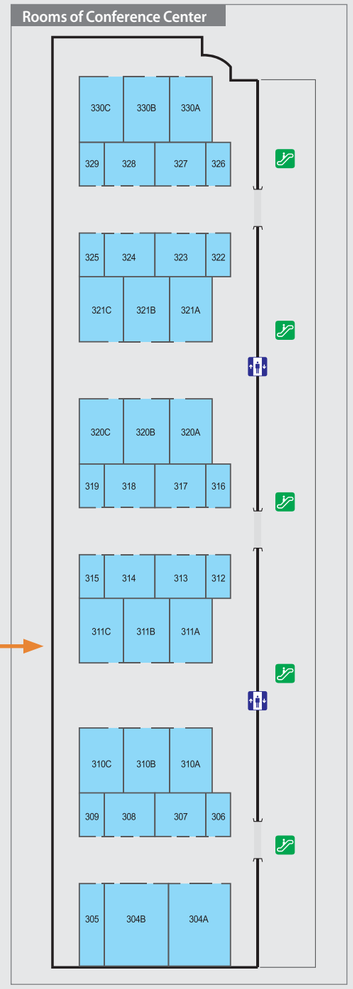

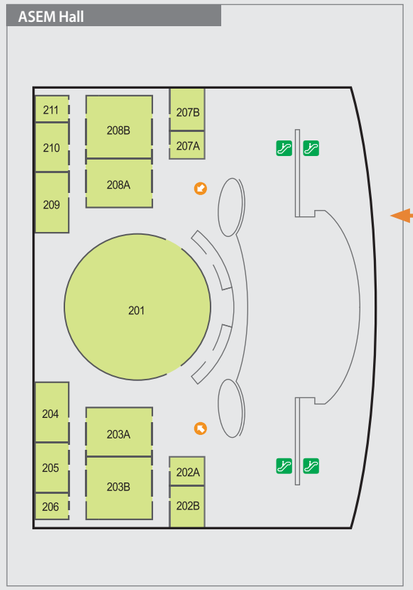

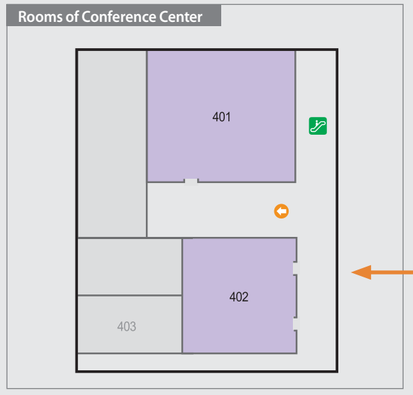

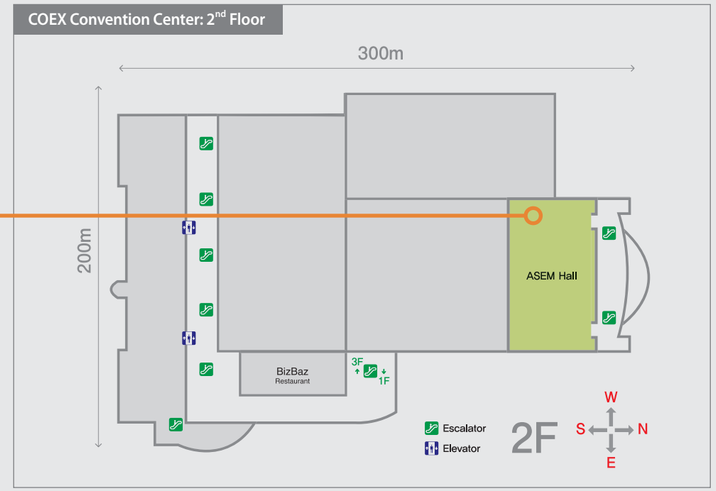

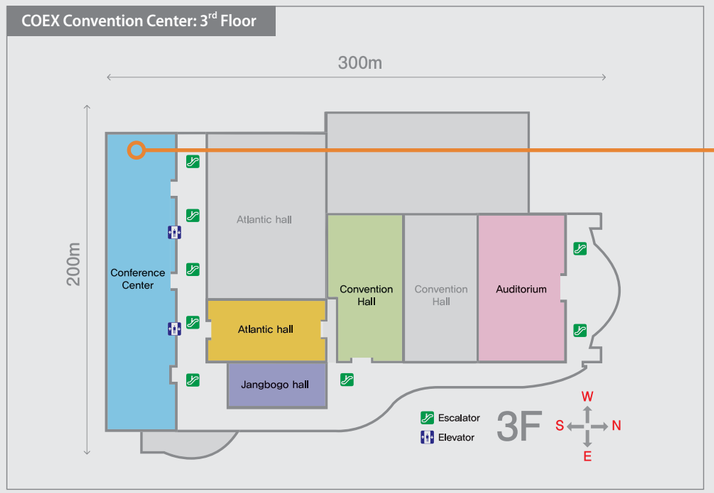

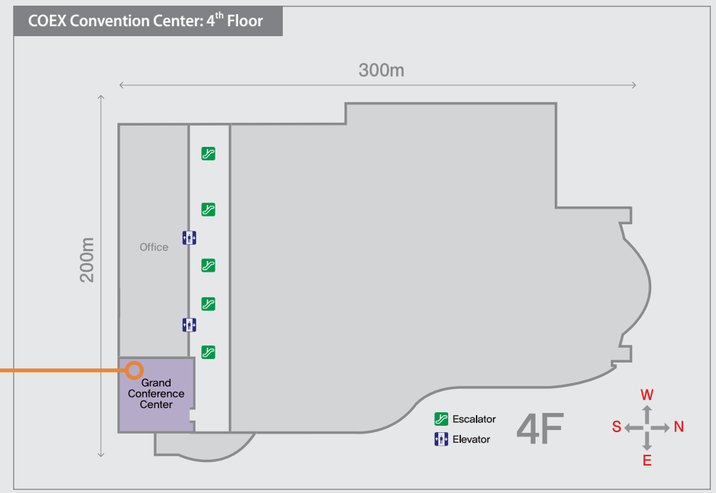

IFAC WC 2008 Technical Program Friday July 11, 2008

Plenary | Video | CC1 | CC4 | CC7
Highlight | Panel Discussion | CC2 | CC5 | CC8
Milestone | CC3 | CC6 | CC9

Track 1	Track 2	Track 3	Track 4	Track 5	Track 6	Track 7	Track 8	Track 9	Track 10	Track 11	Track 12	Track 13	Track 14	Track 15	Track 16	Track 17	Track 18	Track 19	Track 20	Track 21	Track 22	Track 23	Track 24	Track 25	Track 26	Track 27	Track 28	Track 29	Track 30	Milestone
Atlantic Hall	304A	304B	308	307	310A	310B	310C	311C	311B	311A	313	314	318	317	316	320A	320B	320C	321C	321B	321A	323	324	328	327	326	330A	330B	330C	401

09:00-10:00 **FrPA** Auditorium
SmartFactory - from Vision to Reality in Factory Technologies

		Track 2	Track 3	Track 4	Track 5	Track 6	Track 7	Track 8	Track 9	Track 10	Track 11	Track 12	Track 13	Track 14	Track 15	Track 16	Track 17	Track 18	Track 19	Track 20	Track 21	Track 22	Track 23	Track 24	Track 25	Track 26	Track 27	Track 28	Track 29	Track 30	Milestone
10:30 - 12:30		Regular **FrA02** Robust Nonlinear Control	Regular **FrA03** Anti-Windup Strategies	Regular **FrA04** Discrete-Time Nonlinear Systems	Regular **FrA05** Applications of Nonlinear Control Methods	Invited **FrA06** Fractional Differentiation and Its Applications I	Regular **FrA07** Algorithm and Software for Optimal Control	Invited **FrA08** Reachability, Estimation and Control Synthesis under Uncertainty I	Regular **FrA09** Continuous Time System Identification	Regular **FrA10** Switching Control I	Regular **FrA11** Gain Scheduling	Invited **FrA12** Supervisory Control Design and Applications	Regular **FrA13** Optimal Filtering and Estimation	Regular **FrA14** Management of Natural Resources I	Regular **FrA15** Bioprocess Control Applications	**FrA16**	Regular **FrA17** Control Education: Simulation & Modelling Learning Tools	Regular **FrA18** Localization and Mapping	Invited **FrA19** Haptics Technology: Current Trends and Potential of Haptics	Invited **FrA20** Advanced Intelligent System Based on Machine Vision	Regular **FrA21** Modeling Human Performance	Regular **FrA22** Intelligent Controllers	Regular **FrA23** Manu-facturing Plant Control	Regular **FrA24** Job and Activity Scheduling I	Regular **FrA25** Monitoring and Performance Assessment	Invited **FrA26** Intelligent Control of Power Systems	Regular **FrA27** Remote Sensor Data Acquisition	Regular **FrA28** Marine System I	Regular **FrA29** Adaptive and Robust Control in Aerospace Vehicles	Invited **FrA30** Non-Intrusive Human Monitoring	
14:00 - 16:00		Regular **FrB02** Chaotic Systems and Bifurcations	Regular **FrB03** Systems with Saturation	Regular **FrB04** Topics in Control	Regular **FrB05** Digital Control	Invited **FrB06** Fractional Differentiation and Its Applications II	Regular **FrB07** Stochastic Optimal Control	Invited **FrB08** Reachability, Estimation and Control Synthesis under Uncertainty II	Regular **FrB09** Frequency Domain System Identification	Regular **FrB10** Switching Control II	Regular **FrB11** Autotuning	Regular **FrB12** Stochastic Hybrid Systems	**FrB13**	Regular **FrB14** Management of Natural Resources II	Invited **FrB15** Nonlinear Control and Estimation in Bioprocesses	**FrB16**	Invited **FrB17** Mechatronics Education	Regular **FrB18** Mechatronics for Special Feature Robots	Invited **FrB19** Putting Energy Back in Robotics	Invited **FrB20** Electrical Machine Control and Applications	Regular **FrB21** Human-Robot Interaction	Regular **FrB22** Structural Components	Regular **FrB23** Intelligent Manu-facturing Systems	Regular **FrB24** Job and Activity Scheduling II	Invited **FrB25** Control Mechanisms in Systems Biology	Regular **FrB26** AI Applications in Power Plants	Regular **FrB27** Remote and Distributed Control	Regular **FrB28** Marine System II	Invited **FrB29** Cooperative Motion Control of Multiple Autonomous Vehicles	Regular **FrB30** Control Design for Trans-portation Vehicles and Systems	

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