

swiss/ccs



SRRT



# ICCCS 2012<sup>+</sup>

INTERNATIONAL SYMPOSIUM ON  
CONTAMINATION CONTROL

ZURICH, SEPTEMBER 3 – 7


Please visit our website for updated information  
[www.ICCCS2012.ethz.ch](http://www.ICCCS2012.ethz.ch)

3rd Announcement and Session Program

## Clean Technologies – What is the Future?



Zurich, Switzerland  
**September 3 - 7, 2012**  
Swiss Federal Institute of Technology ETH Zürich  
[www.ICCCS2012.ethz.ch](http://www.ICCCS2012.ethz.ch)



# Invitation to **ICCCS** 2012<sup>+</sup>

## Chairman's Welcome



It is a great honor for the Swiss Contamination Control Society, SwissCCS (SRRT), to host the 21st International Symposium on Contamination Control, ICCCS 2012, at the ETH, the reputable Swiss Federal Institute of Technology in Zurich, Switzerland.

Zurich has been the city where the International Confederation of Contamination Control Societies, ICCCS, was founded in 1972 and the first international meeting was held. In 1990 Switzerland hosted the 10th International Symposium and 22 years later, in 2012, we are proud to invite again to Zurich to meet at the ETH for a productive exchange of vast experience, know-how, and to enjoy friendship throughout all the participating countries.

Latest advances in cleanroom technology, control of particulate and molecular contamination, as well as new fascinating applications, such as nanotechnology, are challenges of the future. Innovative approaches, applications, and ideas, as well as technology to reduce the risk of accidents will be discussed at the symposium.

We invite you to get together at the 21st ICCCS Symposium in the wonderful City of Zurich. An attractive partner program, visits to interesting companies, exhibitions, and a banquet will accompany the visionary technical program. Outstanding keynote speakers will present their view on advanced subjects and future trends. In addition, many working groups and committees will hold their meetings during the Symposium week.

On behalf of the SwissCCS and of the whole organizing committee we welcome you to Zurich and are looking forward to seeing you at the symposium.  
Sincerely,

Hans Zingre, Chairman ICCCS 2012  
President SwissCCS

Professor Jérôme Faist, ETH Host,  
Quantum Optoelectronics Group,  
Department of Physics, ETH Zurich

## Organizers

**SWISS/CCS**

**SRRT**

The ICCCS 2012 is hosted by the Institute of Quantum Electronics, Department of Physics, of the ETH Zurich, Switzerland.

It is organized by SwissCCS, the Swiss Contamination Control Society for ICCCS, the International Confederation of Contamination Control Societies.

## Scientific and Organizing Committee

Symposium Chairman:	Hans Zingre, President SwissCCS	Switzerland
Members:	Arnold Brunner	Switzerland
	Egon Holländer	Switzerland
	Tobias Merseburger	Switzerland
	Norbert Otto	Germany
	Alexandra Stärk	Switzerland
	Werner Straub	Switzerland
Secretary ICCCS 2012:	Alfred Moser, Science Services	Switzerland

## International Advisory Committee



Koos Agricola	Oce Technologies BV, Venlo	Netherlands
Laure Alloul-Marmor	ASPEC, Paris	France
Berthold DÜthorn	Robert Bosch GmbH, Crailsheim	Germany
David S. Ensor	RTI International, Research Triangle Park, NC	USA
Gordon J. Farquharson	Critical Systems Ltd., Surrey	United Kingdom
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Shuji Fujii	Tokyo Institute of Technology	Japan
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Norikazu Namiki	Kogakuin University, Tokyo	Japan
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Da Qian Wang	CCCS International Coop Dept., Beijing	China
Jing Wang	ETH Zurich	Switzerland
Rudolf Wepfer	rw-consulting, Uster	Switzerland

## ICCCS Member Societies



Austria ORRG	Ireland ICS	Russia ASENMCO
Brazil SBCC	Italy ASCCA	Scotland S2C2
China CCCS	Japan JACA	Switzerland SwissCCS
Egypt ECCCS	Korea KACA	The Netherlands VCCN
France ASPEC	Nordic Countries R3 Nordic	USA IEST
Germany VDICCT	Romania RACC	

Please, find more information about the International Confederation of Contamination Control Societies, ICCCS, on its web site: <http://iccs.net/>



## Topic

### Facilities

### Standardization

### Research and development

### Metrology

### Environmental control

### Equipment

### Health care

### Life sciences

### Cleaning & services, Surface cleanliness

### Filtration

### Nanotechnology

### VOC contamination

GMP: Good Manufacturing Practices  
HACCP: Hazard Analysis and Critical Control Point  
HAZOP: Hazard and Operability

## Examples

New trends in cleanroom engineering design, physical parameters

New and revised standards (chemical and particle cleanliness of surfaces, nanotechnology) , etc.

New technology trends

New instruments and methods, monitoring, statistics

Concepts, energy, material, and waste management, regulations, methods, etc.

Equipment, automation, robotics, energy management, building technology, infrastructure, etc.

Medical devices, health care, hygiene

Pharmaceutical industry, food industry, GMP, HACCP, HAZOP, etc.

Material compatibility, efficiency, methods, etc.

Particle-, chemical-nano filtration, minienvironments, isolators, RABS, etc.

New challenges for contamination control in nanotechnology applications, nanoparticles, atomic layer deposition

Volatile organic compounds and contamination, material emissions, decomposition of VOCs, standardized procedure for monitoring

RABS: Restricted Access Barrier Systems



# Important Dates, Calendar



**Book accommodation before:** July 31, 2012

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**Regular registration deadline:** August 17, 2012

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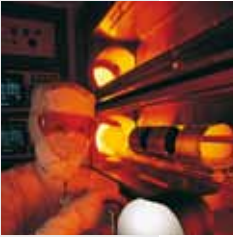
**Conference registration desk opens at 15:00** September 3, 2012

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# ICCCS 2012 Session Program

Program with technical sessions, keynote plenary lectures, and technical tours.



	September 3, 2012	September 4, 2012	September 5, 2012	September 6, 2012	September 7	
	Monday	Tuesday	Wednesday	Thursday	Friday	
8:00		<b>Registration</b> ML E 13	<b>Keynote 2</b> Roland Germann	<b>Keynote 3</b> Sylvain Cottens	<b>Technical Tour 1: IBM Lab, Rueschlikon</b>	
9:00		<b>Break</b>	<b>Break</b>	<b>Break</b>		
		<b>Opening, Welcome</b>	<b>Facilities physical</b>	<b>Surface cleanliness</b>	<b>Metrology</b>	<b>Technical Tour 2: Zimmer Orthopedics GmbH, Winterthur</b>
10:00		<b>Keynote 1</b> Udo Gommel	<b>Nano technology</b>	<b>Filtration</b>	<b>Environm. control</b>	
	<b>VDI Fachausschuss Reinraumtechnik (FA RRT)</b>	<b>Break &amp; Exhibition</b>	<b>Break &amp; Exhibition</b>	<b>Break &amp; Exhibition</b>	<b>Technical Tour 1: IBM Lab, Rueschlikon</b>	
11:00	<b>ICEB Meeting</b>	<b>Facilities general</b>	<b>Standardization</b>	<b>Research &amp; development</b>		<b>Metrology</b>
	<b>Lunch Break</b>	<b>Surface cleanliness</b>	<b>Health care</b>	<b>Nano technology</b>	<b>Filtration</b>	<b>Technical Tour 2: Zimmer Orthopedics GmbH, Winterthur</b>
12:00		<b>Health care</b>	<b>Standardization</b>	<b>Research &amp; development</b>	<b>Metrology</b>	
	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Closing Session</b>	<b>Technical Tour 1: IBM Lab, Rueschlikon</b>	
13:00		<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Close at 13:30</b>		
	<b>ICCCS CoD Meeting</b>	<b>Facilities design</b>	<b>Cleaning &amp; services</b>	<b>Health care</b>	<b>Farewell Lunch</b>	<b>Technical Tour 1: IBM Lab, Rueschlikon</b>
14:00		<b>Standardization</b>	<b>VOC contamination</b>	<b>Life sciences</b>		
	<b>Registration at entrance to Dozentenfoyer</b>	<b>Break &amp; Exhibition</b>	<b>Break &amp; Exhibition</b>		<b>Technical Tour 2: Zimmer Orthopedics GmbH, Winterthur</b>	
15:00		<b>Facilities design</b>	<b>Cleaning &amp; services</b>	<b>Health care</b>		
		<b>Standardization</b>	<b>VOC contamination</b>	<b>Life sciences</b>	<b>Technical Tour 1: IBM Lab, Rueschlikon</b>	
16:00		<b>Break &amp; Exhibition</b>	<b>Break &amp; Exhibition</b>			
	<b>Welcome Party, Dozentenfoyer, ETH Main Building HG, Floor J</b>	<b>Exhibition</b>	<b>Exhibition</b>		<b>Technical Tour 1: IBM Lab, Rueschlikon</b>	
17:00		<b>Session Chair Dinner</b>	<b>Banquet Dinner at Restaurant Lake Side</b>			
18:00						
19:00						
20:00						

Departure and return times and location of bus pick-up will be announced

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 Tuesday, Sep. 4, 2012
 

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Room: D

<b>Keynote 1</b>	<b>9:50</b>
Udo Gommel: A short Introduction to Cleanliness Technology: Meeting the future Challenges	4011

Room: A

<b>Facilities general</b>	<b>11:00</b>
Joao Ramos: Indoor Air Quality Audit of Office Buildings in Portugal	4111
Frank Hochmair: Fast Track Cleanroom	4112
Thomas Lederer: Retrofit of existing facility	4113

<b>Facilities design</b>	<b>14:00</b>
SHOJI TAIZO: The new airflow system for cleanliness and temperature stability	4211
Xiaofeng Cheng: Research progress on contamination control technology of Shenguang-III Laser Facility	4212
Ondrej Pech: Capture efficiency of pollutants in a free space and over a workbench with reinforced slot exhaust systems	4213

<b>Facilities design</b>	<b>16:00</b>
André Bösiger: From Conceptual Design to Validated Equipment "Suppliers View"	4311
Kwang-Chul Noh: Application of partition in LCD clean room for cross contamination control	4312
Frans Saurwalt: The cascade approach: segregation by airflow design in stead of by room pressure.	4313

Room: B

<b>Surface cleanliness</b>	<b>11:00</b>
Yoshihiko Yajima: Introduction of Surface Particle Counter	4121
Xiaodong Yuan: Laser Cleaning of the Contamination on the Surface of Optics and Sandstones	4122
Kae Sasaki: Optical Measurement of Particles diameter and refractive index on the Glass Surface by Light-Scattering	4123

<b>Cleaning &amp; services</b>	<b>14:00</b>
Berit Reinmüller: Clothing systems in Operating rooms – a comparative study	4221
Joachim Ludwig: Cleaning and packaging of single parts and components for the use under clean room conditions	4222

<b>Cleaning &amp; services</b>	<b>16:00</b>
Frank Duvernell: Risk management for a professional Cleanroom Cleaning	4321
Frank Duvernell: significance of gowning procedures	4322
Shiue Angus: Dynamic measurement of particle production rate of an operator with different garment arrangement in Cleanrooms	4323

Room: C

<b>Health care</b>	<b>11:00</b>
Bengt Ljungqvist: Swedish survey and a summary of investigations in operating rooms	4131

Jan Gustén: Dispersion of airborne contaminants through door openings in operating rooms 4132

Benoit Sicre: Mobile instrument tables with laminar air flow for protection against contamination in operation theatres: assessment of effectiveness 4133

**Health care 14:00**

Zhecho Dimitrov Bolashikov: Reduced exposure to coughed air by a novel ventilation method for hospital patient rooms 4231

Stefanie Rud: Photo sensitization, an innovative Technology for Cleanrooms and Enviroments with high standards of hygienic 4232

Lu Yang: Study on Ventilation Strategy for Removing Dust Particles 4233

**Health care 16:00**

Horst Weiss sieker: Green Blue Yellow Hospital 4331

Leander Mölter: Determination of the protection degree according to SWKI 99-3 and DIN 1946-4 4332

Jihong Ling: Research on Air Distribution and Air Changes in Airborne Infection Isolation Room 4333

**Wednesday, Sep. 5, 2012**

Room: D

**Keynote 2 8:30**

Roland Germann: Nanotechnology for the Computer Industry 5011

Room: A

**Facilities physical 9:30**

Martin Pesek: The temperature fields measurement method in the air in small closed spaces using an infrared camera 5111

Christian Schmidt: A New Challenge for High-Tech Fab/Lab Design – Control of Electromagnetic Fields 5112

**Standardization 11:00**

Egon Hollaender: Cleanrooms and Contamination Control: Changes and new tendencies in the standardization 5211

Dr. A. Fedotov: CLEANROOM STANDARDIZATION: WHERE DOES IT GO? 5212

A. Fedotov: New method of cleanroom classification with assurance factor 5213

**Standardization 14:00**

Werner Straub: Classification Clean Surfaces 5311

R Vijayakumar: Global Standard for HEPA and ULPA Filter Testing and Classification 5312

Philip van Beek: Compliance is the new C 5313

**Standardization 16:00**

Zuraimi Sultan: A protocol and rating system to assess the performance of portable air cleaners for residential indoor environments 5411

Koos Agricola (NEN-WG1): Practical test for discussed sampling methods in new ISO 14644-1 5412

Udo Gommel: Challenges in The Assessment of The Cleanroom Suitability of Equipment and Materials 5413



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 Room: B

**Surface cleanliness 9:30**

Isabelle Pecault: Performance assessment of probes dedicated to the monitoring of surface particle contamination 5121

Isabelle Pecault: Analysis of intentional organic contamination adsorbed on optics in a dedicated microchamber and impact on the optics performance. 5122

**Research & development 11:00**

KYUNG-HOON YOO: Comparative Study on Energy Consumption in Steam-Humidification- and Water-Spray-Humidification-Type Outdoor Air-Conditioning Systems for Semiconductor Manufacturing Clean Rooms 5221

Jihun Mun: Theoretical analysis and quantitative evaluation of particle measurement probability in light scattering sensor system to solve uncertainty problem 5222

Tadashi Okada: Stochastic study of aerosol contamination detection from time variation in aerosol number concentration in real time 5223

KYUNG-HOON YOO: An Experimental Study on Energy Consumption in Air Washer Outdoor Air Conditioning Systems for Semiconductor Manufacturing Clean Rooms 5224

**VOC contamination 14:00**

Yuiko Yamane: Secondary organic aerosol formation from p-Dichlorobenzene in the indoor air 5321

 K. Sekiguchi: Simultaneous decomposition of O<sub>3</sub> and VOC with an ozone-decomposition catalyst immobilized on a nonwoven fabric 5322

Sumin Kim: Application of tannin resin as novel environment-friendly adhesion system for particle boards 5323

Norikazu Namiki: Attempts to verify mechanisms for ultrafine particle generation from laser printers 5324

**VOC contamination 16:00**

Markus Keller: Classification of volatile organic contamination from cleanroom materials: VDI 2083 part 17 5421

Shiue Angus: Monitoring and Analyzing Volatile Organic Compounds in Fabs by Gas Chromatograph / Surface Acoustic Wave sensors 5422

 T. Yoshida: Complete decomposition of water-soluble VOC using ozone microbubbles and TiO<sub>2</sub> photocatalyst immobilized on a nonwoven fabric 5423

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 Room: C

**Metrology 9:30**

Koos Agricola: Determination of operational quality of cleanroom by particle deposition monitoring 5131

Gordon Farquharson: New real space technique for visualisation and counting of fine airborne particles 5132

**Metrology 11:00**

sang gu Lee: Application and performance test of a wide-range particulate matter sensor for real-time measurements 5231

Jürg Schlatter: Independent calibration for optical particle counters 5232

Sheng xiong REN: Analysis and discussion of recovery time measure method 5233

**Life sciences 14:00**

Hans Zingre: Detection of Microorganisms in Compressed Gases 5331

Beat Glauser: A new Method for Continuous Measurement of Air Born Biological Contamination in Isolators and RABS Systems 5332

Esmeralda Carvalho: Alternative solution for aero-biocontamination control in clean rooms in few hours 5333

**Life sciences 16:00**

Alexander Fedotov: AIR CLEANLINESS FOR STERILE PRODUCTION 5431

Vincent Thomas: An updated review of VHP efficacy and mechanism of action 5432

Silvia Yuko Eguchi: Effect of support material on biocide concentration required for Biofilm eradication 5433

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 Thursday, Sep. 6, 2012
 

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 Room: D
 

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<b>Keynote 3</b>	<b>8:30</b>
Sylvain Cottens: Emerging technologies in drug discovery	6011

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 Room: A
 

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<b>Nanotechnology</b>	<b>9:30</b>
Jing Wang: Filtration of airborne nanoparticles down to single-digit nanometer range	6111
Kyu-Tae Park: Fabrication of carbon nanotube-deposited air filter using aerosol and thermal CVD processes and its use for the enhancement of nano-particle filtration and inactivation of bioaerosols	6112

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<b>Nanotechnology</b>	<b>11:00</b>
KYUNG-HOON YOO: Particle-Free Atomic Layer Deposition of Transparent Conductive Oxide for Flexible Organic Solar Cell	6211
Taesung Kim: In situ size measurement and analysis of Si Nanoparticles using PBMS	6212

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 Room: B
 

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<b>Filtration</b>	<b>9:30</b>
Michael W. Osborne Ph.D.: Applied membrane air filtration technology for best energy savings and enhanced performance of critical processes	6121
Junho Hyun: Optimization of particle filtration system assisted by electrostatic force using weak electric field and carbon brush ionizer	6122

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<b>Filtration</b>	<b>11:00</b>
R Vijayakumar: Filter Test Methods Using Sodium Flame Photometer and Particle Counters	6221
Jens Mueller: AMC control and state of the technology filters in the semiconductor industry	6222
Christopher Muller: Advanced AMC Control for Leading-Edge Microelectronics Manufacturing	6223

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 Room: C
 

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<b>Environmental control</b>	<b>9:30</b>
Jianping Jiang: Real time microbial detection by laser induced spectroscopy and its application in contamination control	6131
Robert Laudien: Continuous emission monitoring of ammonia by ion mobility spectrometry with a non-radioactive ionization source	6132

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<b>Equipment</b>	<b>11:00</b>
Leander Mölter: Calibration system for optical particle counters	6231
Takuya Kambayashi: Tornado nozzle for vacuum cleaning	6232
You-haeng Joe : Production and evaluation of a ubiquitous sensor network dust sensor for monitoring aerosol concentration in the flow duct	6233

## Group and Committee Meetings



Various task and working groups will hold meetings during the ICCCS 2012 Symposium. A tentative schedule for the group meetings is shown below. Capital letters G, H, J, K refer to different meeting rooms. Werner Straub of the ICCCS 2012 Organizing Committee coordinates the group and committee meetings. Chairmen can report changes in their group meetings to him. The schedule may still change at any time. Updates will be published on <http://www.icccs2012.ethz.ch/groups>.

Group name	Date	Morning, a.m.	Afternoon, p.m.
VDI Fachausschuss Reinraumtechnik (FA RRT)	Sep 3, 2012	H	
ICEB Meeting	Sep 3, 2012	J	
ICCCS CoD Meeting	Sep 3, 2012		J
ISO TC142 WG s	Several WG meetings from Monday to Thursday, Sep. 3-6		
ISO TC142 Plenary Meeting	Sep 7, 2012	J	J
ISO TC209 WG 1	Sep 6, 7 & 8, 2012	H	H
ISO TC209 WG 3	Sep 7 & 8, 2012	G	G
ISO TC209 WG 10	Sep 8, 2012	K, pending	K, pending
ISO TC 209 Technical Committee	Sep 10, 2012 Sep 11, to 14:00	H	H
CEN TC195 WG6 - M/461	Sep 5, 2012	J	
CEN TC 243, Cleanrooms	Sep 11, 2012		H
DIN Assessment of suitability of equipment and materials for cleanrooms			

Entries G, H, J, K are meeting room names.

This tentative schedule may change at any time. Updates on <http://www.icccs2012.ethz.ch/groups>

## Technical Tour to the *IBM Research – Zurich* Laboratories



*IBM Research – Zurich* is one of nine IBM research laboratories around the globe. The Zurich laboratory in Rueschlikon was established in 1956. Cutting-edge research and outstanding scientific achievements – most remarkably two Nobel Prizes – are associated with this lab. One of them for scanning tunneling microscope (Binnig, Rohrer) opened the era of nanotechnology. As the European branch of IBM Research, the mission of the *IBM Research – Zurich* lab – in addition to pursuing advanced research for tomorrow's information technology – is to be one of the premier places to work for world-class researchers and to help drive Europe's innovation agenda. - <http://www.zurich.ibm.com/>

In 2011, a new facility for collaborative nano-scale research was opened on the campus of *IBM Research – Zurich*. The Nanotechnology Center is part of a strategic partnership in nanotechnology with ETH Zurich.

The visit at *IBM Research – Zurich* on Friday, September 7, 2012, is organized in two groups, one in the morning, the other in the early afternoon. In identical tours, the groups will visit the *IBM Industry Solutions Lab*. After an overview, the current research in nano technology is introduced, and a tour through different labs and/or showrooms concludes the visit.

## Technical Tour to *Zimmer Orthopedics GmbH, Winterthur*



*Zimmer Orthopedics Switzerland GmbH* in Winterthur is an international leader in development, production, and marketing of the highest quality orthopaedic surgical products (OSP) and services that repair, replace and regenerate. We'll get a chance to have a glimpse at research and development of human implants for surgical repair. Hip, knee, elbow, shoulder, spine, and trauma products are manufactured in the Winterthur, Switzerland, Facility. These are also the European headquarters.



**Each of these tours takes only half a day and will be conducted twice, so delegates can book both, one in the morning and one in the afternoon. The number of participants is limited. Participation must be specified on the symposium registration. Departure time and location of shuttle bus will be communicated to registered participants.**

## Sightseeing Tours for Accompanying Persons



Sightseeing tours for accompanying persons are planned for Tuesday, September 4 (old town of Zurich) and Wednesday, September 5, 2012 (full-day excursion to Swiss Alps and a morning excursion to Chocolate manufacturer Frey). Details and cost are on Symposium web site.

See our Webpage: <http://www.iccs2012.ethz.ch/sightseeing>

### **Tuesday, September 4, 2012 - Walking tours in Zurich**

- Stories of the Old Town – Rediscover Zurich historic center. Time: 10:00 a.m.
- From Calatrava to Gull – Impressive architecture Time. Time: 13:30
- Zürich & Its Guilds – Stories and traditions. Time: 16:00

### **Wednesday, September 5, 2012 - Full-day excursions**

- Day excursion to Appenzel and Saentis peak. Time: 08:00 - 17:00
- Day excursion to Lucerne & Pilatus peak. Time: 08:00 - 17:00
- Morning excursion to Chocolate manufacturer Frey. Time: 08:00 - 13:00

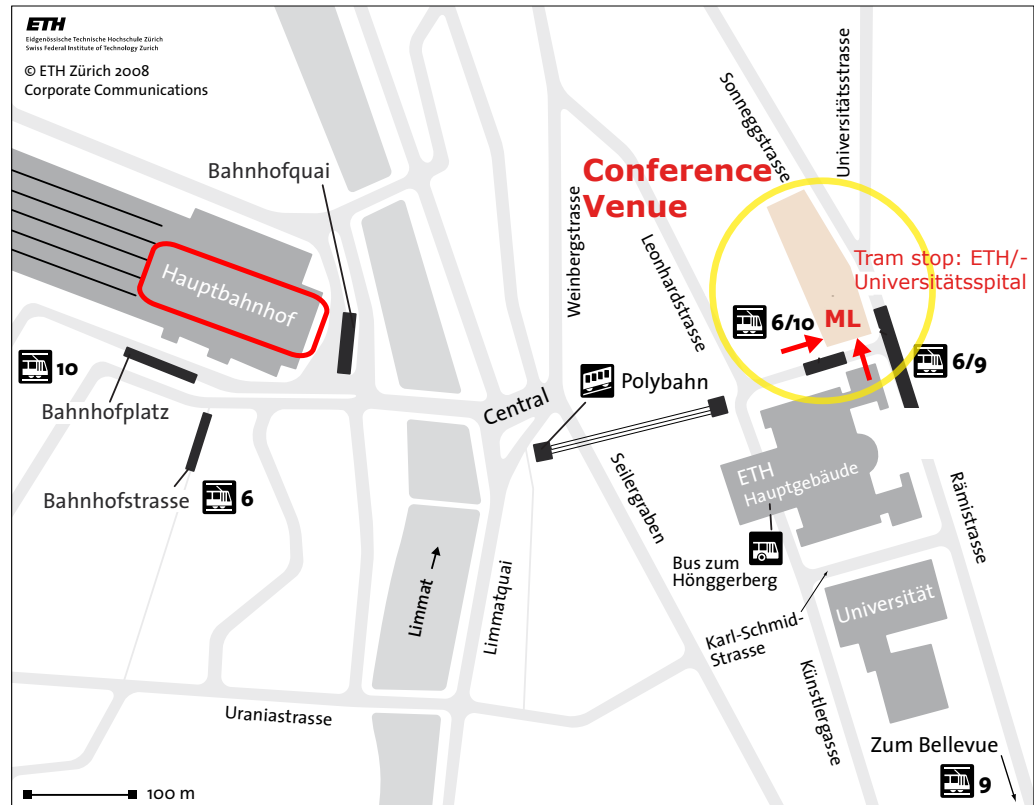


## Conference Venue: ETH Zurich, Switzerland



The ICCCS 2012 will be held at the ETH in Zurich, September 3-7, 2012. The ETH is the Swiss Federal Institute of Technology, [www.ethz.ch/index\\_EN](http://www.ethz.ch/index_EN). The symposium takes place in the Mechanical Engineering Department Building ML (Maschinenlaboratorium) in the original campus in the center of town. It is easy to get there from the main train station (Hauptbahnhof, HB) of Zurich by tram nos. 6 or 10 or by walking. Please, consult the following map:

### City Map



### Mechanical Engineering Department Building ML (Maschinenlaboratorium)



The Mechanical Engineering Department Building ML is also visible in the aerial view at right of the historic main building.



Book flights to Zurich International Airport (ZRH).  
How to reach Zurich Main Station by train

The transfer from the airport train station to the center of Zurich (Main Station, Hauptbahnhof HB) takes only about 12 min, and trains operate frequently. Please, buy a ticket at the vending machine (with credit card) or at the ticket counter on the floor above the tracks before you board the train.

Other travel options are on <http://www.iccscs2012.ethz.ch/travel>

## Zurich – World Class, Swiss Made®



As a lifestyle capital on the water, Zurich offers the unique mix of discovery, pleasure, nature and culture. The finest culinary highlights, unlimited shopping pleasure, over 50 museums and more than 100 galleries, Switzerland's liveliest nightlife, numerous events and countless green oases in the center of the city tempt guests to linger and enjoy.



Please, visit the web site of Zurich Tourism to get information on sightseeing, accommodation, excursions, gastronomy, nightlife, and much more! – <http://www.zuerich.com/en/Visitor.html>

## Travel Information:

[www.zuerich.com/en/Meeting-Convention/Planning/Congress-Transportation.html](http://www.zuerich.com/en/Meeting-Convention/Planning/Congress-Transportation.html)



## Symposium Registration



Registration is simple. To be able to submit an abstract, you have to open an account on the ICCCS-2012 server. This is not a conference registration, it just identifies you as an author and/or potential participant. For instructions, please consult the flowchart on <http://www.iccscs2012.ethz.ch/Registration/Guideline>.

To make a valid conference registration, go to the Registration page and select Conference registration. At this time you must use your credit card to pay for registration. The Credit-card interface uses a secure connection. Regular registration deadline is August 17, 2012.

Please note that you are not automatically registered when you submit an abstract and paper! Like all symposium participants, authors also have to register.

A separate registration must be submitted for accompanying persons (using the same Login Account). Accompanying persons are spouses or partners of delegates; they have no access to technical presentations.

## Registration Fees



- |   |     |     |
|---|-----|-----|
| • Full participant (including banquet dinner)           | CHF | 950 |
| • Student (including Banquet dinner)                    | CHF | 475 |
| • Accompanying person (Banquet dinner)                  | CHF | 120 |
| • Speaker (first author only, including banquet dinner) | CHF | 750 |
- Technical tour: Program and cost on symposium web site.
  - Sightseeing tour for accompanying persons: Details and cost on symposium web site.
  - Currency of Fee: CHF (Swiss Francs)

## Cancellation Policy



For cancellation of a paid registration for any reason after August 5, 2012, no refund can be paid. The full registration fee is forfeited. In case of a cancellation of a paid registration on or before August 5, 2012, 50% of the amount received by the conference office (minus bank fees) will be refunded on request.

## Accommodation in Zurich



Reservation and booking of hotel rooms must be done by conference attendees themselves independently of symposium registration. Payment for accommodation is settled directly with the hotel. We have published a list of recommended hotels on the Symposium web site: [www.icccs2012.ethz.ch/travel/accommodation](http://www.icccs2012.ethz.ch/travel/accommodation).

The hotels with blocks of rooms reserved by Zurich Tourism:

Zürich Marriott Hotel \*\*\*\*\*  
Hotel Krone Unterstrass \*\*\*\*\*  
Hotel Alexander \*\*\*  
Comfort Hotel Royal \*\*\*  
Hotel Astor \*\*\*  
Walhalla Hotel \*\*\*  
Zürcherhof, Best Western Hotel \*\*\*  
Hotel Limmathof \*\*  
Hotel Marta \*\*

On [www.zuerich.com/en/hotels/](http://www.zuerich.com/en/hotels/) you will find a city map with the locations of hotels, their categories (number of stars), link to Tripadvisor, and more details. Use Google to find the hotel homepage.

## Sponsoring Opportunities and Exhibition



ICCCS 2012 offers a variety of sponsoring opportunities. To appear as a sponsor of the ICCCS 2012 in Zurich will bring many benefits, as your logo and your presence will attract the attention of many key persons active in your very field of specialization.

Your benefits: You will reach specialists, developers, or end users in the field of your products and services, - a group of potential customers important to your marketing concept!

Your contribution: As a commercial sponsor you can choose among three sponsoring categories. The cost and advertising options are explained in the Sponsoring Checklist, which may be downloaded from [www.icccs2012.ethz.ch/sponsor](http://www.icccs2012.ethz.ch/sponsor), or you may contact Arnold Brunner <[arnold.brunner@bht.ch](mailto:arnold.brunner@bht.ch)> to discuss your intentions and preferences.

## Symposium Newsletter



The Symposium secretariat publishes an electronic Newsletter at periodic intervals or when new information becomes available. Please, sign up for this Newsletter on: [www.icccs2012.ethz.ch/news/Newsletter](http://www.icccs2012.ethz.ch/news/Newsletter).

You can unsubscribe at any time as by instruction on each newsletter.

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