

10th IWA Specialised Conference

Design, Operation and Economics of Large Wastewater Treatment Plants

9-13 September 2007, Vienna, Austria

CONFERENCE PROGRAM



**International
Water Association**



Preface

The global population is still increasing. Up to three quarters of the people will be living in large urban agglomerations within the next decades. With rapidly growing cities water quality and quantity management becomes a crucial issue. The key element of water quality management is the protection of surface water, which can only be realized with adequate waste water treatment.

Water quality management is strongly influenced by water availability. Therefore, appropriate wastewater treatment must be linked to the local water situation. As a consequence treatment efficiency requirements for large plants show a great variety. Actual standards range from chemically enhanced primary treatment to reverse osmosis as a final treatment step in order to reuse the treated effluent even as drinking water. The whole range of mechanical, chemical and biological treatment processes is used in different combinations to find the best solution for a specific local water problem.

The title of the first famous Vienna Workshop in 1971 “Design and Operation of Large Waste Water Treatment Plants”, already clearly demonstrated the two driving forces for the success of waste water treatment: proper design and reliable and efficient operation. Efficiency has always two aspects; the effluent quality and the costs. Therefore, “Economics” was added to the title of this conference series. Additionally to the conventional sessions, a new emphasis will be set on this year’s conference; a “Workshop for Utility Management” to serve the interests and needs of utility managers and chief operators.

For the achievement of the Millennium Goals, it is required to increase the global treatment plant capacity by 400.000 PE every day. Most of this capacity will be realized with large treatment plants. Having this in mind, I conclude, that the topic of this conference will be of high relevance for the future development. It will be a platform for exchanging scientific knowledge and full scale experience on an international level and, beyond commercial interest, for the benefit of people’s health all over the world.

Vienna, September 2007

Helmut Kroiss

Conference President

How to get to the conference

From Vienna international Airport:

City Airport Train (CAT): departure every 30 min., travelling time 16 min. to "Wien-Mitte" (return ticket € 16.00, single ticket € 9.00), underground line U4 to Karlsplatz (single ride ticket is additionally required!).

Local railway ("Schnellbahn") S7: departure every 30 min., travelling time 30 min to Wien-Mitte (single ticket € 3.40), underground line U4 to Karlsplatz (single ride ticket is included!).

Airport Bus: every 30 minutes departure to "Schwedenplatz"/City Center (return ticket € 11.00, single ticket € 6.00), underground line U1 to Karlsplatz (single ride ticket is additionally required!).

Taxi (appr. € 30.00). The taxi stands are situated in front of the Arrival/Departure hall at the Vienna Airport.

Getting around in Vienna

The conference venue is located near one of Vienna's main stops for public transport, called "Karlsplatz/Oper". You can get there by underground (lines U1, U2, U4), tramlines (62, 65, D, J, 1 or 2) or the "Badner Bahn".

Vienna has an excellent, safe and reliable public transport service (underground, tram, bus and night bus). We recommend using the following tickets:

24-hour pass	€ 5.70
72-hour pass	€ 13.60
4-ride package	€ 6.80
8-ride package	€ 13.60
Single ride ticket at advance sale at ticket vending machines (only at underground stations)	€ 1.70
Single ride ticket that can be bought directly in a tram or bus	€ 2.20

These tickets are available at all ticket vending machines (in all underground and railway stations), at sales offices in selected underground stations and at tobacconists. The 72-hour pass is also available in the Tourist Information Office (1st district, Albertinaplatz, daily open 9:00 - 19:00).

When using the Vienna tram system (a good way for sightseeing), single tickets are also available from the vending machines in the tram for a small surcharge (single ride ticket costs € 2.20 instead of € 1.70 at advance sale, have coins ready!).

Registration

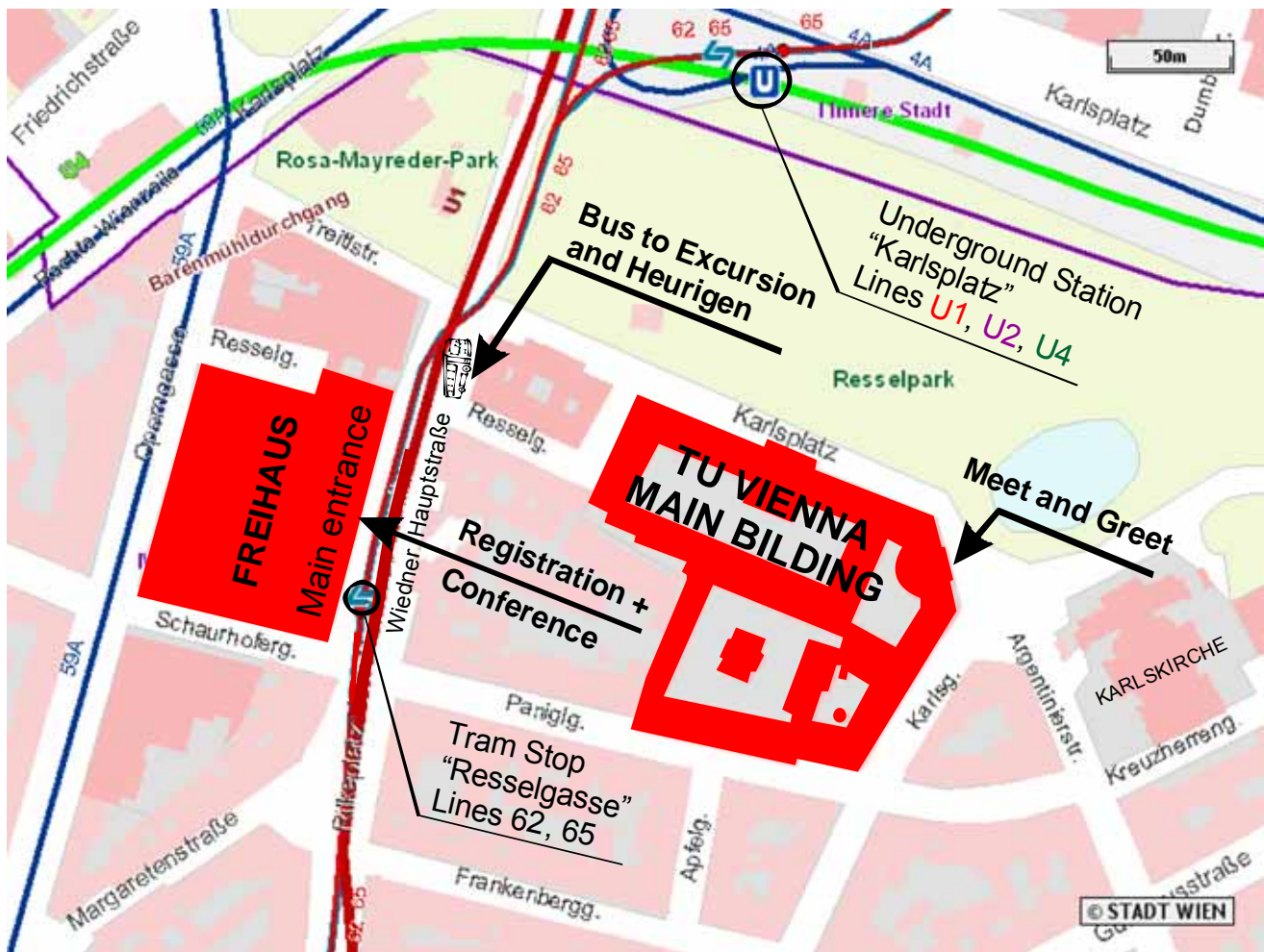
Registration will take place from 15:00 - 19:00. on Sunday, 09 09 2007, at the "**Freihaus**"-Building (Wiedner Hauptstraße 8-10, 1040 Vienna) at the Vienna University of Technology (TU Vienna). The registration desk will be open during the whole conference and can help you with any aspect of the conference or other information required during your stay in Vienna.

Meet & Greet Party

On Sunday, 09 09 2007 from 18:00 – 20:00 there will be a get-together reception held in the representative “Prechtlsaal”, TU Vienna Main Building. The Organising Committee is pleased to invite all Conference participants to gather for an informal meeting with drinks and snacks.

Conference Venue

The registration desk and the conference halls are situated in the **“Freihaus”**-Building (Wiedner Hauptstraße 8-10, 1040 Vienna), at the Vienna University of Technology, which is situated at the southern edge of the city centre, near to Karlsplatz.



Source: www.wien.gv.at

Presentations

Each presentation has a 20 minute time slot plus 10 minutes for discussion. Presenters should ensure that their speeches are well-rehearsed and do not overrun the scheduled time allocated by the Chairperson. The lecture halls are equipped with beamer, computer, microphones and overhead projector.

The presentations need to be previously downloaded. Therefore presenters are asked to hand in their presentations on a CD or on a USB stick at the registration desk for the morning sessions the latest at 8:00 and for the afternoon sessions at 13:00.

Poster presentations

Posters will be on display during the whole conference. The poster panels are numbered consecutively. Each poster should be mounted on the designed panel. You can find the poster numbers in the list of posters in this program and also get your personal number with your conference documents at the registration desk.

Poster presenters are asked to be at their poster during the afternoon break on Monday and the morning break on Tuesday. There will be a voting for the best posters. Each conference delegate gets one ballot paper where she/he can select the number of her/his favourite poster. The ballots must be deposited in the ballot boxes provided in the poster area. The winners of the poster session will be announced and have the opportunity to give a short presentation (3 minutes, 3 slides) in the final poster session on Wednesday afternoon, 12 09 2007.

Publication

Each delegate gets the Conference Proceedings with the full papers and extended abstracts of the posters. Selected papers will be published in Water Science and Technology or in Water Practice & Technology.

Computer and Internet Centre

A conference computer centre with Internet access will be available to all registered participants and will also give presenters time to prepare for their speech. The computer centre is located on the 2nd floor. For login and WLAN access please ask at the registration desk.

Badges

All participants are asked to display their conference badge at all times during the conference, including lunch and coffee breaks.

Conference staff and Committee members can be identified with specific labels.

Meals and Coffee breaks

Coffee will be served in the hallway on the 1st floor. Lunch will be available in the cafeteria (Mensa) on the same level. Participants will receive vouchers for lunch with their conference documents.

Technical tour to Vienna Main Treatment Plant

Tuesday, 11 09 2007. Departure Time: 13:30.

Meeting point: at the corner of Wiedner Hauptstraße / Resselgasse (see attached map).

Participation is free; registration is required until Monday 10 09 2007, 16:00.

The Main Wastewater Treatment Plant of Vienna (4 million p.e., dry weather flow 680.000 m³/d), which has been extended in 2005, is a great example of cost-effective design and operation of large nutrient removal plants.

Third Man Tour

Sunday, 09 09 2007 hourly at 17:00 – 21:00
or Thursday, 13 09 2007 hourly at 17:00 – 21:00

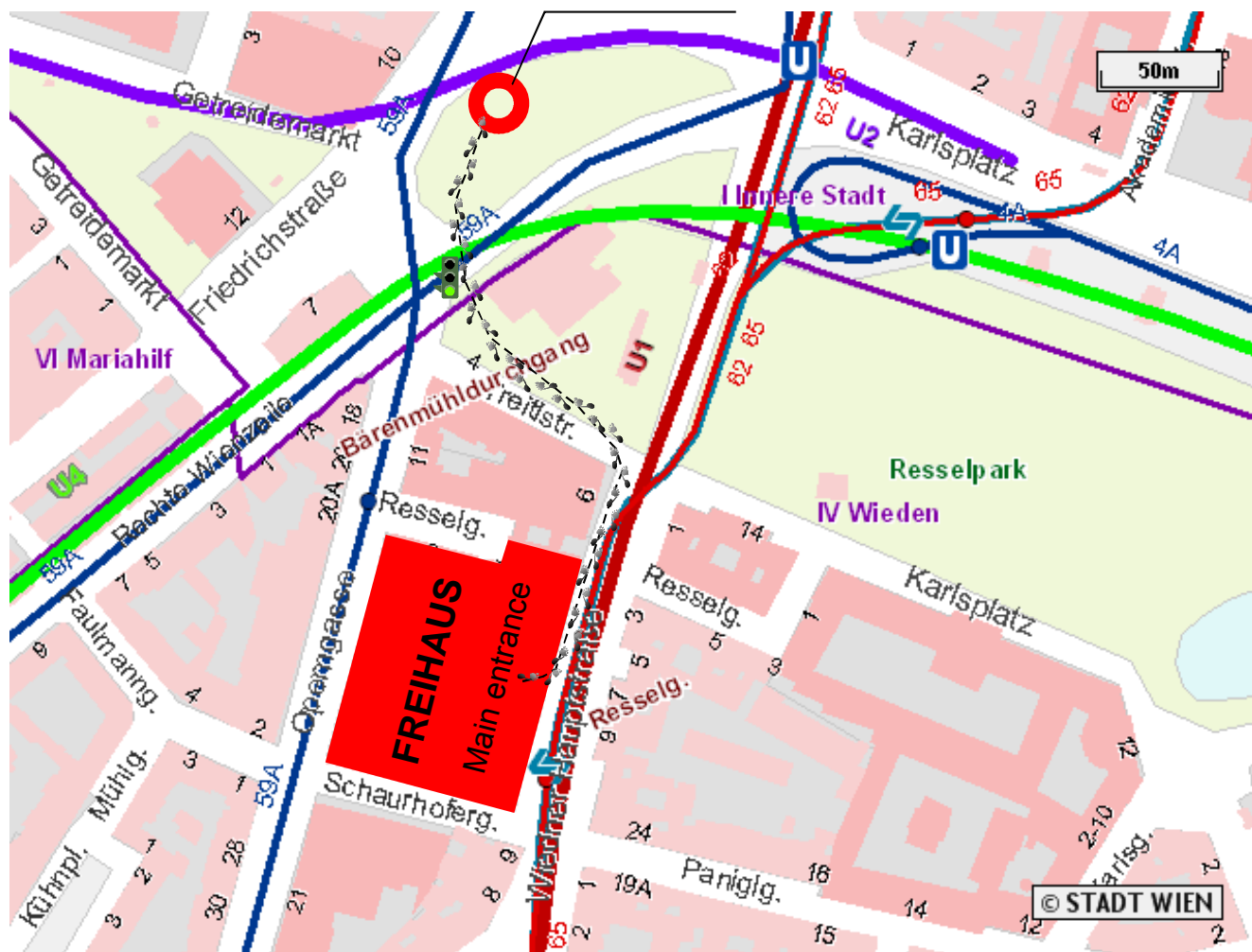
Scripted by Graham Greene and directed by Carol Reed, “The Third Man” is an undisputed masterpiece of the British cinema. It is a most authentic documentation of post-war Vienna as a microcosm of world politics at the time of the Cold War.

The Third Man chase scene with Orson Welles as Harry Lime through the Vienna sewers is one of the most famous in the history of film.

It is in these very same sewers that Vienna’s Sewerage Department is organising walking tours for tourists to follow in the footsteps of this great actor. On this guided tour, participants can learn more about the sewers fascinating past and present.

For delegates wishing to participate in the tour on Thursday, please enter your name on the list at the registration desk (limited access – first come first serve). Free entrance with the badge of the LWWTP Conference.

Meeting Point
excursion “The Third Man”



Registration Fees

IWA Member	€ 540
Non IWA Member	€ 640
Student*	€ 250
Student Social Package	€ 105
Accompanying Person Social Package	€ 105

* *Student card or a certificate signed by the Head of Department required.*

The Registration fee for IWA members and Non IWA members includes:

Admission to all sessions and the "Utility Workshop", admission to the poster session, conference documents, coffee breaks, lunch vouchers, Meet & Greet, Opening Ceremony, technical tour, Gala Dinner, Closing Ceremony, "Gulaschausklank"

The Student registration fee includes:

Admission to all sessions and the "Utility Workshop", admission to the poster session, conference documents, coffee breaks, lunch vouchers, Opening Ceremony, technical tour, Closing Ceremony

The additional Student Social Package includes:

Meet & Greet, Gala Dinner, "Gulaschausklank"

The Accompanying person Social Package includes:

Meet & Greet, Opening Ceremony, Gala Dinner, Closing Ceremony, "Gulaschausklank"

The IWA Young Water Professionals (YWP) Programme

The IWA Young Water Professional Programme was designed for students and professionals under the age of 35, working in the field of water technologies. They form the future scientists and experts pool and therefore also the future of the International Water Association (IWA). The Young Water Professionals Programme aims to build up international connections between young scientists, who are all in the same situation, for example finishing their studies or working at the beginning of their career as a water professional.

The representatives of the Young Water Professionals in the Austrian IWA National Committee have the pleasure to welcome the YWPs at the IWA Conference on Large Wastewater Treatment Plants in Vienna. At the IWA desk on the conference site, some information material about the YWP-Programme will be prepared for you.

We would also like to invite you to the Conference Dinner, where separate tables are reserved for YWPs only to provide networking opportunities with other young water professionals.

Social Program

Meet and Greet Party

Sunday, 09 09 2007

Time: 18:00 – 20:00

Meeting Point: TU Vienna, Main Building, Prechtl Saal,

Third Man Tour

Sunday, 09 09 2007 hourly at 17:00-21:00

or Thursday, 13 09 2007 hourly at 17:00-21:00

For Details and how to get to the Meeting Point, please see page 5

Dinner at the Heurigen (optional)

Tuesday, 11 09 2007

Meeting Point: At the Corner of Wiedner Hauptstraße / Resselgasse

Return Point: Congress Venue

Time: 19:30 - app. 22:00.

The Viennese Tavern "Bach-Hengl" is a special traditional inn, located between vineyards and the Vienna Forest in one of the most beautiful villages "Grinzing". All the wines served, originate completely from the family-owned and self managed vineyard.

Price per person incl. bus transfer, food/beverages, musical background: €44.00.

Gala Conference Dinner

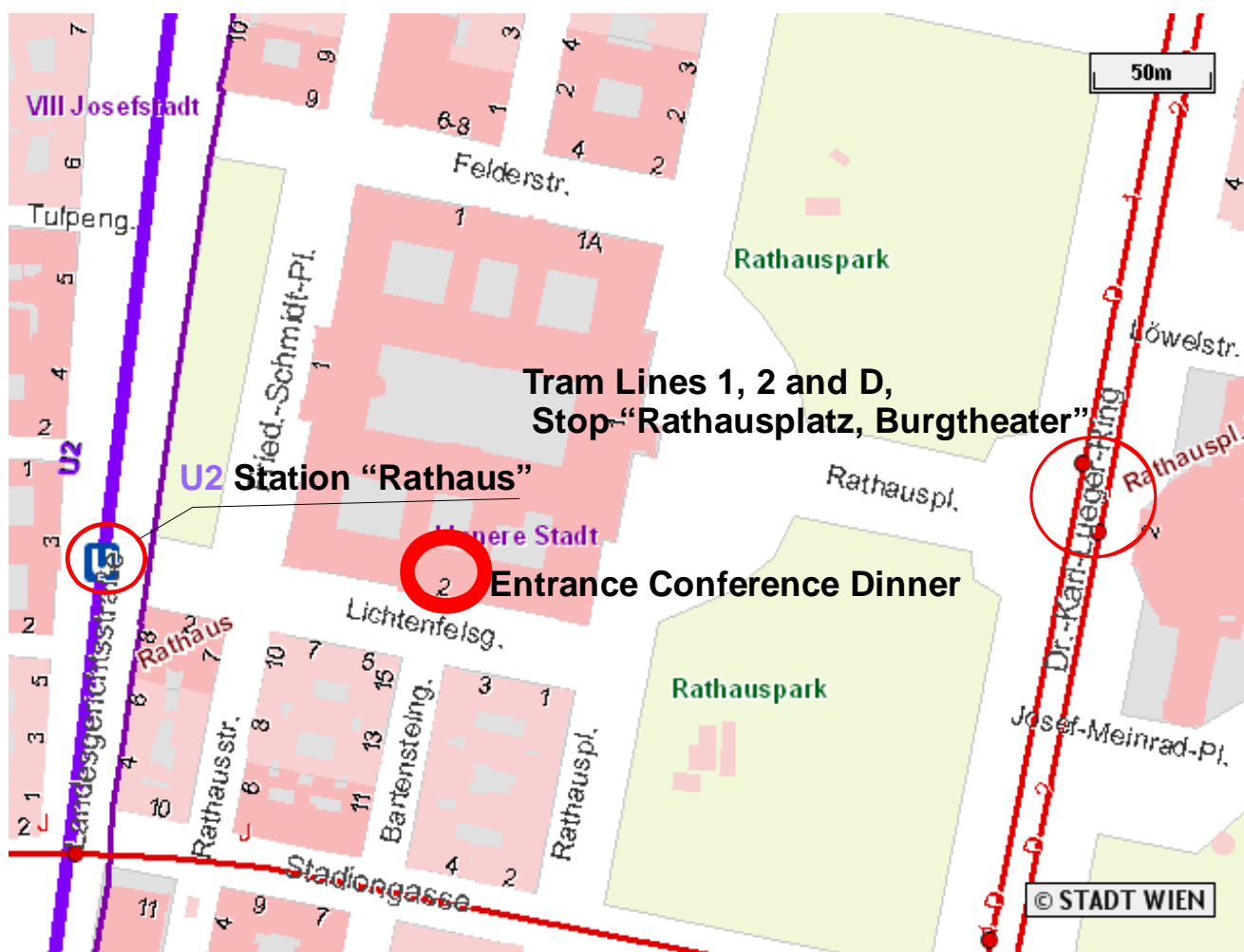
Wednesday, 12 09r 2007

Meeting Point: City Hall, Lichtenfelsgasse 2, Vienna

Time: 19.30 - 23.30.

The mayor of Vienna invites all participants of the conference to a gala dinner in the representative city hall. Fine Viennese cuisine will be served in an atmosphere full of history and glamour. Participants get the invitation letter with the conference papers at the registration. The invitation will be necessary for attending the Dinner, so, please don't forget to take it along!

With public transport the City Hall can be reached by Underground Line U2, station "Rathaus" or by Tram Lines 1, 2 and D, stop "Rathausplatz, Burgtheater".



Source: www.wien.gv.at

Gulaschausklang

Thursday, 13 09 2007

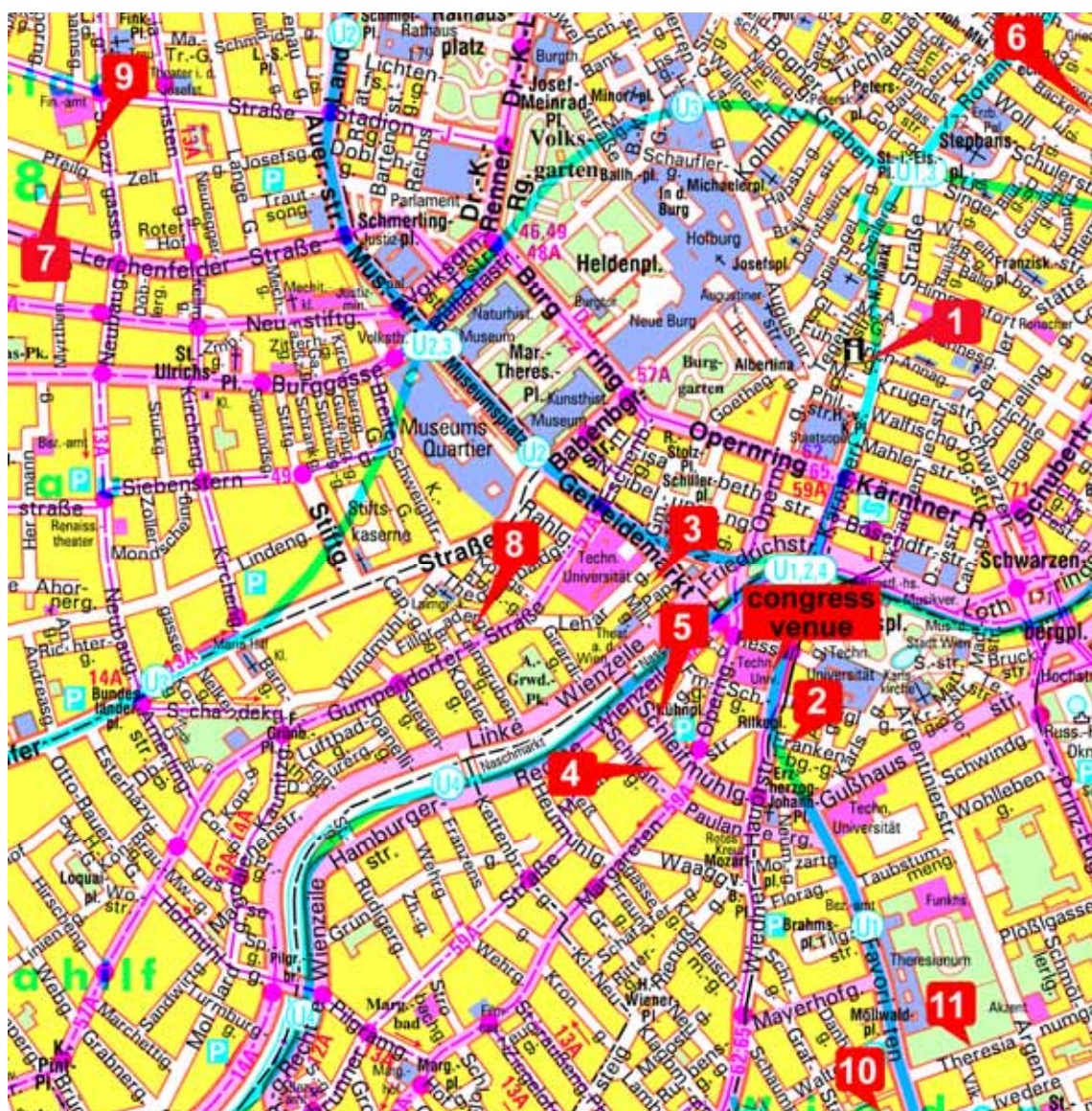
Meeting Point: Freihaus, lecture hall H1

Time: 17:30-19:00

The Gulaschausklang is an informal final get-together in a relaxed atmosphere after the closing ceremony of the conference, where the traditional meal "Gulasch" with rolls and beer will be served in the cafeteria of the University.

Hotel information

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1 Astoria
Kärntner Strasse 32-34, 1010 Vienna
+43-1-51577-0</p> <p>2 Kaiserhof
Frankenberggasse 10, 1040 Vienna
+43-1-5051701</p> <p>3 Mercure Secession
Getreidemarkt 5, 1060 Vienna
+43-1-58838-0</p> <p>4 Carlton Opera
Schikanedergasse 4, 1040 Vienna
+43-1-587 53 02</p> <p>5 Drei Kronen
Schleifmühlgasse 25, 1040 Vienna
+43-1-587 32 89</p> <p>6 Post
Fleischmarkt 24, 1010 Vienna
+43-1-51583-0</p> | <p>7 Academia
Pfeilgasse 3a, 1080 Vienna
+43 1 40176 55</p> <p>8 Terminus
Fillgradergasse 4, 1060 Vienna
+43 1 587 73 86-0</p> <p>9 Hostel Pfeilgasse
Pfeilgasse 4-6, 1080 Vienna
+43 1 408 96 60</p> <p>10 Beim Theresianum
Favoritenstraße 52, 1040 Vienna
+43 1 505 16 06</p> <p>11 Clima City
Theresianumgasse 21a, 1040 Vienna
+43-1-5051696</p> |
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Scientific and Technical Program

Sunday, 9 September 2007

15:00	19:00	Registration
18:00	20:00	Meet and Greet

Monday, 10 September 2007

09:00	09:30	Opening Ceremony	Prof. Franz Rammerstorfer, Vice Rector of TU Vienna Prof. Harro Bode, Chairman of the Scientific Committee Prof. Helmut Kroiss, President of the Conference
09:30	11:00	Session 1: Case studies I	Session Chair: Harro Bode
09:30	10:00	M. Papp , S. Zelinka (A)	Wastewater Treatment and Sludge Disposal in Vienna
10:00	10:30	J. Wanner , M. Kos, L. Novák (CZ)	Intensification of Prague Central WWTP – Ten years of practical experiences with in-situ bioaugmentation nitrification method
10:30	11:00	J.W. Loiacono , C-F.H. Ho, N.V. Sierra, D. Jolis, D. Parker, F. Smith (USA)	San Francisco's Vision for the Future: An Integrated Urban Wastewater Management Plan
11:00	11:30	Coffee Break	
11:30	13:00	Session 2: Case studies II	Session Chair: Michel Gousailles
11:30	12:00	A.F. van Nieuwenhuijzen , M. Havekes, B.A. Reitsma, P. de Jong (NL)	Wastewater Treatment Plant Amsterdam West: New, Large, High-Tech and Sustainable
12:00	12:30	E. Choi, Z. Yun , K.S. Min (KOR)	The invisible BNR plant provides high quality effluent and recreational area for densely populated urban area
12:30	13:00	J.R. Campos, M.A.P. Reali, R. Rossetto , J. Sampaio (BR)	A Wastewater Treatment Plant Composed of UASB Reactors, Activated Sludge with DAF and UV Disinfection, in Series
13:00	14:00	Lunch Break	
14:00	15:30	Session 3: Case studies III	Session Chair: Timothy Shea
14:00	14:30	N. Jardin , L. Rath, A. Schönfeld, T. Grünebaum (D)	Cost-effective upgrading of a biological wastewater treatment plant by using lamella separators with bypass operation
14:30	15:00	G. Wandl , H. Schaar, M. Papp, K. Svardal (A)	The first two years of full scale operation of the two-stage Main Wastewater Treatment Plant of Vienna
15:00	15:30	H.K. Winkler , W. Widmann (A)	The Sulaibiya Wastewater Treatment and Reclamation Project
15:30	16:00	Coffee Break	
16:00	17:30	Session 4: Aeration and mixing	Session Chair: Masahiro Maeda
16:00	16:20	M. Wagner , P. Looock, T. Guenkel (D)	Design and Operational Aspects of Modern Fine Bubble Aeration Systems
16:20	16:30	W. Frey (A)	The role of diffuser arrangement and mixing for efficiency optimisation of fine bubble aeration systems
16:30	17:00	S. Gillot , A. Héduit (F)	Prediction of alpha factor values for fine pore aeration systems
17:00	17:30	D. Rosso , L.E. Larson, M.K. Stenstrom (USA)	Aeration of large-scale municipal wastewater treatment plants: state of the art
17:30	18:30	Meeting of the IWA Specialist Group	Chair: Harro Bode

Tuesday, 11 September 2007

08:30	09:00	Keynote I: Sudhir Murthy	The role of wastewater treatment plants for the nutrient management in the Chesapeake Bay
09:00	10:30	Session 5: Nutrient removal I	Session Chair: Norbert Matsché
09:00	09:30	K.-H. Rosenwinkel , M. Beier, L.-C. Phan, P. Hartwig (D)	Conventional and Advanced Technologies for Biological Nitrogen Removal in Europe
09:30	10:00	K.R. Pagilla , K. Czerwionka, M. Urgun-Demirtas, J. Makinia (USA)	Nitrogen Speciation in Wastewater Treatment Plant Influent and Effluents - the US and Polish Case Studies
10:00	10:30	B. Böhm (D)	Modifying an Existing Settlement Tank into an Activated Sludge Denitrification Reactor
09:00	10:30	Workshop 1: Cost Management Tools	Session Chair: Michael Beckereit
10:30	11:00	Coffee Break	
11:00	12:30	Session 6: Nutrient removal II	Session Chair: Harald Kainz
11:00	11:30	K. Jönsson , A. Pottier, I. Dimitrova, U. Nyberg (S)	Utilising laboratory experiments as a first step to introduce primary sludge hydrolysis in full-scale
11:30	12:00	M. Swinarski, J. Makinia , K. Czerwionka, W. Fordonski (PL)	Improving Denitrification Efficiency at the "Wschod" WWTP in Gdansk (Poland) - Effects of Different Carbon Sources
12:00	12:30	S.M. Scherrenberg , R. Neef, H.W.H. Menkveld, J.H.J.M. van der Graaf (NL)	Dual media filtration competitive with continuous sand filtration for phosphorous and nitrogen removal
11:00	12:30	Workshop 2: Human Resources Management	Session Chair: Roelof Kruize
12:30	13:30	Lunch Break	
13:30	17:30	Excursion to WWTP Vienna	
19:30	22:00	"Heurigen" (optional)	

Wednesday, 12 September 2007

08:30	09:00	Keynote II: László Somlyódy	Economic aspects of municipal wastewater treatment in the Danube region
09:00	11:00	Session 7: Design and planning	Session Chair: Johannes Pinnekamp
09:00	09:30	D. Dominguez , B. Truffer, W. Gujer (CH)	WWTPs for the future - Assessing the required flexibility
09:30	10:00	S. Winkler , M. Gasser, W. Schättle, D. Krenn, P. Kletzmayer, N. Matsché (A)	Upgrading of WWTPs for nutrient removal under optimal use of existing structures
10:00	10:30	L. Høiby , J. Clauson-Kaas, H. Wenzel, H.F. Larsen, B.N. Jacobsen, O. Dalgaard (DK)	Sustainability assessment of advanced wastewater treatment technologies
10:30	11:00	E.P. Jordão , I. Volschan Jr., P.A. Sobrinho (BR)	Secondary WWTP Preceded By UASB Reactors - An Excellent Brazilian Experience
09:00	11:00	Workshop 3: Safety Management	Session Chair: Miklos Papp

11:00	11:30	Coffee Break	
11:30	13:00	Session 8: Costs and economics	Session Chair: Norbert Jardin
11:30	12:00	S. Lindtner, H. Schaar , H. Kroiss (A)	Benchmarking of large municipal wastewater treatment plants > 100,000 PE in Austria
12:00	12:30	A. Kraft , F. Obenaus (D)	Energy management - A key factor of economic plant operation
12:30	13:00	T. Partaj , M. Papp, J. Weiss (A)	The Main Wastewater Treatment Plant of Vienna: Favourable Operation Conditions as Consequence out of Well Designed Tender Procedures
11:30	13:00	Workshop 4: Public Relations & Cooperation with Authorities	Session Chairs: Per Manhem und Jon Loiacono
13:00	14:00	Lunch Break	
14:00	15:30	Final poster session & announcement and short presentation of winning posters	Session Chair: Harro Bode
15:30	16:00	Coffee Break	
16:00	17:30	Session 9: Operating experiences I	Session Chair: Wah Yuen Long
16:00	16:30	D. Braun , W. Gujer (CH)	Reactive tracers reveal hydraulic and control instabilities in full-scale activated sludge plant
16:30	17:00	S. Morling (S)	Plant performance of an Sequencing Batch Reactor in Poland, operated with high Chromium load, reaching advanced nutrient removal
17:00	17:30	B. Teichgräber , P. Jagemann (D)	Biological Nutrient Removal - Requirements and Reality in Two Case Studies
19:30	23:30	Gala Conference Dinner / Vienna City Hall	

Thursday, 13 September 2007

08:30	09:00	Keynote III: Georges Ekama	New developments in modelling wastewater treatment processes – Using Stoichiometry to build a plant wide mass balance based steady state WWTP model
09:00	10:30	Session 10: Modelling	Session Chair: Mogens Henze
09:00	09:30	K.A. Third , A.R. Shaw, L. Ng (AUS)	Application of the Good Modelling Practice Unified Protocol to a plant wide process model for Beenypur WWTP design upgrade
09:30	10:00	L. Koncsos, Z. Melicz (H)	Use of a mathematical optimisation procedure for model calibration and enhancement of nitrogen removal in high-load systems
10:00	10:30	G. Sin, D.J.W. De Pauw, S. Weijers , P.A. Vanrolleghem (B)	Developing a framework for continuous use of models in daily management and operation of WWTPs: A life cycle approach
10:30	11:00	Coffee Break	
11:00	13:00	Session 11: Settling and separation	Session Chair: Thomas Grünebaum
11:00	11:30	J.L. Barnard , T.E. Kunetz, J.P. Sobanski (USA)	65-year old final clarifier performance rivals that of modern designs

11:30	12:00	M. Patziger , H. Kainz, M. Hunze, J. Józsa (A)	Analysing Sludge Balance in Activated Sludge Systems with a Novel Mass Transport Model
12:00	12:15	K. Ramalingam , J. Fillos, S. Xanthos, M. Gong, A. Deur, K. Beckmann (USA)	Development and Validation of a 3-Dimensional Computational Fluid Dynamics(CFD) Model for Rectangular Settling Tanks in New York City Water Pollution Control Plants
12:15	12:30	P.G. Piekema , J. Krijgsman (NL)	Optimisation of final clarifiers using the dynamic model FAST2D
12:30	13:00	D.S. Parker , R.P. Merlo, J.A. Jimenez, E.J. Wahlberg (USA)	Analyzing Wet Weather Flow Management Using State of the Art Tools
13:00	14:00	Lunch Break	
14:00	15:30	Session 12: Sludge Management	Session Chair: Peter Balmér
14:00	14:30	V. Parravicini , K. Svandal, H. Kroiss (A)	Post-aeration of anaerobically digested sewage sludge for advanced COD and nitrogen removal: results and cost-benefit analysis at large-scale
14:30	15:00	G. Bowden , B. Bodniewicz, B. Stinson, A. Deur, K. Beckmann (USA)	Optimization and Performance of a Side-Stream Centrate/Rejection Water Treatment System Integrated with a Secondary Step-Feed Process
15:00	15:30	D.J.I. Gustavsson , I. Dimitrova, U. Nyberg, J. la Cour Jansen (S)	Fast upstart of a full-scale SBR for treatment of sludge digester liquor and operation with stable nitrite accumulation
14:00	15:30	IWA Task group "Good Modelling Practice" Workshop	Chair: Leiv Rieger, location will be announced.
15:30	16:00	Coffee Break	
16:00	17:00	Session 13: Operating experiences II	Session Chair: Kees de Korte
16:00	16:30	V. Erbe , G. Kolisch, F. Schmidt (D)	A Decade of Kohlfurth WWTP Upgrade under Operation - Highlights and Drawbacks
16:30	17:00	G.T. Daigger , A. Hodgkinson, D. Evans (USA)	A Sustainable Near-Potable Quality Water Reclamation Plant for Municipal and Industrial Wastewater
17:00	17:30	Closing Ceremony	
17:30	19:00	"Gulaschausklang"	

Reserve papers (poster)

1	A. Jobbagy , G. Tardy, G. Palkó, A. Benákova, O. Krhutková, J. Wanner (H)	Savings with upgraded performance through improved activated sludge denitrification in the combined activated sludge- biofilter system of the Southpest Wastewater Treatment Plant
2	D. Brocard, M. Garcia, T. Kunetz, J. Sobanski, A. Waratuke, T. Weber (USA)	Physical Model Study of Chicago's New Calumet Influent Pumping Station
3	I. Keresztényi , G. Kicsi, C. Dobolyi, G. Isaák (H)	Enhanced biological treatment of a residual oil processing plant wastewater by a membrane-bioreactor for effluent quality improvement in a Hungarian refinery
4	D. di Trapani , G. Mannina, M. Torregrossa, G. Viviani (I)	Hybrid moving bed biofilm reactors: a pilot plant experiment
5	T. Palmgren , A.M. Sundin (S)	Running an efficient Wastewater Treatment plant in Sweden
6	N. Schwarzenbeck , E. Bomball, W. Pfeiffer (D)	Can a wastewater treatment plant be a powerplant? - a case study

Posters

7	Y. Ubukata, A. Ibe (Japan)	Amino acid uptake and phosphate release by anaerobic/aerobic activated sludge used in treating municipal sewage
8	J. Sandino, J. Sizcka, T. Sigmund, R. Onderko (USA)	Bio Chemically Enhanced Clarification for the Management of Wet-Weather Flows in Large WWTPs
9	M.K. Nielsen, I. Damgaard, G.B. Nielsen, M. D��verh��g, A. Fransson (Denmark)	Biological Nutrient Removal by a combining plugflow and fully mixed reactors in Dynamic Plugflow, the DP-process
10	D. von Felde (Germany)	Cofeimentation in Wastewater Treatment Plants
11	I.A. Esp��rito Santo, E.M.G.P. Fernandes, M.M. Ara��jo, E.C. Ferreira (Portugal)	Cost Minimization of a WWTP Using an Augmented Lagrangian Pattern Search Based Solver
12	Ying-zi Lin, Yin Jun, Zhao Ke, Zhang Li-guo, Liu Zhi-sheng, Wang He-li (China)	Design and operation of A/O process in Changchun municipal wastewater treatment plant
13	S.L. Kuang, C.H. Guo, V. Ivanov (Singapore)	Design of BiolronTech Process for Phosphorous Removal from Return Liquor of Municipal Wastewater Treatment Plant
14	A. Kumar, R. Bhargava, P. Kumar (India)	Design of Multistage Activated Sludge-Biofilm Reactors
15	T.G. Shea, P. Burrowes (USA)	Discretionary versus Non-Discretionary Wastewater Treatment Projects - What's Being Left Behind?
16	Mi Hwa Kim, Tae-Joo Park (Korea)	Economic Benefits by Implementing a Fixed-Biofilm BNR Process for Retrofitting the Existed Municipal Wastewater Treatment Plants in Korea
17	P. Zima, J. Makinia, M. Swinarski, K. Czerwionka (Poland)	Effects of Dispersion on Predicting Longitudinal Concentration Profiles in Actual Flow Activated Sludge Reactors
18	J. Mikosz, Z. Mucha, S.M. Rybicki (Poland)	Evaluating the performance of aeration system with computer simulation: a case study
19	G. Insel, G. Sin, D.S. Lee, D.J.W. de Pauw, S. Weijers, P.A. Vanrolleghem (Turkey)	Evaluation of prediction performance of ASM2d for an intermittently aerated carousel type EBPR plant after three years its calibration
20	K. Press-Kristensen, E. Lindblom, J.E. Schmidt, M. Henze (Denmark)	Examining the biodegradation of endocrine disrupting bisphenol A and nonylphenol in WWTPs
21	A.G.N. van Bentem, P.F.T. Schyns, H.F. van der Roest (Netherlands)	Full-scale experiences at the Varsseveld MBR
22	G. Langergraber, J. Alex, N. Weissenbacher, D. Woerner, M. Ahnert, T. Frehmann, N. Halft, I. Hobus, M. Plattes, V. Spering, S. Winkler (Austria)	Generation of diurnal variation for influent data for dynamic simulation
23	B. Mrowiec, J. Suschka (Poland)	Generation of Aromatic Hydrocarbons (BTX's) in Anaerobic Processes and the Impact on Treated Sewage Quality
24	M. Ahnert, F. Blumensaat, G. Langergraber, J. Alex, D. Woerner, T. Frehmann, N. Halft, I. Hobus, M. Plattes, V. Spering, S. Winkler (Germany)	Goodness-of-fit measures for numerical modelling in urban water management - a summary to support practical applications
25	M.T. Garrett, jr. (USA)	How to avoid a solids washout in an activated sludge plant
26	J. Ribes, J. Serralta, A. Seco, J. Ferrer, R. Lloret, I. Bern��cer, J.J. Morenilla (Spain)	Implementation of a supervisory fuzzy logic based control system in the Denia WWTP
27	Kurt Ingerle (Austria)	Large Biocos Wastewater Treatment Plants
28	O. Jamjun, R. Dring, T. Conway, G. Shimp, K. Pagilla (USA)	Master planning to improve operational performance at the Stickney water reclamation plant
29	A. Schmid (Germany)	Mechanical Aeration System by "Supercavitation"
30	P. Phothisilangka, M.A. Schoen, B. Wett (Austria)	Mechanisms and impacts of heat pretreatment of sewage sludge for increased biogas production

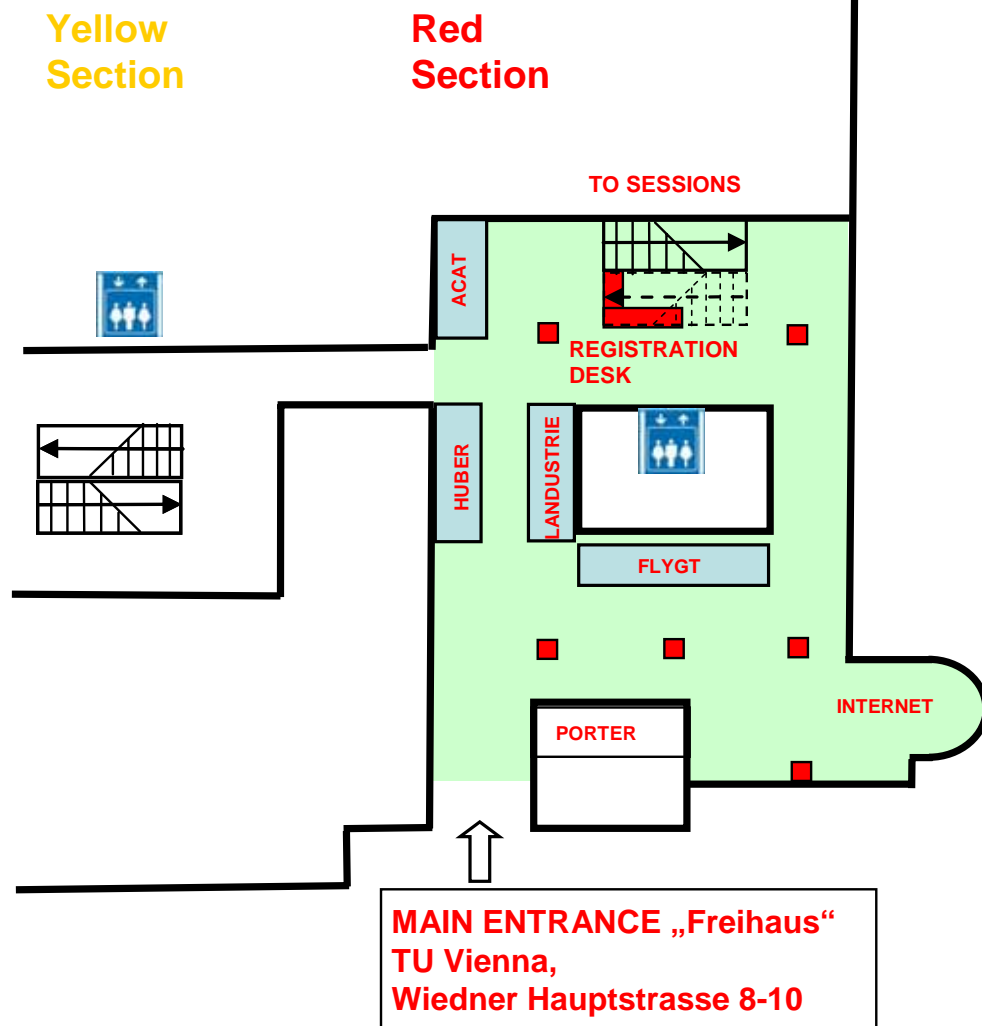
Posters

31	D. Petruzzelli, G. Boghetich, M. Petrella, A. Petrella, E. Ranieri, V. Petruzzelli (Italy)	Modelling carbon and nitrogen removal at a large wastewater treatment plant
32	R. Rustum, A.J. Adeloye (UK)	Modelling Activated Sludge Process Using Adaptive Network- Based Fuzzy Inference System (ANFIS)
33	V. Spering, N. Schlösser, S. Märker, K.-H. Rosenwinkel (Germany)	Modelling biocinetics of Microthrix Parvicella as module for the ASM3
34	G. Mininni, C. Di Iaconi, G. Mascolo, A. Pollice (Italy)	New perspectives for up-grading wastewater treatment plants to meet the standards of Water Framework Directive and Directives on wastes
35	M. Urgun-Demirtas, K.R. Pagilla, T.E. Kunetz, J.P. Sobanski, K.P. Law (USA)	Nutrient removal process selection for planning and design of large wastewater treatment plant upgrade needs
36	F. Michelet, T.F. Chan, F. Rogalla (UK)	Optimising the Solids and Energy Balance of Biofilm Reactors
37	O. Caliskaner, G. Tchobanoglous (USA)	Optimization of Compressible Medium Filter for Secondary Effluent Filtration
38	J. Alex, M. Wichern, V. Spering, N. Halft, M. Ahnert, T. Frehmann, I. Hobus, G. Langergraber, M. Plattes, S. Winkler, D. Woerner (Germany)	A method to use dynamic simulation in compliance to stationary design rules to refine WWTP planning
39	C. Sahlmann, J.A. Libra, R. Gnirss (Germany)	Reducing Aeration Costs using a Control Strategy Based on Nitrification Rates
40	J. Pedersen, H.A.R. Thomsen, T. Önnérth, B.N. Jacobsen, T. Guildal (Denmark)	Reducing costs and increasing hydraulic capacity by means of advanced control and ATS (Aeration Tank Settling)
41	F.J. Fernández, J. Villaseñor, L. Rodríguez (Spain)	Reduction of aeration costs by tuning a multipoint on/off controller
42	A. Mattsson, B.-M. Wilén, L. Björnsdotter, D. Lumley, P. Balmér (Sweden)	Saving external carbon source for post-denitrification by deoxygenation of trickling filter effluent
43	S.M. Rybicki, M. Cimochoicz-Rybicka, J. Mikosz (Poland)	Selected impact of enhanced phosphorus removal on wastewater sludge processing
44	L. Plonka, K. Miksch (Poland)	Short-term wastewater flow prediction by means of artificial neural network for better WWTP control
45	B. Petrik, J. Heywood (USA)	The Mangere WTP UV Disinfection Facility, Auckland New Zealand - Implementation of a World-Class Installation
46	G. Demoulin, K. Wutscher (Austria)	The World's Largest SBR in Malaysia
47	G.V. Crawford, S. Blair, R. Lewis (Canada)	Three Years of Operation of Large Membrane Bioreactors at Traverse City
48	S.M. Rybicki, E. Plaza (Poland)	Wastewater treatment in Poland - present situation and trends
49	G.P. Villioti, N. Tzouvaras, G. Stefanakou (Greece)	Psytalia Wastewater Treatment Plant: Wastewater primary treatment assessment over a ten year long period
50	R.J. Santos, A.A. Martins, M.M. Dias (Portugal)	Analysis of Mixing Influence in Activated Sludge Simulation
51	B. Kiss, V. Bakos, A. Szabó, A. Jobbágy (Hungary)	Comparative experimental studies for upgrading the Northpest Wastewater Treatment Plant
52	Mi-Hwa Kim, Ha-Jin Kim, So-Jung Park, Young-Gi Kim, Tae-Joo Park (Korea)	Evaluation of Optimum Conditions on Physiochemical Preliminary Treatment of Korean Foodwaste for Co-Digestion with Organic Wastes
53	Z. Kazmierczak, L. Plonka, J. Surmacz-Gorska (Poland)	Wastewater Composition and Flow Rate Changes in Years 2000 - 2005 as a Factor Influencing WWTPs' Performance in the Wielkopolska Region
54	G. Mannina, G. Viviani (Italy)	Upgrading of an existing WWTP with Hybrid Moving Bed Biofilm Reactor Systems

Posters

55	E. Saracevic, F. Bertrán de Lis, N. Matsché (Austria)	Hydrogen sulfide in pressure sewers - Evaluation of combat strategies
56	A.I. Shchetinin, M.A. Yesin, B.Y. Malbiev (Ukraine)	Upgrading of Chernogolovka wastewater treatment Plant (WWTP)
57	C.A. Zaror, C. Segura, H. Mansilla, M. A. Mondaca, P. González (Chile)	Detoxification of Waste Water Contaminated with Imidacloprid using Homogeneous and Heterogeneous Photo-Fenton Processes

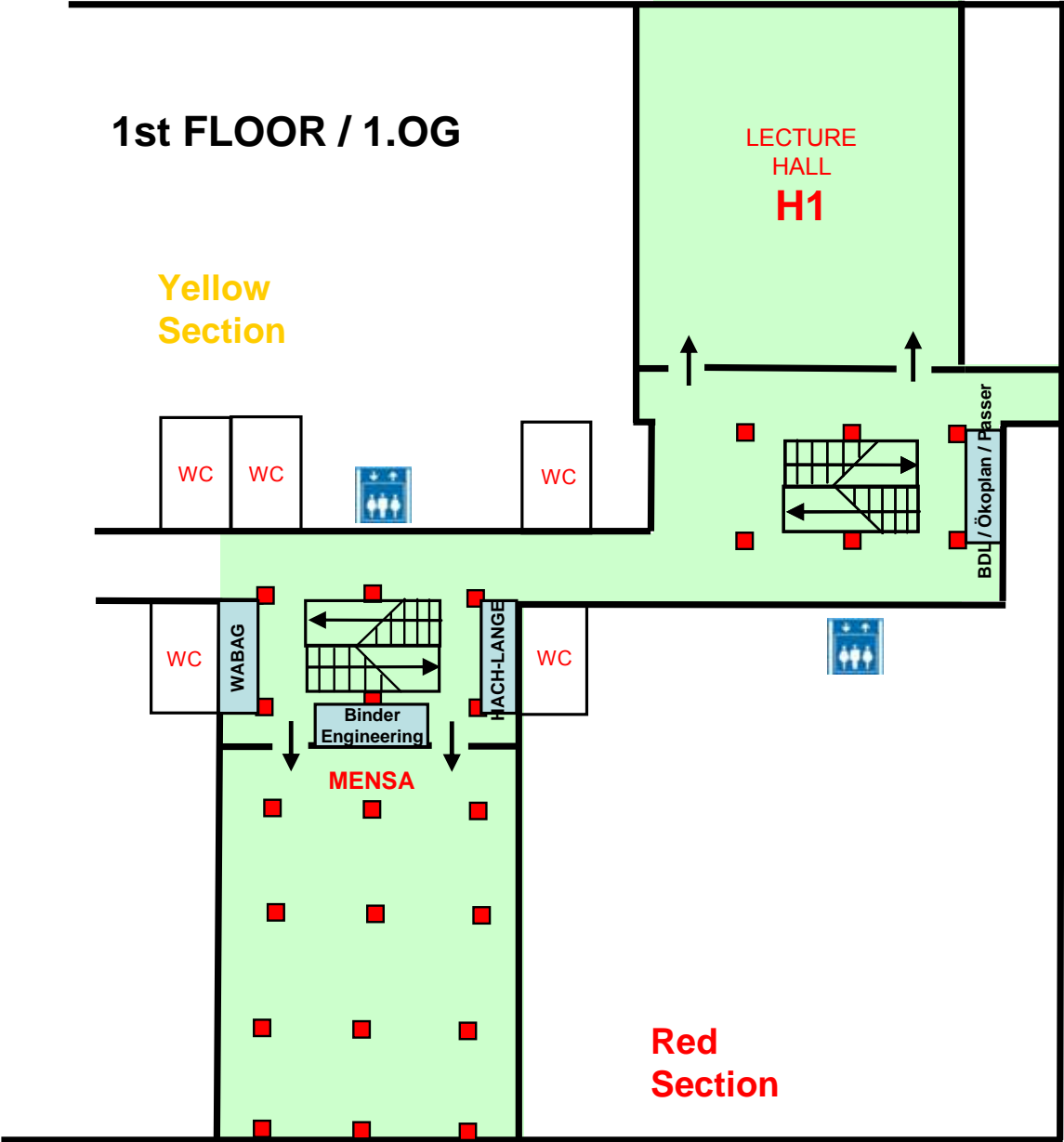
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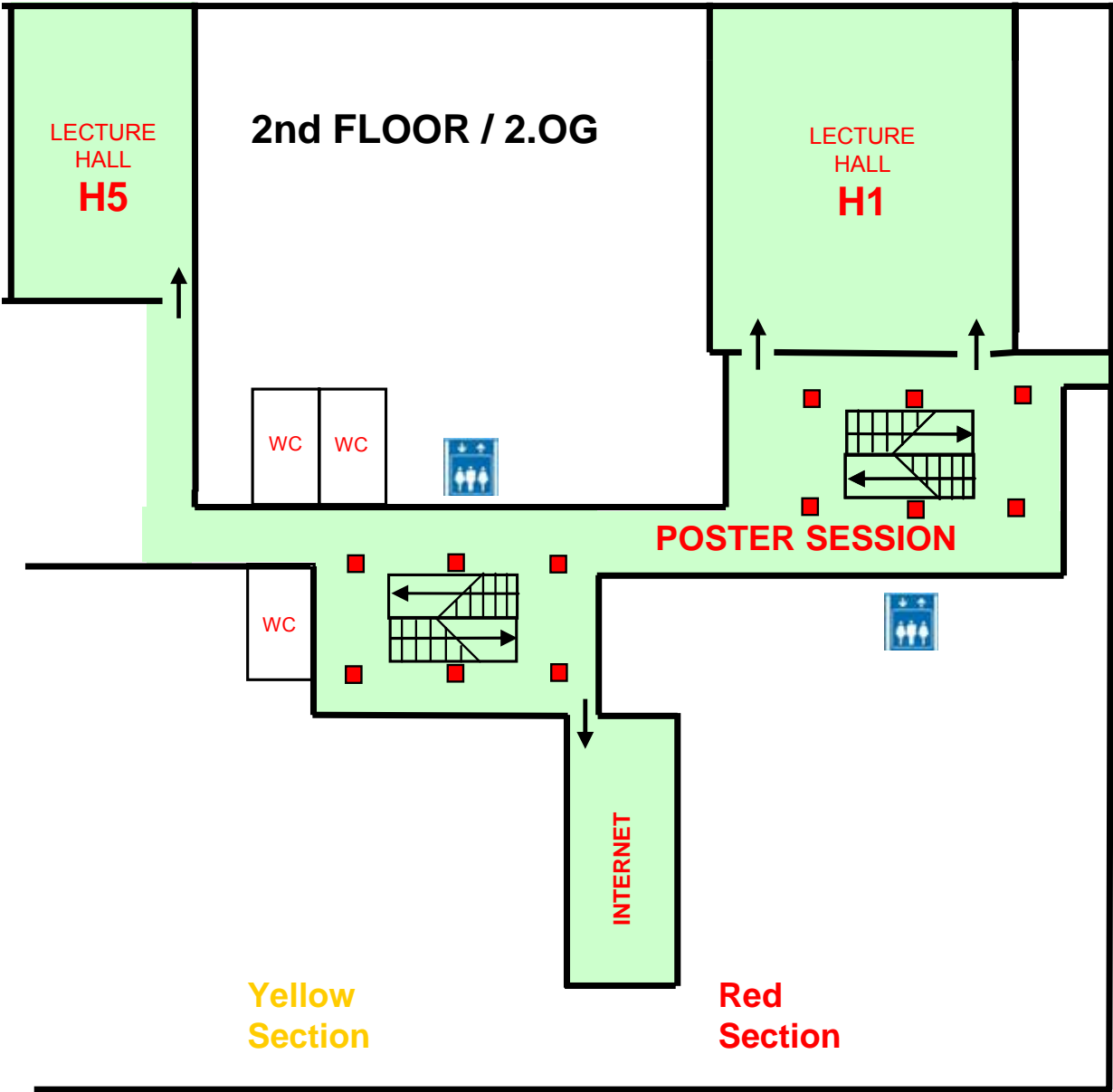


Registration Desk and Conference Office

1040 Vienna, Wiedner Hauptstraße 8-10, Tel. +43-664-60588-703

Sunday, 09 09 2007	15:00 – 19:00
Monday, 10 09 2007	08:00 – 16:00
Tuesday, 11 09 2007	08:00 – 14:00
Wednesday, 12 09 2007	08:00 – 16:00
Thursday, 13 09 2007	08:00 – 16:00





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Time Table

Sunday 09.09.2007	15:00-19:00	Registration	
	18:00-20:00	Meet and Greet Party TU Vienna Main Building, Prechtlsaal	
Monday 10.09.2007	09:00-09:30	Opening Ceremony	
	09:30-11:00	Session 1: Case studies I	
	11:00-11:30	Morning Break	
	11:30-13:00	Session 2: Case studies II	
	13:00-14:00	Lunch Break	
	14:00-15:30	Session 3: Case studies III	
	15:30-16:00	Afternoon Break (Authors of posters are present)	
	16:00-17:30	Session 4: Aeration and mixing	
	17:30-18:30	IWA Specialist Group meeting	
Tuesday 11.09.2007	08:30-09:00	Keynote I: Sudhir Murthy	
	09:00-10:30	Session 5: Nutrient removal I	Workshop 1: Cost Management Tools
	10:30-11:00	Morning Break (Authors of posters are present)	
	11:00-12:30	Session 6: Nutrient removal II	Workshop 2: Human Resources Management
	12:30-13:30	Lunch Break	
	13:30-17:30	Excursion to WWTP Vienna	
	19:30-22:00	"Heurigen"	
Wednesday 12.09.2007	08:30-09:00	Keynote II: Laszlo Somlyódy	
	09:00-11:00	Session 7: Design and planning	Workshop 3: Safety Management
	11:00-11:30	Morning Break (Deadline for poster voting)	
	11:30-13:00	Session 8: Costs and economics	Workshop 4: Public Relations & Cooperation with Authorities
	13:00-14:00	Lunch Break	
	14:00-15:30	Final poster session, announcement and short presentation of winning posters	
	15:30-16:00	Afternoon Break	
	16:00-17:30	Session 9: Operating experiences I	
	19:30-23:30	Reception by the Mayor of Vienna / Gala Conference Dinner	
Thursday 13.09.2007	8:30-9:00	Keynote III: Georges Ekama	
	9:00-10:30	Session 10: Modelling	
	10:30-11:00	Morning Break	
	11:00-13:00	Session 11: Settling and separation	
	13:00-14:00	Lunch Break	
	14:00-15:30	Session 12: Sludge Management	IWA Task Group "Good Modelling Practice"
	15:30-16:00	Afternoon Break	
	16:00-17:00	Session 13: Operating experiences II	
	17:00-17:30	Closing Ceremony	
	17:30-19:00	"Gulaschausklang"	

Lecture Hall HS 1

Lecture Hall HS 5

Social Events, different locations

Room to be announced



Organised by

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Karlsplatz 13, 1040 Wien, Austria

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