



STUTTGART STUDENT
CHAPTER

ANNUAL REPORT 2005

The 2005 committee:

President:	Dipl.-Ing. Rüdiger Siebel
Vice-president:	Dipl.-Ing. Milos Vasin, M.Sc.
Treasurer(s):	Dipl.-Ing. Eckhard Fischer (until March 2005) Allisha Sordi, B.Sc. (from April 2005)
Project coordinators:	Hüseyin Eraydin, B.Sc. Holly Kenendy, B.Sc.

General and organisational activities:

The 2005 committee aimed at improving the efficiency of the organisational work within the Stuttgart Student Chapter (SSC). The main problem in the past years has always been related to membership issues. This problem was solved by installing a database which automatically creates actual membership lists, showing clearly who paid the last membership fee on which date and also the date of graduation. Moreover, using the database, membership cards can be created (to date, those have not been spread amongst the members). In the future, this database will be a very helpful instrument for keeping the work related to membership issues minimal. All what needs to be done by the SSC-treasurer in future is to keep the database updated.

A second very important step that has been completed is the official registration of the IAHR-SSC in the register of German associations (now officially called IAHR Stuttgart Student Chapter e.V.). With the help of a notary, the by-laws were revised such that they comply with the IAHR guidelines as well as with German laws. After the official registration, a bank account could be opened under the name of the IAHR-SSC. To date, the SSC accounts have always been under the treasurer's name, which changed every year. In terms of continuity of the work, the decision to register IAHR-SSC and open a bank account was an very important step.

Additionally, a filing system (soft copies as well as hard copies) has been installed with a clear structure which allows each new year's committee members to easily find items that have been done by the respective committees of previous years (e.g. reports, meetings minutes, correspondences, important addresses, financial docu-

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ments etc.). Moreover a corporate design layout for all official documents was designed which provides a high level on professionalism and “brand” recognition.

The IAHR-SSC annual colloquium 2005:

As in previous years, the annual SSC-Colloquium in the summer was one of the main events organised by the 2005 committee. On June 29, 2005, the IAHR Stuttgart Student Chapter presented its annual Colloquium at the Universität Stuttgart, titled, “An integrated approach to the challenges of the Danube River”.

The presentations took the attendees on a journey along the Danube River starting in Germany, including various aspects such as revitalisation, navigation, water supply and groundwater issues. Then a stop was made in Austria, where the development and actual problems at the Austrian Danube downstream of Vienna such as river engineering, shipping and ecology have been pointed out. The next stop was in Hungary, which provided some insights on the problems concerning the Gabčíkovo–Nagyymaros barrage with all its impacts on the downstream reaches. Finally a global outline of water resources management under changing climate conditions was presented, awarding the Colloquium a worthy end.

The presenters included numerous high-ranking scientists and researchers, which came from different European countries situated on the Danube River, such as Germany, Austria and Hungary. Also, the attendance of the Executive director of the IAHR secretariat in Madrid, Dr. Christopher George, was another highlight of this year’s Colloquium. In addition to the presentation, a poster exhibition was also on display, giving the presenters, as well as others from consulting companies and other universities, the opportunity to present their work on the Danube River.



Dr. Balint from VITUKI in Budapest giving a presentation about the Gabčíkovo-Nagyymaros project

Unlike previous years, this year's colloquium was a full day event, which made it worth the journey for those speakers and guests coming from outside the university area (from consulting companies, state authorities as well as other universities). Additionally, this year was the 5th anniversary of the Stuttgart Student Chapter whose inauguration was on the 30th of June 2000, thus it was planned to make the Colloquium a special one. The Colloquium was sponsored by several institutions of the Universität Stuttgart, such as ENWAT (International Doctoral Program “Environment Water”), WAREM (Internationally oriented Master of Science Program “Water Resources Engineering and Management”) and IWS (Institute of Hydraulic Engineering). They covered the travel costs of the presenters, as well as the lunch on the day of the Colloquium. All other costs have been covered by IAHR-SSC itself.

About 80 people came to attend the Colloquium. Many of them were students from Stuttgart and employees from the IWS. But also a large number of people from all over South-Germany and even from outside Germany attended the presentations.

Altogether it can be said, that this Colloquium was very successful with a lot of interesting presentations followed by inspiring discussions.

Technical excursions:

Excursion to the dam site of a planned flood retention reservoir at the river Brettach

On June 13, 2005 a group of 22 IAHR-SSC members together with 18 IWS staff members went to visit the construction site of a dam on a planned flood retention reservoir on the small river Brettach about 60 km north from Stuttgart. This reservoir is the first and most upstream reservoir of three planned reservoirs designed to protect the downstream village Bretzfeld against devastating flood events, which occurred in the past decades. For the decentralised flood protection scheme, which is enforced in the state of Baden-Württemberg, those reservoirs are an important component.

The visit was guided by representatives of the consulting companies and the executive construction company. Two details of the dam are worth being specially mentioned. For landscape-architectural reasons those dams were not planned with conventional spillways made of concrete. Flood relief occurs over the crest of the overtoppable earthdam. The 1:4 sloped downstream face of the dam is protected by an arrangement of concrete ribs covered by a vegetation layer which will be eroded in case of overtopping.



Participants getting technical explanations in front of the outlet structure

The second interesting detail is the arrangement of two different outlets, a service outlet and a so-called “eco-outlet”, whose purpose is to ensure the transmissivity for the organisms living in and at the river (aquatic ones as well as terrestrial ones).

As conclusion of the very interesting excursion all participants were invited from the construction company to a nearby traditional wine inn.

Excursion to the Rudolf-Fettweis-Hydropower Plant Complex & Schwarzenbach Dam in Forbach (Black Forest)

The Rudolf-Fettweis-Hydropower Plant Complex, situated in the beautiful Murg-valley in the Black Forest southwest of Stuttgart is a system of four individual powerplants which are all linked through pipes with different water catchment reservoirs. The annual energy production averages about 130 GWh.

On November 11, 2005, 36 IAHR-SSC members enjoyed the second excursion. First, the attendees visited to the complex' main powerplant in Forbach, where, in the visitors room, a movie about the history, the development and the operating modes of the hydropower plant complex was shown. The main component of the complex, the “Schwarzenbachwerk”, which was completed in 1926, was the first pumped storage powerplant in the world, refining electric energy by pumping with cheap electricity in the night and producing energy during the day, when the demand for energy is the highest. For the energy production, which occurs by aid of two Pelton turbines, the water from the nearby Schwarzenbach Reservoir, retained by the Schwarzenbach Dam, is used, utilising a pressure head of about 360 m. To keep the losses on a low level the water for pumping is taken from another reservoir, which is situated 145 m above the powerhouse so that the pumping height is only about 215 m.

The second part of the excursion took the participants to the nearby 65 m high and 400 m long Schwarzenbach Dam (1922-1926), a slightly curved gravity dam made from large granite blocks backfilled with concrete. The viewing of the corridor inside of the dam, where several measuring devices like the measuring of declination and of the spillage are installed, was particularly interesting. The composition of the dam could be seen clearly in a corridor which had been broken out subsequently.

This excursion, which was mainly planned as an SSC activity for the new WAREM-students, concluded with an interesting visit of a home brewery in Karlsruhe, where not only an insight into brewing processes was given but also the beer could be tried and a cozy dinner was served.



Participants in front of the imposing Schwarzenbach Dam

The XXXI IAHR congress in Seoul (Korea):

As representatives of the Stuttgart Student Chapter the president Rüdiger Siebel, as well as, vice-president Milos Vasin travelled to Seoul from September 9 to 17, 2006.

Besides the congress itself, with all its interesting presentations and exhibited posters, several other commitments had to be undertaken. At the congress exhibition a combined booth of the IAHR-SSC, ENWAT and WAREM was presented. As a very important purpose of the visit of the congress the Student Forum was considered, where students, mainly organised in IAHR student chapters, met to exchange their experiences about the work with the student chapters. Another meeting with Dr. Christopher George included discussions about an effective linking of the student chapters to each other as well as to the mother organisation IAHR. Moreover, Milos Vasin gave a presentation for the JFK Student paper competition and Rüdiger Siebel presented a poster at the poster exhibition.



Rüdiger Siebel & Milos Vasin at the booth on the congress exhibition

The technical visits to Cheonggye-cheon river restoration project in the heart of Seoul, as well as, the visit of the Sihwa lake reclamation project with its planned tidal power plant were other highlights of the journey to Korea. Furthermore, a lot of interesting contacts with scientists from all over the world were established during the social programs of the congress such as welcome reception, gala evening or congress banquet.

Social events:

Besides the above mentioned technical activities, the IAHR-SSC also organises plenty of social events to bring together the members as they come from many different countries with many different cultures and many of them need some orientation when they arrive in Germany which they can get from the older students in IAHR-SSC. The 2005 social events included a potluck party at the beginning of summer semester, a BBQ at the end of the summer semester, a movie night and a cultural evening where every participant is asked to bring some dish or perform some music and/or dance from their home countries. That cultural evening was held in October particularly to introduce the SSC to the newest generation of students.



End of semester BBQ on the campus of Universität Stuttgart

Fundraising events:

A general problem of the Stuttgart Student Chapter is the financial situation. Though the SSC gets a lot of support from ENWAT, WAREM and IWS, it is preferable to have a certain amount of own assets to be a bit more independent from the above-mentioned institutions. Specifically, to help cover the costs for more expensive events in the future e.g. excursions which require accommodations and more expensive means of transportation. The 2005 committee had two ideas about how and where to get money for financing future events.

The first idea was the so-called “Ladder climbing adventure” game which was performed at the “Bauigelfest”, the biggest festival on the university’s campus, organised by students of civil engineering. For a small amount of money, people could try to balance on a diagonal stretched, rotatable suspended rope ladder and hit a button on top. Those who could do it won a prize. The device was constructed by SSC members themselves so that it can be used again the coming years without any costs. Considering the bad weather conditions that day the profit made was very respectable.

As a second idea, tickets for a raffle game have been sold on the ENWAT/WAREM Christmas party. The prizes that could be won were donated by the bank or they were items by committee members. A respectable amount could also be earned with this idea.



“Ladder climbing adventure” game on the “Bauigelfest” on university campus in Stuttgart

General meeting and committee elections:

According to the by-laws the annual general meeting was held on November 29, 2005. President Rüdiger Siebel gave a review of the 2005 activities and explained the financial situation of the IAHR-SSC to the 24 attending members. An open discussion was also part of the general meeting, as were the elections for the 2006 committee.

The following new committee members for 2006 were elected during the general meeting which was observed by the SSC faculty advisor Prof. Kobus:

President:	Dipl.-Ing. Milos Vasin, M.Sc.
Vice-president:	Tesfaye Kebede Gurmessa, M.Sc.
Treasurer:	Dipl.-Ing. Eva Fenrich, M.Sc.
Project coordinators:	Amir Aghakouchak, M.Sc. Maguy Sadek, B.Sc.

The 2005 committee wishes the 2006 committee good luck and success for their work with the SSC, hoping that they can continue with what has been achieved in 2005 and the years before and that they continue to improve the contacts with other student chapters.

Written by Rüdiger Siebel