

ANNUAL REPORT

A. Division name: IAHR HYDRAULICS

Committee name: Fluvial Hydraulics

Reporting period: 2010 - 2011

B. Mission statement / Long range objective

To promote research and best practice in Fluvial Hydraulics/River Engineering, contribute to the solution of global problems in our subject area, and provide forums for exchange of information among researchers and between researchers and practitioners, both within and outside IAHR.

C. Committee Membership

Number of committee membership: Not known

Primary affiliation: Not known

Secondary affiliation: Not known

2. Leadership Team: names and addresses

Chair	Ana Maria da Silva (Canada)	amsilva@civil.queensu.ca
Co-Chair	Mustafa Altinakar (USA)	altinakar@ncche.olemiss.edu
Past Chair	Yves Zech (Belgium)	zech@gce.ucl.ac.be
Member	Andreas Dittrich (Germany)	a.dittrich@tu-braunschweig.de
Member	Jose Rodriguez (Australia)	Jose.Rodriguez@newcastle.edu.au
Member	Yee-Meng Chiew (Singapore)	cymchiew@ntu.edu.sg
Member	Hendrik Havinga (The Netherlands)	hendrik.havinga@rws.nl
Member	André Paquier (France)	andre.paquier@cemagref.fr
Co-Opted Member	A. Salehi Neyshabouri (Iran)	salehi@modares.ac.ir
Co-Opted Member	A. Leopardi (Italy)	a.leopardi@unicas.it

3. Name and composition of Working Groups

- The Leadership Team works closely with the FHC Development and Diffusion (D&D) Subcommittee, composed by

Massimo Greco (Italy)	grecom@unina.it
Aronne Armanini (Italy)	Aronne.Armanini@ing.unitn.it
Juan Pedro Martin Vide (Spain)	vide@ehma.upc.es
Sandra Soares Frazao (Belgium)	soares@gce.ucl.ac.be
Jorge Abad (USA)	jabad@pitt.edu
Rafael Murillo Munoz (Costa Rica)	RAFAEL.MURILLO@ucr.ac.cr
Cheng Liu (China)	chliu@iwhr.com

- River Flow 2010 Working Group
Andreas Dittrich a.dittrich@tu-braunschweig.de

Jochen Aberle j.aberle@tu-braunschweig.de
Katinka Koll katinka.koll@tu-bs.de

- River Flow 2012 Working Group
Rafael Murillo Munoz RAFAEL.MURILLO@ucr.ac.cr
Rafael Oreamuno Rafael.Oreamuno@gmail.com
- River Flow 2014 Working Group
Anton Schleiss anton.schleiss@epfl.ch
Giovanni De Cesare giovanni.decesare@epfl.ch

D. Affiliation with other professional associations

IFI, which is part of ICHARM

Affiliation with international programmes

WASER

E. Report on activities in reporting period

1. Committee meetings

Committee meeting was held in Braunschweig on September 9, 2010.

2. Specialty conferences

- River Flow 2010
This was held in Braunschweig, Germany, on Sep 8-10, 2010, with Master Classes held on Sept. 7. Numbers are summarized in the table below:

Abstracts submitted	484
Papers invited	281
Oral presentations	160
Poster presentations	59
Participants	~300

The participants came from 33 different countries. About 100 participants were IAHR members. A total number of 109 students registered to the conference. Of these, 52 participated to one of the 7 Master Classes organised on September 7. Only one Master class had to be cancelled due to insufficient student registration. There was a high level of satisfaction among the participants of the Master Classes. The Masters pointed out the good scientific level of the presentations and discussions with the students. The high attendance of students to the Master classes shows the interest of young scientists for this event in particular and the River Flow Conference series in general. The relaxed and friendly atmosphere of the conference is probably playing an important role in attracting young scientists and professionals to this event.

A detailed report was published in Hydrolink 2, 2011.

- River Flow 2012
Work was carried out in collaboration with the members of the LOC of River Flow 2012 through frequent emails exchanges as well as meetings in Braunschweig. Mustafa Altinakar was hosted by the LOC in San Jose Costa Rica during June 24-25, 2010, to discuss various issues in relation with the preparation of the conference and inspect the conference venue. River Flow 2012 Conference is being organized back to back in conjunction with the LAD Congress.
- activities related to World Congress and Division Congress
- IAHR World Congress Brisbane 2011:
 - Ana Maria da Silva, Chair, served as associate editor for the topic 5.4 Fluvial Hydraulics in IAHR Congress in Brisbane, in collaboration with Dr. Mark Jempson from BMT WBM Consulting Company in Melbourne, Australia.
 - All members of the Leadership Team and D&D were actively involved in the extensive paper review process.
3. (continuing) education activities, workshops, training seminars, courses, etc.
Mustafa Altinakar, Vice Chair, gave a 3-day short course on June 21-23, 2010, in San Jose, Costa Rica under the auspices of the IAHR-FHC, and hosted by the Engineers and Architects of Costa Rica. The title of the short course was "Sediment Transport Processes in Rivers and Reservoirs and Associated Environmental Issues".
4. Technical/Scientific Working Group meetings and output
The FHC has 3 active technical/scientific working groups
- Compound channels (led by Didier Bousmar)
 - Dam-break flows on mobile beds (led by Sandra-Soares Frazao)
 - Groyne fields (led by Hendrick Havinga)
- Both compound channels and dam-break flows working groups are involved in benchmark exercises. As a result of the first benchmark exercise, the working group on dam-break flows on mobile beds has submitted a paper to the JHR under the auspices of the FHC.
- The working group on groyne fields has made considerable progress towards establishing an international network devoted to the topic.
5. Publications: proceedings; papers for IAHR Journals; state-of-the-art papers; monographs; books
- Conference Proceedings:
 1. Proceedings of River Flow 2010.
 - Hydrolink articles:
 1. Pakistan Floods: Background report on contributory factors, by Prof. Hanif Chaudry, Hydrolink 5, 2010.
 2. 10 questions to Dr. Daniel Kull (International Federation of Red Cross and Red Crescent Societies), by Ana Maria da Silva (FHC Chair) and Mustafa Altinakar (FHC Vice-Chair), Hydrolink 5, 2010;

3. Report of River Flow 2010, by Joe Aberle, Hydrolink 2, 2011.

6. Contacts with other organizations

7.- Other activities.

- Participation in the IAHR Climate Change Working Group: Andre Paquier, Member of the FHC Leadership Team, was the FHC representative in this working group, as well as a contributor to the mid-term report on state-of-the-art on climate change in IAHR
- IAHR-FHC has co-sponsored the International Conference on the Status and Future of Large rivers, held in Vienna, 11-14 April 2011. Yves Zech, Past Chair, and Sandra Soares Frazao, D&D Member, attended the conference to represent IAHR-FHC.

F. Short range plans (1 to 2 years)

- specialty conferences:
 - River Flow 2014, to be held in Lausanne, September 3-5, 2014, with Master Classes on Sept. 2, and technical tour on Sept. 6.
- activities related to next IAHR World Congress
 - Review of papers under Fluvial Hydraulics topic
 - Organization of joint IAHR/Waser/IAHS/Unesco special session on Water and Sediment
- (continuing) education activities
- working group activities
The 3 technical/scientific working groups will continue their present efforts and continue to have meetings over the Internet and during IAHR and River Flow Conferences.
- publications
 - Conference Proceedings:
 1. Proceedings of River Flow 2012.
 - Monographs:
Work has been initiated towards the production of a monograph on Recent Advances and Open Challenges in Fluvial Hydraulics.
- contacts with other organizations
Contacts with IFI and WASER will be continued.
- other activities.

Remarks