

**International Association for Hydraulic Research  
Division III Geophysical Hydraulics  
Section 4: Ice Research and Engineering  
Minutes of Meetings at the 19<sup>th</sup> IAHR Ice Symposium  
6-11 July, 2008, Vancouver, BC, Canada**

**Ice Committee Meetings**

Sun. 6 July, 1600 -1700 (all members)

Mon. 7 July, 1745-1930 (all members)

Tues. 8 July, 1800-1900 (all members)

Fri. 11 July, 1030-1145 (all members & student paper award committee)

**Attendees**

K.-U. Evers (Chairman, Germany)*	<a href="mailto:Evers@hsva.de">Evers@hsva.de</a>
H. T. Shen (USA)*	<a href="mailto:htshen@clarkson.edu">htshen@clarkson.edu</a>
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A. Tuthill (USA)	<a href="mailto:Andrew.M.Tuthill@usace.army.mil">Andrew.M.Tuthill@usace.army.mil</a>
R. Gagnon (Canada)	<a href="mailto:Robert.Gagnon@nrc-cnrc.gc.ca">Robert.Gagnon@nrc-cnrc.gc.ca</a>
M. Jasek (Canada)	<a href="mailto:Martin.Jasek@bchydro.com">Martin.Jasek@bchydro.com</a>
F. Hicks (Canada)*	<a href="mailto:faye.hicks@ualberta.ca">faye.hicks@ualberta.ca</a>
P. Langhorne (New Zealand)*	<a href="mailto:pjl@physics.otago.ac.nz">pjl@physics.otago.ac.nz</a>
T. Takeuchi (Japan)*	<a href="mailto:take@hi-tech.ac.jp">take@hi-tech.ac.jp</a>
S. Kioka (Japan)	<a href="mailto:kioka@ceri.go.jp">kioka@ceri.go.jp</a>
M. Määttänen (representing Kärnä of Finland)	<a href="mailto:mauri.maattanen@hut.fi">mauri.maattanen@hut.fi</a>
R. Asvall (representing Kvambekk of Norway)	<a href="mailto:rpa@mse.mo">rpa@mse.mo</a>
A. Bekker (Russia)	<a href="mailto:bekker@mail.primorye.ru">bekker@mail.primorye.ru</a>
K. Choi (Korea)	<a href="mailto:kchoi@hahara.kmaritime.ac.kr">kchoi@hahara.kmaritime.ac.kr</a>

**Absentees**

C. Haas (Germany) *	<a href="mailto:chaas@ualberta.ca">chaas@ualberta.ca</a>
Q. Yue (China)	<a href="mailto:yueqj@dlut.edu.cn">yueqj@dlut.edu.cn</a>
T. Kärnä (Finland)	<a href="mailto:tuomo.karna@gmail.com">tuomo.karna@gmail.com</a>
A. Kvambekk (Norway)*	<a href="mailto:aask@nve.no">aask@nve.no</a>
V. Lytle (Australia) *	<a href="mailto:vlytle@crisis.ku.edu">vlytle@crisis.ku.edu</a>
I. Stepanov (Russia)*	<a href="mailto:igorstepanov@gsg.spb.ru">igorstepanov@gsg.spb.ru</a>

\* indicates committee members whose terms expire this year

**Sun. 6 July, 1600 -1700**

1. Karl-Ulrich (Kalle) Evers opened the meeting by welcoming committee members.

2. New members Hayley Shen and Andy Tuthill (secretary) were introduced.
3. The agenda was accepted.
4. Nine student papers were identified and an evaluation committee was selected. Bob Gagnon to judge ice mechanics papers 108, 118, 056, 151 & 124. Steve Daly to judge river ice papers 029, 065 & 103 and Pat Langhorne and Hayley Shen to judge sea ice paper 026. Other members to assist evaluation committee as schedules permit.
5. Martin Jasek reported that about 120 papers will be presented in two concurrent sessions. All but the late papers are printed in two volumes of proceedings which are included in the full conference registration. Student registration does not cover the printed proceedings but they can be purchased for \$75. Late papers will be included in a post-conference CD. An effort was made to identify authors who will not be able to attend and present. At least three from China could not obtain travel visas.
6. Approval of committee membership and awards (all approved).
7. New committee members were proposed. Asterisks (\*) next to the above names indicate outgoing members. Membership goals and target numbers were discussed. The minimum number was thought to be about 16 since members may not be able to attend every meeting. The maximum from a single country is two, not including the Committee Chair and Co-opted members. . Contributing to the committee and staying active in the ice research field were deemed important selection criteria. An ability and willingness to organize future ice symposia is considered major plus.

Martin Jasek was nominated by Faye Hicks. Committee members approved and Jasek accepted.

Mauri Määttänen nominated Matti Leppäranta and Jakko Heinonen of Finland who are both willing to serve. These nominations were accepted by the committee.

### Monday 7 July, 1745-1830

Whether or not a poster (without an oral presentation) could be considered in the student paper competition was discussed. This is vague in the current version of the student paper award requirements. It was decided that, in addition to the other requirements, the award must go to a student who presents the paper orally and the requirements should be reworded accordingly.

### 7. (Appointment of new members continued)

Randi Pytte Asvall suggested that outgoing member Anund Kvambekk's term be extended since he was unable to attend the Vancouver meeting due to illness of his wife. The consensus was that a committee membership term should not be extended if a symposium is missed as it would interfere with the natural turnover in committee membership. Knut Hoyland was then proposed and accepted as a new member from Norway.

Alexander Bekker suggested Pavel Truskov of Moscow or Zubakhin of St. Petersburg as possible new members from Russia, but said he would need to discuss this with them.

Pat Langhorne proposed Vernon Squire or Greg Leonard as new members from New Zealand, but said she would need to discuss with them.

Outgoing ice committee chair, Kalle Evers will continue to serve on the ice committee as “co-opted” member. This position was described by Mauri Määttänen as a kind of emeritus membership that is not associated with any nationality.

Kalle Evers suggested Sveinung Loset as second co-opted member due to his long-term activity and commitment in the ice research community.

Hayley Shen cautioned against selection of new members who accept the position but were then unable to attend the symposia or participate on the committee.

Table 1. Proposed New Members to the Ice Committee

<u>Name</u>	<u>Nationality</u>	<u>Proposed by:</u>	<u>Accepted</u>
Martin Jasek	Canada	Hicks	yes
Matti Leppäranta	Finland	Maattanen	yes
Jaakko Heinonen	Finland	Määttänen	yes
Knut Hoyland	Norway	Asvall	yes
Pavel Truskov	Russia	Bekker	
Zubakhin	Russia	Bekker	
Vernon Squire	New Zealand	Langhorne	
Greg Leonard	New Zealand	Langhorne	
Karl-Ulrich Evers	Co-opted (Germany)		yes
Sveinung Loset	Co-opted (Norway)	Evers	yes

8. Hung Tao Shen proposed Pat Langhorne as the new ice committee chair which was unanimously supported by the committee members. Pat accepted. Her qualifications include a long history of contributions to ice research, support and encouragement to young ice researchers and students, and a major role in the organization of the 2002 Otago, NZ Ice Symposium.

9. The 2008 Ice Research and Engineering Award will go to Hung Tao Shen. This decision was unanimously accepted by the committee.

### Tuesday 8 July, 1800-1900

The committee considered the addition of two student papers in the competition. No. 126 by Raed Lubbad will be included while No. 132 will not since the student is not the first author.

10. Approval of committee membership and awards (all approved).

## 11. Review of action items 2006 meeting.

### A. Proposal for new working groups

At the 2006 meeting, working the following working groups were recommended and proposed as topics for special sessions at the 2008 symposium:

- Numerical modeling in ice engineering
- Oil spills under ice
- Ice interaction of compliant structures

Hung Tao Shen recommended that, in addition to the tradition topics of ice mechanics and river ice, we maintain some flexibility with regard to new topic areas for working groups. For these new topic areas, people should be encouraged to organize special sessions at future ice symposia. All agreed on the importance of new directions in ice research, an example being winter ecology in ice covered waters.

Mauri Määttänen suggested the following working group areas:

- Ice mechanics
- Ice bridge formation and ice pile up
- Ice aspects of climate change
- Instrumentation in ice research
- Ice engineering and ice management
- Environmental issues in ice infested waters

Dr. Choi suggested a topic area on ship-ice interaction problems since ship building is important in Korea.

### B. Maintaining the IAHR Ice Committee Website

A home for the IAHR Ice website was discussed. Hung Tao Shen inquired if CRREL could host a site to replace the one that now resides at Clarkson University. Andy Tuthill agreed to explore this.

[www.clarkson.edu/projects/iahrice/](http://www.clarkson.edu/projects/iahrice/)

### C. Conference Proceedings

In 2006 the Ice Committee decided that the 2008 and 2010 Ice Symposia proceedings should be published as hard copy with PDF electronic versions made available on the IAHR Ice website. Matti Leppäranta has proposed that the 2010 proceedings be electronic only in order to save on conference registration fees. This was generally agreed on by the committee. Randi Asvall suggested that at least the abstracts be printed and made available at the meeting. Should the proceedings go to a purely electronic format, all agreed on the importance of providing a well defined formatting template that authors adhere to. Martin Jasek agreed to send Hung Tao Shen a pdf version on CD-R of the final 2008 proceedings to be posted on [www.clarkson.edu/projects/iahrice/](http://www.clarkson.edu/projects/iahrice/)

It was decided that papers submitted but not presented should still be included in the final electronic proceedings.

#### 12. Status Report of the planning for 20<sup>th</sup> Ice Symposium, Lahti, Finland, 2010

Mauri Määttänen reported that planning for the Lahti 2010 Symposium by Matti Leppäranta and others was going well. Määttänen suggested that maps and information for the 2010 conference be placed on the IHAR ice committee web site with links to the Main IAHR website.

#### 14. Proposals for the 21<sup>th</sup> Ice Symposium in 2012:

Following the tradition of rotating symposia venues among continents, it was agreed that the 2012 meeting should take place in Asia, Australia, or New Zealand. Alexander Bekker offered to host a meeting in Vladivostok, Russia. This is discussed in greater detail below.

#### Thursday July 10, 0730-0830

Prizes for the student paper competition were discussed. It was decided that the winner, announced at the closing ceremony, would receive a souvenir-type gift and mailed a certificate.

It was agreed that Mauri Määttänen should speak about the 2010 Lahti, Finland Symposium at the closing ceremonies.

#### 13. Ice Research and Engineering Award 2010

Kalle Evers nominated Prof. Torkhild Carstens as a candidate for the Ice Research and Engineering Award in 2010. Hung Tao Shen seconded, citing Carstens' many contributions to ice research and the IAHR Ice Committee over the years. Also, Prof. Carstens chaired the first Working Group on Ice Forces and helped organize the 1994 Ice Symposium in Trondheim, Norway in 1994.

This nomination and additional suggestions for award candidates are to be voted on later by committee members and past chairs. The confidential vote will be conducted by the committee secretary by email. No requirement exists to give this award every two years. Past recipients include: Bernard Michel, Guenther Frankenstein, Mauri Määttänen, George Ashton, Hiroshi Saeki, Joachim Schwarz, and Hung Tao Shen.

A discussion of past Ice Committee meeting records and documents defining the awards process followed. It was thought that the former secretary, John Dempsey, probably has much of this information. The idea making this information accessible on the IAHR Ice website was generally agreed on. Faye Hicks offered to have the IAHR Ice website linked to the CRIPE site.

#### 14. Proposals for the 21<sup>th</sup> Ice Symposium in 2012 (continued)

As mentioned previously, Alexander Bekker offered to host the 2012 meeting in Vladivostok Russia. Dr. Bekker has experience organizing this type of meeting. In addition to the technical sessions, Vladivostok hosts much arctic infrastructure, R&D and industry and would be a good site for

technical tours. Hung Tao Shen recommended that Dr. Bekker submit a written proposal to the committee outlining how the conference would be organized. Though remote, Vladivostok is accessed fairly easily by air from Japan or Korea.

It was mentioned that the term of the Ice Committee Chair (and members) ends in October. Pat Langhorne will take over for Kalle Evers in October 2008.

### Friday July 11

It was agreed that outgoing and new committee members would be announced at the closing ceremonies of the 2008 Symposium. The recipients of student paper awards, Holly Goulding and Raed Lubbad would be announced. The winning papers are:

Goulding, H. and T. Prowse: "Spatial and Temporal Patterns of Breakup and Ice Jam Flooding in the Mackenzie Delta, Inferred from Historical Hydrometric Data and Remotely Sensed Imagery"

Lubbad, R, Moe, G, and S. Loset: "Static and Dynamic Interaction of Floating Wedge-Shaped Ice Beams and Floating Structures"

Draft minutes of the 2008 Ice Committee will be circulated to members for comments and corrections.

Martin Jasek will prepare a summary report on the 2008 Vancouver Symposium which will be submitted to the main IAHR secretary.

The new Ice Committee secretary should provide a photo to the main IAHR for their website.

Kalle Evers thanked all committee members for attending and contribution to the meetings.

Action Items from 2008 Ice Committee Meeting:

1. Finalize the list of new Ice Committee members. Of the 10 new members proposed, four have accepted (Table 1). Once the others have agreed to serve on the committee, finalize the list and update the table in the Appendix of these minutes. Also, obtain and list e-mail addresses of all members (Tuthill).
2. Formalize the list of proposed working groups and special session topics for the 2010 Symposium in Finland. Share and discuss with Matti Leppäranta.
3. See if CRREL can host the IAHR Ice Committee website (Tuthill). Link the IAHR Ice site to the CRIPE Site (Hicks).

4. Consolidate records and meetings of past Ice Committee Meetings. Where practical, make accessible via Ice Committee website (Dempsey, Tuthill).
5. Post pdf version of final proceedings on the IAHR Ice website (Jasek, Shen, Tuthill).
6. Prepare draft proposal for 2012 Symposium at Vladivostok, Russia (Bekker). Members to review and vote on the proposal.
7. Suggest additional candidates for the Ice Engineering Research and Engineering Award. Submit suggestions to secretary.
8. Clarify requirements for the student paper award to specify that the paper (and not a poster) must be presented orally at the symposium (See Appendix).
9. Prepare and mail certificates to the winners of the 2008 student paper competition (done).

Respectfully Submitted:

Andrew M. Tuthill  
Ice Committee Secretary

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## APPENDIX – Background information

### 1. 2006 committee members (to be updated to 2008)

Version 22 June 2008

IAHR Ice Committee Members				Year Nominated	2004	2005	2006	2007	2008	2009	2010	2011	2012
					Sympos. Russia		Sympos. Japan		Sympos. Canada		Sympos. Finland		Sympos. ??
1	Bekker	Alexander	Russia	Member	2006								
2	Choi	Kyungsik	Korea	Member	2006								
3	Evers*	Karl-Ulrich	Germany	Chairman	2004								
4	Gagnon	Robert	Canada	Member	2004								
5	Haas*	Christian	Germany	Member	2002								
6	Hicks*	Faye	Canada	Member	2002								
7	Kärnä*	Tuomo	Finland	Member	2002								
8	Kvambekk*	Anund	Norway	Member	2002								
9	Langhorn*	Patricia	New Zealand	Co-opted member	2004								
10	Lytte*	Victoria	Australia	Member	2002								
11	Shen	Hayley	USA	Member	2006								
12	Shen*	Hung Tao	USA	Co-opted member	2004								
13	Stepanov	Igor	Russia	Member	2004								
14	Takeuchi*	Takahiro	Japan	Member	2002								
15	Tuthill	Andrew	USA	Secretary	2006								
16	Yue	Qianjin	China	Member	2004								

\* outgoing members

### 2. Ice Research and Engineering Award

“The Award be used to recognize long-term, significant accomplishments in the field of ice engineering and support to the IAHR Ice Research and Engineering Section”

The 2006 Award was presented to Dr. Joachim Schwarz (Germany) during the Ice Symposium in Sapporo, Japan. It was announced in Sapporo that the 2008 Award will be presented to Prof. Hung Tao Shen (USA) during the 2008 Ice Symposium.

### 3. Student Paper Award

The local organizing committee is responsible for advertising and providing competition for the award.

Rules are:

- 1) Awardee must be a full-time student at a university during a period between the last and present symposia;
- 2) The paper must be **orally** presented by the student nominated;
- 3) The student must be the sole or primary author;
- 4) Both the contents of the paper and the presentation are to be judged;
- 5) The paper must already be included in the pre-symposium volumes available at registration.

(The three member committee should consist of one each from river ice, sea ice, and ice mechanics.)

### 4. Future symposia venues

The 20<sup>th</sup> Symposium on Ice in 2010 will be held in Lahti, Finland (chair of local organizing committee is Prof. Matti Leppäranta (HUT)).