Minutes of the IWWWFB Steering Committee Meeting

- IWWWFB 2013 E-mail comments

From Nick Newman -- 11 April 2013

Dear John, et al

After the closing session yesterday we spoke briefly about my concern that the Workshop is not quite as great as it used to be. My own concerns should be discounted, insofar as they may be affected by senility. However I also spoke with several others at lunch and afterwards, and discovered that they have similar concerns. I will try to summarize my views and theirs below, in the hopes that this may initiate a useful discussion. This email is copied to all who I spoke with, plus a few others who might want to be included in this discussion. All addressees should feel free to amplify, correct, or otherwise comment on what follows below.

My views were reinforced by the sparse attendance at the last sessions. In a sense, the Workshop seems to be drifting slowly in the direction of other larger conferences. The following are a few of the comments I received when discussing this:

'Some of the abstracts are repeating old work'

'The Workshop is not what it used to be'

'There are too many talks, not enough time for each'

'The Workshop has lost some of its sparkle'

'Talks should be addressed to the wider audience rather than to those in their subspecialty'

'We should meet in a smaller room which does not require a loudspeaker/microphone system (and discourages people from coming and going during the sessions!)'

'Talks by sponsors and others from industry should be encouraged'

In the organization of the Workshops we have tried to keep it as simple as possible, with our principal focus on arrangements for the future Workshops. Thus the intellectual aspects have evolved over the years in a laissez faire manner. This may be a good time to discuss these aspects. Possibly this could be done by an ad hoc group which reflects the broad interests (and ages) of the participants.

It was wonderful to see you all again.

Nick

From Bernard Molin -- 11 April 2013

Dear all Here are my reactions to Nick's email:

1. About the situation in general.

Offshore hydrodynamics has become a mature field. In the 70s, 80s and early 90s, there were plenty of problems to solve, new problems were arising everyday (e.g. springing, ringing), there was a deep need of validated engineering tools, etc. Nowadays the knowledge is there and most of the tools required for engineering have become available.

In the same time numerics have become more and more performing, the need for elaborated analytical work has decreased to the profit of numerical expertise.

Finally the average level of students in our field has diminished. To be an engineer is no more and attractive position in most occidental countries. Every year I downgrade my lecture notes in order to keep with the level of my students.

To my view the IWWWFB is still faring better than most other conferences. Take today's OMAE or ISOPE proceedings, and compare with those of 20 or 30 years ago!

2. About the 28th workshop

Just a reaction to some of the comments quoted by Nick

'There are too many talks, not enough time for each'

: We received 80 abstracts and rejected 20. We could have rejected more, we but found it difficult (we = Harry, Spyros, Yannis and me). I thought of limiting the number of abstracts per group (there were 5 from Dalian, about the same number from DTU, 4 proposed by UC Dublin), but this should have been announced together with the call for papers. I find it hard to reject a paper from medium quality when it is from a newcomer in our community, or when from a PhD student.

'We should meet in a smaller room which does not require a loudspeaker/microphone system (and discourages people from coming and going during the sessions!)'

: Maybe we should have stayed in the room we used on Sunday afternoon. I was concerned that people in the back of that room could not see the screen well. Also there were side-advantages in using the theater (proximity of lavatories, space for coffee breaks). We obstructed the theater back rows with chairs so that people would have to sit in the front rows but the chairs got quickly displaced. And most people in the back rows had their laptops on their knees. We need rooms with no WIFI!

'Talks by sponsors and others from industry should be encouraged' : I fully agree. I had planned a talk by Mamoun, but I cancelled it when I saw that there was slot in the program.

Best Bernard

From Harry Bingham -- 12 April 2013

Dear All,

I think that this is an important discussion to have, so thanks Nick for starting it off. In general though, I agree with Bernard that IWWWFB is faring well when compared with other conferences. Some specific comments follow.

Intellectual aspects:

I agree with most of Bernard's general assessment of the situation, though I tend to be a bit less negative about the level of the students. Although the average level of engineering students is perhaps dropping, Offshore Engineering and Renewable Energy is attracting a lot of top students. I also feel that the balance between analytics and numerics is not a problem as long as we keep the focus and philosophy of the workshop clearly on: "the interaction between water waves and floating bodies."

Practical aspects:

I absolutely agree that we should combat this modern trend of laptop and phone use during meetings. If possible, we should try to use smaller rooms without wi-fi, and perhaps also encourage people to step outside if they need to use these devices.

The total number/length of talks vs. number of rejected abstracts is always a difficult balance. We could consider fixing this number by committee which in the end could make the host's job easier.

I also agree that one or two presentations by sponsors is a good thing to highlight the practical concerns of industry.

All the best,

Harry

From Odd Faltinsen -- 12 April 2013

The arrangement of IWWWFB and the opportunity to meet with other people was as usual very good. The conference has high quality and very good reputation. The question is how we can improve the technical part in the future. I think it is a good idea to not make the schedule so tight and by listening to some of the presentations it is possible to reduce number of papers. Examples on content of papers that could be omitted are:

- 1. A minor part is new and a major part has already been published
- 2. Papers which only consist of presenting comparisons between established numerical methods with old results
- 3. Wrong physical models
- 4. Papers which are not up to date in knowledge about the established research

The centre of gravity should be analytical and numerical work dealing with water wave effects on marine structures. Relevant purely experimental papers must emphasize physics. The strategy of involving PhD students that present their work is important. The papers do not need to be complete work but one must be able see the potential for publication in a top international journal. The fact that IWWWFB is a workshop suggests that longer time should be spent on discussions. I have heard complains that the time for presentation was too short. However, I do not have strong opinions about this.

There should not be papers which are purely based on commercial CFD programs and which present results without physical discussions. Papers on new accurate and CPU (GPU)-effective computational methods should be encouraged. We should also encourage analytical work. I like papers such as the paper on Dean and Ursell results. There will always be a need for analytical models as well as the ability to simplify a theoretical problem based on physical arguments. In general we are looking for novelty. I do not favor that sponsors should talk. I note different opinions on this. Long time ago we started together with Delft and MIT the BOSS conference on behavior of offshore structures in Trondheim. Both soil mechanics, structural mechanics and hydrodynamics was dealt with. I believe that it was very successful in the beginning. The fact that we rejected many papers, may be 30 %, increased the quality. One should therefore not be afraid of a high rejection rate. We also decided to stop the conference. A reason was lack of novelty. I do not see this danger for IWWWFB.

I am optimistic about the future. I see from my desk many challenges in marine hydrodynamics. I could mention lowering and lifting of complex subsea systems in high sea states, accidental slamming loads and structural response on columns of deep-water offshore structures due to plunging breakers, sloshing-induced slamming response in LNG tanks, floating bridges and submerged tunnels with very long span (for ex. 4000m), nonlinear springing and whipping of ships, maneuvering of ships in irregular waves, speed loss of ships which not only account for the added resistance in waves but also the effect of waves on the propulsion, fish farming in the open sea.

From Diki Porter -- 12 April 2013

Dear all,

I suspect we will all agree over most points.

On the technical aspects, I completely agree with everything Odd has said.

I would also like to add that this discussion and these comments should in no way be taken as a reaction to or reflection on the last IWWWFB alone, but are part of a much broader view on the evolution of the IWWWFB. I would really like to thank Bernard for providing us yet again with a wonderful conference.

On other points:

I don't mind sponsors talks, but I think they should only be allowed to talk if they enter into the "spirit" of the workshop (presenting problems they are interested in) and do not use it purely for advertising.

I think we should ban the use of all electronic devices from the lecture room. In as much as it's possible given the venue, we should try to be more compact in our seating arrangements. The most successful meetings have been those without a reliance on microphones which always seem to cause more problems than they solve. We are only 90-strong (on a good day!).

Finally, I do think the workshop is generally healthy. I think the balance has been slipping away from analytical work over many years and that may just be the way things are going. But perhaps we need to encourage more of the really bright (younger) people who don't currently attend to come along. Although less frequent than perhaps during the 70's-90's there are still new and interesting phenomena being discovered (e.g. cloaking). Personally, I see ocean wave energy capture as the biggest practical challenge set for the ww/fb community -- this is still an immature and unresolved area of marine hydrodynamics. But both examples require a combination of analysis, numerical modelling and experiments and this is where the workshop works best.

Diki

From Rod Rainey -- 12 April 2013

Diki you have said exactly what I was going to say.

I agree completely with you on every point.

Rod

From Rod Rainey -- 12 April 2013

John and I have the following radical suggestion:

- 1. Halve the number of papers accepted.
- 2. Keep presentation-time strictly to 20 min, but have NO LIMIT ON DISCUSSION TIME, and allow discussers to PRESENT POWERPOINT SLIDES, if the chairman agrees.
- 3. Encourage authors of rejected papers to prepare such discussion slides in advance of the meeting.

Over the years, I remember many excellent discussions being curtailed, and several times wanting to show pictures in the discussion, and been prevented from doing so.

Regards

Rod

From Harry Bingham -- 12 April 2013

Rod and John,

It's an interesting idea, but I don't think it would work for two main reasons:

- 1. Very few people would attend just to participate in the discussions of other peoples abstracts.
- 2. The additional pressure of rejecting so many abstracts would most likely push out many PhD student contributions.

Best regards,

Harry

From John Chaplin -- 12 April 2013

Well there may be much in what you say Harry, but I do think that some space, and therefore flexibility, in the programme would be beneficial. After all, this is meant to be a workshop rather than a conference. We don't have parallel sessions that have to be synchronised.

Regards John

From Rodney Eatock Taylor -- 13 April 2013

Dear All,

I agree with the view that this was a wonderful Workshop. Bernard and his team did superbly well and hosted it in such style.

Now back home, I am able to join in this discussion (which I have tried to assemble into a single thread). I sympathise with the points that Nick has raised and on which others among you have commented, though it seems to me that the Workshop is still in pretty good heart: attracting good participants, many interesting papers, and (let's not forget) great enthusiasm to keep it going in the years ahead.

I agree however that overall the level of discussion was not as sparky as I remember at some other Workshops in the series (though this could also be a feature of just remembering the good times). Subjects that in the past have led to exciting discussions (trapping or impact for example), did not necessarily lead to much response despite presenting interesting new findings. I think the time allocated for discussion was about right (give or take 30 seconds!), but perhaps we just can't cope with so many papers. Like me, various people confessed to being rather tired: jet lag or old age may be partly responsible, but perhaps we should consider shortening the span of the formal sessions (I haven't checked how the programme compared with previous Workshops). And a smaller room (if possible without wifi), better supportive of audience participation, might indeed help.

I too was disappointed by some of the papers, generally for the same reasons as mentioned by Odd, and it may be that we should provide more elaborate guidance in the call for Abstracts (emphasising attention to the underlying physics). I am not so keen on actively encouraging papers focussed on new computational methods, unless we deliberately change the balance and go out to attract more of the world leaders in this area - surely at the moment we surely do still have plenty of hydrodynamic aspects to be discussed (admittedly the line is fuzzy; of course the balance may well change in due course, but we do not yet need to encourage this). I think it would be risky to allow presentations (based on slides) without a reviewed Abstract: that could just encourage self-promotion rather than facilitating productive discussion.

Best wishes,

Rodney

From Yonghwan Kim -- 14 April 2013

Dear All,

First of all, I would like to appreciate the effort of Bernard and his colleagues. Bernard and his team showed wonderful organization and teamwork, indeed.

I think that this kind of discussion is very important for the future of Workshop. It seems that most suggestions and ideas are pretty much close what I have been thinking. So I am not sure if my discussion is useful. But I would like to send some of my opinion as follow:

- 1. I agree with David's opinion that current topics can be kept. Probably I am one of participants with very diverse topics. However, the current scopes, i.e. water wave and floating bodies, cover the issues which are enough to call abstracts and participants. As Odd mentioned, there are still many topics in our field. I don't see a big reason to promote more topics for the workshop. In my school desk, there are more than 10 topics which Korean industry asks me to solve. All problems don't cross the border of the scope of this workshop.
- 2. I think that keeping quality is really essential. The quality is the main pillar of this workshop. Nowadays, there are numerous conferences, big or small. The primary difference of this workshop with such big or small conferences is its high standard of quality. I understand what Bernard mentioned about the quality of students in past and now. So we may need to put our expectation slightly down. To be honest, in the future, I feel that it will be impossible for current junior participants (relatively, I mean) cannot keep the same quality of seniors. All we can do is just doing our best. In this sense, I prefer to keep some traditions (?), e.g. participants can be from authors, co-authors, and session chairs. Also the number of presentations can be no more than a certain number. I assume that such traditions were created due to the same/similar reason that we are discussing now. As long as we don't decide to give up the original spirit of this workshop, we can go with such existing methods to control the quality. If the workshop is shrinking, we need to consider other choices seriously. But the workshop runs quite well and we are not aiming to a big conference.
- 3. If some people feel strongly that quality becomes lower than past, it may be due to increase of numerical results. We cannot avoid this trend. Though, I fully agree with the guideline proposed by Odd. Particularly we have to excuse the reject of abstracts which don't solve water waves and floating body motion. Also, the abstracts to introduce only computational results by using CFD or no physical meaning should be recommended to publish in other conferences.
- 4. We have to encourage introducing new problems. Call for abstract has described that on-going research can be introduced in the workshop. One of typical symptoms to transfer to more conventional conference is to bring more complete and formal forms of paper. Through this workshop, we need to share our interest and information for new problems and new approaches.

Participants of this workshop shouldn't be afraid to present incomplete results for emerging problems although the result is not complete. (but with a certain quality)

- 5. It may be a good time to consider the balance of experimental, theoretical, numerical studies. We can accept a little more abstracts for experiment, reducing slightly from theoretical and numerical topics. I understand that, nowadays, definitely more computational effort is made compared to experiment. However, still there are some excellent experimental works, and we can encourage submitting abstracts to the workshop.
- 6. I also agree to encourage industry people to get in our loop. They experience many new problems which are good for our research. Only one worry of mine is that it should be free of commercialism. I have many experience that the presentation from industry eventually goes to the point that their product/system/results/company are better than others.
- 7. One more minor opinion is to limit the number of abstract from one group. By limiting up to 2~3 abstracts from one research group, we can reduce the total number of abstract. leading to more discussion.

Yonghwan Kim

From John Grue -- 14 April 2013

Dear all,

In my mind this years IWWWFB was very successful, again, and thanks to Bernard et al for their very hard work and choice of compromises. The series Workshops is a tremendous success on its global mission, evolving from the joint MIT-Bristol initiative at the start, and reflects the contemporary research field of international marine hydrodynamics. This year's success can be deemed e.g. by the high number of submitted abstracts, 80 in total, making a real challenge to the hosts! It the Spitsbergen Workshop in 2005, I had 86 submissions, accepted 68 for presentation (15+5 mins each - after an email discussion with a reference group in advance). At that workshop complains were few. However, I do prefer a program with a number of 50 (or 50+) papers.

Regarding the low attendance at this years closing session, that is an anomali - past years workshops (Denmark, Greece, Harbin, Zelenogorsk etc.) had good attendance to the very end. I agree that some of the papers this year were repetitions. That should be avoided (responsibility of the paper selection committee). Regarding the presentations of the papers, it should be possible to communicate a rule that an introduction should include some main perspectives, references to early work, and results should be put into perspective. This point is possible to communicate to the authors/presenters.

Regarding subjects, I am not sure; contemporary marine hydrodynamics has a rather wide scope. The field evolves rapidly. I like this years presentation from industry; more of that is welcome.

To me the IWWWFB is the best international scientific meeting I go to, the network of scientists has been very useful for my scientific activity at many occasions, and it continues to be so!

I suggest we continue this discussion and also discuss it briefly at the Workshop Committee meeting, at the next years workshop!

All the best John

From David Evans -- 14 April 2013

The various views that are being expressed suggest that now is a good time to take stock in a more general way as to the progress and possible changes we might want to make to the Workshop format. There is a lot to be said for the saying `if it ain't broke, don't mend it' and there are a good many reasons for suggesting that it ain't broke. Nick and I could never have imagined that the Workshop would turn out to be so successful with often more than four future venues lined up and a large number of papers being submitted each year with many having to be rejected. We have clearly come up with a successful product and if we could have floated it on the London Stock Exchange we would have made a fortune by now! So it might be useful to ask which aspects of its format have contributed to its success. I suggest it is a combination of the following:

- 1. The relatively narrow focus on both water waves and floating bodies which attracts a mix of researchers from ocean and offshore engineering and naval architecture as well as theoreticians intrigued by the complex mathematics thrown up by even the simplified linearized equations.
- 2. The international emphasis in the Workshop which has resulted in an increasingly wide participation from different nationalities across the globe.
- 3. The simple rules on participation through presentation or joint authorship or chairing sessions to ensure attendance which puts a natural limit on numbers and eliminates hangers-on.
- 4. The absence of parallel sessions which means we all learn something outside our own interests and helps to create more of a cohesive feel to the Workshop.
- 5. The consistently high standard of local organization and the enthusiasm of hosts and helpers of which the current Workshop was a good example.
- 6. The twin aims of attracting younger workers in the field (helped by the Tuck Fellowship) as well as more experienced well-known figures ensuring that the subject is constantly refreshed and invigorated.
- 7. The continuing improvement of presentations through advances in computer technology.
- 8. The process of selection of accepted abstracts which, being in the hands of the current and the two previous hosts has ensured choice of papers is made by researchers from active groups who thereby play a key role in the future direction of research in the area.
- 9. The way in which topics introduced one year are developed by contributions by other workers in subsequent years, and the increasing citations of the online abstracts in papers in international journals.

10. The opportunity the Workshop provides once a year for 3-4 days for an international community of enthusiasts to travel to far-flung places around the world to meet up with old friends, make new ones and talk about the research topics they all enjoy most.

That said, we need to take note of some concerns and see if we can improve further the Workshop `product'.

Here are my suggestions in no particular order.

It has been suggested that the subject is less relevant than it used to be. I disagree. In my own area there continue to be exciting developments such as `cloaking', waveenergy and trapped or near trapped modes all of which have clear applications to the offshore industry. Many of our interests have their counterparts in other fields such as acoustics, elasticity and electromagnetism. However we must avoid complacency.

1. We need to embrace new relevant ideas into our field from other areas and encourage enthusiasts from related fields to contribute their fresh ideas to the Workshop.

It has been suggested that too many participants are opting out of too many talks. This appeared to be the case on the last morning although this could be a combination of exhaustion and catching flights home. Also those who do attend are often seen to be deeply engrossed in work or otherwise on their laptops or other devices. This is not a new phenomenon. It is just more obvious in this technological age. I plead guilty to my mind wandering during a less interesting talk, and have even been known to scribble some thoughts down on a problem of my own. I don't think we can exert any sort of undue pressure for participants to attend. Instead we have to improve the attractiveness of the `product'. For example, I am sure not everyone reads the full 4-page Abstracts before attending the Workshop. Therefore I suggest:

2. The guidelines for preparation of papers should include a requirement that all papers should begin with a short (maximum of 4 sentences) Summary of what the aim of the paper is and how it advances previous work. (Many people already do this but not all do in order to save space.) When the list of accepted papers is emailed, each title should include the short Summary (at a little extra effort from the hosts) which would signal clearly those papers of particular interest worthy of further study.

There has been discussion over the number and length of talks.

3. I believe that the optimum number of papers should be about 50-54. I like the 15 minute time for talks but suggest discussion of each talk be restricted to 5 minutes, during which time simple questions and clarifications could be sought. At the end of the 4 or 5 paper session, 20 or 25 minutes could be set aside for the Chair to invite more general discussion on any of the papers in the session. This would give time for participants to prepare a more measured response. (A drawback would be that only the last presenter would be able to refer to his paper.)

4. My proposed limit on numbers of papers means some good papers being rejected. In those cases only (i.e. good papers up to a maximum of about 10) I suggest researchers be invited to attend and prepare a poster version of their work to be displayed in the coffee room. This would stimulate greater discussion during the breaks.

Nick and I were keen to get a regular industrial input to the Workshop and for a while in the early years we did, although it never really worked. The handful of participants from industry never seemed comfortable in a purely scientific environment and too often they were scheduled to talk after dinner which might have been a mistake. There is one exception to this rule who is Rod Rainey and we have seen what a valuable industrial and scientific input he has made.

5. We need to work harder to attract more participants from industry to our community not least because the advancement of science and technology for the common good is, I believe, what we are ultimately about. The excellent talk by Laurent Bressot this year shows how important such contributions can be in stimulating our ideas. And of course they can provide us with valuable support.

I think that is probably enough for now.

David