

Closing Ceremony

Closing Address by Professor Keith Moffatt, President of IUTAM

Dear Colleagues, Ladies and Gentlemen,
We have now come to the Closing Ceremony of this Congress. We shall announce the Bureau Prizes in the course of this ceremony. But my first duty is to call on Professor Tim Pedley, Secretary of the Congress Committee, to present his report on ICTAM04.

Congress Report by Professor Tim Pedley, Secretary General of the Congress Committee

Well, Ladies and Gentlemen, another ICTAM has come to an end. It has been a wonderful Congress and the biggest yet – even slightly bigger than the Millennium Congress in Chicago four years ago. There were 1445 active participants, including students, up from 1430, from 57 different countries (up from 54). That last number is a welcome increase in view of IUTAM's aim of spreading interest and understanding in mechanics more and more widely in the world.

Some more statistics. The number of submitted papers exceeded 2000 for the first time: 2086, up from 1953. Remember that there is a strict rule that no single author may present more than one scientific paper (including seminar presentation), apart from those with contributions to make in the "Education in Mechanics" session. Of the 2086 submitted papers, 42% were in fluid mechanics, 49% in solid mechanics and 9% in topics with joint fluid and solid interest. 1571 (75%) of the papers were accepted by the International Papers Committee (IPC), 716 (34%) for lectures and 855 (41%) for seminars, while 515 (25%) were rejected. In the final programme the number of contributed lectures was 660, and seminars 654. Adding the 38 invited papers brings the grand total in the programme to 1352. There were, regrettably, a few "no shows" (52), so the total actually presented was 1300. I should add that even a number of senior professors found the opportunity for an in-depth discussion in front of their poster a rewarding experience.

This has been a resoundingly successful Congress, both scientifically and organisationally. On behalf of the IUTAM Congress Committee, and of yourselves, I would like to express our profound thanks to the President of the Congress, Professor Witold Gutkowski, and to the Secretary-General, Professor Tomasz Kowalewski, for their immense contribution

to ensuring that success. Possibly most impressive, on the organisational front, was the provision of fully synchronised computer facilities in all the lecture rooms, with the uploading of all computerised presentations in advance. Knowing the range of computers and software used by participants, you will appreciate that every single presentation had to be checked in advance, and modified if necessary, and this meant that a team of students and post-docs were working full time for several weeks leading up to the Congress. I would like to congratulate them on their success and thank them most warmly. The facilities in the building – number and size of lecture rooms – were very impressive and only occasionally did audiences spill over into the hallway. The building's topological complexity was a bit baffling at times, so that though every problem (in seeking a session) had a solution, the solutions were not unique and individual participants did not necessarily find the optimum. Maybe we should have an IUTAM Symposium on Architectural Mechanics and Topology, not forgetting the subset of Mechanics that is Acoustics. The intention to provide everyone with a quick lunch every day was somewhat ambitious, and the sandwiches, on the first day at least, were laminated rather inhomogeneously, with an excess of the outer layer. This led to some resourceful active remodelling. Keith Moffatt has already suggested a future mini-symposium on the mechanics of food. There was some relief, later in the week, when it became known that lunch tickets would be accepted in neighbourhood restaurants. All the administrative arrangements went well, and I would like to thank both the team from Mazurkas Travel and, especially, the team from the Institute of Fundamental Technological Research (IPPT) of the Polish Academy of Sciences, for their tireless efforts. We should also thank those institutions that have provided sponsorship for the Congress, especially the Polish Academy of Sciences and the Minister of Science, together with all the bodies named on the posters hanging in the Great Hall. This sponsorship enabled considerable support to be given to participants from countries with limited funds for the support of science.

On behalf of the Congress Committee, I would also like to thank the members of the International Papers Committee (IPC) for their dedicated hard work in evaluating and selecting the papers to be presented at the Congress. These were Professors Peter Monkewitz, Howard Stone, Bernhard Schrefler, Kazimierz Sobczyk and Viggo Tvergaard. A lot of reading was required in February and March of this year, and culminated in an intense four day meeting in Warsaw at the end of March. The IPC were guided by the recommendations of the chairs of the mini-symposia and the pre-nominated sessions, and by the national committees of nine major countries: Canada, China, France, Germany, Japan, Poland, Rus-

sia, UK and USA. All those involved in the paper assessment process deserve our warm thanks.

Now to decisions that the Congress Committee has made this week. By the end of May this year the Committee had received three very strong invitations to host the 2008 ICTAM. These were from Adelaide, Beijing and New Delhi. The bids were presented to the Congress Committee by the prospective hosts and were discussed in great detail at the meetings of the Congress Committee on Sunday 15 August and Thursday 19 August. The final decision was made on Thursday by secret ballot. There was strong support for both Beijing and Adelaide but in the end, as you heard at the banquet last night, the vote went to Adelaide, so the 22nd ICTAM will be held in Adelaide, Australia, at the end of August 2008. . .

Professor Keith Moffatt

Now, Ladies and Gentlemen, I have great pleasure in announcing that the Congress Committee agreed yesterday on the location of the next IUTAM Congress, which will be held in August 2008. As you will know, we have now held 21 Congresses, all in the Northern hemisphere. The next Congress will, for the first time, be in the Southern hemisphere. The Australasian bid to hold the Congress in Adelaide, South Australia, has been successful. The Congress President will be Professor Ernie Tuck, and I have pleasure in now inviting him to say a few words.

Professor Tuck expressed his gratitude for electing Adelaide for the next congress, inviting all participants to Australia in 2008.

Acknowledgments by Professor Witold Gutkowski, President of ICTAM04 and Chairman of the Local Organizing Committee

Mister President, Ladies and Gentlemen, Dear Colleagues,
The organization of an ICTAM consists, among other things, in co-operation of many bodies: Congress Committee, International Papers Committee, Chairs of Sessions, and National Committees of IUTAM. I would like to express our gratitude to all those, for their very effective cooperation, which facilitated our complex work of the Local Organizing Committee. Sincere thanks!

As you already know, there are three institutions standing behind the organization of ICTAM, here in Warsaw.

The idea of organizing an ICTAM in Poland has its long history. It originated in the Committee of Mechanics of the Polish Academy

of Sciences and at the same time the Polish National Committee of IUTAM. Without the intellectual encouragement of the whole Polish mechanics community, the organization of the congress in our country wouldn't be possible. This is then right time and right place to express my sincere appreciation to all members of the Committee of Mechanics, for emboldening us in the organization of ICTAM04. Thanks to you we could disseminate information about the Congress to a very broad international scientific community. Sincere thanks!

The Institute of Fundamental Technological Research, known as IPPT, has also been, for years, strongly supporting the organization of an ICTAM in Poland. When the Congress Committee of IUTAM invited us to organize the congress, the institute became the center of preparatory works. All scientists and administration were highly supportive. IPPT hosted meetings of IUTAM Bureau and XCC, as well as the International Papers Committee. I wish to express my sincere thanks to the directors of the institute, Professors Kleiber and Nowacki, for their help and for their patience, when watching the disorder inevitable in such situations and paying sharply growing telephone bills.

Thank you, Professor Kleiber, thank you, Professor Nowacki, thank you, all friends from IPPT.

The idea of organizing the Congress in Warsaw found many supporters at the largest university in Poland, the Warsaw University of Technology. The university has offered its beautiful edifice we are now in as a site of the congress. The organization of ICTAM here was strongly encouraged by Professor Stanisław Mańkowski, President of the university and the host of the Welcome Reception. Thanks to the team led by Professor Włodzimierz Kurnik, Vice President of the University and Cochairman of the Local Organizing Committee, together with Professor Stanisław Radkowski, we had this beautiful building prepared for our gathering. Several lecture rooms were specially adapted on this occasion. We have been guarded all the time and had medical assistance. Altogether, it was a great effort for the whole university administration. Professors Mańkowski, Kurnik and all friends from the university – many thanks!

Such a great event as our congress couldn't be organized without the help of a professional bureau organizing large conferences. We asked Mazurkas Travel to: take care of your money, make hotel reservation, serve lunches and coffees, prepare poster stands, transportation, organization of excursions and many other things for good comfort of participants. I hope you have enjoyed the service of Mazurkas Travel. Let me then express my thanks to Mazurkas Travel and its director Mrs. Barbara Zygmunt.

The dissemination of information started with the first announcement and then continued with the second. The nice booklet of the second announcement is the work by Professor Krzysztof Doliński, member of the Local Organizing Committee. Next, closer to the Congress, there was an increasing need for a larger team to build the whole congress infrastructure. It had to include plans of all lectures and their assignment to particular rooms, porter stands. A great and highly responsible job was to upload the lectures sent by the authors. Then, the control everything is working well during the conference.

It is impossible, to mention by names all young volunteers, mostly PhD students. It has been a real pleasure to see all those strongly motivated young girls and boys working hard and trying to do their best way. They were led by two extremely active and efficient members of the Congress Bureau – Mrs. Izabella Ślęczkowska and Dr. Kamil Kulesza.

Professor K. Doliński, Mrs. Ślęczkowska, Dr. Kulesza and all young volunteers, your contribution to the successful Congress cannot be overestimated. Thank you!

Last but not least, I am acknowledging the heart, soul, brain and calculator of the Congress organization – Professor Tomasz Kowalewski, Secretary General of ICTAM 2004!

You have been meeting him from the beginning, at the congress page, that is since September 2000. Tomasz has loaded for you all update information. For the first time in the history of IUTAM Congresses, participants could see the program and read an abstract and extended summary of an arbitrary paper, still being home, before reaching the congress site. This was Tomasz's idea and his realization. The perfect preparation of the meeting of the International Paper Committee helped much to take right decisions on accepting papers for presentations. Again, this was Tomasz's idea and realization with the help of several PhD students. Suffice it to say that each of 2000 papers could be found within seconds by title, author's name or country.

And with all that, thousands, thousands of e-mails sent and replied to. It is impossible to enumerate all the works he has done, but I should add at least two others. He kept our finances under strict control and he infected the minds of all young people who worked with him with his enthusiasm for organization of ICTAM 2004.

Here I must mention my own contribution to the Congress. It is probably not modest to praise myself, but in this case it is justified. I did two important things. First, I invited Tomasz to be the Secretary General of the Congress. Secondly, I didn't disturb Tomasz in what he was doing.

There are not enough words to express my deepest thanks to you and I hope all participants will join me in conveying you our sincere thanks for your great contribution to the success of the Congress. Thank you, Tomasz. In order to commemorate your great contribution to organization of the Congress, let me hand you this 19th century statuette of a Bacchanate, a woman, as we know enjoying good wines. The statuette is inscribed in Polish: *To Professor Tomasz Kowalewski for his outstanding contribution to organization of ICTAM04. Organizing Committee.*

IUTAM Bureau Prizes – Professor Keith Moffatt (certificates), Professor Witold Gutkowski (statuettes)

The members of the Bureau have this week been attending many lectures and seminar/poster presentations given by young researchers. The word 'young' is of course a relative term: I regard everyone younger than myself as young! But to be eligible for a Bureau prize, you must be really young, and that means under 35 years of age. The Bureau met today over lunch to agree on the winners, and I have to say first that the competition was a stiff one – we may well say of Olympic standard; and three 'gold medallists' have emerged from this competition. The prizes consist of a certificate, a cheque for \$500, and, as a special gesture from the local organisers, a beautiful owl, symbol of wisdom, cast in bronze.

The three prizes are awarded as follows:

- Ingo Kaiser, of the Institute of Robotics and Mechatronics, Wessling, Germany, for his lecture on “The running behaviour of an elastic wheelset”; Ingo gave a beautiful demonstration of the effect of elastic deformation on the stability wheels running on a track; you should be warned of this if you plan to return home by rail after the Congress!
- Taisuke Sugii, of the University of Tokyo, Japan, for his seminar/poster presentation entitled “Molecular dynamics study of permeation process of small molecules through a lipid bilayer”; biomechanics is a field of tremendous potential and rapidly growing importance; this paper provides an excellent example of the application of mechanical principles at the biomolecular level.
- Pantxica Otheguy, of LadHyX, Ecole Polytechnique, Palaiseau, France, for her lecture on “Instability of corotating vertical vortices in a stratified fluid: why strongly stratified turbulence is not similar to 2D turbulence”; Pantxica gave a beautiful interpretation of the ‘zig-zag instability’ to which such vortices are subject, illus-

trated by a video of an experiment showing the nonlinear outcome of this instability.

We congratulate these three young scientists on the excellence of their presentations.

Ladies and Gentlemen,

This week the General Assembly of IUTAM met twice, and as part of its business elected its new Bureau to serve our Union for the next four years from 1st November 2004.

The President will be Professor Ben Freund from Brown University, Providence, Rhode Island, USA, who has served IUTAM so successfully as Treasurer for the past eight years. Professor Dick van Campen will continue as Secretary-General for a further four-year term. Dick has been extremely successful in implementing recommendations of a previous Appraisal Committee, both as regards setting up Working Parties in nine different priority areas, and in developing an excellent website for IUTAM, at which information about all our activities can be easily accessed. We are most grateful to him for his willingness to continue to carry this heavy responsibility.

Professor Juri Engelbrecht, from Estonia, who has served on the Bureau for eight years, has accepted the important position of Treasurer. I myself continue, according to IUTAM rules, as Vice President for the next four years. Four other members of the Bureau have been elected by the General Assembly. These are: Professors Tsutomu Kambe (Japan), Alfred Kluwick (Austria), Niels Olhoff (Denmark) and Zhemin Zheng (China).

I wish to thank the retiring members of the Bureau, Carlo Cercignani, Roddam Narasimha, Jean Salençon and Werner Schiehlen (retiring Vice-President) who have served with great conscientiousness and wisdom.

We have also elected four new members-at-large of the General Assembly, in recognition of their distinction in mechanics and their service to our Union: these are Professors Andy Acrivos (USA), Sol Bodner (Israel), Werner Schiehlen (Germany) and Franz Ziegler (Austria). So you see that we have done our best to ensure that IUTAM will continue to be well governed!

Now I just have to add some words of thanks myself: first to my old friend and colleague, Tim Pedley, who will continue as Secretary of the Congress Committee for a further four years. This is a task of great responsibility, which Tim has carried out with flair and efficiency. I ask you to join me in thanking him.

Second, I wish to thank Witold Gutkowski, who has been such a gracious host to us here in Warsaw. The smooth running of the Congress owes much to his efforts over the last four years.

Finally, I wish to echo Professor Gutkowski's remarks concerning Tomasz Kowalewski, Secretary-General of the Congress. Tomasz has been indefatigable in his control of every detail of this immense organisation, in which he has shown amazing skill, patience, good humour and efficiency, and we all owe both Tomasz and Witold a resounding vote of thanks.

And even more finally, I wish to thank all of you, Invited Sectional Lecturers, Convenors of Mini-Symposia, Chairmen of Pre-nominated Sessions, contributors of lectures and seminar/poster presentations, and all of you who by your presence have made this Congress such a brilliant success.

I wish you all a safe journey home, and will look forward to seeing you again down under in Adelaide in August 2008, if not before!

Keith Moffatt