

# INDC-372

## INTERNATIONAL NUCLEAR DATA COMMITTEE

REPORT ON THE
HELSINKI CONFERENCE QUESTIONNAIRE

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The participants in the Second International Conference on Nuclear Data for Reactors were asked to give their comments on the arrangement of the conference. A questionnaire was given out (see appendix) and 66 or about one third of the participants returned it, some of them with quite extensive comments.

#### GENERAL COMMENTS

One comment of very general nature, made by Dr. John Story, deserves to be quoted in full:

"It is always easy to be critical. There were too many papers, but it is a pity that so many had to be excluded. There was too little time for presentation - but too much time was wasted on tedious experimental technicalities (the speakers should speak only in general terms of the improvements made, since the detail is given in the paper). The balance of papers between differential measurements, evaluations, and integral applications can be criticised, and their arrangement through the course of the day, and from day to day, can also be debated at length. But in fact the virtues of such a conference are as follows: 1) People are encouraged to bring their work to a definite state so as to produce their papers, instead of endlessly delaying. 2) One learns as much from the unexpected: e.g. a stray comment which reinforces one of ones own half-formed ideas. 3) The personal contacts made are always important."

In his comment, Dr. Story touched upon most of the subjects which were touched upon in a large number of the comments which were received:

(i) - The schedule was too tight. Too many papers were included,
 which prevented sufficient time for discussion.

- (ii) The balance of papers should have been better. In particular, integral measurements and applications were, according to many, rather neglected. One suggestion was, that reactor physicists should be invited to speak on (a) the needs for data, (b) the form of needed data and (c) on the use of the data (codes, comparisons with integral data etc.).
- (iii) The detailed schedule, that is the arrangement of subjects, was much commented upon. The need for parallel sessions for all or part of the conference was expressed in seven comments. Two preferred a strict rapporteur system with few papers or even only the invited papers read. One suggested that the chairman and the contributors meet in a preparatory meeting only to choose papers and rapporteurs. One suggested that there would be some advantage to start with users' needs, follow with evaluations, and end with the measurements.
- (iv) The personal contacts that one can make during a conference are always important. Many participants suggested improvements, such as - to mention a few - better facilities for small informal evening meetings; time for informal contacts should be reserved in the program; a "message centre" could help the participants to find each other.

## MEETINGS, SUBJECTS AND SCOPE

Question number one gave the following result:

- (a) The scope of the conference is too narrow. I would like to see further subjects covered, as given in comment.
- (b) The scope of the conference is 0.K.
- (c) The scope of the conference is too wide. I should prefer several smaller symposia covering various subfields as given in comment.

Most of the answers with alternative (a) were combined with comments to the effect, that integral data deserved more emphasis. Possible subjects for meetings were given in the comments to this question and to question 4. We shall list them all here, as they could span from conference size to small experts' meetings.

ν, η and α measurements

(n, γ) cross sections in the range 10 keV - 5 MeV

Neutron flux measurements

Integral data from reactors

for 235<sub>U</sub>

Absolute cross section standards

Evaluation methods and problems

Differential cross sections

Theoretical interpretation of criticals

Integral data from critical experiments in D<sub>2</sub>O lattices

Status of fission products data.

235<sub>U</sub> (or <sup>239</sup>Pu) cross sections and comparisons with integral measurements.

Data and methods for the measurement of neutron fluences and spectra

#### EXPERTS MEETING IN PREPARATION FOR THE CONFERENCE

Question number 2 gave the following result:

Assuming that for a following conference in a few years the scope will be the same as for this present conference:

- (a) I believe that an increase of submitted contributions should be met by a smaller number of accepted papers.
- (b) I believe that a number of subfields should be separately treated, each in a smaller expert's meeting before the conference in the vicinity of the conference itself, and reported at the conference.
- (c) I have the following alternative suggestion: ...

An overwhelming majority voted for a system of experts preparatory meetings. Voices were raised, however, against "experts keeping themselves to themselves", and they generally preferred parallel sessions, evening sessions, etc. One possibility, given in several suggestions, is to have a conference consisting of parallel sessions on special topics in the first half, followed by the second half with plenary sessions, in other words, to make the "experts meetings" an integral part of the conference. Some suggestions here went very far: "Accept contributions as abstracts, have only few papers read and devote most of the time to discussions." One suggestion was to reduce the number and length of invited papers, while another one was to have only invited papers in plenary sessions and others in parallel sessions.

In general, many complaints were registered about the short time given to the reports from the experts meetings at this conference. Even two reports reflecting different viewpoints might be needed in some cases according to one suggestion. One participant goes so far as to say that the system of experts meetings before the conference is the <u>only feasible</u> solution, and recommends such a large number of such meetings, that everybody could attend at least one of them.

#### PARTICIPATION - PRESENTATION

Question number 3 gave the following result:

Assuming (according to alternative 2.a) that for a future conference, a smaller number of contributions would be accepted.

- (a) I think, that my institution would object to participation in the conference without the presentation of a paper.
- (b) I think that, at my institution, the participation in a conference is not much dependent upon the presentation of a paper.

A few comments were given to this question. One pointed out that, with a scheme of experts meetings, participation in such a meeting might compensate for not presenting a paper at the conference. A couple of comments suggested other factors as more important (economical, peographic). One comment was "I think we would always have something to contribute!"

## PARTICIPATION - EXPERTS MEETING

Question number 4 gave the following result:

Assuming (according to alternative 2.b) that a number of subfields will be the subjects of preparatory meetings before a future conference on nuclear data with subsequent summary reviews given at the conference.

- (a) I would probably be able to participate in the conference and a preparatory meeting on the subject ....
- (b) I would probably be able to participate in the conference only.

Only a few topics were added in alternative (a), and these have been mentioned in connection with question number 1.

#### PROCEEDINGS

Question number 5 gave the following result:

- (a) I have ordered the proceedings of this conference at halfprice on my own expense.
- (b) I have ordered the proceedings and will be reimbursed by my institution.
- (c) I do not intend to take advantage of the offer to purchase the proceedings at half-price.

A number of participants who indicated alternative (c) commented that they will receive a complimentary copy as chairman for a session. (By the way, this was the only bias which was discovered in the selection of people who returned their questionnaire: a surprisingly large fraction of the chairmen submitted their answers). A few of them stated that they would have chosen (c) anyway.

#### CONFERENCE ARRANGEMENT'S

Question number 6 gave the following result:

The <u>arrangements</u> of the present Conference have been, in my opinion:

opinion:			
-	From administrative point of View:	From scientific point of view:	By the host country:
(a) excellent	26	17	46
(b) very good	29	<b>2</b> 5	
(c) good	7	18	
(d) no good		2	

We had invited comments after this question and comments we received.

It would be easy, but fairly useless, to mention the excuses we can find against the critical comments. Our self-confidence has not been damaged seriously, thanks to a number of very encouraging comments.

It should first of all be quite clear that the figures quoted for question 6 do not give a fair balance between the work of the scientific and the administrative secretaries of the conference.

Many participants criticised as "Administrative" as follows:

- "The pre-conference arrangements (invitations, paper review, etc.) appeared to have received an amazing lack of attention (The one who made this comment chose "very good" from scientific point of view, but abstained for the administrative part).

- "My criticism is based purely on the poor timing of acceptance of papers, etc." (This comment was added to a "good"-vote from scientific and a "no-good" vote from administrative point of view.)

In other words, the part of the arrangements, which were the responsibility of the <u>administrative</u> secretary, has not been criticised and deserves a better mark than the figures for question 6 actually reflect.

Most other critical comments dealt with the insufficient time for discussion, the very late distribution of papers (this is presumably sort of self-criticism from the physicists?), with the very late decisions on chairmen and summary panel participants, etc.

### Suggestions of positive nature:

- The briefing sessions could be made longer and more in advance, so that a chairman is familiar with all the papers in his session.
- Shipping home of documents by surface mail should be free and arranged by the IAEA. (I'm afraid that the one who suggested this doesn't realize that the cost for such a service would be very high.)
- All abstracts submitted (also the rejected ones) should be distributed in advance to all participants.
- Papers on more specialized subjects should be treated differently, to allow more discussions of general character.

## THE QUESTIONNAIRE

One participant suggested that a questionnaire, like the present one, should be issued to others in the field as well; not only to conference participants.

Another comment here touched upon a subject which was mentioned in the general comments by several others:

To translate only abstracts and to publish the different papers in their different original languages in one book was not regarded as satisfactory, and it was suggested that the opinions in the scientific community regarding this policy should be surveyed in a questionnaire. Cenerally the participants are probably not aware of the difficulties involved, which can be demonstrated by one comment:

"I would like to see the early deadlines on abstract and paper-submission abandoned. Manuscripts should be requested only at the time of the conference, and the proceedings should be printed 2 - 3 months after the conference, as was achieved e.g. for the Washington conferences on Neutron Cross Section Technology. There should be no need to send extra copies to a technical editor. All papers should be in one language; there should be an English, a French and a Russian version, if English is not enough. Translations should be made at the Agency."

## CBSERVATIONS. SUMMARY

Comments like the one quoted in the previous paragraph might seem to require no counter-arguments, but I believe that they reflect a certain lack of communication between the Agency and the scientific community, particularly with respect to the particular conditions under which the Agency as an international organization must fulfil its obligations. This was also reflected in the many suggestions on parallel and evening sessions, on "no coffee-breaks", and in the criticism against the organisation of deadlines and the distribution of preprints in whatever language, connected with the need for official nomination of participants.

Very particular difficulties involved in the arrangement of Agency conferences and symposia are largely due to the multi-lingual character of the meetings. Personnally I believe that this must be regarded as a firm boundary condition, as the international organisations in a unique way can bring about better contact between people from different parts of the world. Another cause for difficulties is the delay of communications through

"official channels". For the Helsinki conference, for example, this can be demonstrated by the fact that after the deadline (1 February) about half of the contributed abstracts were received - a dozen as late as in May, less than one month before the beginning of the conference. Some of the most important contributions were in this group, and it would not have been in the interest of the scientific community to reject these. We have reason to believe that most of the authors of very late abstracts had submitted their contributions in time. Similar experiences were made for some of the invited papers.

Any meeting will have its boundary conditions, and I don't think that we should regard the arrangements of Agency conferences as more restricted by the difficulties which we have mentioned than, for example, national meetings, but they certainly make the conditions different. In recent years, many meetings of new kinds have been tried. As an example we can mention the Gordon Conferences, which have been very successful with their very informal character. The advantages of an informal atmosphere are difficult to bring out in a large meeting where interpretation is necessary. Therefore, I regard a system of small "experts preparatory meetings" - to be considered as an integral part of the conference - the only way to combine an informal atmosphere with the interpretation system. Such an approach would have the additional advantage of full publication of all papers which are of interest to scientists outside the small experts group on a for the Agency financially sound basis.

#### ACKNOWLEDGEMENT

My thanks to the sixtysix co-authors who so willingly supplied me with their sincere and valuable help in writing this report. Their contribution will be most helpful in the planning of the next Conference on Nuclear Data for Reactors.

# QUESTIONNAIRE

Please fill out the enclosed questionnaire as completely as possible and return it, during your last day of attendance, to the Registration Desk. Your eff rts to answer this questionnaire will be very much appreciated and will contribute to meaningful statistics.

#### BACKGROUND

An extraordinarily great interest in the Second International Conference on Nuclear Data for Reactors has been reflected in the submission of more than 180 abstracts of contributed papers, in addition to the more than 20 invited and special papers foreseen for the Conference. As it was obviously impossible to accept each submitted paper, it was felt desirable that, in two well-defined and within the scope of the Conference particularly important subject fields all presently available results should be presented and extensively discussed in two experts meetings before the Helsinki Conference. These meetings were arranged, with the kind support of the Swedish Authorities, in Studsvik/Sweden, during the week preceeding the Helsinki Conference.

The development in the field of nuclear data might require certain revisions of Conference policies. You opinion is needed, so that we can give you a better service next time.

NAME	(opt	ional)	• • • • • • • • • • • •
1.	(a)		The scope of the conference is too narrow. I would like to see further subjects covered, as given in comment.
	(b)		The scope of the conference is O.K.
	(c)		The scope of the conference is too wide. I should prefer several smaller symposia covering various subfields as given in comment.
	Comm	enti	

2.	Assuming that for a following conference in a few years the scope will be the same as for this present conference:				
	(a) I believe that an increase of submitted contributions should be met by a smaller number of accepted papers.				
	I believe that a number of subfiels should be separately treated, each in a smaller expert's meeting before the conference in the vicinity of the conference itself, and reported at the conference.				
	I have the following alternative suggestion:				
3•	Assuming (according to alternative 2.2) that for a future conference, a smaller number of contributions would be accepted.				
	(a) I think, that my institution would object to participation in the conference without the presentation of a paper.				
	I think that, at my institution, the participation in a conference is not much dependent upon the presentation of a paper.				
4•	Assuming (according to alternative 2.b) that a number of subfields will be the subjects of preparatory meetings before a future conference on nuclear data with subsequent summary reviews given at the conference.				
	(a) I would probably be able to participate in the conference and a preparatory meeting on the subject				
	(b) I would probably be able to participate in the conference only				
5•	Proceedings				
	(a) I have ordered the proceedings of this conference at half price on my own expense.				
	(b) I have ordered the proceedings and will be reimbursed by my institution.				
	(c) I do not intend to take advantage of the offer to purchase the proceedings at half price.				

6.	Ine arrangeme	ura of the bresent C	onference have been, i	n my opinion:
		From administrative point of views	From scientific point of views	By the host country:
	(a) exceller	nt 🗀		
	(b) very goo	od.		
	(c) good			
	(d) no good			
	Suggested imp	provements:		
7•		? What would your o	have like to see raise wn answers have been t	
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8.	Other comment	is:		