

# The President's Report

The report of the President, M. Jacob, that will be sent to Council delegates so they can consult their colleagues before the Council meeting in Athens on 27/28 March 1992.

"Drive thy business, let not that drive thee"  
"Lost time is never found again"

Benjamin Franklin

These two quotes suit well the Society's present situation. We have already given some thought to a restructuring which, following the wish expressed by Council last May, will be thoroughly discussed at Council in Athens next month. While it is clear that we operate under very strict financial boundary conditions, we ought at least initially know what we *should* do, rather than merely reflect on what can be done with what we presently have. For we should try to drive the Society and not be driven by its presently limited resources. This is one thing. But the most important aspect at present is the proper exploitation of the golden opportunities offered by the disappearance of barriers which divided Europe for so long. Expectations are great: the difficulties speak for themselves.

Fostering east-west collaboration remains the main and urgent task of our Society. There is no time to be lost. We have to continue identifying the best ways for action, and then act: we should feel privileged to live during such a challenging but promising period.

While these themes are preoccupying, I shall turn first to more routine matters, EPS has maintained a good level of activity throughout 1991 — activities that were to a large extent those of the Divisions, Interdivisional Groups, Action Committees, and task forces, each operating at the full European level. Many conferences, meetings and workshops were organised, detailed reports of which will be summarised in *Europhysics News* after Council.

In focusing on a few topics which concern the Society as a whole, I note that I have already served for about a third of my anticipated mandate, so this is the proper time to present the lines of action which have been initiated, and to indicate how their continuation is perceived at present. While some balls have been set rolling recently, many of the actions taken in fact follow initiatives started before May 1991 when the last Council took place.

## Restructuring

The Executive Committee has been working on restructuring following the mandate of Council. We were given the task to propose a suitable scheme, whereby all individual members of the Member Societies would also become directly affiliated with the EPS. The main purpose of the restructuring should be to increase the visibility of EPS, both within and outside the physics community. A Society of some 60 000 members could play a strong rôle in the life of physics in Europe. Divisions and Committees operating from a base ten times larger

than the present one would be able to increase their activities considerably.

So restructuring was a very important item on the agenda of the Executive Committee meetings in Geneva, in August 1991 and again in January 1992, and in Budapest last October. Much discussion took place in preparing for them and a position paper drafted by the Executive Committee was sent at the end of 1991 to the Presidents of the Member Societies, to Division and Action Committee Chairmen, and to the IOM delegates. In proposing a restructuring scheme, it remains first of all a *consultative* document. Benefiting from reactions, the Executive Committee will write a working paper as the basis for discussion at the next Council, where it will be an important item on the agenda. If, as we may now hope, a line of action can then be defined, we shall continue our work in order to prepare a scheme which could be proposed for approval at the following Council in March 1993, with implementation foreseen on 1 January 1994.

Many challenging questions still call for satisfactory solutions and the boundary conditions are tight. We should not rush but keep working. The working paper lists the lines of action along which the EPS could extend its activities as a result of its increased strength and visibility. The document proposes that, according to the new scheme, all members of the national societies would receive *Europhysics News* as a clear sign of their membership, and all would be eligible for election to the Boards of Divisions, Interdivisional Groups, Action Committees, and task forces. The proposal tries to minimise the extra financial support required from the National Societies while aiming to even out their contributions per member. A national society joining the scheme would become a "full membership society" and it is anticipated that all will eventually join, although the scheme allows for a gradual implementation. Representatives from the Divisions would be given a larger relative weight at Council.

After this brief survey of the present state of our work on restructuring, I shall very briefly turn to finances and to the operation of our Secretariat. This is limited to generalities: reports

Prof. N. Kroo (on the left), Vice-President of EPS, and Prof. R.A. Ricci, immediate past President, talking to E. Jakeman (on the right) at the Executive Committee meeting in Budapest.

to Council by the Treasurer (Ed.: summarised on page 37) and the Secretary provide more detailed information.

## Finances

Restructuring was partly motivated by our past financial difficulties. There are, however, limits to the support which we can receive from national societies in the present circumstances. The line followed is therefore indirect: we aim to achieve an improved financial situation from increased visibility — from a larger membership but most of all from a greater visibility in term of actions. The proposed scheme would help greatly if adopted in its general lines, but we still need to work out a solution for what we call in physics a "bootstrap" problem to have the scheme move forward. Our finances are now in good order and we expect to have cleared our accumulated deficit by 1993. However, the situation still needs much attention, especially since the present operation of our Secretariat with the Executive Secretary based in Budapest should be considered as a temporary mode. The financial situation is regularly monitored by a finances task force having members of the Executive Committee as its permanent nucleus.

At present some 36% of our resources come from the Member Societies, 24% from our Associates, 22% from IOM contributions, and 13% from *Europhysics News*. The finances task force has played a particularly important rôle in working to convince Associates of the importance of helping directly the Society's initiatives through financial and other forms of support. But help from everyone is very much needed! Keep trying to convince colleagues to become IOM's. Try to convince companies or research organizations to become Associates. The situation has already improved but we hope to make still more significant progress. *Europhysics News* assists in making what we are doing more widely known. Present increasing interest in our bulletin should be a great help in enticing others to join the Society.

## An appeal for sponsors

We consider that all fees should now be paid in Swiss francs, or the equivalent, but we do not want to have a two-tier society with two or more levels of fees. We should take as a working hypothesis that the present great disparity in income between our





western and eastern members will eventually decrease. Nevertheless, changes will be slow and we should show much understanding towards our colleagues from central and eastern Europe. I therefore turn to the richer societies in the west and ask them whether they would partly sponsor their partners in the east for a limited time so that fees are properly paid. Including the former Soviet Union, we are talking about 70 kSFR each year, out of which we shall probably have to find a significant fraction through sponsors during the coming two years. If, as I hope, our Member Societies are willing to help, this global figure indicates the amount which could be pledged for a special entry on our budget. While the Society will cope with any shortfall, we should consider it a matter of principle that all fees are properly covered.

The situation is even more critical for IOM's since fees presently represent an excessively large fraction of a physicist's salary in central and eastern Europe. In this case we are talking about 15% of our IOM's. I now turn to our IOM's in the west and ask them "Are you willing to cover the fees, or part of the fees, for a colleague in central or eastern Europe for a year or longer?" An appeal along these lines has already been launched by Professor Buckel in Germany. Perhaps others would consider doing the same elsewhere?

Once again, collecting full fees is a matter of principle, quite independent of the resources they represent. As discussed later, the Society as a whole should find the best ways to help keep physics alive in the east. We are busy at it. A gesture from the Member Societies and the IOM's would clearly demonstrate the great concern for the present situation, and would be an extremely valuable encouragement to all.

#### Full involvement

We are ambitious when it comes to actions. But we have limited resources. Indeed, because of the present difficulties with research funding, many physicists are encouraged to take an early retirement. We should try to take a positive look at the problem by appreciating that there is a gold mine of competence and talents which we would like to exploit to the full in fostering actions by our committees and task forces. While meeting travel and ancillary expenses always remains a problem, it is nonetheless extremely valuable if we can call upon the time and goodwill of experienced physicists. To all those that this may concern, I would like to stress that our Society offers many opportunities for action in domains where it wishes to expand activities.

#### The Secretariat

Speaking in general terms, the operation of our Secretariat, with both a Geneva and a Budapest component, has been working as well as one could hope. Quoting again from Benjamin Franklin, I should say in this respect that "It is easier to build two chimneys than to keep one in fuel". Yet we managed. We should, however, acknowledge the difficulties which have to be met by our Exe-



*On the left, Maurice Jacob, President of EPS, thanking Professor T. Fujii, Chairman of the IUPAP Particles and Fields Commission, for IUPAP's co-sponsorship of the 1991 LP-HEPP Conference.*

cutive Secretary and the rest of the staff. Their work and cooperation commands praise. Our goal is to bring the Executive Secretary back full-time to Geneva by the end of 1992. By then the Budapest branch will be able to efficiently deal by itself with some specific tasks. At present, and for a few years, this branch represents an opportunity to quickly extend, if needed, the tasks entrusted to the Secretariat.

#### Some Specifics

I now turn to some specific points which are worth a special mention this year. In presenting some of our activities, the list is by no means exhaustive. More extensive and timely reports can be found in *Europhysics News*.

#### East-west collaboration

East-west collaboration has always been a focus for the Society's activities and will remain so in the foreseeable future. The recent political developments have brought wonderful opportunities and raised great expectations, but the difficulties are all too apparent. Help to colleagues from central and eastern Europe was mainly channelled through the Action Committee for Physics and Society (ACPS). Responding to their request, as formulated in the framework of our east-west task force, which has become a very efficient forum for the exchange of ideas and defining initiatives, the ACPS organised a workshop in Dagstuhl, Germany, last August. It brought together representatives of the main research organizations in western Europe and representatives from national societies elsewhere. It was a great success, being instrumental in defining the best ways to find financial support and to foster collaboration according to a "bottom-up" procedure. We are now trying to help along such lines as much as we can: a Directory of research institutes is being set up and assistance for international peer reviews will be implemented. ACPS has also monitored help for libra-

*Participants at the annual meeting of the Associates being shown a world-class acoustic chamber at the Vibroacoustic Laboratory in Cracow.*

ries and for instrumentation. Contacts with the American Physical Society (APS) have shown that the APS is eager to collaborate with us in helping improve the situation in central and eastern Europe and we are actively following up this possibility.

Visits to Poland, Czechoslovakia and Hungary have been the occasions of very interesting and constructive discussions. We organised the annual meeting with our Associate Members in Cracow, in September, in conjunction with the "Physics for Industry, Industry for Physics" Conference, while the meeting with the Chairmen of the Divisions and of the Action Committees took place in Budapest, in October.

Physical societies in Albania, Estonia and Lithuania have applied for membership. After hearing about their activities and reading their Constitutions, the Executive Committee decided at its October meeting to recommend them for membership to Council. Decisions should be reached in Athens.

The situation of physics research in the former Soviet Union is a matter of great concern. While we maintain our long association with the Soviet Academy of Sciences, we are also in contact with the Moscow Physical Society, the Soviet Physical Society and the recently formed Russian Academy of Sciences. We are exploring ways to help keep a vigorous physics community. Much the same can be said about the disturbing situation to Yugoslavia, where physicists are represented in EPS by the Union of Yugoslav Societies of Mathematicians, Physicists and Astronomers and by the Institute "Ruder Boskovic".

We have been staying in close touch with CERN on east-west affairs as the organization plays a leading rôle in the scientific integration of Europe. Our thanks go to the NATO Scientific Affairs Division and to CERN for the valuable help provided to our east-west task force.

#### North-south collaboration

Special mention must be made of the very successful 1st EPS Southern European School of Physics which was held in September in Avila, Spain. It benefited much from support from Spanish colleagues. The school dealt with topics in molecular physics and a software teaching aspect, organised with the help of IBM Madrid, was an interesting and valuable experiment which should be repeated. The next school, on





laser physics, will be in Crete, Greece, in 1993. These Southern European Schools are somewhat special among the many summer schools as students must be fully supported and the topics covered have to promote research already well implemented in southern Europe. Funding comes mainly from UNESCO, the European Community (EC) and local sponsors.

#### *Relations within Europe*

We have remained in close contact with the DG-XII of the Commission of the EC. Approval of the new Framework Programme for science has been delayed, but we hope to be involved with its implementation in physics as soon as this becomes appropriate. Visits to Brussels are being maintained and *Europhysics News* regularly offers information on opportunities in physics. Our direct contact with Brussels is operating very well.

The outcome of visit to the European Science Foundation (ESF) in Strasbourg last July is summarised in a report which has been circulated. It was the occasion to itemise many points on which the EPS and the ESF could coordinate actions. The ESF is eager to work with us in physics. Special mention should be made of the organization of the European Research Conferences (ERC's) that are operated in the framework of the ESF with EC funding. EPS agreed at the beginning of the scheme to integrate its Study Conferences that had been running for 20 years. However, owing to some restrictions on organizers, it was decided in 1991 to continue holding separate Study Conferences. EPS continues to act as the adviser to the ESF for physics, and ERC's are proposed and run by our Divisions. We are happy that six ERC's in physics took place in 1991 and 10 are scheduled for 1992. It is hoped that such activities will greatly increase during the course of the next DG-XII programme when it is finally approved.

The progress of the EC Erasmus and Tempus mobility programmes are being closely monitored and one would hope to be increasingly involved with their implementation. We are working on student mobility and on physicist's qualifications at the European level. For the latter, fields close to health and safety require special and urgent attention.

EPS should appear as the natural partner when it comes to pan-European physics. Owing to limited resources, we must sometimes rely on goodwill and direct help. Nevertheless, we should try harder since this is the best way to increase visibility and eventually resources and means of action. Much should be done in close collaboration with Member Societies.

The EPS should also offer an effective forum for shaping constituencies for the most promising, new, international research facilities. Initiatives in two directions, nuclear physics and supercomputing, have been assisted in 1991. This is also a domain where we could efficiently act in association with the ESF where our help would be welcomed. The Divisions and Interdivisio-

nal Groups could perhaps think about such matters and there will be a speedy response to requests and suggestions.

#### *Relations outside Europe*

As indicated previously, the APS is very interested in acting in association with EPS, particularly for all matters having to do with physics in central and eastern Europe. Two visits to the APS in 1991 were occasions to find ways to develop a fruitful collaboration. Following approval by Council in May, a scheme with link-persons between each of the APS and EPS speciality Divisions, and between each of the APS and EPS committees, has now been implemented. The aim is to develop a good flow of information directly at the action level. This should lead to improved coordination in organising topical conferences as well as be conducive to joint workshops and common actions.

EPS is still poorly known in North America, and yet one meets many colleagues who are interested in what we are doing when the information becomes available to them. The APS is helping us in our present drive for subscriptions to *Europhysics News*. The directions given to the collaboration between APS and EPS are treated in a joint paper by the Presidents of both societies which will be published simultaneously in the March issues of *Europhysics News* and *APS News*, the new bulletin of the APS.

We have also implemented a link system between the Executive Committee of EPS and the Board of The Physical Society of Japan, and are keeping in regular contact with the Association of Asian-Pacific Physical Societies.

#### *New Divisional structures*

It is necessary to single out the former Optics Division and the existing Astronomy and Astrophysics Division for detailed discussion. The Optics Division decided to disappear as such in early 1991. This was not a surprise as a more industrial oriented, world-wide framework was perhaps better suited to the organization of the main conferences in optics. With the creation of the European Optical Society, the Quantum Electronics Division and the Atomic and Molecular Physics Division agreed to cater to the needs of physicists working in optics. The QE Division changed its name to the Quantum Electronics and Optics Division and all members of the defunct Optics Division have been notified. While what has happened illustrates the difficulty of having a lively structure where both academic and industrial research can satisfy common interests, physicists in basic research in optics should still be able to use the EPS for their needs, and this within our existing Divisions.

The recent creation of the European Astronomical Society (EAS) has been a serious challenge to our Astronomy and Astrophysics Division, the more so because its Chairman became a leading member of the EAS. In view of the creation of the EAS we have certainly to drop astronomy from our responsibilities. But we should by no means renounce astrophysics! The A. & A. Divi-

sion does not wish to continue in its present form so we should develop an Astrophysics Division. Now that the EAS exists, we should do it with them rather than in competition. The idea is therefore to create a strong Astrophysics Division that should be associated with both the EPS and the EAS. Extensive discussions have taken place throughout 1991, in close association with the Solar Physics Section, and a report was presented to Council last May. The Section agrees fully with a draft proposal and it will assure the interim until the new Division is in place, encompassing, let us hope, several Sections covering most of astrophysics. Together with the President of the EAS, I have signed a proposal for the creation of a new Division that will be submitted for approval to the Councils of EAS and EPS. It seems that it is what best meets the wishes of astrophysicists in Europe, who, depending on their respective country, lean more toward physics or more toward astronomy. The Division would have members of either the EPS or the EAS, preferably both, and each of its Sections would choose either EPS or EAS for administration.

There remain "border" domains in which we should extend our activities, namely mathematical physics, biophysics, etc. Suggestions on how to participate in these areas would be welcomed.

#### *Publications*

Publications are an important source of income for several physical societies. But this is one area which the EPS can hardly exploit as, in Europe, scientific publishing is to a large extent in the hands of powerful commercial scientific publishers. Moreover, we cannot compete with some of our Member Societies which are also active in publishing. We should instead help them reduce the number of journals.

Given the situation, which is not conducive to extra income, the EPS should increasingly apply itself to general topics in physics publication, such as electronic publishing, as is being done through the Publications Committee. The Society as a whole should also try to play a larger rôle on editorial boards as well as help coordinate the many different physics journals in central and eastern Europe which now seek a wider basis. These journals probably cannot develop without some specialization, which we could help define.

#### *EPS-9 General Conference*

Preparation of EPS-9, with R.A. Ricci as the Conference Chairman and E. Brezin as the Chairman of the International Programme Committee, is now well under way. The conference, which will also mark the 25th anniversary of EPS, takes place in Florence on 14-17 September 1993. Falling between two other EPS conferences in Florence, one organised by the Quantum Electronics and Optics Division (11-13 September) and the other by the Liquids Section of the Condensed Matter Division (18-22 September), should represent a plus. One hopes the conference will bear witness to a thriving Society which has a high visibility.