GLOBALISATION IS UPON US. IT SEEMS THERE IS NO ESCAPE FROM THE PURSUIT OF UNIVERSAL EFFICIENCY.

Governments the world over have followed Margaret Thatcher's lead and privatised many of the services which used to depend on State funding. State support is regarded as inefficient unless competition is around to make it work better. The prevailing wisdom is that our survival into the next millennium will depend on competitiveness, that elusive quality which can only be acquired by facing the harsh realities of the market.

We are told that this is one of the major arguments in favour of the European Union. By opening up the frontiers within Europe and creating a level playing field for wider competition within the Union, the full benefits of a large single market can be realised. Supposedly, this should make European companies more effective, and more able to compete globally.

However, there is one notable exception. It is the funding of basic science. In this area, the Governments of Europe intend to preserve national monopolies, in the form of Research Councils, whose activity is limited to funding their own scientists within national boundaries. There is a tacit agreement between Research Councils supporting the same areas of science in different European countries. Basically, scientists of the European Union are only allowed to apply for support from Government agencies of their own Member State.

True, there exists a European Agency in Brussels, which provides support for science. However, the rules of the Commission are written in such a way that this funding is invariably complementary. Also, the programmes are designed so that there is no duplication, which is basically the same as saying: no competition. This is very convenient for supporters of the status quo, since it creates an illusion of pan-European openness without actually opening any frontiers. It seems that goods and services can cross borders, that investment capital can fly across the world, that migrant workers can seek jobs all over the Union, but that scientific projects must stay at home and be funded by the Governments of the countries where they were thought up – a strangely archaic situation.

Thus, science is denied the benefit of a single market of truly European dimensions. The national agencies are not exposed to competition to fund the best science, and European scientists are not competing directly against each other to raise support from across the Union. This situation is quite different from the one in the USA or in Japan. By creating a mosaic of small states, each one independently protecting its own basic science, the Union not only negates its own basic principles, but actually threatens the future effectiveness of its researchers.

Various arguments are presented, which allegedly make it impossible to create a single scientific market. It is claimed that all European countries follow such different rules in the funding of science that they could not possibly manage to remove the frontiers in science funding. The nature of the contracts in each country is supposedly so special that somehow each member state must be allowed to develop separately in this one field. Also, the language argument is used to back this up despite the fact that English is the common language of Science world wide.

All these counter-arguments neglect one simple fact. Structural and social differences exist all over the European Union, but they do not hold up the development of competitive business practice across the Single Market. Do differences in Social Services prevent freedom of movement? Do the different tax laws stop multinational companies from operating all over the Union? If basic science is the precursor of progress yet to come, surely it is even more important to remove the frontiers in science policy and funding, and give them a truly European dimension. What could be the reason for holding back? Might it be that the politicians have lost all the battles to control financial markets and are hanging on to one of the few things they feel still belong to them? If so, that might not be the best strategy for science.

By leaving European science fragmented, and therefore unable to compete in the Darwinian environment of the global market, our National Governments could be condemning it to nothing but a provincial future.

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ALPHAGALILEO CONTINUES TO DEVELOP AND GROW

AlphaGalileo achieved several milestones during the autumn. In September Dr Michel Bernier, the Science Counsellor at the French Embassy in London, launched the upgrade to a bi-lingual site. The new site provides French or English navigation and house-keeping texts depending on the language preference of the browser being used and the language preference of logged-in users. The net result of this is a far more user-friendly experience for French-speaking colleagues. Following the launch, Mme Anne-Marie Revco from the Ministry of Education in France, Michel Bernier, the Science Counsellor at the French Embassy in London, Paris and Geneva, together with research bodies such as France’s CNRS, the British Psychological Society, the European Commission and the Alfred Wegener Institute in Bremen.

Despite the changes and successes of the last few months our objective remains to help ensure that Europe’s young people and taxpayers are aware of the exciting and significant science being carried out in Europe, and that industry world-wide recognises the opportunities and challenges of new technologies being developed across the Continent. We were established because of the concern that Europe’s media was creating an impression that only in the United States was cutting-edge research being carried out. This was happening because American science was more accessible to the European media than was the homegrown product.

Our objective is still not to enhance the image of European research establishments and universities, although that is an undoubted spin-off. AlphaGalileo is firmly based in the public understanding of science and technology camp.

Peter Green
Director AlphaGalileo

Further information from http://www.alphagalileo.org or email site.editor@alphagalileo.org

SCIENCE POLICY WORKING GROUP

This working group was set up right at the start of EuroScience. One of its major aims is to encourage and support policy decisions in favour of the European research community, and of science and technology in general. This prompted us to propose a number of ways through which to improve the management of the Framework 5 Programme in 1997, and to organise a debate within the European Parliament on the role of MEPs in research policy on the eve of the European elections of 1999. Within the same objective, we are currently planning a survey of the different national and European bodies involved in R&D decision making in Europe, with a view to producing a corresponding “map”.

Come to Euroscience’s 2000 Meeting!
6–8 July 2000, Freiburg, Germany

Programme includes:
• Symposium: ‘Limits and Limitations to Research’
• Public debate: ‘Accountability of Scientists to Society’
• A guest public lecture
• Science cafés in German and French
• The Association’s statutory Assembly

The biennial meeting is being held during the city’s Science Festival, so there will be many other events of interest to members.

Put the date in your diary now!

We also wish to encourage institutions to foster scientific exchanges and discussion within Europe. With this aim in view, we are developing an award which will recognise best practice in postgraduate programmes in European universities. This will be described in more detail in a forthcoming EuroScience News.

We are hopeful that the statement from commissioner Philippe Busquin, re-launching the “European Research Area”, will result in more collaboration between and better mobility of our scientists. The Working Group looks forward to an interesting European-wide discussion on this issue, which the commissioner is preparing for next year.

In order to be able to respond to the numerous policy decisions which affect R&D on the European scale, and to make suggestions and develop propositions that are beneficial to the European science community, we are always trying to gather information from the various decision-making centres. In obtaining this information, we need the help of all Euroscience members. So do not hesitate to contact

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us if you are aware of particular information relevant to our work or if you feel we should react on a specific subject. Better still – why not join us!
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EUROSCIENCE EXECUTIVE COMMITTEE MEETING

At the Bureau meeting on 30 October 1999 in Paris, the following items were among those discussed.

The next General Assembly, now renamed the “EUROSCIENCE Biennial Meeting”, will take place on 6–8 July 2000 in Freiburg in Breisgau (Germany), at the invitation of the organisers of the Science Festival there. The provisional programme is set out elsewhere in this issue. During the meeting, the Governing Board will be renewed by one third, with 8 positions to be refilled.

Current state of EUROSCIENCE. The Association has now 1100 members, including 9 associate members (see this page), from 36 European and 6 non-European countries. 54% of members work in the United Kingdom, Germany and France. 15% are from Central and Eastern European countries. The financial situation remains fragile. The Bureau urges members to take advantage of the upcoming fees renewal period to attract new, including associate, members.

Ongoing activities.

– The conference on “New Science and Technology Professions in Europe” has been postponed twice. Although this was no fault of EUROSCIENCE, the cause being changes in EC funding rules, the Bureau considered this a major drawback for the Association. A new application is being made to hold the conference in late 2000.
– AlphaGalileo (see p.2) continues to develop. With the further help of EUROSCIENCE and public funders, the centre should soon include Finland and some other countries.
– The Bureau endorsed the proposal that EUROSCIENCE take on the attribution of the Rammal medal (see p.4).
– Thirteen European winners of the Nobel Prize have accepted to become members of the Euroscience Honorary Committee (more in the next issue!). Among them, Sir Harold Kroto has solicited Euroscience to participate in the Vega Science Trust (http://www.vega.org.uk), a venture he is developing, to foster well-informed and attractive scientific views on the Internet and on some TV channels.
– The Bureau decided on participation in the joint Council of Europe/UNESCO conference on the State of Science and Technology in Europe (Gdansk, October 2000) (see article by J. Langer, page 6).

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NEW EUROSCIENCE ASSOCIATE MEMBERS

Associate Members are important for EUROSCIENCE, enabling the involvement in our aims of a range of organisations. They can be corporate bodies, industrial companies, institutions such as science funding agencies, international organisations etc. They have a vote, for example at the General Assembly, and can be represented in any open EUROSCIENCE venture by a delegated person. Associate Members also have the right to propose up to 20 of their personnel to be individual members of EUROSCIENCE without additional fee.

Over the past few months, we have been delighted to welcome the following new Associate Members:
– GeoforschungsZentrum, Potsdam, an institute established in Eastern Germany after 1989, dedicated to Earth Sciences;
– La Recherche, Paris, a monthly magazine on science;
– Specola Vaticana, Vatican City, the astronomical Observatory run by the Jesuits;
– I C R A, Roma and Pescara (International Centre for Relativistic Astrophysics), a centre for advanced conferences in high-energy astrophysics, particularly – though not exclusively – for Eastern Europe.

These join our earlier Associate Members, namely CERN (European
ESF GENERAL ASSEMBLY

The General Assembly of the European Science Foundation (ESF) took place in Strasbourg, 25–26 November. The ESF (see EUROSCIENCE News no. 8) was founded 25 years ago and is made up of European science funding agencies and some academies from 22 European countries. At the Assembly, the President of the Dutch science agency NWO – Dr. Reinder van Duinen – was unanimously elected the new President of the ESF. He announced that one of his priorities would be the launching of a novel type of pan-European basic research programme – EUROCORES – the idea that he first put forward at our last General Assembly. Estonia became a new member of the ESF, through the Estonian Academy of Sciences and the Estonian Science Foundation.

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An award to be conferred by EUROSCIENCE: the Rammal Medal

A proposal was made to EUROSCIENCE by one of its members, Gérard Toulouse, a condensed-matter physicist from the Ecole Normale Supérieure, Paris. G. Toulouse, acting as donor, asked EUROSCIENCE to be responsible for the awarding of the Rammal Medal, an award that was created in memory of a gifted Lebanese physicist, Rammal Rammal, who died in 1991 at a young age and with whom Toulouse had collaborated.

The Medal was started in 1993 with the goal to distinguish “an outstanding personality of strong scientific stature from one of the Mediterranean countries who, through his life and activity (whether in fundamental or applied research, teaching or the integration of knowledge), has given a new and modern form to the flow of scientific exchange in this part of the world, rich with ancient tradition”.

The Medal can also be shared by several recipients and/or awarded to an organisation.

As wished by the donor, the Medal “will serve to illustrate the capacity of science to overcome barriers and to foster relations between the Mediterranean peoples”.

EUROSCIENCE has been asked to replace the French Physical Society as the organiser of the award. In this new phase, the Medal will no longer be restricted to physicists: all disciplines will qualify for the Medal, including social sciences and humanities.

EUROSCIENCE proposes to constitute a jury of six members (the Scientific Committee of the Rammal Medal) that will be responsible for identifying and selecting potential candidates for the award. The Scientific Committee will be entitled, under its own responsibility, to subcontract the evaluation of preselected candidates to external referees competent in the candidate’s field.

An Honour Board will assist the Scientific Committee. This will ensure that the donor’s intentions are implemented. It will include the initiator of the award, relatives of the late Professor Rammal, a subset of the EUROSCIENCE Honour Committee (see Bureau report, page 3), as well as the President of EUROSCIENCE.

EUROSCIENCE is working to award the Medal anew in year 2000. The jury is currently being constituted under the responsibility of the EUROSCIENCE Governing Board.

The list of earlier recipients, all physicists in the previous phase, includes: Miguel Virasoro (director of the International Centre of Theoretical Physics, Trieste), Celal Sengör (Technological University, Istanbul), Habib Bouchriha and Faouzia Charfi (Tunis), Manuel Velarde (Universidad Complutense, Madrid), and Lotfi El Nadi (University of Cairo).

This is the first scientific honour that EUROSCIENCE has charge of. The significance of this commitment is high, as it is also the task of a scientific association to help mitigate conflicts by showing publicly the merits of high level and courageous scholars.

SEMENAR IN MEMORY OF ROBERT MAGNAVAL

A seminar was held on 24 November in Brussels (European Commission, DG Research) on the subject of “The European Paradox in Innovation”. This paradox, as measured by various indicators, points up the difference between the scientific & technological potential of Europe and its relative weakness in turning this advantage into practical innovation and corresponding economic results. Robert Magnaval was a biologist by training, and lately a senior officer at DG Research’s Strategy Directorate. He was an active member of EUROSCIENCE’s Working Group on Science Policy, and had been stimulated in his reflections by this paradox. In fact he doubted its reality, as did quite a few other researchers who discussed it during the seminar, but Robert used the hypothesis for a series of excellent papers on science policy which were distributed at the seminar. Robert passed away not unexpectedly last August and the seminar paid homage to his inquiring mind, his thought-provoking way of presentation, his broad political inspiration, and his long-term vision of the future of Science and Technology in Europe.

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This weighty book by a Professor Emeritus of the University of London is a treasure for anyone interested in how Europe was formed. The author presents in a magisterial way the vast panorama which, from 10,000 BC up to the demolition of the Berlin Wall, has given shape to the political, cultural, and economic Europe which we know today and which Davies calls “the Peninsula”.

For Davies, Europe is not only the smallest continent but an extension of Asia. He emphasises that Europe was built not only from the Roman-Greek inheritance, but also from that of the Celts, and of the barbarian and nomadic invaders of the Roman empire, most of whom came from Asia, so that “no modern European nation can lay reasonable claim to undiluted ethnic purity” (p. 238).

EUROSCIENCE being an association concerned both with Europe and with science, I wanted to read this enormously rich book to see what major forces had or had not contributed to the slow forging over centuries of a common background for the European peoples. And of course I wished to place the role of science in this venture. Thus mine was a kind of orientated reading, not neglecting any of the political or sociological developments described by the author, but especially seeking what influence, in such a broad programme, might be ascribed to science. Davies gives due account of science in the Greek world, and, after reading him, one can but be full of admiration for Archimedes. By contrast, the scientific revolution, born in prosperous European cities between the mid-16th and 17th centuries, is not given much room. Nor are Newton and Euler, two eminent figures of the age of Enlightenment. 19th century Europe is described as the “powerhouse of the world”; technology and science are shown to have become more important than ever before as factors of economic development. Mendeleyev, Mendel and Darwin, as well as Daimler and Benz, illustrate some of the major breakthroughs of the century, and a meeting on 30th June 1860 of the British Association for the Advancement of Science, where the debate was about evolution, is nicely described (p. 793).

Then comes the period that the author names “Tenebrae, or Europe in Eclipse (1914–1945)”, during which tragedies pile up. Only after 1945, in Europe, a region of the world which wanted peace but was divided, did one seriously start to think of ways to become internationalist European. The author pays much attention to all the efforts deployed mainly in the political sphere to develop co-operation and create an undivided Europe. He shows how the concept of Europe was kept alive in the East and in the West, despite divisions. One may regret that he takes little note of the decision by governments in Western Europe to build large scientific facilities in common (p. 1081): at that time CERN, ESO, ESA, followed by other European scientific institutes, were created. This was an important event as some of these scientific organisations preceded many of the political ones at the European level; they were and are great successes.

The book is illustrated by numerous plates, maps, and appendices and it contains 300 “capsules” – inserts related to an event, a personality, a cultural phenomenon. A little more than 5% of these refer to scientific episodes. The author makes it easy to find information on almost any European subject. Davies wanted to write a book for the “general reader”. Such a reader will appreciate finding here a reflection on the various conceptions of Europe which have prevailed through time, and a critical distance vis-à-vis the concept of “western civilisation”. Above all he or she will encounter an historian with a resolutely European mind and a determined resistance to all nationalist biases.
EUROPEAN PARTNERSHIP IN SCIENCE: TOWARDS BRIDGING THE GAP BETWEEN EASTERN AND WESTERN EUROPE.

On 6 November 1999, UNESCO held a meeting of ministers and science policy experts as a follow up to the World Science Conference (See EUROSCIENCE News No. 9) and a ministerial meeting of Central and East European Countries. Jerzy Langer, a Vice-President of EUROSCIENCE, addressed this meeting. We reproduce here the (slightly edited) text of his talk.

In Budapest, at the World Conference on Science, several delegations from Central and Eastern Europe (CEE) gave brief accounts of the situation of research in their countries. Science is not an isolated island, despite a common notion of scientists sitting in their ivory towers. Therefore, as could be well anticipated, the political and economic changes of the last decade made a very serious impact on research conducted there.

The situation is quite complex and just quoting a few pessimistic numbers, e.g. the fraction of public funds available for research, or a big wave of internal and external emigration of scientists, does not provide a true and balanced picture of the situation. In Poland, for example, the amount of money available for research per capita is almost constant in real terms, despite booming economic growth. However, at the same time, the number of students has increased almost threefold. To accommodate such a “gold rush” for higher education, both the public and the rapidly developed private education sector had to take appropriate measures, which simply means to transform itself. Science cannot go private, but its organisation had also to follow the societal changes, which means certain market rules such as competitiveness, better efficiency in using financial resources, openness to criticism, and internationalisation.

At the regional sub-meeting at this conference Professor Mossakowski - the President of the Polish Academy of Science - put forward a suggestion of a possible action that could help in lowering the still existing barriers and disparities in European research. Although he spoke explicitly only about a series of multilateral meetings on international collaboration in science under a common title – European Partnership in Science – I think that now we should consider this proposal more broadly, namely as a way to do science and research in Europe.

The starting point for such a suggestion was the analysis of the situation in CEE countries, particularly in Poland. However, it should not be considered as another bridging initiative of former Eastern Block countries and Western Europe. The issue is a global one and a situation in CEE is only a small fragment of a more general problem, namely how to utilise more efficiently the enormous intellectual potential that we have in Europe.

Science has become more global than ever before because of four factors:

- increased speed of distribution of research results (internet);
- limited national material resources;
- increased human and capital mobility;
- increased societal and economical consequences of research.

The globalisation of science has brought both positive and negative results. Societies are easier to manipulate, easier to be endangered ecologically, and paradoxically harder to be persuaded that the only way to grow and to develop is to follow the science-dictated and science-developed way of thinking and rationalising things.

Many people say that the coming millennium will be the era of the information society. True, but what information? Look how flooded we are by variety of pseudo- and parascience. And this sells well. This may be a real millennium ecological bomb - but here the object of the pollution is our brain.

These very serious issues should also be tackled by the European Partnership in Science initiative. If we restrict ourselves only to analysing and developing the instruments of doing better science, then we would simply escape our responsibility to our societies and to the taxpayer.

Let me come back to the idea of a conference. It should provide us with an analysis of the situation in European science seen as a joint international venture. It should identify both strengths and weaknesses as seen from both the East and the West. Some of the issues listed in Budapest were as follows:

- what actions could bridge the existing gaps, and what would be most efficient and effective in achieving these goals?
- how can the scientific communities and learned societies of the formerly divided Europe work together to lower existing barriers?
- what would be the most efficient way to make national research programmes more coherent on the international scale, especially as the Framework 5 Programme (FP5) - the largest joint action in European research - was recently opened to several so-called accession countries?

Interestingly, the Committee for Science and Technology of the Parliamentary Assembly of the Council of Europe undertook a somewhat similar initiative. In October 2000 a meeting on the Perspectives
for Science and Technology in Europe in the 21st Century will be organised in Gdansk in Poland. Professor Edmund Wittbrodt - a member of Polish Senate - has taken on the burden of organising it.

Let me finally enumerate four concrete issues that may be discussed at the meeting, and measures that might be implemented. The first three belong to the bridging category, while the last is more general.

1 Participation of CEE scientists in the European Community research programmes.

Considering the intellectual potential of the CEE countries, it may be beneficial for both sides to open up the scientific and technological programmes of the European Community to research groups from the former Eastern block, and not only to the accession countries. In the negotiation process, consideration should be given to the disparity in the level of financing science in CEE countries and the fact that much weaker industry there cannot absorb the output at the same pace as in more developed European countries. This issue was raised in Budapest by Dr. Frackowiak, the Science Secretary of the State Committee for Scientific Research in Poland.

2 Large facilities and centres of excellence.

Here consideration should be given to developing new and supporting existing international centres of excellence in CEE countries, especially those on the EU accession list. Some effort towards this goal we may find within the FP5 programme. At present an increasing amount of very limited resources of the CEE countries are de facto being transferred in the form of direct contributions to more wealthy countries in which large facilities already exist or are being built. Such a process will in the long run increase disparities between the EU accession countries and the EU.

3 Qualification and expert procedures.

The effort should be made to involve a larger number of top scientists from the CEE countries in the qualification and expert procedures within the European Community and vice-versa. This would provide not only a better linkage between EU and CEE countries, but also should speed up the application of good standards and procedures of the EC countries to similar problems of the CEE countries.

4 Coherence in research programmes.

Such coherence is absolutely necessary not only in applied research, but also in so-called basic science. Here the problem is quite severe, as there is no single European agency which oversees the distribution of resources in a similar fashion as does the European Commission for FP5. Quite an interesting suggestion of a novel approach in this direction was recently discussed at the ESF in the form of the so-called EUROCORES (see page 4, this issue).

Now a key question: who should participate in the European Partnership in Science endeavour?

We may borrow the answer from modern materials science. The most promising materials are composites: in microelectronics these composites are just multilayered structures. Following this example we should think about three layers that may form an effective combination.

The first one is just scientists and research groups. Here grassroots interdisciplinary organisations like EUROSCIENCE or some learned societies may do a service in contributing to the programme and also in the execution of this initiative.

The second layer consists of bigger science organisations and research institutions. Here international collaboration is more institutionalised. The National Academies and large Research Institutes and Funding Agencies, having already developed mutual agreements and collaboration procedures, may significantly contribute to the meeting by sharing their experiences. Among the European international organisations the ESF seems to be best placed to coordinate the partnership.

The final layer is governmental. Their decisions are more political than are those of the other two layers. And on the international scale the key players should be UNESCO, the Parliamentary Assembly of the Council of Europe, the OECD and the European Commission.

Of course this list is neither complete, nor exclusive. But to achieve success all of the three layers and the respective organisations should be involved in a steering committee and during various stages of preparation of this large programme on the European Partnership in Science. We also must not forget about a crucial role that could be played by the media and especially interdisciplinary journals such as Nature.

The politicians are speaking about a new united Europe. This is the most ambitious goal for this continent for the coming millennium. To achieve it we must make great effort to use most efficiently the intellectual resources of Europe. And Europe taken as a whole, not as a set of regional blocks.

The European Partnership in Science is a very important component in this process. Science, and especially research, are key ingredients in securing stability, in harmonising economic growth, and in societal development. And this can be achieved, but we should act wisely by identifying key areas and by developing good strategies and vehicles to execute them. Each country has its own priorities, and these must be honoured. We also have much individual experience to share.

The initiative of a European Partnership in Science might serve well in bridging the gaps not only in European science. If successful, it could be followed by more specific actions and programmes. And this could be a valuable contribution of the scientific community to European integration.

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A VOICE FOR EUROPE’S YOUNG RESEARCHERS?

The Marie Curie Fellowship Association (MCFA) is open to scientists who have received EC mobility research training grants. It held its first thematic conference in Brussels on 12–13 November 1999. As a function of this meeting was to raise awareness of the problems facing young European scientists, it was very appropriate that EUROSCIENCE was invited to participate.

EUROSCIENCE’s invited speaker, Norbert Glaser, focussed on the issues raised in our 1998 report on the “Future of Young Scientists in Europe”, which concluded that postdoctoral studies do not meet today’s challenges. Changing labour markets affect career structures in science and technology, yet our young scientists are faced with traditional working environments which have not adapted to future needs. Not only were EUROSCIENCE’s messages received enthusiastically by the audience – almost all of them were underlined in other talks by specialists from e.g. Mckinsey, Unilever Research, IIASA, Nature, EARM A and Science.

Molecular biologist Barry M. Sweeney, who is responsible for the MCF scheme, sketched its aims – to foster the selection and further development of Europe’s future R&D “élite”. Barry wants “his” MCF Fellows to be simply the best: Europe’s competitive edge depends on them. The MCFA leadership presented its efforts and achievements, with talks by Christine H. Eller, head of the MCF committee for scientific excellence and advancement, and Laure Ledoux, the MCF A chair who spoke on “a voice for young scientists in Europe”.

A most welcome ethical intermezzo was delivered by distinguished physicist, Nobel laureate for the Pugwash community and un-firing fighter for higher moral standards in science, Sir Joseph Rotblat, still going strong at age 92. At no other moment during the Conference was the audience so attentive: one could “feel” the intensity of this pioneer’s conviction. His forceful message was brilliantly transmitted to “Europe’s next wave”.

Dr David Brawner (Mckinsey) and Dr Jonathan Powell (Unilever) provided two interesting career perspectives. Though the content of one’s knowledge does matter for a career in industrial research, it was remarkable how similar their views were to what makes scientists successful. On the one hand it is the scientific approach, and the ability to think logically. On the other hand success depends on communication skills, working with others, listening to customers, meeting deadlines, and not spending one’s whole career in one position or environment.

The rewards of such non-academic careers include better opportunities for personal development, multiple career paths, honing of problem solving skills, and often achieving ends results very quickly. Both speakers pointed to the elaborate hiring process requiring solid preparation, determination, and an active attitude. As Powell said: “We cannot find you; you will have to find us”. Both companies were comparable in their approach, and the ability to think logically. The last theme was about talking to the public. Dr David Dickson from Nature told the audience that a scientific background does confer advantages over coming from general journalism into science writing or broadcasting. Some common themes running through the contributions included the need to communicate to gain trust and to justify funding for science, the necessity of involving young scientists, who do the real work, in communicating science, and the importance of training oneself to reach out to the public.

However, trust in science, which was stressed a great deal, should not be misunderstood. It is clear that recent crises (e.g. BSE) have jeopardised the existing institutional trust framework. Moreover, electronic communication undermines the traditional mechanisms for validating scientific results. So, while stressing that widely shared scientific evidence cannot be simply put aside by whimsical opinions, it is important to engage in public debate and to express oneself as a scientist about uncertainties, about the limits to what we know, and about societal concerns.

These are all important topics to be picked up further by EUROSCIENCE.

MCF A is an interesting forum with which EUROSCIENCE could usefully establish closer relations, for example in a joint working group with the newly created MCFA task force on postdoctoral studies.

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COPY FOR THE NEXT ISSUE SHOULD REACH THE EDITOR, PREFERABLY BY EMAIL TO J.FINNEY@UCL.AC.UK, BY THURSDAY 11TH MARCH 2000

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