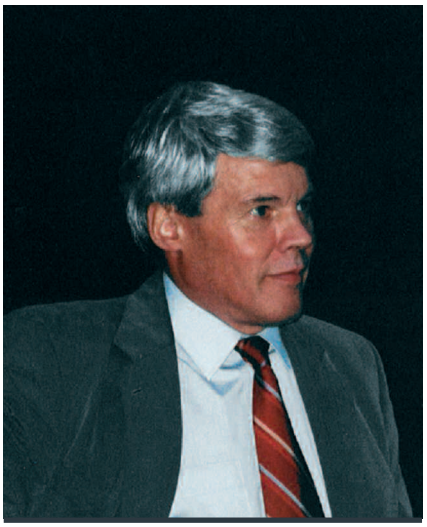
VIEWS FROM
PRESIDENTS M. DUCLOY AND M.C.E. HUBER

MY 40 YEARS OF EPS

Martial Ducloy (France),
President of the EPS 2001-2003



My first contact with the European Physical Society was a very early, but indirect one, when I was young *"Docteur de Troisième Cycle"*, starting a *"Thèse d'Etat"* at Ecole Normale Supérieure, in the "Laboratoire de Spectroscopie Hertzienne" under the direction of Alfred Kastler and Jean Brossel. At the end of 1968 - beginning of 1969, Jean Brossel, then President of the French Physical Society (SFP), toured his lab to recruit new members for SFP. It was necessary to make SFP stronger in view of its insertion inside the newly created EPS. Nothing has actually changed since then… Thus, as a student member of SFP, I attended the 1st EPS congress in Florence, in April 1969. I have to confess that I spent as much time visiting Florence as attending the sessions organised in the historical "Palazzo Vecchio".

A second, closer, contact with EPS came later when I was elected as a member - and subsequently Chair (1995-8) - of the Board of the Quantum Electronics and Optics Division (QEOD). One of the main objectives of the QEOD Board at that time was to create a European Conference which should be a major, world-recognized, meeting in the field of Lasers and Optics. This has been realised in collaboration with American learned Societies (OSA, IEEE) – which were both collaborators and competitors in this matter – and led to the successful launch of the CLEO®/Europe - EQEC conference series in 1994 (CLEO: Conference on Lasers and Electro-Optics). The need for the QEOD division to get full control over this conference series led EPS to set up a dedicated conference services department a few years later. Another major decision of QEOD, started with my predecessor Jürgen Mlynek, was to establish a *"Quantum Electronics"* prize. The first awardee was Claude Cohen-Tannoudji in 1996. It was a perfect choice to start with: he received the Nobel Prize in physics the following year.

My two-year mandate as EPS President (2001-3) occurred at a time of fast change in European science. The implementation of the European Research Area, launched in 2000 by Philippe Busquin, EU Commissioner for Research, was creating a new frame and setting a new impetus for scientific research. Physical sciences strongly needed to be present in front of fast-growing disciplines like biology, computer science, information science and technology… The response clearly had to be brought at two levels: first to demonstrate again the continuing importance of physics as a basic discipline (in quantum physics, condensed matter, particle physics, cosmology, etc.) with its many scientific and technological applications; secondly, to pinpoint the central role of physics among all other experimental disciplines (biophysics, medical sciences) as well as the emerging ones (information science, environmental sciences, etc.). However all these points have to be recalled and exemplified at large, towards all types of public, young people, policy-makers, etc. For that purpose, I proposed to EPS to pursue this objective by initiating and organising a *"World Year of Physics"* in 2005, for the 100th anniversary of the Albert Einstein's *"annus mirabilis"*. The challenge to physics being universal, the response needed to be world-wide. I successfully obtained the agreement and support of IUPAP, UNESCO and UN General Assembly *in fine*. One should add that this initiative was supported by the European Commission with a 2.1 M€ contract. The result was that the impetus to physics outreach in 2005 was outstanding, mobilising thousands of physicists around the world. The huge success of this world year of physics has been such that many scientific disciplines have followed the path paved in 2005: 2007 and 2008 were the international geophysical years (heliophysical year and year of planet earth); 2009 will be the international year of astronomy (400th anniversary of Galileo's first use of his lunette to observe the sky and planets), and 2011 could be the international year of chemistry.

A second response to the scientific challenges appearing in the early 21st century was to better occupy those newly emerging fields in which physics has to play an important role, and to make room for them inside EPS. During my mandate, two new divisions were proposed to the EPS Council (2002): the "Physics in Life Sciences" division, which underwent a very fast growth soon after its creation, and the Division of Environmental Physics. Also an action committee on the place of Women in Physics has been set up at the same time. I very recently realised, by reading the reminiscences of Jacques Friedel, EPS President, 1982-4, (EPN 39/2, page 11) that the creation of the "Physics in Life Sciences" division was the second, this time successful, attempt 20 years after a first untransformed try of setting up a Division of Biophysics. With those new divisions - and maybe a few more to come (an attempt to create a Nanophysics Division in 2001-3 has been unsuccessful) -, EPS was better equipped to face those new

challenges and tackle the reorganisation of scientific research taking place in Europe. My feeling is that EPS, in its 40's, should keep evolving to adapt to new frontier research.

By looking back at the history of the European Physical Society during its still young life, one should underline the fast adaptation of EPS to a changing world: *e.g.*, by associating from the start more countries than those constituting the Common Market in 1968; by transcending political differences with the presence of many East European physics societies in the early years, which made the EPS immediately reactive when the iron curtain broke down and the Soviet Union split into independent countries. EPS must be able to respond to the emerging socio-economical challenges in the 21st century. One of the main objectives of EPS should be to attract more and more young scientists into physics, and get them more proactive inside the whole EPS organisation. This is clearly a key-point for the future of EPS. ■

▲ M. Ducloy with the General Director of the UNESCO, K. Matsuura

MY YEARS FOR EPS: PRESIDENCY AND BEYOND

Martin C.E. Huber (Switzerland), President of the EPS, 2003-2005

When Maurice Jacob asked me whether I would stand for election as Vice-President of EPS, I agreed without much deliberation, because I thought that there would be several of them. Although I had participated as Division Chair in several EPS Council meetings, I hadn't realised that there was a four-year 'curriculum' progressing through one year as Vice-President (or President elect), two years as President, and again one year as Vice-President (or immediate Past President). What I entered into light-heartedly became one of the most interesting and satisfying periods in my life.

The time span of my 'curriculum' coincided with the World Year of Physics 2005 (WYP2005) that had been initiated by my predecessor Martial Ducloy, the inauguration of the new building for the EPS Secretariat in Mulhouse, the adoption of a new EPS Constitution, and in our participation in the preparations of the European Research Council (ERC). There were also many visits – with talks – of national and regional physics conferences in Europe and overseas. Having been recently retired from my employment with the European Space Agency, I could spend sufficient time on EPS matters, and as I was living not too far away from Mulhouse, I tried to visit there about once a fortnight. Thus I got to know David Lee and the other EPS staff members very well and they were made aware that I cared about their work for EPS.

A major task was the organisation of EPS13, the 13th General Conference. I had participated in several earlier EPS General Conferences and had realised that it was becoming more and more difficult to attract young physicists to general physics conferences. As EPS13 was scheduled for 2005, the centenary of Albert Einstein's *annus mirabilis*, the choice for the location was almost a foregone conclusion: it was to be Bern. The conference was called 'Beyond Einstein — Physics for the 21st Century', and consisted of three parallel meetings dealing with today's status of the topics of Einstein's three most important 1905 papers. The titles of the three parallel conferences were:

I. Photons, Lasers and Quantum Statistics
II. Relativity, Matter and Cosmology (with ESA, ESO and CERN)
III. Brownian Motion, Complex Systems and Physics in Biology ►

In this way, EPS13 actually consisted of three topical conferences that, moreover, involved all EPS Divisions. There was hope that we could attract and give the floor to young physicists for presentations. This hope was fulfilled in part only, because it seems that many physicists prefer to go to narrowly focussed topical conferences, which usually are series and often are held every year, possibly even at the same time and at the same place. General physics conferences, which also permit to hear talks by speakers from fields different from one's own, are apparently less in demand – at least in the western part of Europe. Nevertheless EPS13 was an impressive meeting. In addition, participants could also visit the locally organised celebrations of the centenary of the annus mirabilis. This included an exhibition of note on Einstein's life and work, public discourses and a 'Festakt' with the President of the Swiss Confederation, Samuel Schmid, Nobel Laureate Murray Gell-Man and other dignitaries as speakers.

It was notable during my presidency that EPS became more and more in demand by 'Brussels'. Indeed, whenever European matters in physics were concerned, 'Brussels' didn't call London, Paris or Berlin, but directed their enquiries toward Mulhouse. One of the most consequential queries concerned the ERC. The Executive Committee supported the creation of such a body and this led to EPS strongly participating in the effort leading to the creation of the ERC. EPS acted here in the framework of the Initiative for Science in Europe (ISE), a loose association of European learned societies from the fields of humanities and social sciences as well as natural sciences. It was an extremely rewarding experience to live through the preparations, which were strongly supported by the prominent science policy leader José Mariano Gago.

The launch of WYP2005 in France was celebrated in Mulhouse together with the inauguration of the new building for the EPS Secretariat. On this occasion a talk in French on 'photons et atomes' had been organised in collaboration with the Université de Haute Alsace, on whose 'Campus Universitaire' the EPS Secretariat is located. This lecture by Nobel Laureate Claude Cohen-Tannoudji attracted about 600 students from schools in and around Mulhouse as well as from the University.

We have since established a series of such lectures, on the one hand to strengthen the relations between EPS and the Université de Haute Alsace, and on the other hand to offer insight into interesting aspects of physics for young people in the Haute Alsace – and hopefully to attract some of them to the field of physics. Eminent speakers have presented topics that are attractive for a young audience such as *'Les épreuves du big bang'*, *'anti-matière – ange ou démon'*, *'variabilité du rayonnement solaire et son influence sur le climat de notre planète'* and *'la construction des grands monuments de l'Egypte Ancienne: point de vue scientifique'*. In the subsequent lecture in November 2008, Christophe Salomon discussed *'la mesure du temps'* and in spring 2009 we will be able to welcome Nobel Laureate Albert Fert as a further speaker in the series.

Another interesting and enjoyable development started at a preparatory meeting for the World Year of Physics in Montreal in 2004. There I met the Secretary General of the Chinese Physical Society (CPS), Enge Wang, who invited me to visit some of the best physics institutes in China, and to speak at the first General Physics Conference of the CPS in Wuhan in September 2005. Given the enormous rise of China's physics community, this conference will in a short time become an important annual event on the international scene. So, I concluded that an exchange programme between EPS and CPS would be highly beneficial. In 2006 we signed an agreement for the exchange of speakers between CPS and EPS. During the current year, this led to EPS President Friedrich Wagner speaking in China on 'The Path to Iter'; conversely a member of the Council of CPS, Academician Hesheng Chen, gave a special EPS-CPS lecture on 'Prospects of Particle Physics in China' at CERN on the eve of the 40th anniversary of EPS. CERN was chosen, because it had been the cradle of EPS, and we marked this by a joint EPS-CERN Press Conference on 26 September, the day EPS had been founded in 1968.

I have been asked to further pursue some EPS-related matters; for example to represent EPS on the Board of the Europhysics Letters Association, where we now are taking steps to make EPL, a general letters journal, into a real competitor of the currently dominating American sister publication PRL. My regular reports to the EPS Executive Committee on the development of EPL give me the opportunity to follow from close-by how EPS is gaining strength, and how it is blossoming under the guidance of my successors, Ove Poulsen and Friedrich Wagner. And so I wish much success to their successor as of spring 2009, to Maciej Kolwas! ■

The University of Bern welcomed the participants in EPS13. This building did already exist, when Albert Einstein gave lectures at the University of Bern as a 'Privatdozent'.