A New Qualification for Physicists

M. Peter, Chair, Register Commission

The designation European Physicist (abbreviated as Eur Phys) is a new qualification for physicists that was established by the EPS in 1995. The fundamental reason for its creation stems from the fact that times are changing, and are becoming harder for many physicists. Gone are the days when a permanent position is offered to most successful students upon graduation from university. Permanent employment may become the exception rather than the rule, so physicists, like most professionals, have to reeducate, and to adapt to a new career more than once.

The reason for this evolution is to be found in the changing nature of the European economy, which is moving increasingly from the secondary sector into services. One might have hoped that this trend would increase rather than decrease research activities. To a certain extent this is indeed happening, but at the same time the nature of these activities is also changing since industrial research is tending to move to where manufacturing has gone.

In this changing climate, the possibility to adapt one's activities becomes an important asset. Adaptation includes continued education and the ability to take initiatives in organizing work for oneself and for others. It also includes mobility. Mobility is facilitated by professional qualifications which are widely recognised.
Professional Qualifications
Formal professional qualifications exist in many occupations. Generally, a person receives such a qualification on the basis of a combination of academic attainments and experience in a profession. Where they exist, however, there are for some professions wide differences between formal systems of recognition, in the body awarding the qualification, in the criteria applied, and in the code of conduct an applicant is expected to abide by.

Such differences may restrict the opportunities for citizens of a given country to exercise their profession elsewhere. In the case of the European Union (EU), the European Commission, which has been active for some time in promoting the mutual recognition of academic degrees, is now also taking initiatives regarding professional qualifications. The EPS includes EU countries as well as most of the European countries that are not part of the Union. It will therefore be a special challenge for the EPS to establish for its Eur Phys qualification widespread and efficient recognition both within the EU and between the EU and non-EU countries.

National societies, institutes and associations covering various fields of science and technology have collaborated in establishing several European Registers for qualified professionals. In physics, the situation is somewhat different from that found elsewhere owing to the existence of the EPS which one can join directly or participate in through a national society. The Register is open to all physicists and its abbreviation Eur Phys will be kept informed, by means of a section in Europhysics News, the Bulletin of EPS, and its abbreviation Eur Phys; a special electronic newsletter, about professional aspects relating to the practice of physics and of developments in the professional recognition of physicists.

Inclusion of a physicist’s name will give the public an assurance that the physicist concerned has satisfied the Register’s requirements and has agreed to adhere to a Code of Conduct. The Register is open to all physicists in Europe. For admission it is necessary to produce evidence for the successfully completion of a minimum period of seven years’ professional formation, including:

- at least three years’ university education in physics or in a physics-related discipline to an academic level;
- at least two years’ responsible post-graduation experience, which may include a period of training;
- at least two years’ additional university education and/or appropriate post-graduation experience.

The initial phase of post-graduation experience may include training, whether formal or otherwise, but a candidate will be expected to demonstrate a capacity for independent judgment in work related to physics or its application. The nature of the experience may include research, project management, supervision and training, and safety management. Candidates will be expected to demonstrate an awareness of responsibility to the public when this is implicit in the nature of their work.

The Register of European Physicists is already a going concern. A total of 34 applications for entry on the Register have been submitted so far. Some applicants have been asked to resubmit applications once they have gained more experience; others have been asked to provide additional information. The Register Commission is aware that the application and registration fees may present difficulties for some applicants. The problem is under study, and proposals will be made in due course to the Council of the EPS. Eventually, the operation of the Register should become self-supporting, and render possible the establishment of a Eur Phys Solidarity Fund.

National physical societies have been asked to help ensure that the European Register of Physicists becomes well established by:

- making the Register known to their members;
- nominating representatives to the European Regional Monitoring Committee.

The Register

Those included on the European Register of Physicists are:

- able to use the designation European Physicist and its abbreviation Eur Phys;
- kept informed, by means of a section in Europhysics News, the Bulletin of EPS, and a special electronic newsletter, about professional aspects relating to the practice of physics and of developments in the professional recognition of physicists.

Inclusion of a physicist’s name will give the public an assurance that the physicist concerned has satisfied the Register’s requirements and has agreed to adhere to a Code of Conduct.

The Register is open to all physicists in Europe. For admission it is necessary to produce evidence for the successfully completion of a minimum period of seven years’ professional formation, including:

- at least three years’ university education in physics or in a physics-related discipline to an academic level;
- at least two years’ responsible post-graduation experience, which may include a period of training;
- at least two years’ additional university education and/or appropriate post-graduation experience.

The initial phase of post-graduation experience may include training, whether formal or otherwise, but a candidate will be expected to demonstrate a capacity for independent judgment in work related to physics or its application. The nature of the experience may include research, project management, supervision and training, and safety management. Candidates will be expected to demonstrate an awareness of responsibility to the public when this is implicit in the nature of their work.

A European Regional Monitoring Committee evaluates the application. It is assisted by independent experts familiar with the regions in which applicants have trained and worked. The Committee then makes a short summary and a recommendation to the Register Commission.

The Commission reviews the summary and recommendation to ensure uniform, high standards. If it is satisfied, you will be invited to pay the registration fee of 250.- Swiss francs for admission to the European Register of Physicists for an initial period lasting five years.

Thereafter, registration will be renewable without the need to submit a new application (although you might be asked to update your first application).

You will be provided with a formal certificate of registration. From then on you will be able to use the designation European Physicist.

Acknowledgments are due to those who thought of the Register, and who believed in it from the start, namely Peter Boswell, Secretary of the Register Commission, Eddy Lingeman, Secretary of the European Regional Monitoring Committee, and last but not least Derek Jefferys who formulated the scheme and is now the coordinator.

Information and application forms can be obtained on the EPS EurophysNet WWW service at http://epswww.epfl.ch, from national physical societies and from E.W. A. Lingeman, Secretary, European Regional Monitoring Committee, POB 94395, NL-1090 GJ Amsterdam (ed@nikhef.nl). Tel: +31 20 592 21 17; fax: +31 20 592 21 65.