

Minutes of the Section Committee meeting of  
the Physics and Engineering Sciences Section of Academia Europaea  
Paris, 10 June 2013

**Participants:** Jörg Aichelin, Laszlo P. Csernai (past Chair), Pavel Exner, Marie Farge, Muhsin N. Harakeh (Chair), Jan S. Vaagen  
Absent with notification: Vladimir E. Fortov, Anke R. Kaysser-Pyzalla, Horst Stöcker  
Absent without notification: János Ginsztler

The Section Committee of the P&E Section met on Monday, 10 June 2013 at 9:00 a.m. at the Laboratoire de Météorologie Dynamique, Ecole Normale Supérieure in Paris, with due thanks to Marie Farge who organised the meeting. The main purpose of the meeting was to evaluate the nominations. A table was prepared beforehand which listed all the nominations that had been received by 3<sup>rd</sup> of June including citation reports of the candidates. This year, we had 18 regular nominations in the Physics Subsection, 9 in the Engineering Subsection and 11 foreign-member nominations. (N.B. Two more candidates for the Physics Section whose nominations were deferred last year were evaluated per e-mail later). The candidates were discussed individually and ranked on a scale of increasing priority with marks of 1 to 5, i.e. according to an average of the marks given by the members of the Section Committee.

During and following the evaluation process a discussion ensued on the criteria for nomination and acceptance of candidates. Age, gender and field of endeavour were considered. It was clearly stated that age cannot be used as a criterion as long as the candidate is still active. Furthermore, one cannot discriminate according to gender or field of learning, although it is known that there is overrepresentation by one gender and possibly by some subfields. The solution is to motivate and encourage female nominations as well as a spread in the nominations according to the subfields represented in the P&E Section. It may be useful to have a list of all members of the P&E Section with distributions according to categories as gender and subfield.

The issue of Donation/Fee was raised by Marie Farge. She reminded the SC members that national academies don't usually ask for a fee or donation when members are elected to them. Furthermore, she said that a letter sent to candidates informing them that they have been elected to AE and that they are expected to pay an annual fee/donation may, if not considered insulting, give them a very bad impression of AE. It was mentioned by some SC members that there is an essential difference between the national academies and Academia Europaea. The national academies usually receive funding from their governments whereas Academia Europaea cannot run without the income from the members' contributions and the grants applied for successfully. After some discussion, the SC reached an understanding on how to proceed, and agreed upon the step that needs to be taken. To resolve this issue, it was agreed to submit to the Board of Trustees the idea to approach the newly elected members in two stages, i.e. two letters. The first letter would inform the newly elected members about the fact of their election asking them whether they confirm and accept their election. The second letter would follow upon acceptance of membership and would essentially explain to the newly elected members the AE financing system, possibly accompanied by a leaflet presenting AE (its history, goals, members, management, financial support, etc...), and then ask for an annual donation or fee. Of course, elected members will have the freedom whether to pay the donation/fee or not. The SC believes that this may provide a solution to all those who may feel "insulted" upon receiving the letter as it is now. The Board of Trustees should consider this option seriously.

The existence of a number of European academies was mentioned at the meeting with different views and possibilities. This is a point we suggest for consideration by the Board of Trustees.

Another point was presented by Marie Farge, which concerns Open-Access (OA) Publications and their importance for all researchers in all fields of learning. Marie is very active in this and is member of the scientific committee of the “Berlin 11 Open Access Conference” which will be organised in Berlin on November 19-20, 2013 to celebrate the 10<sup>th</sup> anniversary of the Berlin Declaration that the Academia Europaea signed on October 22, 2003. She reminded the SC that public research is financed by everybody’s taxes. Results obtained in this context should belong to the community, and articles published with such a support should be freely accessible as soon as they appear. This is not presently the case as publishing companies impose on researchers that they relinquish their copyrights and, if they refuse, their articles do not get published. Such a transfer of copyright makes publishing companies own the research articles including the text, the figures and the tables presenting data. Since a few years the objective of publishing companies is to connect articles to databases linked to them. The day such a move will be successful, means that giving the copyright implies giving new rights to the publishing companies concerning the data themselves. This opens the way to transforming data into merchandise, something that is not yet the case. Data, as ideas, have to stay outside the market as collaborations between researchers are based on free and multilateral exchanges of data. Publishing companies are trying to interfere with this process to draw a profit from this common wealth at the expense of researchers and taxpayers.

Researchers are proposing to develop a new publication model, called 'Diamond Open Access', that would be much less costly than the one of the paying author ('Gold OA') or that of the paying reader ('Green OA') presently imposed by publishers. It is characterised by the fact that neither the author nor the reader have to pay, and the journal does not belong to the publishing company but to the editorial board. This is a group of researchers whose members, replaced in due time, are in charge of the evaluation of articles without being paid (as it is presently the case). The dissemination of the articles is then done through unit services whose role is to professionally make articles accessible for free. This means taking care of the indexation, so that articles are properly identified by search engines, and of making them accessible on line. The financing of the service units could be taken care of either by public research infrastructures, on the model of computer centres or informatics networks, or by offering various kinds of supplementary services, such as editing, converting files into various formats that can be stored and accessed through different media (pads, cell phones), services that would be paid for their value (see, e.g., the economic model underpinning 'Freemium'). Marie encourages all SC members to attend the next meeting in Berlin.

Laszlo Csernai and Jan Vaagen informed the SC about the plans to establish an AE Knowledge Hub in Bergen, Norway following the successful establishment of the AE knowledge hubs in Barcelona and Wroclaw. The plan is already well advanced and a signing of the contract could be made soon. Also, there are preliminary plans to establish a particle-therapy centre in Bergen. This follows the successful workshop organised by the P&E Section on “Heavy Ions in Science and Health” that was held last year on 10 September 2012 in Bergen, preceding the SC and general AE meetings.

Jan Vaagen mentioned the work of EASAC (the European Academies' Science Advisory Council) which concentrates on the topics of energy, environment and health. This was presented during the SC meeting in Bergen last year. Jan again emphasised the need for the P&E Section to take steps towards working on topics of strong societal relevance in collaboration with EASAC. In its recent meeting in Amsterdam, which Jan could not attend, EASAC focussed on the topic of energy. It would be important for P&E Section to get involved in this.

Finally, the Chair reminded the present members of the Section Committee (SC) that the terms of two of the SC members, Marie Farge and Horst Stöcker, will end this year and possibly a third vacancy will also become available. The Chair according to the AE statutes can fill half of the vacancies and he spoke of his intention to fill only one of them. For the other two vacancies new candidates should be nominated who will be put for election through the members of the whole Section. The Chair encourages the present SC members to nominate new SC members and informs them that he will send an e-mail before beginning of August to all Section members to ask for nominations.

The meeting ended around 16:00.

#### Important information for P&E Section members

The next AE Annual General Conference (AGC) will be held in Wrocław, Poland in the period 17-19 September 2013. It will be a very special event since it will celebrate the 25<sup>th</sup> anniversary of Academia Europaea. All Section members are encouraged to attend.

Muhsin N. Harakeh  
Chair P&E Section  
July 20, 2013