Keeping the PhD in Established Quality

Joint Declaration of Science and Engineering Establishments

As regards the role and significance of the PhD within the framework of the Bologna process, the organizations listed below, as representatives of natural and engineering sciences in Germany, have issued a joint declaration. Universität Karlsruhe (TH) is member of TU9, the association of the nine leading technical universities in Germany, and supports the request.

Joint Declaration

of the Conference of the Faculties of Physics (KFP),
the Conference of the Faculties of Chemistry (KFC),
the Association of Mathematico-Scientific Faculties (MNFT),
the Association of the Faculties of Engineering and Information Science of Universities (4ING),
the TU9 – German Institutes of Technology,
the German Academy of Engineering Sciences (acatech),
the German Association of Mathematicians (DMV),
the Association of German Chemists (GDCh),
the German Bunsen Society for Physical Chemistry (DBG),
and the German Physical Society (DPG)

on the Significance of the PhD in Natural and Engineering Sciences in Germany

April 22, 2009

On April 28 and 29, 2009, the ministers from the 46 Bologna states, who are responsible for university education, will meet at Leuven/Louvain-la-Neuve in order to assess the state of the art of the Bologna process and to discuss the continuation of this process beyond the year 2010 (“Bologna 2020”).

The objective of the Bologna Declaration (1999), namely, creating a joint European higher education area and a “Europe of knowledge”, is assessed positively by the signatory organizations that represent the natural and engineering sciences in Germany. These organizations hope that the second decade of the Bologna process will bring about further progress on this way.
Since the 2003 Berlin conference, the PhD has been referred to as the “third cycle” of academic education by the Bologna Communiqué. The natural and engineering sciences in Germany are very concerned about this classification and have repeatedly pointed out that the PhD in Germany and in particular the PhD in natural and engineering sciences is to be understood as the first phase of independent scientific occupation rather than the third cycle of university education.

Natural and engineering sciences in Germany are very pleased that federal minister Professor Dr. Annette Schavan and the other German actors in the Bologna process have made this position their own and argued accordingly since the 2007 London conference in Europe. This position was outlined recently in the national report on the implementation of the Bologna objectives dated November 1, 2008.

Professional skills and capabilities in natural and engineering sciences are acquired during diploma or bachelor/master studies courses. On this basis, the PhD represents an additional scientific qualification in the field of research. In fact, a large part of the research services in natural and engineering sciences in Germany is rendered by PhD students. Any PhD opens up scientific virgin soil. It is characterized by own responsibility and independence of the work. Scientists and engineers having acquired a PhD at a German university are characterized by this independence and by their professional and extra-professional skills in international competition.

Europe has to prove itself in international competition for research results. Any efforts to modify the PhD process have to be judged by the extent to which they contribute to further increasing the quality of young scientists and, hence, of research in Europe. The quality, attractiveness, and international recognition of a PhD in natural and engineering sciences at German universities have to be maintained on the highest level – as a specific contribution to the performance of the European higher education and research area.

For this reason, natural and engineering sciences in Germany encourage the German representatives in the Bologna process to continue to insistently argue in favor of their well-established quality standards and their conception of the PhD. They encourage all European decision-makers to agitate for the variety of options of acquiring the PhD in Europe and to aim for high standards of the quality of the PhD in the European higher education area.

The Conference of the Faculties of Physics (KFP) is the association of the 59 faculties of physics of German universities. Website: www.kfp-physik.de

The Conference of the Faculties of Chemistry (KFC) is the association of the 56 faculties of chemistry of German universities. Website: www.kfc-chemie.de
The Association of Mathematico-Scientific Faculties (MNFT) represents all mathematico-scientific faculties/departments covering biology, chemistry, geosciences, mathematics, physics, and pharmacy (associated) at German state universities. Presently, it comprises faculties of more than 60 universities. Website: www.mnft.de

The Association of the Faculties of Engineering and Information Science of Universities (4ING) represents 130 faculties and departments of universities and technical universities in Germany. They offer more than 90% of all university studies in the fields of civil engineering, geodesy, mechanical engineering, process technology, electrical engineering, information technology, and information science. Website: www.4ing.net

The TU9 – German Institutes of Technology is the association of the nine leading technical universities in Germany: RWTH Aachen, TU Berlin, TU Braunschweig, TU Darmstadt, TU Dresden, Leibniz Universität Hannover, Universität Karlsruhe (TH), TU München, Universität Stuttgart. Website: www.tu9.de

The German Academy of Engineering Sciences (acatech) represents the interests of German engineering sciences in Germany and abroad in a self-determined, autonomous, and common welfare-oriented manner. It advises politics and the society as regards future-relevant aspects of engineering, science, and technology policy. In addition, it is the objective of acatech to support knowledge transfer between science and industry and to promote young scientists and engineers. Website: www.acatech.de

The German Association of Mathematicians (DMV) is an association of roundabout 5000 mathematicians with various occupations: High-school graduates, professors, secondary school teachers, industry mathematicians, enterprise consultants, and retirees. Apart from two scientific journals, the DMV publishes the quarterly “Mitteilungen der DMV” (DMV newsletter) as well as the portal www.mathematik.de. Website: www.dmv.mathematik.de

The Association of German Chemists (GDCh) is the largest chemical scientific association on the European continent with members from universities, industry, administrations, and other sectors. It supports chemical and molecular sciences in teaching, research, and application and is committed to the understanding and knowledge of chemistry and chemical relationships in the public. Website: www.gdch.de

The German Bunsen Society for Physical Chemistry (DBG) is a non-profit, scientific-technical society with more than 1500 members. It is the objective of the DBG to support physical chemistry in general by the publication of research results, to organize scientific meetings and colloquia, and to promote excellent scientists and young physico-chemists. Website: www.bunsen.de
The German Physical Society (DPG) is the oldest and, with more than 56,000 members, largest physical society worldwide. The DPG supports the exchange of experience in the scientific community and wishes to open a window to physics for all interested persons. Website: www.dpg-physik.de

The Karlsruhe Institute of Technology (KIT) is the merger of the Forschungszentrum Karlsruhe, member of the Helmholtz Association, and the Universität Karlsruhe. This merger will give rise to an institution of internationally excellent research and teaching in natural and engineering sciences. In total, the KIT has 8000 employees and an annual budget of 700 million Euros. The KIT focuses on the knowledge triangle of research – teaching – innovation.

The Karlsruhe institution is a leading European energy research center and plays a visible role in nanosciences worldwide. KIT sets new standards in teaching and promotion of young scientists and attracts top scientists from all over the world. Moreover, KIT is a leading innovation partner of industry.

This press release is available on the internet under www.kit.edu.