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Prime Minister Jan Fischer
Government of the Czech Republic
Edvarda Benese 128/4
118 01 Praha 1
Czech Republic

Dear Prime Minister Fischer:

I am writing to express my deep concern and consternation over the suggestion of drastic cuts in support of the Czech Academy of Sciences. According to the July 9, 2009 issue of *Nature*, it has been proposed to begin cutting their budget to the point where there would be no governmental support as of 2015. Thus, support for basic research that underpins any technologically based society will be eliminated under this plan. I would suggest to you that this approach is not in the best interest of the Czech Republic and its people.

High quality, fundamental research such as the world-class nucleation research being done in the Institute of Chemical Process Fundamentals may not always have immediate pay-back in terms of new products, but it does produce very large, long term benefits when clever people put the various pieces of knowledge together to make a breakthrough discovery. All such discoveries are critically dependent on prior work that was carefully conceived and rigorously executed. In the work I have seen coming from the Czech Academy of Sciences, these criteria for excellence in research are consistently met and are recognized world-wide by those of us who work in the various fields of science and technology.

Another issue is that of evaluating research productivity. Such evaluations are really very difficult and there is a strong tendency to simplify the process by simply counting papers and conference presentations or even patents. The value of a publication is often impossible to gauge when it first appears. Citation indices have a narrow viewing window in which they assess papers, so it takes an effort to assess the incremental knowledge in a published manuscript. It is possible to gain additional insights into the real impact of an organization like the institutes that comprise the Czech Academy of Sciences, but it is hard work to get a full view of their global impact on the community of science.

I have had the good fortune to have a strong interaction with people in the Institute of Chemical Process Fundamentals including extended visits to my laboratory and many good discussion with colleagues at scientific conferences. It would be a major loss to me, but more importantly to the broader worldwide scientific community if the high level researchers in the Academy were to have to change their work to areas that only have short-term economic returns. This is akin to eating the seed corn and will result in a long term loss of the technological base that must undergird developed societies in the 21st Century. Thus, implementing the plan as presented in *Nature* article and in other places, will be highly counterproductive for the future of the Czech Republic and I urge you and your colleagues in the government to look at ways that the full range of approaches to develop science and technology in your country.

Sincerely yours,

Philip K. Hopke
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Distinguished Professor, and
Director, Center for Air Resources
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