



GESELLSCHAFT DEUTSCHER CHEMIKER

Statement of the German Chemical Society on Plan S

In its statutes the German Chemical Society (Gesellschaft Deutscher Chemiker, GDCh) commits itself to the promotion of scientific publishing and information dissemination. It therefore supports all activities that serve this purpose, in particular Open Access, which provides readers with free access to the digital content of publications, including extended usage and sharing options. However, the GDCh has repeatedly stated, as for example in its recent position paper “On the Future of Scientific Publishing” of December 2013, that all these activities must serve the advancement of science, do not restrict authors and are based on resilient and sustainable business models.

On 4 September 2018, eleven European research funding organizations (cOAlition S) published Plan S, which defines in ten principles the framework for the transition by 2020 to open access for the research results funded by these organizations. See <https://www.coalition-s.org/10-principles>.

The German Chemical Society supports the fundamental intention of Plan S and explicitly welcomes some of the principles formulated. However, it sees a need for clarification and is seriously concerned that some of the key issues will have significant adverse effect on the researchers involved and on Europe as a center for innovative research.

(i) The GDCh fully endorses the intention of the research funding organizations to support the creation of high-quality Open Access journals and platforms, in those scientific disciplines where there still are no adequate platforms and infrastructures. See principle 3.

(ii) Both the statement that open access publication fees will be borne by the funders or the scientific institutions and not by the individual researchers and the explicit confirmation that all researchers must be able to publish their research results in Open Access publications, even if their institutions have only limited resources, address one of the major concerns from the GDCh position paper mentioned above and are highly welcomed. However, Plan S does not specify how this should actually be ensured. See Principle 4.

(iii) Together with its sister societies from the US and the UK the GDCh recently set up the preprint server ChemRxiv. On this platform manuscripts can be made publicly available as preprints prior or in parallel to the submission to a regular journal. There are no costs for the author or the reader. ChemRxiv is financed by the participating societies and other partners. Unfortunately, according to the “Guidance on the Implementation of Plan S” from 27 November 2018 preprint servers are not sufficient to be compliant. The GDCh greatly regrets this exclusion. See principle 8.

(iv) The stipulation that hybrid journals (subscription journals in which authors can have their article Open Access after paying an extra fee) are not compatible with the Plan S principles is considered particularly critical by the GDCh. About 85% of all journals are affected by this restriction. In chemistry almost all high-quality and very selective journals, the majority of which are published by nonprofit societies, such as *Angewandte Chemie* and the *Journal of the American Chemical Society*, fall into this category. Hence, these journals are no longer available for authors bound to Plan S. This will have serious negative effects on authors, readers and the affected societies. See Principle 9.

(v) The standardization and capping of open access publishing fees will inevitably result in great economic pressure on high-quality and selective journals, whose costs per published article are necessarily higher because of their high rejection rates. In the field of chemistry, this also applies first and foremost to the journals published by chemical societies. Journals of average or even mediocre quality are favored by this business model and the number of so-called predatory journals will increase to the detriment of science. See Principle 5.

(vi) From a current perspective, broad international support and participation in Plan S, especially from the research-intensive regions in America and Asia, is not expected. The impact on the scientists concerned, or the consequences and risks for Europe as a center for innovative research, if large parts of the global research enterprise do not participate in Plan S, are not addressed.

(vii) In its position paper of December 2013, the German Chemical Society has strongly expressed its commitment to the freedom of researchers and has explicitly rejected mandates that oblige scientists to publish in Open Access journals. The exclusion of hybrid journals formulated in Plan S, the obligation to publish the work under one of the most liberal open licenses, preferably CC-BY, and the threat of sanctions for non-compliance are significant interferences with the freedom of the researcher. The GDCh cannot agree with these stipulations for several reasons, not the least of which is Article 5 Paragraph 3 of the Basic Law of the Federal Republic of Germany, which guarantees the freedom of science. See principles 1, 9 and 10.

The German Chemical Society appeals to Plan S supporters to incorporate its concerns and those of its more than 30,000 members into future considerations and implementation plans. The legitimate aim of making scientific results freely accessible to all must not be thwarted by unintended, science-damaging consequences.

Unanimously passed by the GDCh Board at its meeting on 6 December 2018

The German Chemical Society is with more than 30,000 members by far the largest chemical society in Continental Europe. In its statutes the GDCh commits itself to the support of scientific publishing and information dissemination. The GDCh owns and co-owns some 20 internationally renowned scientific journals, including *Angewandte Chemie*, one of the highest impact journals in chemistry.