

## The JBCS as Heritage of Brazilian Science. We Should All Take Care of It

The publication of scientific journals began with the French and English academies of sciences in the 17<sup>th</sup> century and aimed to disseminate scientific discoveries to advance knowledge about natural phenomena. As scientific activity expanded and became professionalized, other scientific societies began publishing journals to accommodate their own scientific production, leading to the current moment when the production of scientific literature has become a highly profitable business dominated by large commercial publishers.

Since its foundation, the Brazilian Chemical Society (SBQ, *Sociedade Brasileira de Química* in Portuguese) has been committed to its editorial policy, launching *Química Nova*, in 1978, and the *Journal of the Brazilian Chemical Society (JBCS)*, in 1990, both thanks to the vision of Professor Eduardo Peixoto and, in the case of the *JBCS*, also following the community's support to create a journal aimed at publishing original articles in English to enable its international circulation and increase its impact on global literature.<sup>1</sup>

In its first decade, according to the *Web of Science* database (using the search string "All Fields/Chemistry"), 514 papers by authors with at least one affiliation to a Brazilian institution were published in the *JBCS*, corresponding to approximately 10% of all publications in indexed chemistry journals by Brazilian researchers in this database. In subsequent decades, this percentage decreased, reaching approximately 6.0% in the 2010-2019 decade and around 2.5% over the last five years (2020-2024), despite the *JBCS* being indexed in several databases (in the *Journal Citation Reports* since 1998) and the extensive editorial modernization in its recent history.

How can we explain the decrease in the attractiveness of the *JBCS*, the flagship journal of the SBQ?

The almost exponential increase in the number of indexed journals in recent years, particularly those that do not value strict editorial standards and are driven by commercial interests - "pay and publish" - and the significant number of contributions *per issue* (mainly through special issues) is part of the explanation. These publications offer an easier path than well-established journals with better editorial reputation, especially those linked to scientific societies.

This greater ease of publishing in less demanding journals combines perversely with the still almost omnipresent ethos of "publish (at any cost) or perish", which, although justifiable in the past (given that we find only about 600 original articles published by Brazilian authors in indexed chemistry journals in the 1970s), can no longer be considered a strategic action for our community.

Besides the inherent drawbacks of such conduct (fragmentation of results, author consortia, and other ethically questionable practices), it diverts attention and effort from the true advancement of knowledge, prioritizing topics for which obtaining results is less challenging, thus contributing to the overall impact of Brazilian publications remaining below the global average. Dismantling this logic is a task for current and future generations. Although some funding agencies and research institutions in our country

claim to base their selection criteria only on a limited number of publications highlighted by the candidate, in practice, many of us still resort to numerical criteria when acting as reviewers or committee members.

In a few words, instead of fueling this unrestrained race for the number of publications, it would be better to dedicate ourselves, whenever material conditions allow, to science at the frontier of knowledge to achieve better publications. Institutions and funding agencies must strongly support changes in the evaluation of academic performance based on initiatives such as DORA (*The Declaration of Research Assessment*), which recognizes the need to improve the assessment of scientific research performance.

The *JBCS* has been leading actions to demonstrate its commitment to valuing research quality,<sup>2</sup> with recent significant advances in its editorial procedures, encouragement of young researchers' participation, and continuous pursuit of quality in its decisions. The decrease in its impact factor from 2021, when for the first time it slightly exceeded 2.0, requires attention and actions so that we can be more assertive with the community and adopt as a personal goal the regular submission of quality manuscripts for consideration by its editorial board. After all, the responsibility for the reputation of the *JBCS*, the flagship journal of the SBQ, lies with all of us, particularly with the more established researchers and institutions in our community, following the example of some of our leaders who are among the ten chemists with the highest number of contributions the *JBCS* (between 35 and 79 publications). The practice of legitimately citing works published in the *JBCS*, particularly in publications in other journals without resorting to opportunistic citations, as well as inductive actions by graduate programs, such as subsidizing the payment of article-processing charges (APCs) for work accepted for publication in the *JBCS*, could contribute to strengthening our presence nationally and internationally.

For those familiar with the great names in organic chemistry, the example of one of the giants in the field, Professor Teruaki Mukaiyama,<sup>3</sup> is noteworthy - approximately 75% of his 815 articles were published in *Chemistry Letters*, a journal edited by the Chemical Society of Japan. After all, the importance of a country's scientific activity is revealed by the quality and impact of its contributions far more than by their mere number. As expressed very appropriately by our current Editor-in-Chief,<sup>2</sup> "the *JBCS* holds the value our community bestow on it".

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