Editorial

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Forget About the Journal Impact Factor and Other Scientometric Indicators

Please, calm down! Before you judge me for such a statement as the one in the title of this Editorial, I kindly ask you to follow the ideas expressed herein. After that, you are free to decide whether I have made a reasonable argument or am merely a mad editor driven to this state by the demands of our daily routine as scientists. It will be up to you!

Scientometric indicators are widely used in all areas of science as markers of quality and impact. The concept of citation indexes for science dates back to 1955, as formally introduced by E. Garfield.[1] A few years later, at the beginning of the 1960s,[2] the Journal Impact Factor (JIF) was defined, and its use became widespread. At that time, it was unlikely anyone could have foreseen that this simple scientometric indicator would become so controversial. The original idea[3] behind the application of the JIF - aiding libraries in making indexing and purchasing decisions for their collections and classifying scientific journals - was undoubtedly commendable. It is almost universally accepted that scientists enjoy classifications and lists, and that is fine. What was not considered, however, was the potential misuse of these scientific indicators or the unethical strategies used to inflate these descriptors, observed particularly in predatory journals and publishers.[4] Unfortunately, some researchers have also adhered to some controversial practices.

To counter certain questionable practices, the San Francisco Declaration on Research Assessment (DORA) initiative was launched.[5] The DORA initiative, established over a decade ago, outlines best practices for evaluating and communicating scientific contributions. It is well known and easily verifiable that a large number of reputable and serious publishers have adhered to the DORA initiative. The obsession with metrics such as the JIF has profound implications for researchers' careers, particularly for early-career scientists. Young researchers often face immense pressure to publish in high-JIF journals, which can lead to increased stress and health issues, as recently discussed.[6] The prioritization of quantity over quality and a focus on "safe" research areas that align with publication trends, rather than pursuing bold or innovative ideas, suffocate creativity and hinder the advancement of science. This culture not only stifles creativity but also exacerbates inequities, as researchers from less resourced institutions or countries may struggle to compete in this system.

Several journals have actively embraced the principles of the DORA initiative by implementing practical changes to their evaluation and editorial processes. For example, some journals have removed JIF-related information from their websites and promotional materials, focusing instead on transparent editorial practices and the rigor of peer review. Certain publishers have also adopted policies to ensure that hiring and funding committees are discouraged from using JIF as a proxy for research quality, reinforcing the importance of assessing individual contributions based on content rather than publication venue. These actions serve as tangible steps towards fostering a more equitable and meaningful evaluation of scientific work.

In a recently published Editorial,[7] I shared my criticism of the misuse of JIFs and how *the Journal of the Brazilian Chemical Society* (*JBCS*) intends to use this metric. Personally, I do not prioritize JIFs, but as the Editor-in-Chief, I recognize that I must consider all relevant indicators. I also acknowledge that JIF is a metric that inevitably concerns not only me but also the *JBCS* editorial team. However, the search for and pursuit of what is best for the *JBCS*, as well as for all our readers and supporters, requires care, integrity, and a fair evaluation of what the scientometric indicators are, in fact, revealing to us.

In this context, for example, consider two traditional and respected journals focused on Organic Chemistry: *The Journal of Organic Chemistry* (*JOC*) and *Tetrahedron Letters* (*TL*). The current JIF of the *JOC* is 3.4, while *TL* has a JIF of 1.5. There is no need to elaborate on the *JOC*, as every organic chemist worldwide recognizes it as one of the most esteemed journals in the field. *TL* is another outstanding example, being a traditional and respected journal for publishing organic chemistry research. Recently,

I asked some reputable professors in Brazil if they could name any organic chemist worldwide who does not read works published in *TL*. Of course, they could not. *TL* has been, and still is, one of the most read journals for those working in organic chemistry.

What is most striking, however, is that a simple search reveals dozens of journals focused on organic chemistry, some of which are relatively new, that boast higher JIFs than the *JOC* and *TL*. Yet most, if not all, serious researchers I know would prefer to have their work published in these two well-known and reputable journals rather than in any of these other ones with higher JIFs. If you are a scientist, whether in training or fully independent, you are likely to agree with this perspective. And you might find yourself questioning the reasoning behind this seemingly simple decision or preference. The reason is, indeed, quite simple: *The values of prestige and respectability are difficult, if not impossible, to measure or quantify.* A similar analysis could easily be conducted for many other fields of research, where traditional and respectable journals remain the preference of most researchers, even when they hold lower JIF values compared to some alternatives.

The *JBCS* currently has a JIF of 1.3. Working together with all the editors and staff, and with the full support of the *SBQ* (*Brazilian Chemical Society*), we aim to increase it. However, to improve this specific scientometric indicator - and all others currently deemed relevant - it is essential to advance in fields where indicators fail to provide measures. The entire *JBCS* team is currently working to cultivate features such as tradition, respectability, rigorous work, and intrinsic value, aspects that no scientific metric will likely be capable of quantifying. We are aware that many publishers and journals have adopted questionable strategies to inflate their scientometric indicators. These strategies are not - and will never be - an option for us. One of our primary goals is to elevate the intrinsic value of the *JBCS* - a quality that, for those of us who engage with it daily, no scientific descriptor can truly capture.

Achieving this requires strong support from our community. Without it, these ambitious goals risk being dismissed as mere visions of so-called visionary Editors and supporters. However, if we continue working together to elevate the quality of the manuscripts we publish, improve our time to first decision, and demonstrate to our community the greatness of the *JBCS*, I am confident we will secure a bright future for our journal. The natural outcome of these ethical, long-term efforts will be the eventual improvement of scientometric indicators. *But let me be clear: The improvement of any scientometric indicator should result from our hard work and well-informed decisions, not serve as the goal itself.*

With this information and these aims in mind, my title statement to disregard JIFs and other scientometric indicators becomes clear. Seriously consider that, long before the emergence of today's widely used scientometric indicators and classifications, scientists knew where to publish their work. Even now, without a shadow of a doubt, serious scientists - and I do mean serious scientists - know exactly where they want their work to be published, regardless of what scientometric indicators may suggest. These descriptors should be nothing more than the natural outcome of well-executed, long-term planning, consistent effort, and scientifically rigorous work; otherwise, they merely represent meaningless numbers, which, as we know, can be manipulated.

We are diligently working to place the *JBCS* among those serious and prestigious journals that any scientist would consider as one of their top options to publish their best work. We are already proud of, and will continue to be proud of, the path we have chosen to reach these ambitious goals. Along with the *SBQ*, we invite you - readers, authors, and supporters - to join us on this journey. Together, we can strengthen the *JBCS* and its future. As the cornerstone chemistry journal in Latin America, we are committed to taking all necessary steps to ensure an ethical, technical and impactful profile, serving as a benchmark not only for Brazilian journals but also globally. We are currently undergoing this transformation, and you are more than welcome to join us.

Finally, if you have followed these arguments to this point, in addition to thanking you for the opportunity to share my views and our collective efforts, I now invite you to feel free to judge me as a dreamer - or perhaps even mad. All of us, the *JBCS* editors, are, however, navigating together in this sea of scientometric indicator madness, but we know where our wonderwall stands. *After all, the pursuit of bold ideas often comes with its share of skepticism and doubt.* Yet, history shows that those who are often labeled

as dreamers - or even mad - are frequently the ones who drive meaningful change.

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