
The Role of the Editor: The Case of Springer

by

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Project Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Publishing

in the

Publishing Program

Faculty of Communication, Art and Technology

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SIMON FRASER UNIVERSITY

Fall 2018

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Abstract:

Springer, as one of the largest commercial academic publishers, merged with Nature in 2015, and now has a new name: Springer Nature. The merger combines strength of two publishers, with strong book publishing plus strong journal publishing in one publisher. However, the merger does not affect the working modes of the editors at Springer or Nature. Different from the in-house editors at Nature who are handling peer-reviewing process of every article, what are the responsibilities of the editors at Springer? What skills should the editors at Springer have? How can one be a qualified editor at Springer? Facing the new trends in publishing, including big data, open access policies, information exposure, competitive markets, among others, what challenges are awaiting these editors? In particular, in the fast-growing Chinese market, with its enormous output of scientific documents, how can editors based in China work to address this challenge? This report describes the role of editors at Springer regarding the Chinese market, from skills to experiences and from opportunities to challenges.

Keywords: acquisition editor; open access; China market; co-publish journal; scientific community

Subject Terms: Academic Publishing; Commercial Publisher; Academic Book Publishing; Journal Publishing

Acknowledgements

I would like to acknowledge and sincerely thank my supervisor and line manager at Springer, June Tang (Executive Editor, Physical Sciences & Engineering), for her gracious guidance and great support. I am very lucky to have her as my supervisor, who allowed me to attain knowledge and become comfortable in my position at Springer very quickly.

I would also like to thank my husband, Jeff Zhao, for his consistent encouragement. Without him, I do not think I could have done well in the publishing courses I took at SFU, returning to campus after my M.S. graduation four years earlier. Without him, I do not think I could have continued to pursue my career in academic publishing in China so easily.

I would like to convey great thanks to my SFU supervisors, John Maxwell and Juan Pablo Alperin, for their guidance and helps. No matter where I am, their kind helps are always available.

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Chapter 1. Introduction and Background on Springer Nature

A Brief History of Springer

As one of the largest global commercial academic publishers, Springer has published more than 3,000 journals and 200,000 books in various disciplines and interdisciplinary areas to date. With more than 200 Nobel Prize winners among the authors of its books and journal articles, Springer has numbers of highly reputed academic products on record, including works by Nobel laureates in Medicine, J.P. Pavlov (1904); in Chemistry, Otto Hahn (1944); and in Physics, Albert Einstein (1921), Niels Bohr (1922), Pierre-Gilles de Gennes on Physics (1991), and Gerard 't Hooft (1999).

On May 10, 1842, when Julius Springer founded his bookstore and publishing house in Berlin, the foundation for Springer was laid¹. In May 2017, Springer celebrated its 175th birthday (Figure 1), with a huge birthday cake in its Beijing office showing its past and future.



Figure 1. The Designed 175th Anniversary Celebration Slogan

Over the past 175 years, Springer has passed several publishing milestones, including moving from politics to science, from localization to globalization, from printing to digitalization, and from open access to book archives, associated with certain times and features in publishing history.

The shift from politics to science occurred in the first and second Springer generations (from 1842 to 1906), primarily due to industrialization². With the large demand for rapid, scientific innovations and the birth of a new international community, the focus of the “Julius Springer Publishing House” portfolio shifted from political caricatures and treatises to the engineering,

¹ Springer. “Springer-Driving academic publishing since 1842.” Accessed May 1, 2018. <http://www.springer.com/gp/about-springer/company-information/history>.

² Sarkowski, Heinz. *Springer-Berlag history of a scientific publishing house, Part 1 Foundation 1842-1945 Maturation Adversity*. Heidelberg: Springer-Verlag Berlin Heidelberg, 1996. <https://link.springer.com/book/10.1007%2F978-3-540-92887-4>.

technical, medical, and natural sciences disciplines. In 1913, Springer became the second largest German publisher, with a total of 379 titles at that time.

Springer's increasingly international focus was marked by the company founder's grandchildren beginning after the Second World War in 1945 until 1992³. During this period of time, the center of the scientific world was no longer located in Germany or Europe but in North America, specifically in the US. English had become the international language, as well as the undisputed lingua franca of science. During this time, Springer launched subsidiaries or offices outside the German-speaking countries, including in New York (1964), London (1973), Tokyo (1983), Paris (1985), Hong Kong (1986), Barcelona (1990) and Budapest (1990). Above all, Asia would prove to be an important market in the future, which will be discussed in detail in the next chapter.

The digitalization strategy was originally implemented in 1990 and subsequently expanded from production and editorial to marketing and sales. Springer first unveiled the online platform LINK (now called SpringerLink, <https://link.springer.com/>), aiming to allow users to read and purchase scientific publications online and, ultimately, to become one of the most-frequented online libraries for science, technology and medicine (STM) content. For many scientific journals, "Print only", "Online first", and "Print on demand" (POD) are the three standard practices from printing to digitalization.

In the twentieth century, despite the scientific community and the public engaging in countless debates over the scope of Open Access, the concept of Open Access has remained negligible in terms of business in academic publishing. In 2004, Springer introduced the "Open Choice" publishing model, and in 2008, Springer acquired Biomed Central (BMC) and created the SpringerOpen portfolio. In 2010, Springer initiated the label "Springer Book Archives", under which all Springer publications dating back to its founding in 1842 were digitally scanned and made available online. These revolutions from Open Access to the Springer Book Archives were called "digitalization 2.0" in Springer.

³ Götze, Heinz. *Springer-Verlag history of a scientific publishing house, Part 2 Rebuilding 1945-1992 Opening frontiers securing the future*. Heidelberg: Springer-Verlag Berlin Heidelberg, 1996. <https://link.springer.com/book/10.1007%2F978-3-540-92888-1>.

A Brief History of Nature

Nature, more accurately called the Nature Publishing Group, was a part of Macmillan Science and Education, a fully owned subsidiary of Holtzbrinck Publishing Group. The flagship publication of the Nature Publishing Group is *Nature*, a British multidisciplinary science journal first published in November 1869. In the academic research area, the world's most cited and topthree journals are *Nature*, *Science* and *Cell*, so *Nature* is one of the most reputed journals.

Under *Nature*, the Nature Publishing Group has several Nature sister journals; some cover more specific types of publications, and some cover slightly broader topics, with all types of publications; e.g., *Nature Reviews Chemistry* only publishes review articles in chemistry, while *Nature Chemistry* publishes all types of articles in chemistry. Some are subscription-based journals, and some are open access journals; e.g., *Nature Communications* is a fully open access journal for which one must pay an APC (article processing fee) to publish articles in the journal, regardless of who receives these invoices -- the author, the author's institution, or the author's funding agency. *Nature Protocol* is a subscription-based journal, for which the authors do not pay but to which subscribers to the journal must pay for access.

In addition to journals, the Nature Publishing Group also provides other services, including Naturejobs, providing scientific career information, tools and job listings.

The Merger of Springer and Nature

In January 2015, Springer Science+Business Media and the majority of Macmillan Science and Education, including the Nature Publishing Group, were merged into one company, called Springer Nature. The new group is under joint control of Georg von Holtzbrinck, holding 53 percent of the market shares, and by BC Partners. Macmillan Science and Education brings the Nature titles and a strong book list in social sciences and humanities, and Springer brings a well-known portfolio of science books and journals, as well as a strong platform and highly developed back office operations. As a new entity, Springer Nature combines two scientific publishers, each of which has more than 150 years of publishing history. In 2015, after the merger, Springer Nature had 13,000 employees in more than 50 countries worldwide (Figure 2). The new official website is: www.springernature.com. Under this new name, there are several brands, including Springer (which is discussed in this report), Nature Research, BMC, Palgrave Macmillan, Scientific American, Apress, Adis, J.B.Metzler, Macmillan Education, and Springer Healthcare

(Figure 3). However, the editors at Springer and at Nature are set in different modes and have very little interaction in editorial activities, as discussed in detail in later chapters.

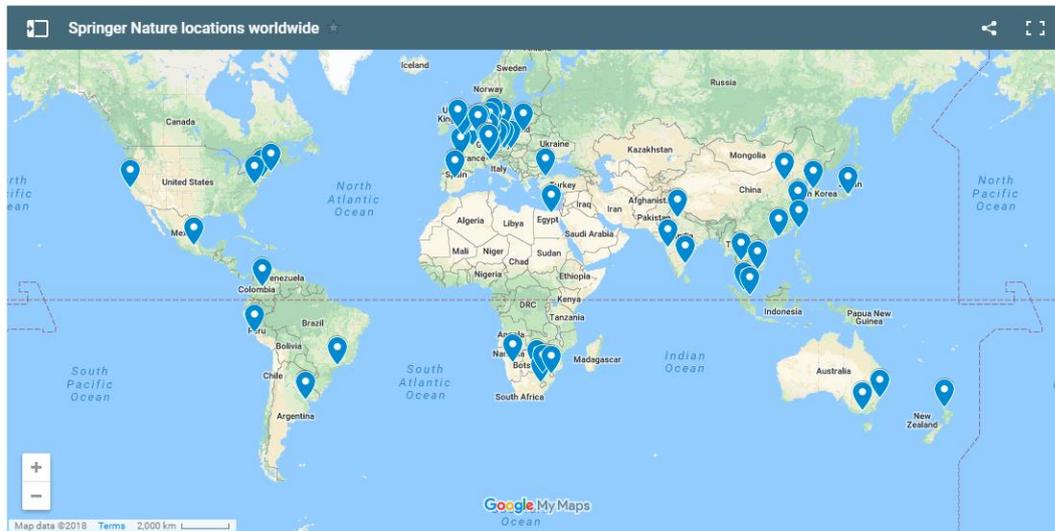


Figure 2. Springer Nature Offices Worldwide



Figure 3. All Brands under Springer Nature

Global Market Share

It was estimated that the global STM and geophysical information market was \$33.7 billion in 2014 and \$35.1 billion in 2015, and it continued to grow steadily in 2016, and shows even stronger growth in 2018⁴. Revenues come mainly from publishing activities, including journals, books, technical databases, developed research tools, abstracting and indexing databases, citations and downloads, subscribers, open access fees, and so on. Data in 2014 indicated that Elsevier remained at the top of the STM market, followed in order by Wolters Kluwer, Wiley, and Springer in the fourth position. In 2015, because of the merger, Springer Nature was listed in 2nd place on the market.

One of the business models is subscription, from which the revenues consist of electronic product subscriptions. Based on data collected by Outsell⁴, before the merger of Springer and Nature, Elsevier was listed as the #1 company in subscription revenue resources, Thomson

⁴ Outsell. “Scientific, technical & medical information: 2015 market size, share, forecast, and trend report.” (July 30, 2015)

Reuters was second, and John Wiley & Sons was third. In 2015, open access constituted approximately 1% of the STM market; however, it is estimated that open access will reach a critical mass within the next five years. Today, many highly well-established journals and newly launched journals are open access modules from different publishers, such as *Nature Communications*⁵ (by Springer Nature, launched in 2010, a multidisciplinary journal in all areas of the biological, physical, chemical and earth sciences; Impact Factor in 2017 was 12.353), *ACS Omega*⁶ (by the American Chemical Society, newly launched in 2016, focusing on new findings in chemistry and interfacing areas of science), and *iScience*⁷ (by Cell Press, a brand under Elsevier, newly launched in 2018, publishing basic and applied research that advances a specific field across the life, physical, and earth sciences). Some publishers provide open access books if the authors or editors of the monographs have publication funding for open access to partial or entire book content.

The transition from printing to digital is also reflected on the market. Digital content constituted 88% of the total market in 2014, and the print revenues shrank from \$3.8 billion in 2013 to \$3.5 billion in 2014⁴. Considering that printing will continue to shrink but will not disappear, most of the journal issues and monograph copies are POD (Print-on-Demand) modules that, when authors or readers requested printed copies, the production team can print them on demand. In addition, university libraries and public libraries as the main sales channels will order at least one or two printed copies to put on the shelf for display. It is believed that, for an international book publisher, the average expected annual printed copy sales of a monograph is approximately 20 copies, but for classic textbooks, the demand might be as high as 100 copies.

Data indicates that, of the global regions' market shares (the breakdowns are: US, EMEA (Europe, the Middle East and Africa), Asia Pacific, and other Americas), the US remains dominant in terms of revenues at approximately 42.8% in 2014, with EMEA as a close second at approximately 34.0%⁴. Although the Asia-Pacific region constituted approximately 17.1%, it is and

⁴ Outsell. "Scientific, technical & medical information: 2015 market size, share, forecast, and trend report." (July 30, 2015)

⁵ Springer Nature. *Nature Communications*. Accessed June 1, 2018. <https://www.nature.com/ncomms/>.

⁶ ACS Publications. *ACS Omega*. Accessed June 1, 2018. <https://pubs.acs.org/page/acsodf/about.html>.

⁷ Cell Press. *iScience*. Accessed June 1, 2018. <https://www.cell.com/iscience/home>.

will continue to catch up dramatically with research and development investments from the Chinese government, and financial support policies from Chinese universities are being implemented in reality. More detail about the Chinese market and China's publishing activities is provided in later chapters.

My Role at Springer

My role at Springer is "Associate Editor, Chemistry". Associate editor indicates the level of an editor. In general, new hires will start as associate editors and then be promoted to editor and thereafter to senior editor, with the highest level being executive editor. Chemistry represents the subject area. Every broad discipline has an editor role in Springer, including Physics, Material Sciences, Environmental Sciences, Electrical Engineering, Computer Sciences, and so on. My specific responsibilities as an associate editor at Springer are twofold: the acquisition and publication of books; and the acquisition and management of co-publish journals, which are discussed in detail in the next chapter.

Chapter 2. The Role of an Editor at Springer

The Requisites of Being an Editor at Springer

Although it has the same job title of “editor”, in fact, the responsibilities and requirements of an editor at Springer are quite different from those of an editor at Nature.

The editor at Nature is more accurately an in-house, full-time editor, with a very strong academic research background, who can handle academic manuscripts and comprehensively understand the scientific content in the required field. The editor at Springer, to some extent, is more concisely called an acquisition editor, rather than editor, because the work that an editor does at Springer is more like acquiring content (including books and journals), instead of managing the editorial process and handing individual journal article.

Based on the descriptions posted by Springer HR for the position of “Editor in Engineering”⁸ and by Nature HR for the position of “Editor in Nature Cell Biology”⁹, the below draws a comparison of similarities and differences between two positions.

From the responsibilities aspect, both editors need to actively build up good networks and keep close contact with scientific community, by attending academic conferences, visiting laboratories, delivering author/editor/reviewer workshops.

However, the target for an editor at Springer in daily work is to plan, acquire and manage editorial projects from scientific community, including books, journals, conference proceedings and electronic database, while the target for an editor at Nature in daily work is to participate in all aspects of the editorial process, including manuscript selection and managing the peer review process, commissioning and editing News & Views and Review articles, and writing for the journal.

From the requirements aspect, both editors need to be fluent in spoken and written English, and preferably acquire an academic degree in a foreign country; Are interested in academic

⁸ Springer Nature HR. Springer (associate editor), Engineering. Accessed July 12, 2018. <https://jobs.51job.com/beijing-hdq/103210013.html?s=04>.

⁹ Springer Nature HR. Nature editor in Nature Cell Biology. Accessed July 12, 2018. https://www.glassdoor.co.uk/Job/berlin-scientific-editor-jobs-SRCH_IL0,6_IC2622109_KO7,24.htm?countryRedirect=true.

publishing with an eagerness to learn new fields and engage with the scientific community; Previous working experience in international academic publishing industry helps but is not a must; Are required to have excellent interpersonal and communication skills, with excellent team work spirit; Are required to have strong organizational skills, capable of handling multiple priorities.

However, the requirements of the education degree level for an editor at Springer is ideally PhD degree in related subject, while for an editor at Nature is PhD degree and postdoctoral experience in related research area; An editor at Springer is required to be ready to travel within China while an editor at Nature is not required but depends on the working style of individual editor at Nature in daily work; An editor at Nature needs to have the ability to critically evaluate research submitted to the research areas covered by the journal, while an editor at Springer is not required.

Education and Training for an Editor at Springer

For any newly hired editor at Springer, regardless of whether he/she has previous publishing work experiences or not, there will be a two-week induction program, covering every topic but not limited to: general company rules and policies (including administration, finance, IT, HR, the history and brand of Springer Nature); main responsibilities of an editor (book acquisition procedures and journal acquisition procedures); editorial systems (BFlux system for books, JFlow system for journals); book production types; journal external and internal workflows; Signing and Publishing Agreements; data analysis (article level and journal level usage reports, journal annual report, Abstracting and Indexing, book matrix, Impact Factor, H-index); sales packages; and marketing functions and activities.

As an editor at Springer, in addition to the basic skills and some extent of knowledge about the academic publishing field, other skills are also a plus, for example, data analysis, which cannot be negligible in daily work. It is true the data specialists and data analysts from Springer's controlling department are responsible for generating and designing all types of data reports and book matrices. As an editor, to fully understand these reports as evidence of some indication is a must because these data can help to determine what the targets are, where the potential markets are, and how the journals or books are performing.

For instance, the below is a comparison of a book matrix in the food science subject area

under chemistry, with two types of publications (major reference work and SpringerBriefs) published in the same year. From the below numbers it can be easily seen that the first handbook is much more popular and successful than the second book.

1. Cheung, Peter C. K., Mehta Bhavbhuti M. *Handbook of Food Chemistry*, published in 2015 by Springer (Figure 4). The book matrix provided for this major reference work is: citations 20 times; mentions 28 times; readers 103 times; and downloads 115,341 times¹⁰.

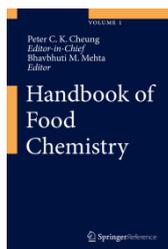


Figure 4. Handbook of Food Chemistry, Cover

2. Verma Meera. *Energy Use in Global Food Production: Considering for Sustainable Food Security in the 21st Century*, published in 2015 by Springer (Figure 5). The book matrix provided for this SpringerBriefs is: readers 16 time; and downloads 5,428 times¹¹.

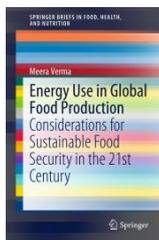


Figure 5. Energy Use in Global Food Production, Cover

Here is an example for the journals side. For every co-published journal each year, the responsible editor visits the journal editorial office and shares the Journal Annual Report (JAR) with it. The JAR is approximately 50 pages, with all of the data related to the whole year's journal performance, including editorial development, the publication schedule, circulation in different regions around the world, usages, impact, ranking, marketing campaigns, among others (Table 1). Therefore, to have a profound understanding of the JAR, from the definition of each section, title,

¹⁰ Cheung, Peter C. K., and Bhavbhuti M. Mehta. *Handbook of food chemistry*. Heidelberg: Springer-Verlag GmbH Germany, 2015. <https://link.springer.com/referencework/10.1007%2F978-3-642-36605-5>.

¹¹ Meera, Verma. *Energy use in global food production: Considerations for sustainable food security in 21st century*. Heidelberg: Springer International Publishing, 2015. <http://www.springer.com/cn/book/9783319167800>.

and items regarding the hints or conclusions underlying these numbers, this information is very important to an editor.

Table 1. Journal Annual Report Items

# Section	Section Name	Items Description
1	Editorial development	Editorial boards, publishing ethics, ethical statements, publisher's code of conduct
2	Publication schedule	How many issues are published, how many articles are published, how many special issues are published
3	Circulation	How many institutional subscriptions, how many online deals, how many compact deals
4	Usages	Articles, downloads and citations, top articles, visits by geographic location, visit referrals
5	Impact	Coverage in databases, Google Scholar h5 Index, CiteScore, Impact Factor
6	Ranking	Top rankings, highest cited articles, top ranked journals in related research areas, top cited journal data, top cited journal data, top organizations contributing to the journal, top countries contributing to the journal
7	Marketing	Marketing campaigns

Another example consists of marketing functions and activities. As an editor, collaborating with the marketing department for marketing campaigns not only can better satisfy customers or clients, but it can also help to drive contracts or sales from end users since an editor at Springer will be the first direct contact for authors who are, at the same time, also the end users of all products from the publisher. During the Information Explosion Era, without marketing or social media platforms, it difficult for the public to pay attention to new releases of published articles or monographs written by faculty members or research groups, as well as coming events.

For example, for the editor in Chemistry in 2018, a case of collaboration with marketing department could be the marketing campaign for the 31st Academic Annual Conference of the

Chinese Chemical Society from May 5 to 8 in Hangzhou, China. As shown on the official landing page¹², it includes several parts: *Words from Editors* (this content is from editors, telling readers that Springer is going to attend the annual chemistry conference, what products Springer will showcase in what areas, and where to find Springer booth); *Selected journals* (the list of journals is provided by editors, focusing on those with the greatest relevance to the annual chemistry conference, a large number of which are from China); *High-impact articles* (high-quality published articles selected by editors to provide a period of free access to all readers to improve visibility and exposure rates); *Featured new books from Chinese authors* (the list of books is provided by editors, selecting those newly published books written by important authors with significant influence on the market); *Read and download selected chapters from the featured books freely* (one or two chapters of each featured book provide a period of free access to all readers to gain interest and curiosity from them); *Top download books, published from 2017-2018* (a list of highly reputed published books worldwide provide one or two chapters for free access for a period of time); and *Meet our editors* (editors' information is provided here for any readers, authors, or potential authors to contact). It is true that several university faculties go to visit Springer booths to meet editors and discuss further cooperation after they see the landing page from the Springer website, and the editors also receive emails from potential authors for inquiries.

To Acquire and Publish Books

To acquire high-quality book proposals is a major task for the editors at Springer. To some extent, calling the position "acquisition editor" might be more suitable for exactly this reason. For acquisitions, which topics are valuable? Whom should one contact? How should one approach them? How does the publishing process unfold? These questions together outline the professional role and working frame for the editor at Springer.

What topics are valuable? An editor must learn project themes and research topics through various resources all the time to stay close to academicians' ideas since the editor does not perform research work in labs or research centers, like when he or she went to schools. These

¹² Springer. "The 31st academic annual conference of the Chinese Chemical Society marketing campaign." Accessed July 31, 2018. <https://www.springer.com/gp/campaigns/ccs2018>.

tools could include the following:

- Data tools, including Journal Citation Report (JCR), Impact Factor, BookMetrix, citations and downloads, can indicate what might be “good” publications from authors. It is true that these numbers are only numbers and sometimes cannot be considered absolutely “good” or “bad”. However, large numbers could at least indicate popularity and acceptability by scientific communities. Therefore, the editor keeps an eye on these numbers but has a balance in his/her mind when judging publications or research work according to the data tools.
- Lists of financially supported projects indicate the funding bodies’ preferences and policy biases. When checking financially supported research projects, the editor could obtain a sense of the so-called “hot” topics. It does not mean that research topics that are not financially supported are not hot topics, but without funding, how can a research lab buy equipment and facilities, how can faculty members hire researchers and post-docs, and how can open access articles be published if funding is lacking? Therefore, to some extent, a project having sufficient funding is a hint for the editor to search good work.
- For editors, to follow the social media of some highly reputed publishers or to register for eNewsletter alerts of top ranked journals in the specific subject area is a good way to learn dynamic research trends over time by reading high-quality articles. For example, in the chemistry subject area, publishers worthy of following could include the American Chemistry Society (ACS), Royal Society of Chemistry (RSC), Wiley, among others (Table 2).

Table 2. Trusted Publishers Worthy of Following in Chemistry by Editor

Publishers	Examples
American Chemistry Societies (ACS)	<i>Chemical Reviews</i> ¹³ , <i>Accounts of Chemical Research</i> ¹⁴ , <i>Journal of the American Chemistry Society (JACS)</i> ¹⁵
Royal Society of Chemistry (RSC)	<i>Chemical Society Reviews</i> ¹⁶
Wiley	<i>Angewandte Chemie International Edition</i> ¹⁷
Springer Nature	<i>Nature Chemistry</i> ¹⁸

Whom to contact? The senior level editors at Springer have very clear cognition in their minds of all of the high-profile authors in the targeted regions. These fully experienced editors are so sensitive that, when they glance at the research areas, introductions or published article titles, they can 99% correctly guess the faculty or scholar names, titles, affiliations, educational backgrounds, and recently published articles in top journals and monographs from certain publishers. This ability is, of course, the accumulation of great efforts, good memory, enormous searches and plenty of time. However, for a newly hired assistant or associate editor to achieve such a level of familiarity with potential authors, he/she must spend much time on one-line searching.

Using online resources, he/she can search the targeted top universities or research centers among university ranks, key major national labs, and potential authors from personal websites,

¹³ ACS Publications. *Chemical Reviews*. Accessed July 31, 2018. <https://pubs.acs.org/journal/chcreay>.

¹⁴ ACS Publications. *Accounts of Chemical Research*. Accessed August 1, 2018. <https://pubs.acs.org/journal/achre4>.

¹⁵ ACS Publications. *Journal of the American Chemistry Society*. Accessed August 1, 2018. <https://pubs.acs.org/journal/jacsat>.

¹⁶ Royal Society of Chemistry. *Chemical Society Reviews*. Accessed August 1, 2018. <http://pubs.rsc.org/en/journals/journalissues/cs#!recentarticles&adv>.

¹⁷ Wiley. *Angewandte Chemie International Edition*. Accessed August 5, 2018. <https://onlinelibrary.wiley.com/journal/15213773>.

¹⁸ Springer Nature. *Nature Chemistry*. Accessed August 15, 2018. <https://www.nature.com/nchem/>.

newly published articles in top journals, newly published monographs and so on, to collect the right information. Sometimes valuable information searching and collection are very time consuming, but practical advice could be to spend some time per day or a fraction of time every day, instead of half a day or the whole day at one time.

Before attending an academic conference to meet potential authors, the new joiner must prepare at least three days in advance to check, become familiar with their research backgrounds and come up with a tentatively interested book title that could bridge the gap in the book titles already on the market, as well as contact the targeted potential authors for appointments during the conference. For a very large conference with more than 5,000 attendants, it is sometimes difficult to meet with someone if there is no appointment ahead of time.

It is often heard in the publishing career field that editors are “gossips”. This is true! Before meeting one potential author, the editor must gather all of the information about the author to fully understand him or her. How can a non-“gossip” editor do such work? It truly requires time for the new joiner to build larger networks and learn about more potential authors. In this case, the editor position at Springer is often very stable because it often requires some years to build and maintain good relationships with potential authors.

How to approach them? There are several ways to approach potential authors. The first is to make appointments for on-site visits at their research labs. These appointments could constitute approximately 20% of authors. The second is to attend academic conferences to meet keynote speakers or invited speakers, which could constitute approximately 50% (Table 3). In particular, large conferences with more than 1,000 attendants or even 2,000-3,000 attendants are a very good opportunity to approach as many authors as possible in a relatively short time, which is why the editors at Springer often leave the office for business travel. For some conferences that are partially sponsored, there are usually booths to present book samples, journals samples, flyers, and posters to show to the attendants, which might help to visually present and explain the different types of publications. The third way is direct and indirect recommendations, which account for the remaining 30%, including recommended excellent PhD theses from top universities, co-published book proposals from other publishers, recommended book proposals from friends or colleagues of the people whom the editor approaches, and so on.

Table 3. A List of Academic Conferences That an Editor in Chemistry is Supposed to Attend in Half a Year

#	Conference Name	Time	Place
1	The 10th International Symposium of Food Science	Aug. 2-3, 2018	Hefei, Anhui, China
2	3rd International Symposium on Phytochemicals in Medicine and Food	Aug. 25-30, 2018	Kunming, Yunnan, China
3	20th National Organometallic Chemistry Conference	Nov. 1-4, 2018	Nanjing, Jiangsu, China
4	15th Solid State Chemistry and Inorganic Synthesis Conference	Nov. 9-11, 2018	Fuzhou, Fujian, China
5	International Conference on Advances and Applications of Innovative Energy Materials	Nov. 30-Dec. 4, 2018	Nanning, Guangxi, China

How to undergo publishing process? For Springer books, there are several steps in the whole publishing process from developing an idea for a book to distribution on the global market (Figure 6). During the whole publishing process, some key procedures receive the most attention from authors. One is internal and external review and evaluation of the book proposal. Internal reviewing is performed by an in-house editor, and external review is performed by well-known professors or experts in the field from universities or research centers. This step is undertaken to ensure the high quality of the book title and chapter structure. A key factor that an editor might consider is whether the book proposal fits in any Springer book series; otherwise, it might publish it as an individual book. Every book series has a series homepage introducing the topics that could be included as a volume in the series, who the series editors are as the gatekeepers, and what titles have already been published. Thus, if the editor believes that a book proposal might fit into a particular series, he/she will send that book proposal to the gatekeeper for review. Another is the signing of the Publishing Agreement, referring to the publishing contract, indicating that the book proposal has been approved, and an official agreement has been achieved between the authors (or the editors) and the publisher. Another is the deadline for book manuscript submission. In principle, for a monograph with approximately 300 pages, the

authors (or the editors) might need one year to prepare the whole book manuscript draft, and extensions might be requested in some cases if the authors are too busy to complete the book manuscript on time. A very large book with more than 1000 pages usually requires more than 2 or 2.5 years to complete, so the length of time to write the whole book manuscript varies case by case. The last key procedure is proofreading and then production. The members of copyeditors and proofreaders are usually native English speakers, providing services of three different levels, copyediting 1 (CE1), copyediting 2 (CE2) and copyediting 3 (CE3). CE1 is usually for book manuscripts written by authors from native English speaking countries with very good English, CE2 for authors from non-native English speaking countries with good English, and CE3 for those need deeply and further copyediting with just fine English. Springer provides the standard cover design and internal layout design for different types of publications, including Springer theses, monographs, conference proceedings, textbooks, major reference works, handbooks, and so on (Figure 7). Textbooks are for undergraduate and graduate students to attain knowledge, and popular sciences books are for common audiences to read and are distributed to bookstores, instead of libraries, so the cover design and internal layout design of these two types of publication might be a bit different from those of other monographs in general.



Figure 6. Springer Book Publishing Process¹⁹

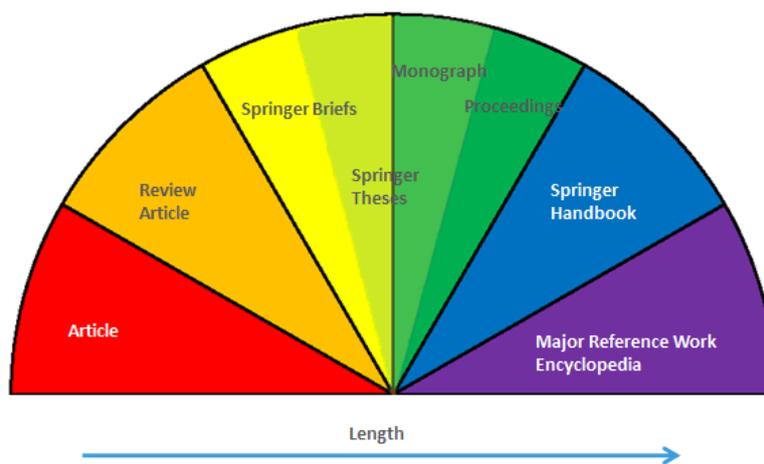


Figure 7. Spectrum of STM Publications¹⁹

¹⁹ Figures from Springer editorial team.

Therefore, for the editor at Springer, approximately two thirds of his/her time consists of attending academic conferences or traveling to academic conferences, and one third of his/her time consists of following up on these meeting and discussions at academic conferences by phone calls or emails. Everybody knows that writing a book requires tremendous effort and must time, so in fact, the editor does not need to persuade researchers or faculty members who are not willing to write a book; instead, the editor only needs to proactively approach those who are qualified and are interested in writing or editing a book and of course are well prepared.

To Acquire and Manage Co-published Journals

At Springer, besides books, the role of editor is also responsible for journals in specific subject areas. In daily work, the setting of the position responsibilities could provide mutual benefits. The authors of either books or papers come from the same group, so when the editor is approaching authors, he/she can offer more choices to them and answers all inquiries for any type of publication, as long as the authors are interested. For example, when the editor is approaching a high-profile author to write and publish an academic book, the author perhaps will not yet have the plan, but he/she might be interested in organizing a special issue for one of the journals from Springer. To some extent, the power of offering more choices to the author from one editor can increase the possibility of success.

The co-published journals refer to those journals at Springer in collaboration with third parties, such as academic societies, research centers, Chinese publishers or university presses. In general, these types of journals have their own editorial offices, and Springer is not the owner of the journals, but the third parties are. Under the signed Publishing Agreement, both Springer and the third party have individual responsibilities and rights, among which roughly Springer acts as a professional journal publisher to provide platforms, service and support to the editorial office of the journals to help to improve the overall performance of the journals. The journal Editors-in-Chief and editorial board members are responsible for the quality of the papers and have the power to decide which papers to reject and which papers to accept. Both the journal editorial office and Springer are involved in journal management. In China, journal publications have to belong to Chinese owners and have CN numbers. In fact, if the journal or the journal editorial office would like to apply for financial support from the government, e.g., China

International Influence Promotion Plan for Science and Technology Journals, the journal must belong to a Chinese owner instead of an international publisher such as Springer. In addition, ISSN numbers (both electronic ISSN and printed ISSN) can be applied by an international publisher such as Springer, e.g., from Germany or Singapore, but a CN number must be applied by a Chinese publisher qualified to apply for CN numbers.

At Springer, all of the available resources applied to Springer-owned journals are applied to co-publish journals as much as possible, including: platforms, article submission systems, and marketing activities. Those resources and services are described as below:

Springerlink platform: For each co-published journal, there is a journal homepage at www.springer.com. All of the accepted and published articles are uploaded and appear in Springer's largest platform, www.springerlink.com, so the public can search and read the content very easily.

EM submission system: The editorial system Editorial Manager (EM) can be chosen to receive and peer review manuscripts, so the full-time Journal Editorial Assistant and Production Editor at Springer can take on the roles of handling and managing the internal workflow of the journals. Of course, if any issues or inquiries are received from the editorial office about the system or the workflow, the responsible staff is ready to help.

Marketing activities: Springer marketing campaign and social media activities are supported to co-publish journals. When attending any national or international academic conferences, the editor selects suitable journal titles to promote at the booth, which can increase the exposure and visibility of the journals. Permission-based email campaigns are organized on a regular basis to targeted readers to deliver some news and highlights of the journals; in addition, table of contents alerts are sent to subscribers' email addresses when every new issue comes out. Importantly, search engine optimization (SEO) is highly emphasized and fully utilized for each journal because when people are using search engines today, only those with the concise keywords that meet their expectations at first glance will be clicked to open. Therefore, the editorial office and the editor at Springer usually spend much time revising these SEO meta-descriptions several times.

The workflow of a newly launched journal: In the initial journal launching idea stage, the editor at Springer is more like a gatekeeper, conveying a deeper analysis of the potential future of the journal compared with similar journals on the market to decide whether it is worthy of launching such a co-published journal, usually based on the following criteria: the reputation of the co-publishing partner; the publishing experience of the editorial office; the memberships of the editor-in-chief, associate editors and editorial board members; the aim and scope of the journal; the competitive journals on the market; the output of the publication in its subject area; and so on. After the Publishing Agreement is approved and signed, the editor at Springer communicates and organizes all staff involved in every step of the journal work to implement the process, including ISSN assignments, journal homepage establishment, Editorial Manager initiatives, marketing promotions, production and design styles, and so on. When all is set to run at a routine level, the editor at Springer monitors the overall performance of the journal to ensure it is healthy and smooth. In this case, the role of editor at Springer could more concisely be called “Managing Editor” instead of “Editor”.

Summary and Conclusion

In summary, the role of editor at Springer could more concisely be called “acquisition editor”, when the responsibility is to acquire book proposals, or “managing editor”, when the responsibility is to handle and manage co-published journals. However, the position is only called “editor” at Springer. Some people might think that having both books and journals under the control of one editor is quite practical since they have the same author group. This is true! However, the styles for working on books and journals are quite different. In fact, most of the faculty members and researchers are quite enthusiastic to publish journal articles to make their research outcomes available as soon as possible or to be promoted in universities; however, few faculties or researchers are ready or sometimes interested in writing and publishing an academic book. One reason is that it usually requires at least one year to complete a book, compared to only weeks to finish and publish a journal article. Therefore, some authors believe that it costs so much time and effort to write a book, so they should be very careful and think it over extensively when deciding to write a book. Another reason is that book publications are often not listed as the criteria or requirements for research achievements when the faculty members or researchers

are being evaluated for promotion; instead, journal article publications are the main research outcomes, as well as research funding applications. The last reason is that an original research article could be 5-15 pages, and a review paper could be 20-30 pages, while the average book is more than 200 pages! In this case, one must review many articles and accumulate substantial research to write a book on a topic. In general, it is rare that a new faculty member writes an academic book by himself/herself or fully under his/her own arrangement. Thus, the ideal potential author to write a book is middle aged, with more than 10 years of research supervision experience in his/her independent lab and who has published many high-quality papers, especially high-quality review papers.

Chapter 3. Editorial at Springer and the Chinese market

Chinese Market in General

Asia, especially China, is positioned as a rising market for most large academic publishers. It is believed that the science, technology and medicine research fields in China are currently in an encouraging, supportive and promising era. Subsequently, in recent years, almost all of the large or highly reputed globally academic publishers, including society publishers, commercial publishers, and university presses, have been building offices or branches in China. As of today, Springer Nature, Elsevier, Wiley, Taylor & Francis, Oxford University Press, Princeton University Press, ACS, RSC, IOP, IEEE, MDPI and other publishers already have offices or branches in China. Some have offices in several large cities, such as Beijing, Shanghai, Guangzhou and Hong Kong, with more than 100 or 200 employees. The many posted job openings by HRs of large publishers on websites such as LinkedIn, 51.jobs, and etc., also indicate a trend that, to meet the potentially growing market in China, the publishers are expanding and hiring more employees.

In addition, the following submission data also indicate that the document submission numbers from China have grown rapidly over the last ten years. For example, in chemistry subject area, it was shown that China's document output was almost double the document outputs in the US in 2016 (66,446 documents from China vs. 35,153 documents from the US), while in 2008, the number of documents was 33,064 documents from China vs. 30,983 documents from the US, and before 2008, China's output was behind the US (data are adapted from SCImago, Country ranking)²⁰. In the materials science subject area, the number of academic documents submitted from China was 1st worldwide in 2017.

At Springer Nature, data in 2015 showed China is the 2nd largest submitter of scientific papers after the US, and the numbers will definitely continue to grow, as everybody expects. Nature branded journals, as highly reputed journals, are boosted by Chinese researchers and Chinese institutions. It is very possible that a faculty member can be promoted to a senior level

²⁰ SJR Scimago journal & country ranking. Accessed August 18, 2018. <https://www.scimagojr.com/journalrank.php?country=AU>.

title in a very short time as long as his/her lab group has published some articles in *Nature*, *Science*, or *Cell*, with their very high Impact Factors. Under the current faculty promotion policies in China, Chinese researchers care very much about Impact Factors and journal ranking zones. They believe that a journal is very good as long as it has a high Impact Factor or is ranked in the Q1 of the Scimago Journal Rank. Therefore, for those journals without Impact Factors or very low Impact Factors listed in Q4 of Scimago, it is very difficult to attract high-level articles from China, except for those rejected by high Impact Factor-desiring journals. An interesting phenomenon is that the first two years are the most difficult time for newly launched journals in China. Since a new journal has no Impact Factor yet, the journal's editor-in-chief, associate editors, editorial members and editorial office must use their personal networks and influences to invite high quality papers to attain a higher Impact Factor two years later. If the journal luckily receives a higher Impact Factor, then more high-quality papers will come to the journal editors to choose and judge. If, unfortunately, the journal fails to obtain a better Impact Factor, an even more difficult road lies in front of the journal -- perhaps a dead end! If the journal obtains a lower Impact Factor, the journal is still alive and can fight to survive.

Domestic Chinese STM Publishing Market

Along with economics and technology growth, domestic STM publishing in China has developed very rapidly in recent years and possesses some unique features as a centrally managed country. These features include the following:

- **China's regulation of newly launched journals and old journals:** The central government's examination and approval of new journal launches mean that one must complete a *Journal Creation Form* if at a university under the Ministry of Education if the owner would like to launch a new journal title. This form with the university seal and other required documents must be submitted to the upper administration of the Ministry. (If one is at a provincial university or other provincial organization, this form should be submitted to the provincial administration for press and publishing.) Once the Ministry approves the application, it sends its approval to the State Administration of Press, Publication, Radio, Film and Television of the People's Republic of China, which makes a final decision on the journal creation application. If it is approved, the applying

organization will be assigned a unified domestic serial number called a CN number, which is a requirement for applying for a journal publishing certificate, as each journal requires. China's regulations dictate that a journal with CN can go to the ISSN China Center to apply for an ISSN. In fact, few journals in China have ceased publication, perhaps because, if one wants to suspend the operation of a journal, one must obtain the approval of the State Administration of Press, Publication, Radio, Film and Television step by step, which is very time consuming.

- **China's vertical administration:** Chinese government administration refers China's management being described as "vertical". Vertical management means the "hierarchy" that the authority of the central government ministries has power over local organizations, from higher to lower level. For locals, one university or province is responsible for looking after the entities within its borders, which is a lower "hierarchy".
- **China's sponsorships of journals:** In China, all academic journals have sponsors, most of which are universities, research institutions and academic societies. The sponsors bear all of the major responsibilities, including political and academic content control, editing and publishing quality, input and benefits, and so on. The Ministry of Education, which is the journal's administration organization, is responsible for evaluating the journal's creation application (as mentioned above), publishing quality, and training of the editors and publishers.
- **Editor training and examination:** This term refers to the editors' bar examinations and registration processes. In 2007, the State Administration of Press, Publication, Radio, Film and Television of the People's Republic of China issued *Regulations on the Management of Publishing Professionals' Qualifications*, stating that only people with qualifications can perform editing and publishing work. They also emphasize that only editors with middle level or higher can be a "responsible editor", whose certificate must be registered. In the book publishing industry, the "responsible editor" designation is very useful because the ISBN will be assigned not only to the publishing houses but also to certain editors. In journal (especially academic journal) publishing, it is difficult to implement this policy because some teachers or researchers will be moved from their original teaching or research positions to editing jobs.

Business Strategy to Occupy the Chinese Market

Springer Nature's objective in China is to create shared values for both the business and society. It must be admitted that, as a commercial publisher, to profit is one thing that cannot be ignored; at the same time there is corporate social responsibility work in China, which includes the following.

1) To advise government bodies on various science policies, by bringing in the latest popular science initiatives, such as open data, compared with traditional "closed" data. Currently, in addition to hybrid open access journals and fully open access journals, open access books, which are more popular in Europe than in Asia, are being strongly promoted in China.

2) To support the development of Chinese researchers as authors, reviewers, and editorial board members through more training. Because language barriers exist, it is sometimes difficult for Chinese researchers to fully participate in academic publishing activities. All employees based in China can speak Chinese, which is a significant advantage when communicating with and delivering training to Chinese researchers. From time to time, Springer Nature editorial teams and marketing teams deliver face-to-face workshops or seminars in scientific writing and publishing or products promoting different institutions, which are very interactive and helpful for researchers to learn about academic publishing and all of the available services for their research work. In addition, online webinars can help to deliver long-distance training to researchers and at a very low or even zero cost.

3) To introduce Chinese scientists' and researchers' success to the global science community. As an international platform, all of the publications, wherever their authors are from, are promoted and marketed worldwide by Springer Nature. In addition, sometimes people see some bias against Chinese authors from high impact journals, so the editors at Springer from China mitigate/reduce these biases and try their best to persuade and educate people, using data, that both the quantity and quality of papers submitted by Chinese researchers are improving rapidly.

4) To support the development of Chinese journals into international journals. Since it is now widely recognized that English is the lingua franca of science, more than 80% of Chinese journals are produced in cooperation with international publishers, so co-published journals are a large business target at Springer in China. For these types of journals, the institutions are the owners of the co-published journals, and Springer is more like a content distributor and a

platform provider.

In addition to the above, since Chinese social media channels are unique, it is necessary to discuss the social media strategy and market intelligence applied in China (Table 4). Facebook, Twitter, and Google are blocked in Mainland China, but WeChat is the largest platform in terms of usage size for China, with the highest engagement and most frequent use. Therefore, to share news and content through WeChat is an effective marketing strategy to spread information. Although surveys have shown that social media use appears to be slightly more passive than active, and evidence indicates that more people read content, but fewer share content in return. To provide valuable content to the marketing team at Springer Nature is also a task for editors when collaborating between the editorial and marketing teams. In addition, for social media posts, “one size fits all” is the wrong way; instead, it might be better to tailor content to specific audiences. For example, the editor in Chemistry might prepare content, including novel research topics from the latest published chemistry articles, the themes of a recent published chemistry monograph, or new appointments with chemistry journal editors-in-chief, specifically to attract chemistry researchers. In China, WeChat appears to be the platform that researchers employ and take most advantage of, with high engagement across multiple activities, including discovering and reading content, supporting research activity, sharing professional content, promoting researchers or researchers’ work, networking and collaborating, commenting and discussing. It is surprising that, when people attend social activities in China, very few exchange business or personal cards, as often happened in past years; instead, they will add each other as friends through their WeChat accounts. As an interesting phenomenon, it indicates that the way in which people communicate with each other is changing. WeChat (called Weixin in Chinese) dominates the social media landscape of China, with over 80% having an account on the platform²¹.

²¹ GlobalWebIndex. “China Market Report, Q2 2017.” 2017.

Table 4. A List of Activities That an Editor Initiates or Participates in Marketing Campaigns

# Number	Channels	Activity Description and Purpose
#1	Weibo	The photos for “Meet Our Editors” at a conference booth are posted, showing editors and authors communicating and sharing information.
#2	WeChat	An issue of newly published articles from a co-published journal is posted, to gain more attention from audiences and readers.
#3	E-mails	Call for papers for a highly reputed book series are sent to potential authors to attract more book proposals
#4	Flyer	A two-page flyer introducing Springer books and journals to be included in a conference manual

Summary and Conclusion

Compared with other regions of the world, Asia, and especially China, is and will be one of the largest markets with great potential in the future for global publishers. However, the critical point for such publishers is to fully understand its uniqueness, Chinese policies, and market needs. Since nearly all large international publishers are or will have offices or branches in China, a publisher that could skillfully utilize its various resources and platforms, products and services could be a big winner.

Chapter 4. Challenges in the Future

Metrics and Professional Business Mode

Springer has more than 3,000 journals and more than 275,000 books, and with the current speed of several new journals or co-published journals launched per day, 40 new books are published per day. Nature has more than 160 journals, with several new Nature sister journals and Nature publishing journals (npj) journals launched per year; Elsevier has more than 2,000 journals, more than 20,000 books, and with the current speed, more than 2,200 new books published per year. When increasing numbers of journals, books and databases are available on the market, how can one compete with the others to win? How do readers choose one or another? From the scholars' perspective, they require some criteria to judge. As the existing strategy, Journal Metrics are the criteria used by Springer Nature. As provided by the Springer website, these include Speed (Days from submission to first decision, Days from acceptance to published online), Usage (Downloads, Usage factor), and Impact (2 Year Impact Factor, 5 Year Impact Factor, Source Normalized Impact Per Paper, SCImago Journal Rank, h5 Index, Journal Author Satisfaction, likelihood to publish with Springer again) (Figure 8). However, in the future, to help scholars easily judge one journal from the other fairly, to make the publishing process more transparent and to keep providing better service, the publisher is always considering the metrics to show and how to show them.

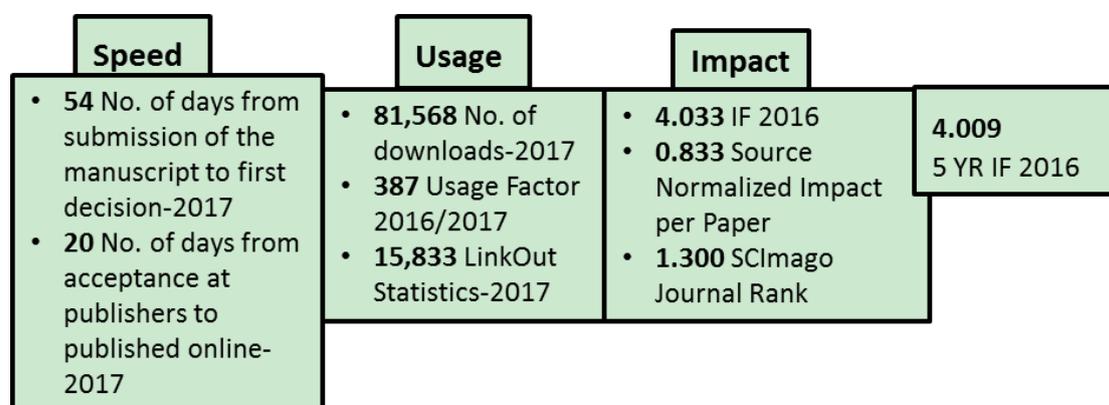


Figure 8. An Example of Journal Metrics from *Topics in Current Chemistry*

Books are unlike journals, which have an Impact Factor as a very authoritative parameter to judge, although it is strongly criticized or opposed by many scientific communities today. At least as an existing strategy, it is a fact that Impact Factor is promoted by Chinese scientific communities today. Actually, it is very difficult to judge a book as good or bad in a very short time, unless it becomes a classic book with several editions published over many years. For example, the textbook *Food Analysis*²², edited by Suzanne Nielsen, is very popular and has had greater success, and it published its fifth edition in 2017 (Figure 9). In this case, what book metrics could help to judge this book? The Springer website now provides No. of downloads, No. of citations, No. of mentions and No. of readers. In addition to these numbers, inclusion in some highly reputed book series could indicate some value; e.g., *Topics in Organometallic Chemistry* as a book series was launched in 1998, with 62 volumes published until 2018, with several international well-known scientists in this field acting as the series editors and as gatekeepers. Thus, if a book is approved to be published in the book series, it could to some extent be said that this book has received very positive comments in the field of organometallic chemistry. In addition, being included in some databases can also indicate value; e.g., a book is included in EI, Scopus, Web of Science, among others. Although people do not care very much about database inclusion for books, if a book or book series is included in the EI or Web of Science database, it is a plus for the editors when acquiring book proposals. In some subject areas in China, such as engineering and computer sciences, book series with EI inclusions are very popular among Chinese faculties and researchers.

In the future, for academic book publishing, the book metrics that could most accurately measure the quality of books is always challenging.



Figure 9. *Food Analysis*, by Suzanne Nielsen, Cover, 2017

²² Nielsen, Suzanne. *Food Analysis*. Heidelberg: Springer International Publishing, 2017. Springer. <https://www.springer.com/cn/book/9783319457741>.

In the generation of big data, data could indicate more what people think, for judging good from bad and for accepting or rejecting. However, every coin has two sides. Because the Impact Factor as the metric for journals is strongly criticized, in the future, how to balance metrics and data, how to fully evaluate research outcomes fairly and professionally, and how to accurately judge books and journals are all questions for academic publishing to consider repeatedly.

Hot Topics and Research Focus

As everyone knows, a book title or article title with a hot topic very easily gains attention and generate more downloads and citations after publication. Therefore, sometimes, when editors are acquiring content, hot topics guide them in what and where to go, especially when they are considering Impact Factors, book metrics, H-index, social media focus, research project funding, and so on. In chemistry, some areas, such as “Green Chemistry”, “Electrochemistry”, and “Energy Conversion and Storage”, are very hot. Green chemistry is very popular today because the environment on earth is deteriorating, and people are seeking environmentally friendly chemical process and chemistry strategies. As with the widespread use of electric vehicles and various electric products, research on the fundamentals, materials, designs, functions, and applications of batteries are very popular. Following these trends, an increasing number of journals, articles, books, and databases on those topics are being published, and these results are easier to publish, compared with other, less popular topics. However, the content of publication might lose balance if all publishers and editors are only seeking so-called hot topics to attract more attention and to receive good performance in data metrics. Less popular topics also provide knowledge to advance the development of the whole society and to serve human beings. Therefore, how to balance hot topics and less popular topics and how to judge one proposal as good to accept but another as bad to reject are always challenges for editors and publishers.

The contents of books and journal articles are quite different. Book content, in principle, should be research outcomes already confirmed and approved to be true so that the readers can learn knowledge systematically from books. Article content, in principle, should be innovative and make great contributions to the field; sometimes, they can be negative or questionable, as long as they are novel and provide some evidence or thoughts for later research. Thus, the editors at Springer should bear these points in mind when they are acquiring individual content

for different types of publications.

As is well known, the editor's role is part editorial, focusing more on content or research focus but not sales. At most Chinese domestic publishers, the annual targets set for their editors are not only book content but also book sales. Therefore, when they are acquiring content, they will consider not only the high quality or low quality of the content itself but also whether the books would have a potentially large market after publication. It is true that this strategy to some extent could ensure book revenues; however, editors are only editors and not salespeople, and if they consider revenues and sales too much, how can this advanced knowledge not belong to hot topics or be published? It is understandable that revenues and profits are important for a publisher's survival and growth, especially under the current condition that several large commercial publishers already find their way to making huge profits. How to balance content and revenues and to clarify the responsibilities of the editor's role in some Chinese domestic publishers continues to be questions to consider.

Chapter 5. Summary and Conclusion

Through this project report, several important issues about the role of the editor at Springer are delivered, which are relating to the publisher history and brand, the editors roles, the markets, the challenges and future.

Since the merger of Springer and Nature in 2015, Springer Nature as a new brand has expanded its market with both books and journals. Under the “win-win” merger strategy, Springer Nature is listed as having the 2nd largest global STM market share. However, the editor at Springer and the editor at Nature are working differently, under Separate departments – Springer Research Group (SRG) and Nature Research Group (NRG). The editor at Springer is responsible for two aspects, both book acquisition and journal management in a specific subject. The editor at Nature is in-house editor, handling articles to ensure high quality articles are accepted to publish, in a specific journal.

China is a potential market with increasing academic documents output in recent years, so the editor at Springer based in China faces huge opportunities for both book and journal contents growth. But nearly all the large commercial international publishers, university presses and non-profit society publishers have realized this chance and try to occupy a portion of the market as soon as possible. They try to set up more office branches or enlarge the existed offices at big cities in China, and to provide more job openings. Therefore, the editor at Springer also faces challenges in such a competitive market.

As the measurement tools, Impact Factor for journals and book matrix for books are relatively effective to differentiate high level publication from low level publication. However, both of these tools are criticized by scholars. An article published in a journal with high Impact Factor does not mean that article is a high quality article. For books, which are written with systematic knowledge, need a long time to judge if they are classical books or not, not just the book matrix number. As advanced technology appears, it is believable that new metrics systems and measurements tools may be designed and accepted by scientific communities.

In the future, metrics and measurements, data and open access, hot topics and research focuses might gain more attention in the academic publishing world.

References

- ACS Publications. *Chemical Reviews*. Accessed July 31, 2018. <https://pubs.acs.org/journal/chcreay>.
- ACS Publications. *Accounts of Chemical Research*. Accessed August 1, 2018. <https://pubs.acs.org/journal/achre4>.
- ACS Publications. *Journal of the American Chemistry Society*. Accessed August 1, 2018. <https://pubs.acs.org/journal/jacsat>.
- ACS Publications. *ACS Omega*. Accessed June 1, 2018. <https://pubs.acs.org/page/acsodf/about.html>.
- Cell Press. *iScience*. Accessed June 1, 2018. <https://www.cell.com/iscience/home>.
- Cheung, Peter C. K., and Bhavbhuti M. Mehta. *Handbook of food chemistry*. Heidelberg: Springer-Verlag GmbH Germany, 2015. <https://link.springer.com/referencework/10.1007%2F978-3-642-36605-5>.
- GlobalWebIndex. "China Market Report, Q2 2017." (2017)
- Götze, Heinz. *Springer-Verlag history of a scientific publishing house, Part 2 Rebuilding 1945-1992 Opening frontiers securing the future*. Heidelberg: Springer-Verlag Berlin Heidelberg, 1996. <https://link.springer.com/book/10.1007%2F978-3-540-92888-1>.
- Meera, Verma. *Energy use in global food production: Considerations for sustainable food security in 21st century*. Heidelberg: Springer International Publishing, 2015. <http://www.springer.com/cn/book/9783319167800>.
- Nielsen, Suzanne. *Food Analysis*. Heidelberg: Springer International Publishing, 2017. Springer. <https://www.springer.com/cn/book/9783319457741>.
- Outsell. "Scientific, technical & medical information: 2015 market size, share, forecast, and trend report." (July 30, 2015)
- Royal Society of Chemistry. *Chemical Society Reviews*. Accessed August 1, 2018. <http://pubs.rsc.org/en/journals/journalissues/cs#!recentarticles&adv>.
- Sarkowski, Heinz. *Springer-Berlag history of a scientific publishing house, Part 1 Foundation 1842-1945 Maturation Adversity*. Heidelberg: Springer-Verlag Berlin Heidelberg, 1996. <https://link.springer.com/book/10.1007%2F978-3-540-92887-4>.
- SJR Scimago journal & country ranking. Accessed August 18, 2018.

<https://www.scimagojr.com/journalrank.php?country=AU>.

Springer. "Springer-Driving academic publishing since 1842." Accessed May 1, 2018.

<http://www.springer.com/gp/about-springer/company-information/history>.

Springer Nature. *Nature Communications*. Accessed June 1, 2018.

<https://www.nature.com/ncomms/>.

Springer Nature HR. Springer (associate editor), Engineering. Accessed July 12, 2018.

<https://jobs.51job.com/beijing-hdq/103210013.html?s=04>.

Springer Nature HR. Nature editor in Nature Cell Biology. Accessed July 12, 2018.

https://www.glassdoor.co.uk/Job/berlin-scientific-editor-jobs-SRCH_IL0,6_IC2622109_KO7_24.htm?countryRedirect=true.

Springer. "The 31st academic annual conference of the Chinese Chemical Society marketing campaign." Accessed July 31, 2018. <https://www.springer.com/gp/campaigns/ccs2018>.

Springer Nature. *Nature Chemistry*. Accessed August 15, 2018. <https://www.nature.com/nchem/>.

Wiley. *Angewandte Chemie International Edition*. Accessed August 5, 2018.

<https://onlinelibrary.wiley.com/journal/15213773>.