

Improving research value and impact through research platforms & tools



About Professor Shen-Ming Chen

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Professor Shen-Ming Chen is currently a Lifetime Distinguished Professor at the Department of Chemical Engineering and Biotechnology, National Taipei University of Technology. He received his PhD in Chemistry from the National Taiwan University, Taiwan and was a Visiting Postdoctoral Fellow with the Institute of Inorganic Chemistry, Friedrich-Alexander University Erlangen-Nuremberg, Germany. He was an Associate Professor from 1991 to 1997 before being promoted to Professor of the Department of Chemical Engineering and Biotechnology in 1997. In 2010, he was appointed as Distinguished Professor of the same department. Professor Chen was also the Dean (Curator) of library between 2000 and 2006 and the Director of Extracurricular Activity, office of student affairs between 1995 and 2000.



His research focuses on instrumental analysis, electrochemistry, nanomaterials, catalytic chemistry, bioinorganic chemistry and bioelectrochemistry. Professor Chen's early research was on electrochemistry and chemical sensor technology before expanding to biomedicine, energy and other fields. His works span a broad and diverse range of applications that is centered on precision technology.

Elsevier Empowers Scientists and Researchers with Publishing

As the measurement of research performance becomes more rigorous in research-based universities and institutions, scholars and researchers are looking at optimizing the value and impact of every research paper they published. To help us understand how veteran scientists and researchers accomplish this, our Senior Marketing Manager, Weiwei Cheng, chats with Professor Shen-Ming Chen of National Taipei University of Technology. He speaks to us about his experience in picking the right quality journals to increase the value of his works and utilizing research platforms and tools to improve his research impact.

A prolific researcher and author of over 800 academic papers, Professor Shen-Ming Chen has been successful in publishing his works in top-tier journals since 1990. According to a Scopus analysis, Professor Chen has the highest number of publications in electrochemical sensors research in the world, and the highest number of publications in Graphene research

in Taiwan. The Elsevier journal where he has the highest number of papers published is *Ultrasonics Sonochemistry*.

Achieving these accolades, however, is not without its struggles, and requires goals and aspirations. What are they, and what strategies does Professor Chen use to overcome them?

Optimizing Research Quality through Peer-reviewed Journals

Like many other researchers, one of Professor Chen's major challenges is competing with a plethora of global research submissions for acceptance in top academic journals. To increase the chance of acceptance, he advocates picking quality peer-reviewed journals that fit the research niche.

In his earlier years, Professor Chen's two main research areas were electrochemistry and catalysis. To compete effectively with other global researchers, Professor Chen quickly understood the value of choosing the right journals to publish his work. As his research touched on very niche areas, he realized that he needed to look for quality, specialized journals that would consider his papers. Thus, he picked the most prestigious journals in these fields – Elsevier's *Journal of Electroanalytical Chemistry*, a top-tier journal in electrochemistry, followed by Elsevier's *Electrochimica Acta* and journals by the American Chemical Society (ACS).

As his research crossed over to other domains, he found Elsevier's *Biosensors and Bioelectronics* and *Sensors and Actuators B: Chemical* to be the two key publications for electrochemical sensors and biosensors, while the *Journal of Molecular Catalysis* and *Ultrasonics Sonochemistry* were the top journals for molecular catalysis and materials and synthesis related fields respectively.

Over the years, approximately 40% of his academic papers were published in Elsevier's publication, due to the fact that many of Elsevier's publications had tremendous impacts on his specialized fields and could help to improve his research profile internationally.

"Elsevier has journals in specialized fields, such as sound synthesis, biosynthesis and material science, and the journals are of very high quality. That's why I choose to publish more frequently in Elsevier journals than in any other academic publications. While other publishers such as ACS, the Royal Society of Chemistry (RSC) and Wiley have good journals, their topics are broader and thus, some of their requirements differ

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from those of the specialized researchers. Comparatively, specialized journals have higher content requirements. In my case, as electrochemistry had already been applied in the medical, material and energy fields, the breadth of my research had widened. Thus, journals from other publishers also welcomed my submissions, and so my submission strategy altered slightly,” Professor Chen explains.

When selecting publishers, Professor Chen also pays close attention to their developmental history. In this aspect, he feels that Elsevier has continuously made strides in professionalism, readership and popularity of research topics.



Approximately 40% of Professor Shen-Ming Chen's articles are published with Elsevier.

Here, Professor Chen emphasizes the importance of being pragmatic and choosing to read only high-quality, peer-reviewed scientific journals in a time when misinformation and predatory publishing are proliferating rapidly. Despite the internet gaining a strong foothold on information search, reading trusted journal articles is still the best way for researchers to gain in-depth insights into trending research topics and find answers to their pressing research queries.

“We live in a digital age when misinformation or erroneous information is rampant. That's why the quality of scientific research and the professional judgments of peer-reviewers are crucial. They are our key gatekeepers of good, accurate information,” he adds. As the world's leading source for peer-reviewed scientific, technical and medical research, ScienceDirect is an essential platform for quality research literature. Over the years, its journals have inspired many scientists in making research decisions and even discovering breakthroughs.

Scopus and SciVal Strengthen Research and Collaboration

To help him manage his readings and ensure that they come from the right sources, Professor Chen points to platforms and tools offered by publishers to assist researchers in managing the immense amount of data available on the internet. One of the tools he uses is Scopus, Elsevier's abstract and citation database that covers over 25,100 titles from more than 5,000 publishers, of which 23,452 are peer-reviewed journals in top-level subject fields including life sciences, social sciences, physical sciences and health sciences. He prefers Scopus because it has journal metrics and article metrics to help him select the right journals to publish. It allows him to search for cross-journal platforms and even compare his research with other international researchers who are conducting similar

The Essential Role of Reading Quality Journal Articles

As a tenured professor, Professor Chen wears many hats, and thus, finding time to read and stay informed is another challenge he faces regularly. In addition to his research work, he is expected to teach and seek possible research and industrial collaborations through the use of tools such as ScienceDirect, Scopus and SciVal. How does he find time to do all these while managing the explosion of information – and misinformation – in all sorts of media and channels in our digital age?

