

## Advanced Synthesis & Catalysis Delivers High Impact and in 2008 Faster

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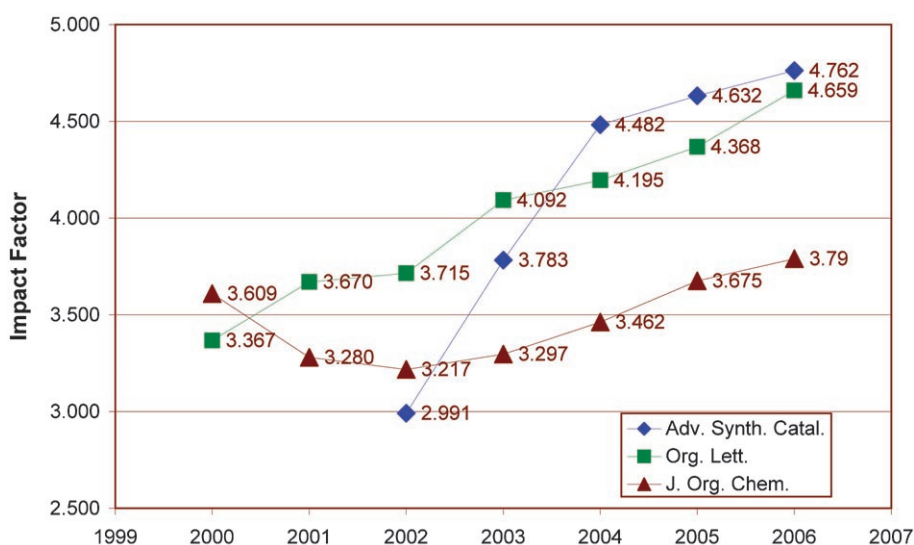
*Advanced Synthesis & Catalysis* has now completed seven years marked by rapid growth and high scientific impact. There have been significant developments in synthesis and catalysis since *ASC* succeeded the *Journal für praktische Chemie* in 2001. The areas of organocatalysis, heterogeneous catalysis directed toward organic synthesis, directed evolution and gene manipulation for improved biocatalysis, catalyst immobilization, multiphase catalysis, green solvents, tandem/cascade/domino reactions and continuous processing are emerging as major contributors to the goal of achieving more efficient and practical “green” synthesis. These advances have been distinguished by an increasingly interdisciplinary approach spanning the fields of chemistry, biology, and engineering. Also, significant advances have occurred in asymmetric catalysis, which has established its place at the cutting edge of organic research. The foresight of the Editorial Board has placed *ASC* at the forefront of these developments and is one reason for the exceptional success of the journal. The roadmap outlined in Ryoji Noyori’s inaugural editorial<sup>[1]</sup> for *Advanced Synthesis & Catalysis* has defined the focus of the journal and is still worth rereading today.

While the aims of *Advanced Synthesis & Catalysis* are clear, there have occasionally been questions

about the scope. Therefore, we have reformulated the aims and scope, which can be found in the 2008 Notice to Authors in this issue. We have attempted to better describe those areas that fall within the scope of *ASC* and which make it unique among organic chemistry and catalysis journals. This uniqueness is based on the focus of *ASC* on the development of practical, efficient, and environmentally benign organic synthetic reactions and processes. Traditional journals on heterogeneous catalysis, surface science, materials science, macromolecules, inorganic chemistry and physical chemistry have a focus that is different from that of *ASC*; manuscripts reporting results that are mainly of interest to the specialists in these fields are best published in one of the appropriate specialist journals. On the other hand, the goals of *ASC* are best achieved by an interdisciplinary approach such that work in these areas that is shown to have a significant impact on practical and efficient organic synthesis is welcome in *ASC*.

The rapid success of *Advanced Synthesis & Catalysis* has exceeded all expectations. The *ASC* Impact Factor increased for the 5th straight year and in 2006 reached 4.762.<sup>[2]</sup> This was the highest for primary research journals in the ISI subject category Organic Chemistry for the second year (2005 and 2006). A comparison of the development of *ASC* and *Organic Letters* is instructive (Figure 1), since both have achieved a high level of success in a short period of time, though certainly for different reasons. The *Journal of Organic Chemistry*, which is the full-paper organic journal of the American Chemical Society, suffered in the first years after the launch of *Org. Lett.*, but has now recovered well (see Figure 1), perhaps due in part to the introduction of the excellent, high-profile personal reviews called Perspectives. Reviews are generally cited more than communications, which in turn are cited more than full papers; therefore, communications journals generally have a higher Impact Factor than the corresponding full-paper journals, as we see with *Org. Lett.* and *JOC*. *ASC* has communications, full papers and reviews.

*ASC* and *Org. Lett.* are currently alone among organic chemistry journals in the Impact Factor range of



**Figure 1.** Impact Factor<sup>[2]</sup> development for *Advanced Synthesis & Catalysis*, *Organic Letters*, and *Journal of Organic Chemistry*.

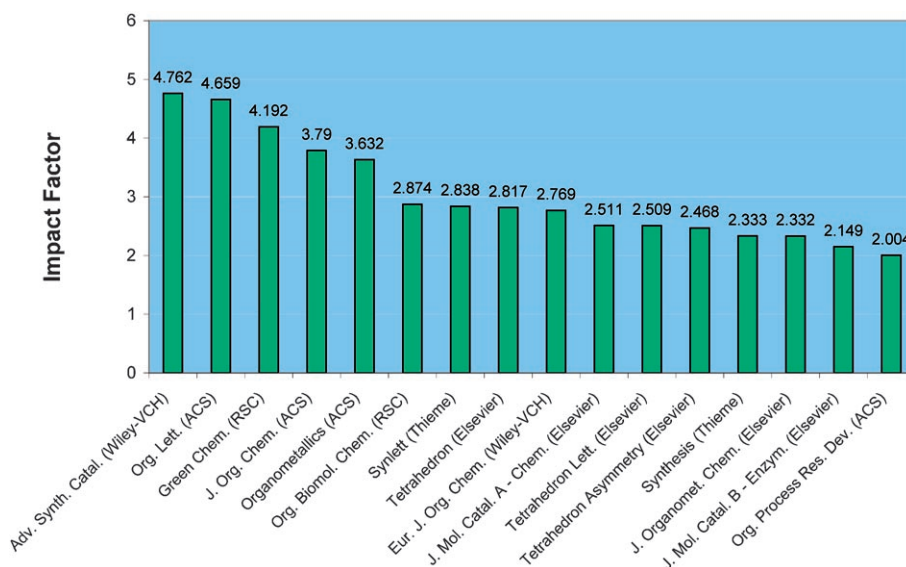
4–5. *JOC* and *Organometallics* have respectable positions in the Impact Factor range of 3–4. The rest of the scientifically significant organic chemistry journals fall into the range of 2–3 (Figure 2).

The 2006 Impact Factor is calculated from the number of times that articles published in 2004–2005 are cited in 2006, divided by the number of articles published in 2004–2005. *ASC* has continued to increase its Impact Factor, in spite of a strong growth trend (see Figure 3). In the calculation of the 2006 Impact Factor, an increasing number of articles published in 2005 increases the denominator without those articles having as much time to be cited in 2006 as the articles published in 2004. Therefore, it is

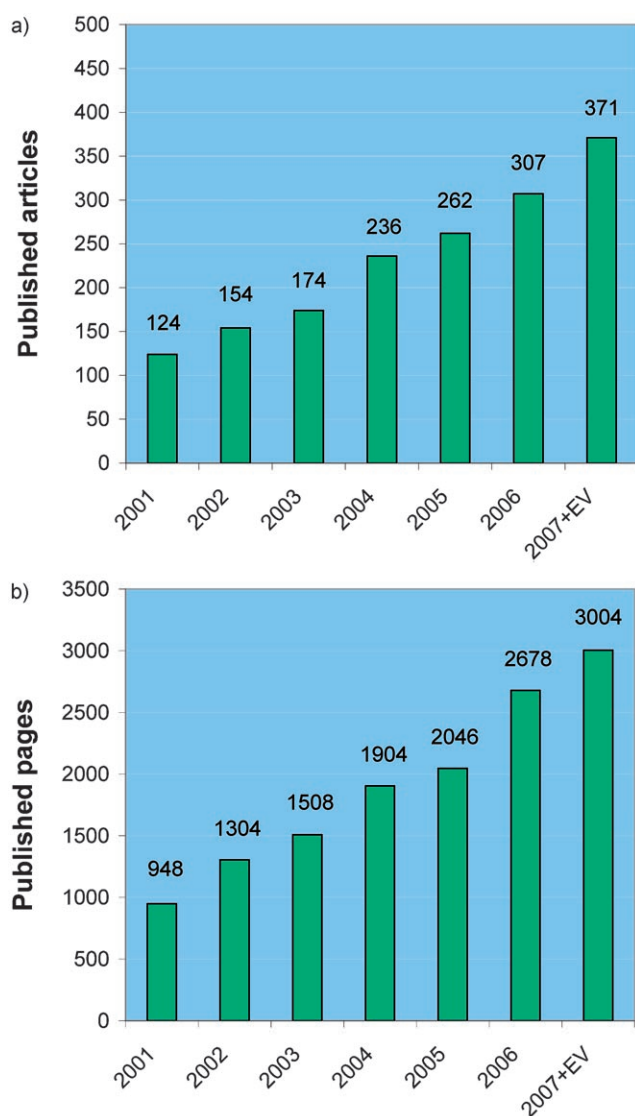
harder for a journal with an increasing size to increase its Impact Factor. The size of *ASC* has tripled in the seven years since 2001. In comparison, the size of *Org. Lett.* has increased from 4270 pages in its first full year, 2000, to 5650 in 2007, or 32%.

I expect that the large jump in size between 2005 and 2006 will have a negative effect on the 2007 *ASC* Impact Factor. Nevertheless, I am convinced that in the long run the impact of *ASC* will continue to increase as the goals of green chemistry become more and more central to the chemical enterprise.

The success and popularity of *ASC* has been a two-edged sword. The number of submissions to *ASC* has increased even more than the number of pages we



**Figure 2.** 2006 Impact Factors<sup>[2]</sup> for primary organic, organometallic and related journals.



**Figure 3.** Increase in size of *Advanced Synthesis & Catalysis* 2001–2007.<sup>[3]</sup>

could publish. Such an increase could not be planned or budgeted. Thus, in spite of the increased number of pages published and a rejection rate of over 50%, a backlog of manuscripts developed, which has resulted in unacceptably long publication times. The editorial office and the publishing house have taken the necessary steps to eliminate this problem in 2008. First, the page budget has been increased substantially for 2008 to accommodate the backlog. Second, all manuscripts now go into Early View<sup>[3]</sup> before being assigned to a given issue. This speeds online publication and responds to the wishes of students and other users for whom the Internet is the primary source of information. Third, we are changing the procedure for entering proof corrections: when received from the authors, the corrections will be entered electronically and forwarded to the printer. In the case of minor

corrections, the final version can appear in Early View within days. Fourth, the average time required for review will be reduced substantially. Finally, no special thematic issues are currently planned for 2008, since the backlog and the normal submissions will already fill the page budget for 2008. The members of the editorial office, the Wiley-VCH production department, and the printer have worked hard to provide high technical competence. Our goal in 2008 is to do it faster.

*Advanced Synthesis & Catalysis* has continued to be very international with a good regional distribution of published articles for a European-based chemistry journal (Figure 4). In 2007, contributions from 29 countries were published in ASC.

As is the case with all other international journals, the number of submissions and of published articles from China has increased for ASC substantially. As seen in Figure 5, China has gone from zero to the largest East Asian contributor in the last 5 years. South Korea and Singapore are also contributing an increasing number of quality manuscripts.

*Advanced Synthesis & Catalysis* publishes reviews, communications, full papers and updates, the latter having similarity with the notes of *JOC*. Occasionally we have commentaries and book reviews. The composition of the journal has remained relatively constant, with full papers predominating (Figure 6).

Since May, 2006, *Advanced Synthesis & Catalysis* has used Manuscript Central<sup>TM</sup> for web-based submission and peer review.<sup>[4]</sup> The system has been improved considerably based on numerous suggestions from ASC authors, reviewers and the editorial office. The system is not yet entirely intuitive and users need to learn how to use it. This should be facilitated by the fact that the American Chemical Society has now adopted Manuscript Central for most of its journals, under the name “ACS Paragon Plus”. The goal is that the system be fast and easy to use; therefore, your suggestions for improvements are welcome.

In 2007, Wiley celebrated its bicentennial. I consider that the contribution of Wiley to science and culture over the 200 years has been exemplary. Of all the publishers, Wiley has proved to be one of the most successful in assuming the role of a worthy and responsible member of the scientific and literary communities. Wiley and since 1996 Wiley-VCH have not just reacted to changing realities in the world of knowledge, they have been a stimulating and creative force for positive development. This vision of the role of a publisher as a contributor to the world of knowledge has earned Wiley the respect of the scientific and literary communities. It is my hope that with the ever increasing financial pressures of a tight world market, Wiley can maintain this vision in the future. The continued success of any scientific publisher will depend on being able to provide high-quality content

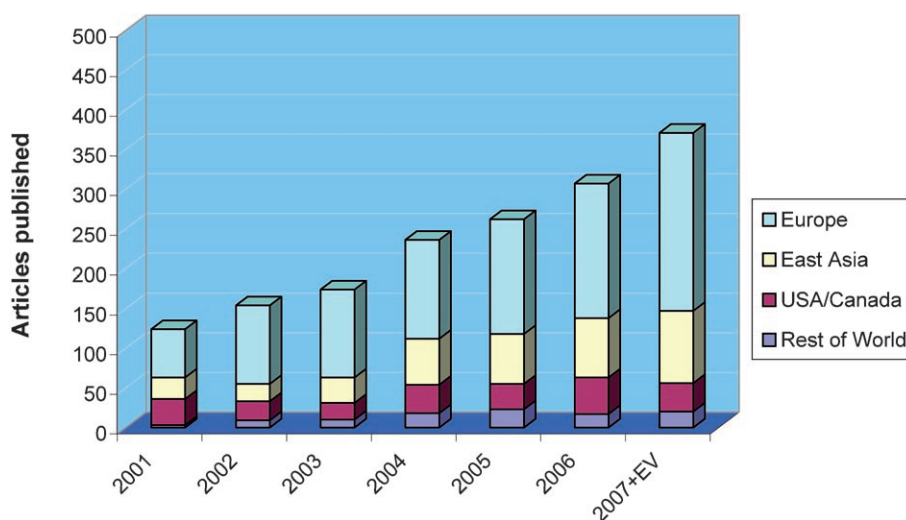


Figure 4. *Advanced Synthesis & Catalysis* publications by region 2001–2007.<sup>[3]</sup>

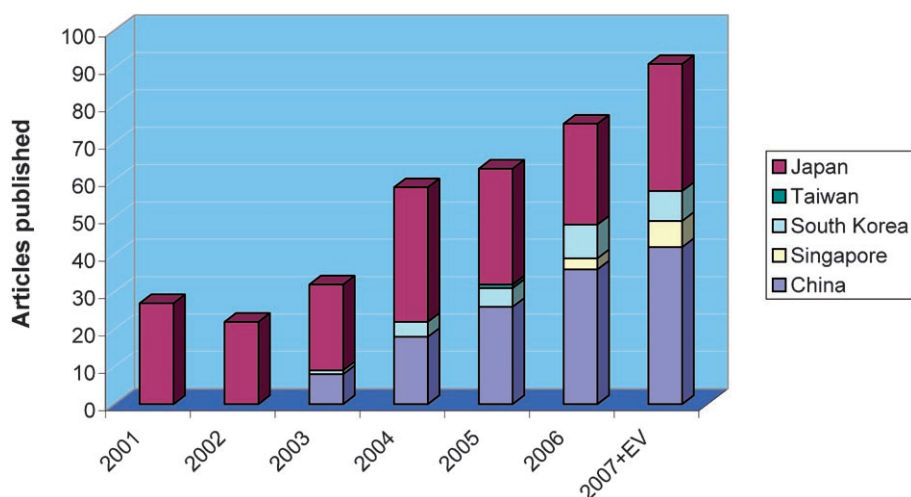


Figure 5. *Advanced Synthesis & Catalysis* publications from East Asia 2001–2007.<sup>[3]</sup>

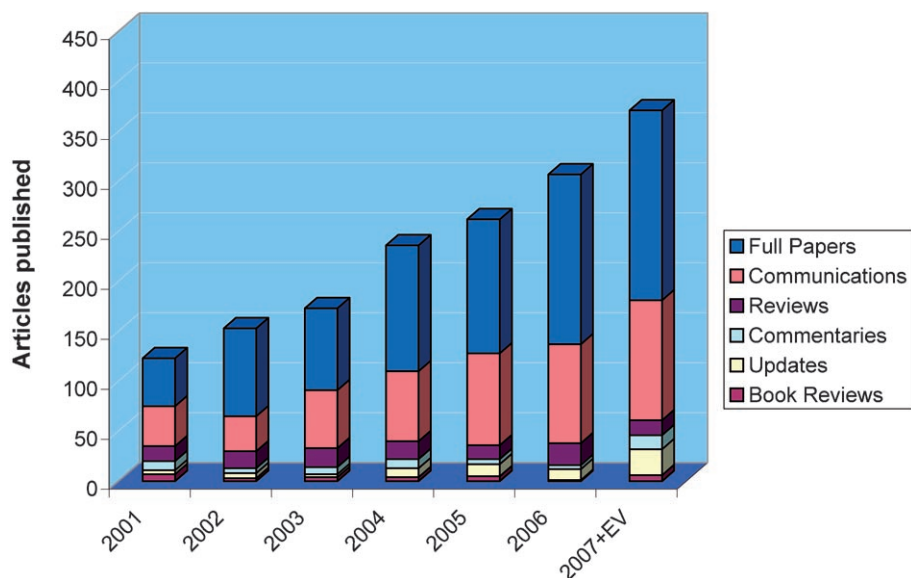


Figure 6. *Advanced Synthesis & Catalysis* publications by section 2001–2007.<sup>[3]</sup>

by making a significant contribution in the value-added chain. This has been achieved by Wiley so successfully until now by a creative, proactive participation in the scientific community.

*Advanced Synthesis & Catalysis* is part of this Wiley tradition and has the goal contributing to the efforts of chemistry to achieve practical and environmentally responsible chemical processes to allow sustained development in our global society. The members of the editorial boards, the authors, and the referees have been responsible for the high quality content that has resulted in the success of *Advanced Synthesis & Catalysis*. We are still a long way from achieving the goal set out by Ryoji Noyori in his visionary Editorial Statement seven years ago: “perfect chemical reactions that give only the desired products, with 100%

selectivity and 100% yield without unwanted wastes.” The research of *ASC* readers like yourself will be crucial to achieving the goals of *Advanced Synthesis & Catalysis* and therefore we look forward to seeing your own “elegant work with practical consequences” appear in the journal in the near future.

## References

- [1] R. Noyori, *Adv. Synth. Catal.* **2001**, 343, 1.
- [2] Source: Thomson Scientific (ISI) Journal Citation Reports®.
- [3] EV = Early View: online publication prior to print.
- [4] J. P. Richmond, *Adv. Synth. Catal.* **2006**, 348, 607.