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Advanced Synthesis & Catalysis – Growing in Size and Impact

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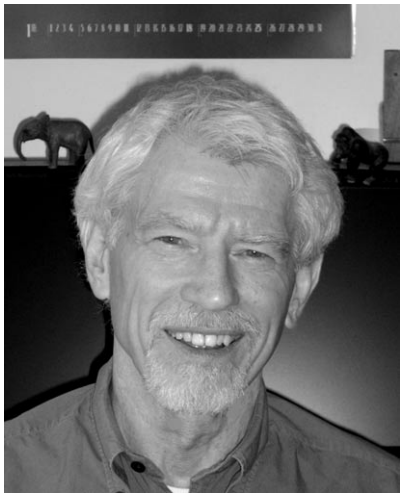

In 2008, *Advanced Synthesis & Catalysis* continued to "advance", showing itself to still be a growing journal after 8 years, with an increase in submissions, published pages, published articles and Impact Factor.[1] Nevertheless, there have been some significant changes as discussed below. The increasing success of the journal is to a large extent due to a focus on some of the most exciting and productive areas of chemical research. Never before has mankind been confronted with such urgent existential issues caused by the unabated increase in environmental pollution. It is therefore no wonder that two of the journals with the most rapid growth in significance, *ASC* and the RSC journal *Green Chemistry*, are both dedicated to developing environmentally friendly chemical processes. The Wiley-VCH journal, *ChemSusChem*, launched in 2008, can also be expected to enjoy increasing importance in years to come. With the announcement that *ChemCatChem* will be launched in the second half of 2009,[2] Wiley-VCH will make a further contribution to green chemistry by focusing on this key technology.

As noted a year ago,[3] it was and continues to be the foresight, guidance and dedication of the Editorial Board that has placed *ASC* at the forefront of the development of practical, efficient, and environmentally benign organic synthetic reactions and processes. The direction of the journal was established in the editorials by Ryoji Noyori in 2001[4] and by Eric Jacobsen in 2002.[5] Although there has been enormous progress, the fundamental challenges recognized at that time have not changed.

While the focus of the journal has been set by the Editorial Board, the *ASC* authors have provided the high-quality content, which has made *ASC* the leading primary organic chemistry journal in terms of Impact Factor for the 4th consecutive year. The landscape of 2007 Impact Factors for primary organic chemistry journals has consolidated into basically three groups (Figure 1). *Green Chemistry* has joined *ASC* and *Organic Letters* at the top, followed by the *Journal of Organic Chemistry* and *Organometallics*. The remaining journals in the field are led by *Organic & Biomolecular Chemistry*, which had a 2007 Impact Factor slightly above 3. The *European Journal of Organic Chemistry* and *Tetrahedron* also continue to make a strong showing in the category of general organic chemistry journals.

The strong growth trend of *ASC* has continued (Figure 2 and Figure 3). *ASC* surpassed the 3000 page barrier in 2008.

While the number of articles published per year has increased constantly over the years, the number of pages in 2006 was above the curve. This can be explained by looking at the distribution of the various types of articles published (Figure 4). There were considerably more reviews published in 2006 than in 2008. Reviews articles are often associated with thematic issues, as was the case for 14 of the 22 reviews published in 2006. Reviews in regular issues of ASC are also important and highlight the issue in which they appear. Indeed, two of the most cited recent articles published in organic chemistry journals were the reviews on the nature of the active species in palladium-catalyzed couplings by Jones[6] and on chiral Brønsted acid catalysis by Akiyama.[7] For 2008 we did not plan any thematic issues in *ASC*, because the number of regular submissions was (and still is) increasing more rapidly than could be accommodated by the increasing page budget.

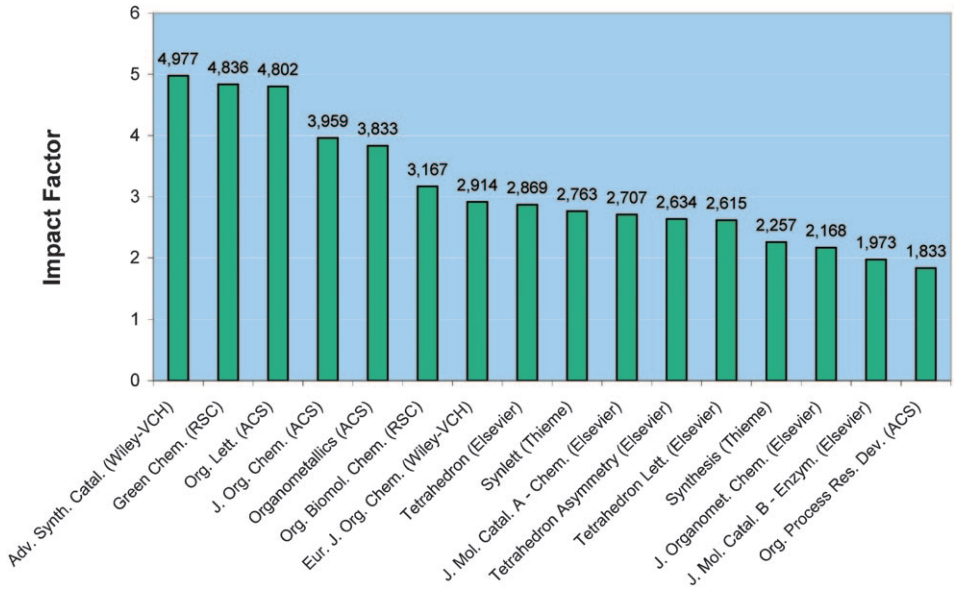

Figure 1. . 2007 Impact Factors[1] for primary organic, organometallic and related journals.

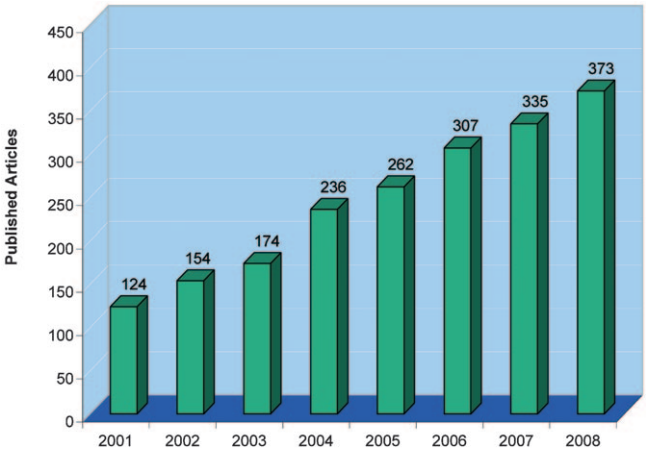

Figure 2. Increase in size of *Advanced Synthesis & Catalysis* 2001–2008: published articles.

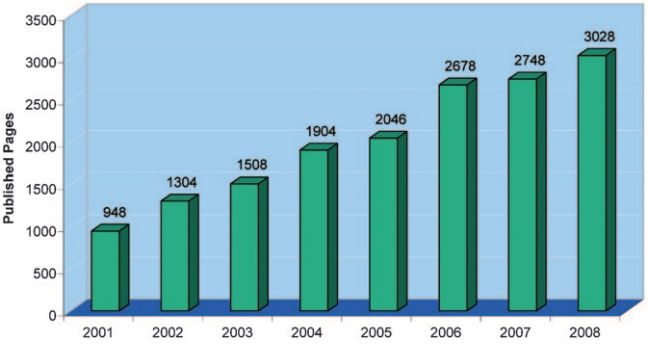

Figure 3. Increase in size of *Advanced Synthesis & Catalysis* 2001–2008: published pages.

As seen in Figure 4, the proportion of communications in *ASC* increased in 2008: from 34% of the articles in 2007 to 40% in 2008.

One year ago, we set the goal of increasing the speed of publication in *ASC*. I am very pleased to say that this goal has been achieved: the average time from submission, or submission after major revision, to publication was under 80 days in 2008. This has been achieved in part by dedicated work of the editorial office staff and in part by making the workflow in the editorial office and production department more efficient. The rapid and conscientious work of the referees is of course a prerequisite for faster publication, and the *ASC* referees have been doing an excellent job.

Advanced Synthesis & Catalysis has continued to be very international with a good regional distribution of published articles (Figure 5). The trends seen in 2007 continued in 2008.

The percentage of published articled from East Asia has increased to just over 30%. Authors from 30 countries published articles in *ASC* in 2008. The number of published articles from China has increased from zero in 2001/2002 to 71 in 2008, which is the largest number for any country (Figure 6). China has clearly become a leading power for research in synthesis and catalysis. Authors from Germany, Italy, France and Spain have continued to be strongly represented. Considering the large amount and high quality of the synthesis and catalysis done in the USA and Japan, a potential exists here for an increase in the number of contributions to *ASC* in the future.

Figure 7 shows the development in the number of published articles from the various East Asian coun-

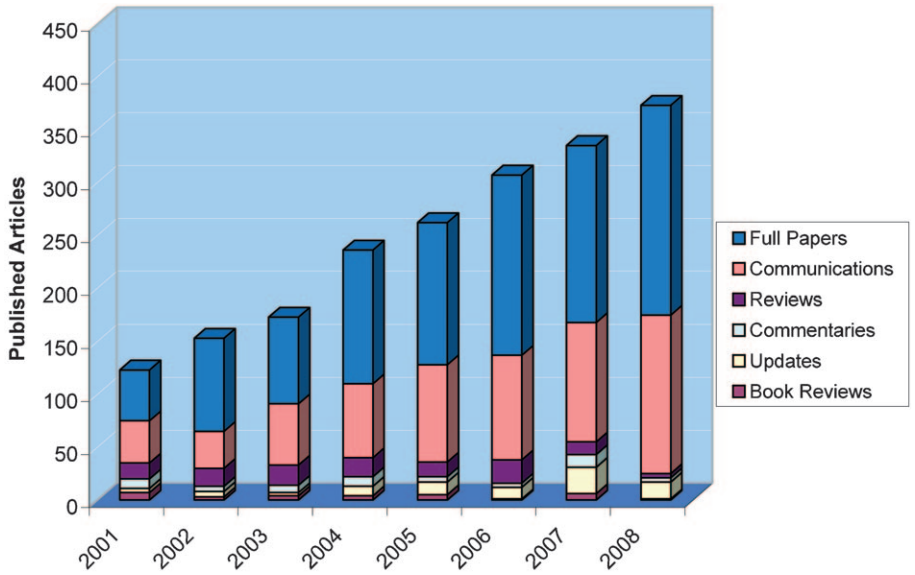

Figure 4. *Advanced Synthesis & Catalysis* publications by section 2001-2008.

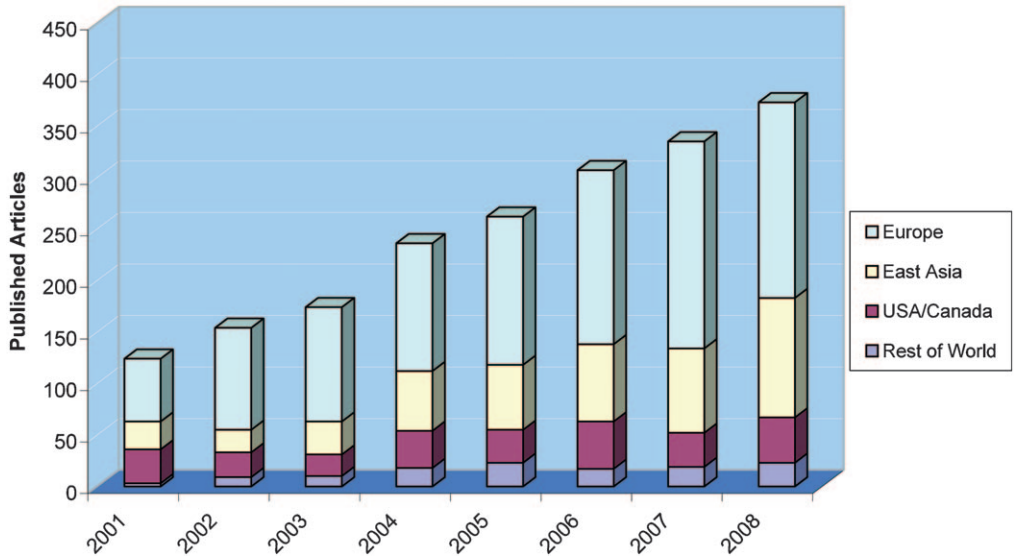

Figure 5. *Advanced Synthesis & Catalysis* publications by region 2001–2008.

ties. Besides China, contributions from Singapore also continue to rise, albeit on a smaller scale.

From the start, thematic issues have been a significant feature in *ASC*. The topics have been timely and the issues have been edited by the top people in the field. For example, the **Olefin Metathesis Issues** in 2002 and 2007, edited by Alois Fürstner, Robert Grubbs and Richard Schrock, the **Catalytic Hydrogenation Issue** in 2003, edited by Ryoji Noyori, and the **Cross-Coupling and Heck Issue** in 2004, edited by Vittorio Farina, Norio Miyaura and Steve Buchwald, were classics. Biocatalysis has always been an integral part of *ASC* from the beginning; there have been four **Biocatalysis Issues**, edited by Chi-Huey Wong, Mark Burk and Wolf-Dieter Fessner: 2001, 2003, 2005 and 2007. As noted above, we did not have any thematic issues in 2008. As seen in Figure 8, although there were fewer invited peer-reviewed articles published in 2008, the number of regular articles increased by 28%, such that the total number of published articles increased substantially once again. *ASC* will continue to have high-quality, timely thematic issues in the future, as the size of the journal increases further.

The submission statistics are a reflection of the publication statistics with two major differences: 1) there is a time lag of 2–3 months, and 2) only accepted manuscripts appear in the publication statistics. This

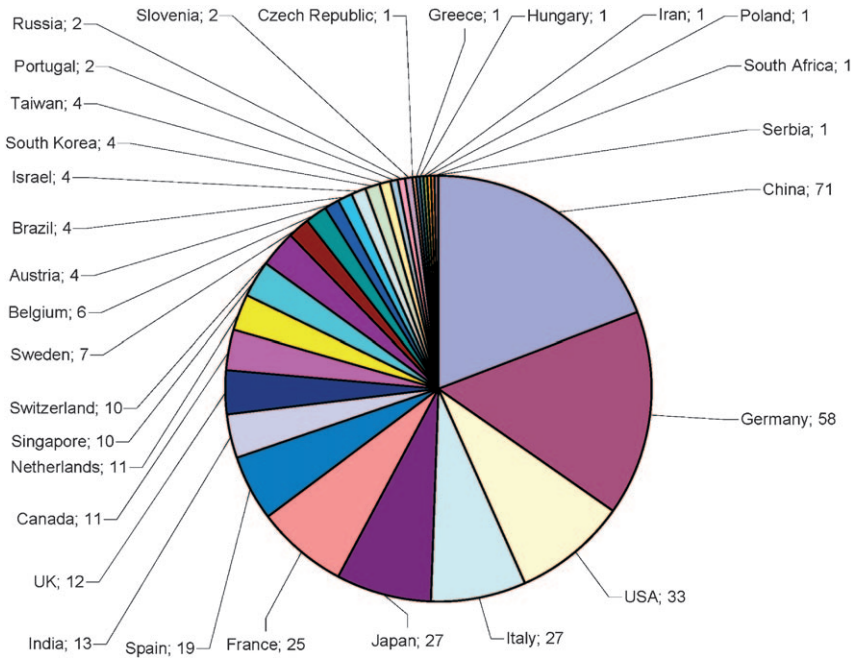

Figure 6. *Advanced Synthesis & Catalysis* publications by country 2008.

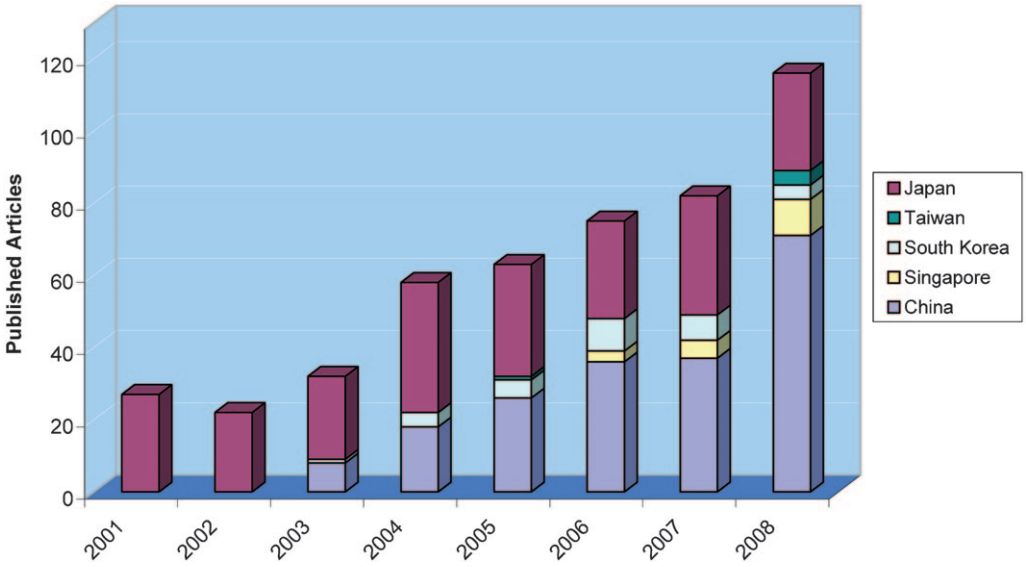

Figure 7. *Advanced Synthesis & Catalysis* publications from East Asia 2001–2008.

might seem trivial, but often can have interesting results.

In the chart of submissions per year, the continued growth in popularity of ASC among authors can be seen (Figure 9). It is at first surprising that the number of submissions in 2007 went down. The explanation had to do with the time lag and with the special issues. There were two major special issues at the beginning of 2007: Issue 1+2 on Olefin Metathesis and Issue 4+5 including a cluster of articles dedicated to Masakatsu Shibasaki. In Figure 8, the larger number of invited articles published in 2007 can be seen. The invited manuscripts for these issues were submitted in 2006, raising the number of submissions for 2006 above the average. Note that invited manuscripts are in addition to the regular submissions. The number of invited manuscripts published in 2008 was relatively low (Figure 8), and very few were published in the first quarter; therefore, there were very few additional invited manuscripts submitted toward the end of 2007. The number of submissions in 2008 was up 33% over 2007. Like 2008, there will be no special

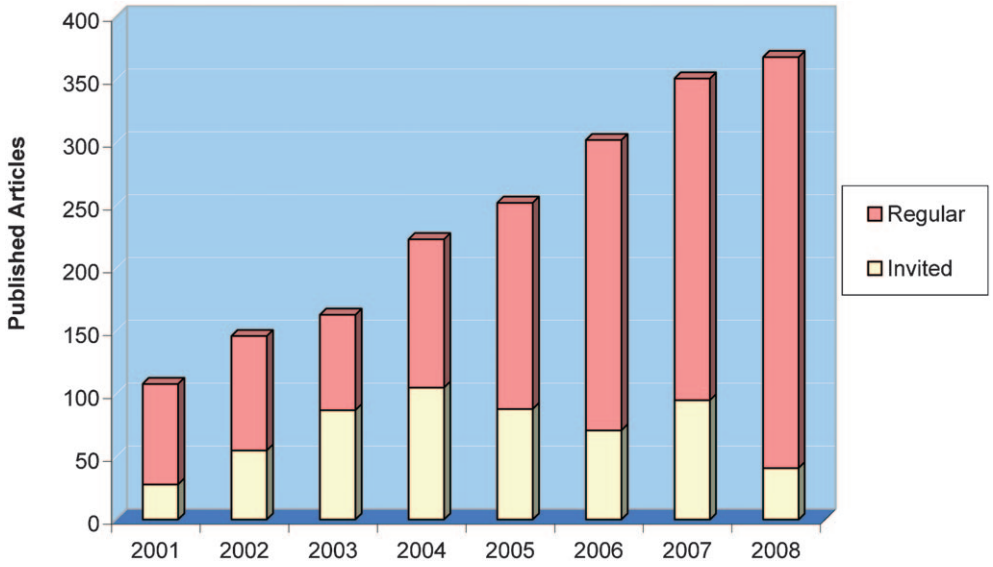

Figure 8. Peer-reviewed articles published in *Advanced Synthesis & Catalysis*: invited *vs.* regular.

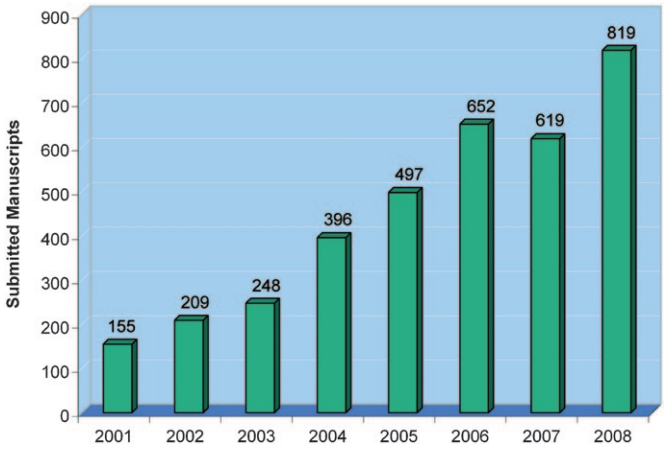

Figure 9. Increase in submissions to *Advanced Synthesis & Catalysis* 2001–2008.

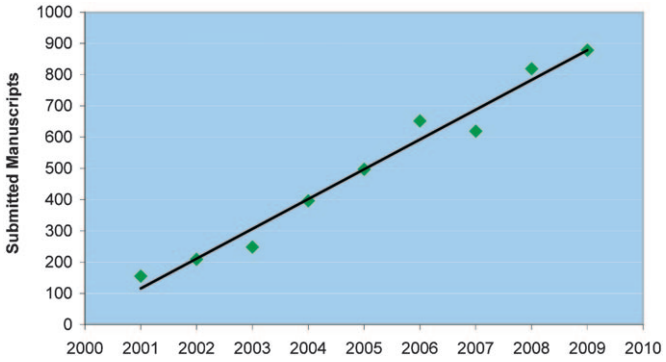

Figure 10. Submissions to *Advanced Synthesis & Catalysis* 2001–2008 projected to 2009.

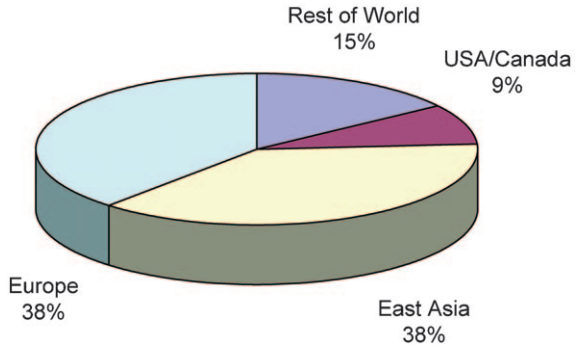

Figure 11. Submissions to *Advanced Synthesis & Catalysis* 2008 by region.

issues in the first quarter of 2009; therefore, there were relatively few invited manuscripts received in the last quarter of 2008. In short, the increase in 2008 of regular submissions is significant.

Figure 10 shows a graph of submissions with a straight-line projection to 2009; 2007 is below the trend while 2006 and 2008 were above.

The regional distribution of submissions also reflects the increasing significance of China. In 2008, East Asia had the same percentage of submissions as Europe (Figure 11).

Figure 12 shows the development of submissions from the various regions and the steady increase from East Asia, mainly due to the increase from China.

Manuscripts from 39 countries were submitted to *ASC* in 2008, a wider distribution than for the accepted and published manuscripts. Figure 13 shows the distribution of submissions according to country. Most striking is the dramatic increase from China, now representing more than double the submissions from any other country and having reached 27% of the total

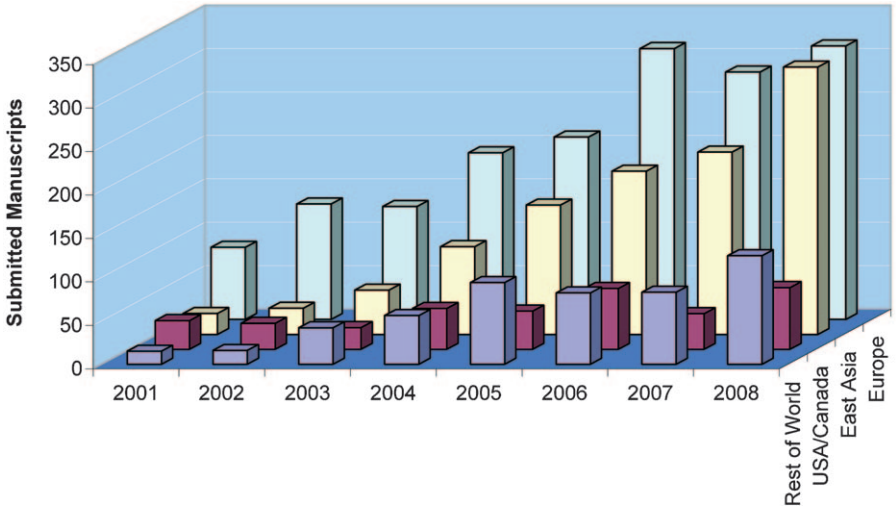

Figure 12. Submissions to *Advanced Synthesis & Catalysis* 2001–2008 by region.

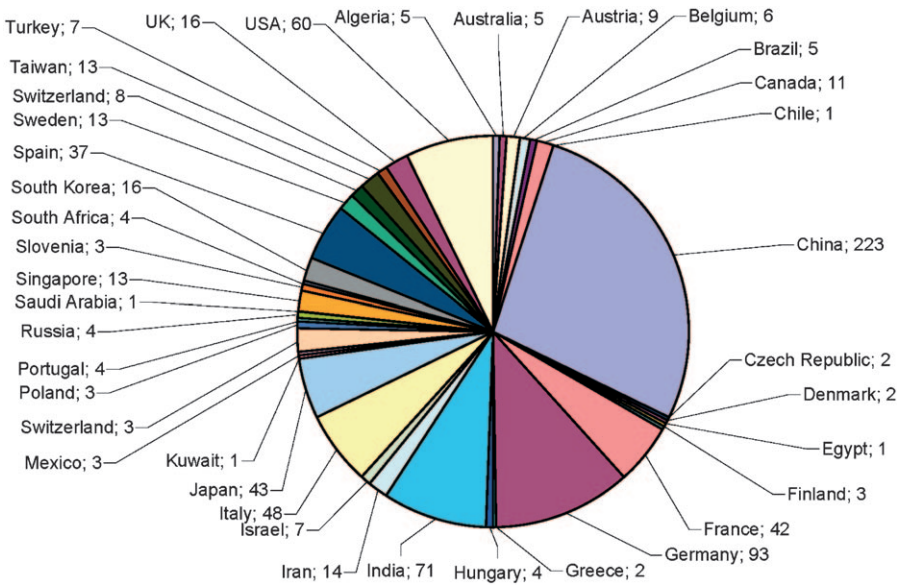

Figure 13. *Advanced Synthesis & Catalysis* submissions by country 2008.

submissions for the year. Authors from Germany, USA, India, Italy, Japan, France and Spain continued to provide a significant portion of the submissions in 2008. Since there is a time lag between submissions and publication, it is fairly safe to predict that the China will continue to be the leading country in terms of the number of publications in the journal in 2009. It is truly spectacular how rapidly Chinese chemistry has developed in the last ten years. Since the level of quality is high, this phenomena constitutes a great enrichment of chemical science and is serving to stimulate more rapid advances worldwide. The launching of *Chemistry – an Asian Journal* in 2006 as an international, high-impact journal was a timely response to this phenomenal growth.

The continued rapid growth in the submissions to *ASC* required the strengthening of the editorial office. I am pleased to announce the promotion of Dr. Tobias Burkert to Associate Editor, in which capacity he is now managing part of the *ASC* refereeing system. Tobias studied chemistry at the University of Stuttgart, where he received his doctorate in November 2007 with Prof. Stephen Hashmi. He joined the *ASC* editorial office in 2007 as Assistant Editor. Since you as readers of *ASC* are also the referees and authors, I hope you all join me in wishing Tobias success in his new position. At the same time, I wish to acknowledge the dedication and skill of the other members of the editorial office, Dr. Richard Dunmur and

Dr. Thomas Kast, whose work has enabled *ASC* to become the high-quality journal that it is.

With the current global economic crisis and threats resulting from environmental pollution, mankind seems to have reached a critical crossroads. The next few decades will determine our fate and that of our children. As chemists, we have a clear mandate to increase our understanding of the physical world and discover more efficient and environmentally friendly chemical processes. The work of research chemists will form the basis for future human progress by making new processes and materials available for practical application. It then depends on industrialists and politicians to apply this knowledge in the interest of long-term human progress, a process in which we are also involved and for which we also share the responsibility. Chemical journals also have a role to play. Under the leadership of the members of the editorial boards, *ASC* has tried to contribute positively by exercising quality control and publishing cutting-edge research with practical consequences. I am optimistic about the future and with your support and contributions, *ASC* will be able to play an increasingly significant role.

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