



Scientific Needs, Directions, and Bargains

Everyone loves a bargain. However, scientific bargains, like all bargains, must meet the needs of the customer, offer value for current state-of-the-art or future use, and be priced consistently with the quality desired. Archival journals are particularly susceptible to these demands, because subscribers, especially libraries, are currently and increasingly under pressure to keep subscription costs low. Furthermore, the readers and subscribers (customers) must feel that the information content is of high quality and focuses on the technical areas of most interest to them.

Much has been written recently concerning journal quality as measured by the impact factor (IF). ECS President Mark Allendorf's comments regarding this measure of quality are the subject of a recent "From the President" column (*Interface*, Fall, 2006, p. 7). Although the influence or impact on a discipline by specific journals is very important, the relative bargain that a journal offers in the current realm of cost effectiveness should also be considered. This means of evaluation has been the subject of a recent perspective by Kimberly Douglas and Dana Roth published in *Chemical & Engineering News* (November 20, 2006). They calculate a cost effectiveness (CE) for a number of journals following analyses proposed by various authors (e.g., Barschall, Roth, and Bergstrom) that include price per page weighted by IF (i.e., p/p/IF); on this basis, a lower number indicates higher cost effectiveness. Selected American Chemical Society journals have a CE of 0.12, while analogous journals from commercial publishers considered in this article have a CE of 1 or greater. Our calculations using the same formalism, show that ESL has a CE of 0.09 for both 2004 and 2005. This number indicates that the technical impact of ESL is a bargain for the scientific community.

The other aspect noted above is the changing emphasis areas for our members. As we began the ninth full year of publication in January of this year, *Electrochemical and Solid State Letters* (ESL) has designated two new sections to the Table of Contents. These sections, *Fuel Cells and Energy Conversion* and *Nanostructures, Carbon Nanotubes, and Fullerenes*, have been added to indicate the growing interest in these areas by the technical community in general, and especially by authors and readers of ESL. Clearly manuscripts in these fields have appeared in ESL since its inception (July, 1998), but the numbers have been growing steadily. For instance, in 2001, which was the first year that we separated published papers by technical areas, there were 10 papers that dealt with fuel cells, while in 2006, there were 53. Similarly, in 2001, 5 papers were published that dealt with nanostructures, nanotubes, and fullerenes, while in 2006 there were 25. Since these topics are covered extensively in symposia held at ECS meetings, it is appropriate to recognize through ESL that these are areas that currently play and will continue to play important roles in the future of the Society.

We want to take this opportunity to thank the dedicated authors and reviewers for enabling us to offer significant value at a reasonable cost. In addition, we welcome their suggestions and ask for their continuing support to ensure high quality technical content for ESL in 2007.



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