

## **A study of Canadian authorship in selected SPARC Alternative journals in the early years after their introduction**

By

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### **Abstract**

The Scholarly Publishing and Academic Resources Coalition (SPARC) is an initiative of the Association of Research Libraries. In 1998 SPARC introduced the Alternative Program working with partners to launch new journals to compete with existing high-priced titles in the STM field. Currently there are 11 titles in this program listed on the website (<http://www.arl.org/sparc/partner/partnerlist.html>), three of which are freely accessible. This study examines the earliest adopters, *Organic Letters* and *Evolutionary Ecology Research* to determine author satisfaction with these journals. *Organic Letters* although originally a SPARC Alternative journal is no longer listed under this Program. A survey of Canadian authors in these journals in the first five years since inception provides insight into the reasons why they chose to publish in these journals and has definite implications for librarians. The results of these surveys are discussed in the larger framework of existing scholarly communication models.

### **Introduction:**

The Scholarly Publishing and Academic Resources Coalition is well-known in the scholarly communications arena through its various partnerships and programs, its advocacy initiatives and its promotion of open access publishing. Its early development and evolution has been traced by Mary Case in [Igniting Change in Scholarly Communication: SPARC, Its Past, Present, and Future](#), which also provides an overview of the three main publisher partnership programs SPARC Alternative, SPARC Leading Edge and SPARC Scientific Communities. As a response to the serials crisis, SPARC introduced the Alternative Program which was designed to create competition to existing high-priced titles in the STM field. SPARC partnered with the American Chemical Society in July 1999 to launch *Organic Letters* in direct competition to the highly priced Elsevier publication *Tetrahedron Letters*, the leading letters journal at the time. At the same time, editor Michael Rosenzweig of *Evolutionary Ecology* and the entire editorial board resigned in protest at the increase in prices sought by its publisher Kluwer. The resulting publication *Evolutionary Ecology Research* was priced at a fraction of the original journal. These two journals which were early adopters in the Alternative Program were joined later by others. The Royal Society of Chemistry journals *Physchemcomm* and *Geochemical Transactions* which followed these journals have since moved elsewhere. *Physchemcomm* an electronic only chemistry journal intended as competition with the high priced Elsevier journal *Chemical Physics Letters* has been

incorporated into another RSC offering entitled *Physical Chemistry Chemical Physics*. *Geochemical Transactions* is presently being published by Biomed Central. The early adopters were soon followed by other alternative journal partnerships so that there are currently 11 journals listed under this program on the SPARC website.

There is a paucity of studies on SPARC initiatives and on user acceptance of the SPARC Alternative Program. The following study was intended to examine prevailing attitudes of researchers publishing in these alternative journals during the first five years after their introduction. Although only Canadian authors have been targeted in this study it is hoped that the results will provide insights which can be applied more widely.

Canadian educational institutions have negotiated online access to e-journal packages including the American Chemical Society journals, through site licensing initiatives such as the Canadian National Site Licensing Project, currently known as the Canadian Research Knowledge Network. Canadian universities are therefore recipients of the alternative journals included in these packages. Other alternative journals such as *Evolutionary Ecology Research* may be purchased as part of the commitment of SPARC member libraries to subscribe to SPARC partner journals. As a result Canadian researchers may have exposure to these journals through their libraries.

### **Literature Review:**

Mary Case in an article published in *Advances in Librarianship* provides the rationale behind the launching of the SPARC Alternative Program and the partnership model envisaged. The enlisting of support by ARL libraries as part of a SPARC membership commitment provided the impetus for development of this program with the expectation that libraries would eventually cancel subscriptions to the high-priced competing journals (Case 21). Soon after the program was announced, an article in the Newsletter on Serials Pricing Issues by Jennifer Kostelnick decried the introduction of new journals to the STM marketplace and the effect on an already overburdened library serials budgets. She stated that “unless these journals can surpass current publications in quality and innovative electronic access, readers will not take notice or will begin to consult the new publications as a supplement to those currently in existence, thus increasing the demand on library budgets rather than reducing it” (214.2). This led to further discussion on the merits of this initiative in subsequent issues of the newsletter by Cameron and Bensman (Cameron 216.2; Bensman 216.3). The official response from Richard K. Johnson, who was SPARC Enterprise Director at the time, stressed that the Alternatives program should not be seen as a single transformative solution but part of an overarching strategy to foster change “that will ultimately lead to more open and accessible scholarly communication”(218.1). More recently Lustria and Case have done a survey of participants and a features analysis of journals that have emerged from SPARC Initiatives. While examining Alternative journals within the purview of SPARC partners the article is encouraging in its assessment of the features and impact of these journals (Lustria and Case 236-246).

## Methods:

A survey of Canadian authors in alternative journals was conducted to determine their satisfaction with these journals as well as to shed some light on how these journals were being promoted to researchers. Canadian authors in *Organic Letters* and *Evolutionary Ecology Research*, two of the early adopters in the SPARC Alternative Program were surveyed. Authors who had published in these journals in the first five years since their launch were contacted by e-mail in December 2004 and asked to participate in a web-based survey. All authors affiliated with Canadian institutions with valid e-mail addresses were contacted. Authors of multiple papers were only contacted once. Canadian authorship in these journals was assessed by checking the address field for papers indexed by the *Web of Science* right from their inception till the end of 2003. Participants in the web-based survey were asked to provide answers to a set of nine questions which are listed in the Appendix.

Using the Analyze feature in the Web of Science, the number of papers published in the selected journals during the years 1999 to 2003 reveals a year by year breakdown of articles by Canadian authors during this period. A similar search for Canadian authorship in the high-priced competitors shows the corresponding pattern for publications in the competing journals *Tetrahedron Letters* and *Evolutionary Ecology*. These figures have been reproduced in Tables 1 and 3 under Results.

## Results:

A comparison of Canadian authorship in the selected alternative journals versus their competitors provides an interesting year by year comparison of Canadian authorship in these journals and has been reproduced below.

### Canadian Authorship in Evolutionary Ecology Research vs Evolutionary Ecology

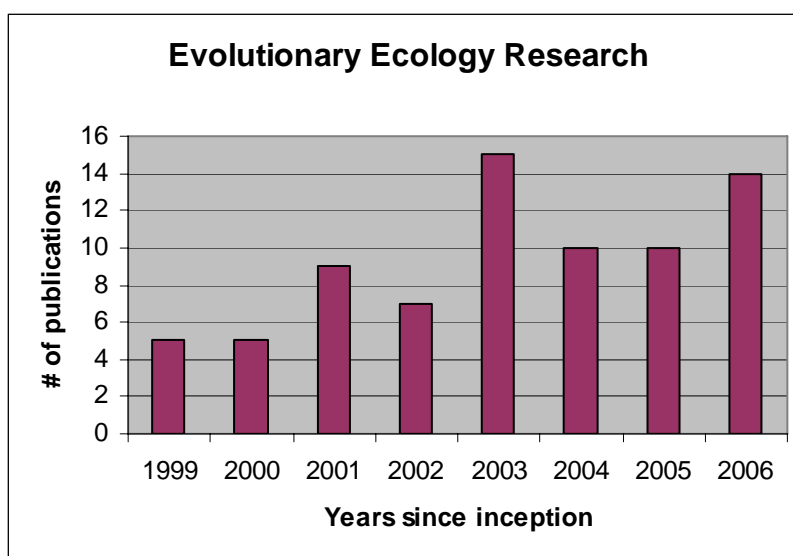
Year	<i>Evolutionary Ecology Research</i> (EER)	<i>Evolutionary Ecology</i> (EE)
1999	5	1
2000	5	3
2001	9	3
2002	7	2
2003	13	2

**Table 1: # of publications by Canadian authors**

The numbers in Table 1. are encouraging in that they show an increasing number of articles by Canadian authors in EER as opposed to EE even after one takes into account the fact that EE began producing fewer issues at the time that EER was gaining prominence.

### Recent years

Further, a more recent search of the Web of Science shows that Canadian authors continue to publish in EER (Table 2). The 2006 impact factor for this journal obtained from Journal Citation Reports is 1.785. The following graph illustrates this trend.



**Table 2**

### Canadian authorship in Organic Letters vs Tetrahedron Letters

Year	<i>Organic Letters (OL)</i>	<i>Tetrahedron Letters (TL)**</i>
1999	24*	64
2000	70	52
2001	50	49
2002	53	49
2003	51	37

**Table 3**

\* OL published its first issue in July 1999.

\*\*TL publishes 52 issues a year compared to 26 in OL.

The results for OL versus TL is striking in that in the case of OL which was launched in July 1999 there appears to be a fairly large number of articles from Canadian authors in the first half-year of its launch. In the succeeding years the numbers shown either match or exceed the number of articles by Canadian authors in the competing journal although TL publishes twice the number of issues per year as OL.

### Recent years

The following provides a graphical view of the number of publications by Canadian authors including data for more recent years. It shows increasing participation by Canadian authors in OL (Table 4) during succeeding years. The meteoric rise in impact factor of OL (4.659 in 2006) may explain this trend.

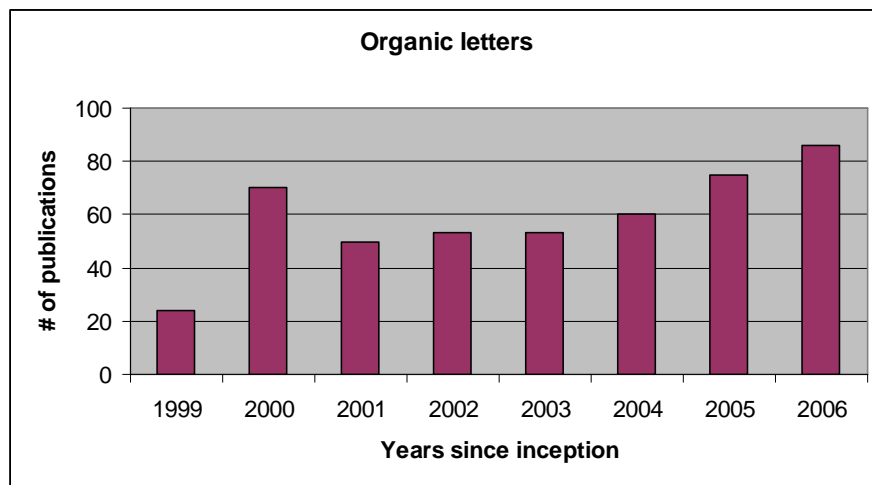


Table 4

### Survey Results

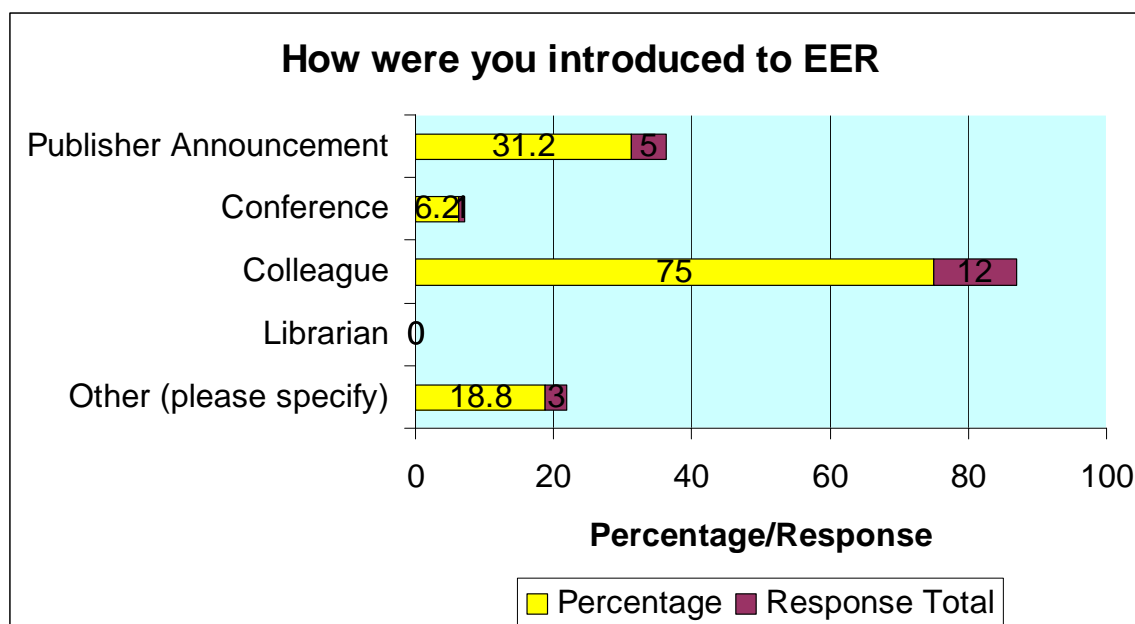
The web-based survey of authors in these journals provides more information on user acceptance of these journals. Of the 54 Canadian authors in EER contacted 16 responded giving a response rate of 29.6% . Of the 269 Canadian authors in OL contacted we received a response from 48 authors giving a response rate of 18 % . Information on background and number of years of research experience of authors in both journals are available in Table 5. Other includes investigators from research institutions other than universities as well as research assistants in academic institutions.

### Profile of respondents

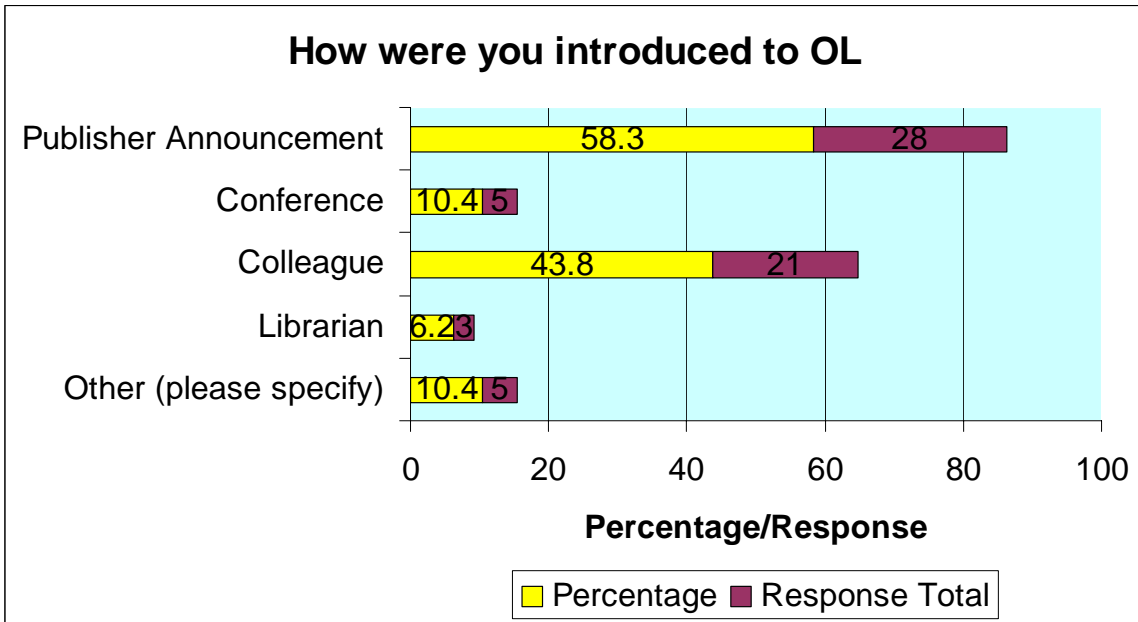
	EER (n=16)	OL (n=48)
Faculty	11	25
Grad students	1	8
Post-Docs	1	8
Other	3	7
Research experience (median years)	13	15

**Table 5**

When respondents were asked how they were introduced to the journal using predefined categories (Q.3), more than half (58.3%) of OL authors mentioned a publisher announcement, 21 (43.8%) mentioned a colleague while only 3 responses (6.2%) mentioned a librarian. Other responses from OL respondents indicated other promotional avenues such as ACS membership, regular use of ACS journals or a complimentary subscription. In contrast 12 EER authors were introduced to the journal through a colleague, 3 through a publisher announcement, and one through a conference. Communication from the editor was mentioned under the other option while none selected the librarian category. The results have been reproduced below.

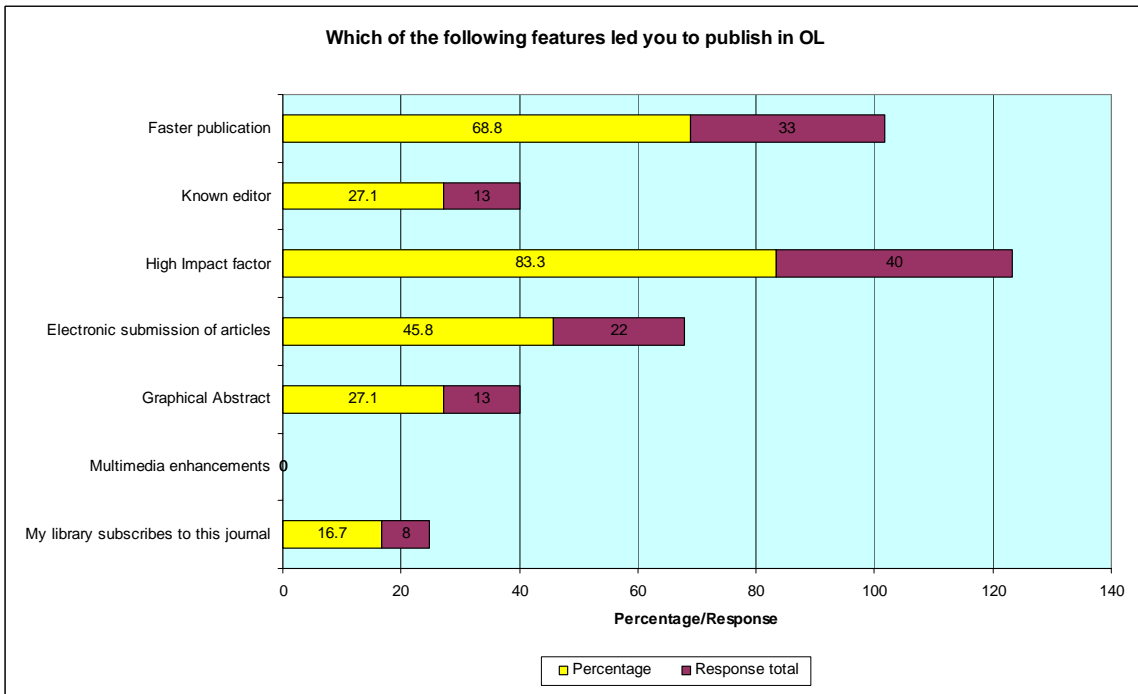


**Table 6**



**Table 7**

When authors were queried on the features which have led them to publish in these journals (Q.4) there was a wide selection as multiple choices were allowed. In the case of OL, its high impact factor and faster publication times generated the most responses, whereas in the case of EER a known editor and faster publication appeared to be the deciding factors by a majority of respondents (Tables 8 and 9).



**Table 8**

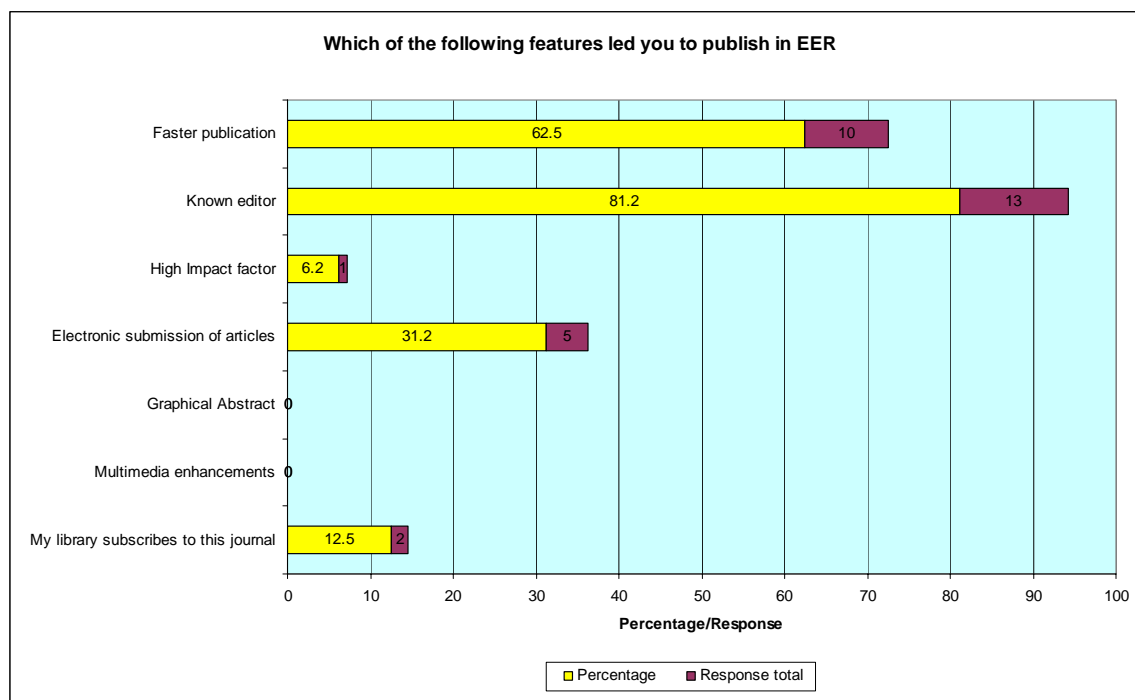


Table 9

Responses to other questions showed a similar divergence. Only 13 (27.1%) of the OL respondents had heard of SPARC and only 19 (39.6%) consider the price of the journal in which they publish. On the other hand, 11 of the 16 EER respondents (68.8%) had heard of SPARC and 12 (75%) of the respondents considered the price of the journal in which they publish. Will they continue to publish in these journals? All but one of the OL respondents indicate they will continue to do so. EER respondents were unanimous in their support for this journal with all authors answering in the affirmative.

### **Additional comments**

Comments from authors (18 from OL authors and 9 from EER authors) were instructive and have been reproduced in part below.

#### **OL authors on journal pricing,**

“As an author, I have stopped publishing in some journals because they were for-profit and very expensive. This is not the case of most ACS journals.”

“I publish here primarily because it is a Societal Journal and the subscription prices and access to archives are reasonably priced. I have stopped publishing in non-societal journals because of their price gouging (i.e. Tetrahedron Letters).”

“Organic Letters is an excellent journal and re(a)sonably priced. There should be more like it.”

“This journal ( Organic Letters) was created in part to compete with the overpriced Tetrahedron Letters, and *has been at least somewhat successful in this goal; it is most certainly less expensive and on average the article quality is higher.* On the other hand its



inception killed the Communications section of its sister journal , *the Journal of Organic Chemistry (JOC)*. *This is regrettable, as the Communications in JOC were something special, and although articles in "OL" are of good quality, they are not quite in that category.*"

"When I submitted to this journal I knew about a relationship with sparc, but there was really nothing different as far as I saw."

#### **On Organic Letters,**

" I really enjoy reading Organic Letters and I hope for its continued success. I am especially impressed with how fast things get published without compromising the content."

"This is the most efficient journal in the world for the ease of submitting manuscripts and speed of publication. Referees are only allowed 7 days to review a manuscript."

" OL is the premier ACS journal for ORGANIC comms. However, I don't like the template, I found it a real pain in the neck!!!!"

"Liked the electronic article template feature that was offered to authors for manuscript preparation".

#### **And on wider issues,**

"Methods should be found for more internationalization of authors publishing in communication journals to achieve a fair distribution of countries in the top 5 journals for organic chemistry....."

" I would eventually wish to publish in open access journals like BioMed Central."

#### **EER authors on SPARC**

" The editor-in-chief has done a tremendous amount of work in promoting the philosophy of SPARC", "the main reason I publish in this journal is that it is in my field and I approve of the SPARC initiative."

#### **On journal pricing,**

"My efforts to publish in journals that keep their prices down will increase as my academic career progresses. I was very happy with editorial process at EER."

"The Editor-in-chief has made it his goal to keep ER affordable and accessible to all. As a consequence, EER subscriptions are affordable and I have yet to see a better author copyright agreement at other journals."

" I certainly prefer publishing in journals that emerge from scientific societies rather than ones associated with making money (e.g. springer)."

#### **On Evolutionary Ecology Research**

" I have published in EER because it is freely available to most scientists and because it is free of corporate ownership. Despite this, its impact remains low, and I don't feel like it is sold very well or advertised very well. The editor and the board are , indeed, well known, but this didn't influence my decision."

"content of previous issues was an important consideration in choosing to publish in EER"

“This journal has an editor and an editorial board that is capable of making its own decisions without constantly deferring to anonymous referees”.

“ I quite like EER, and I think that the material it publishes is of high quality. However, it seems that the journal is not widely read (or at least not widely cited) which is unfortunate.”

### **Discussion:**

The survey of Canadian authors in two journals which were early adopters of the SPARC Alternative program serves as a snapshot of user perceptions regarding these journals. Although response rates were low there are interesting divergences in attitudes between the two author groups. The American Chemical Society brand appears to have been instrumental in the acceptance of the journal *Organic Letters*, whereas with the journal *Evolutionary Ecology Research* we see commitment to the low priced alternative. This is apparent both from the comments as well as the intention of these authors to continue publishing in these journals.

The Lustria and Case study of SPARC partners shows that the movement is largely driven and motivated by academe. In their analysis of the features provided by journals partnered by SPARC competitive pricing appears to be a major advantage of SPARC alternative publications (243-245). While pricing is an issue for libraries, Searing and Estabrook in their examination of how far the Principles for Emerging Systems of Publishing ( promulgated in May 2000 **at Tempe, Arizona**) align with scientists' priorities, indicate that cost does not seem to be of particular concern to chemists (90-93). The responses from our survey of *Organic Letters* authors are consistent with this view.

On the other hand, EER authors from our survey appear to be well informed on serials pricing issues. Julia Blixrud in her presentation at the 2002 UKSG conference at the University of Warwick has traced the flight of authors from *Evolutionary Ecology* to *Evolutionary Ecology Research* in the early years after its launch. Mary Case in her overview of SPARC initiatives refers to the consequent scaling back of the number of *Evolutionary Ecology* issues being published. The fact that all EER respondents in our survey indicated that they will continue to publish in this journal speaks well to the influence of the editor-in-chief Michael Rosenzweig and augurs well for the future of this journal.

Lorin Garson provides evidence that electronic only journals in chemistry have not been well received although he indicates a steady rise in the number of articles in Physchemcomm from its launch till the year 2002 (141-148). Since 2004 this journal is no longer being published and has been incorporated into Physical Chemistry Chemical Physics. As mentioned earlier, the other RSC journal Geochemical Transactions is no longer listed officially as a SPARC partner and is now being published by the open access publisher BioMed Central. Its future as an open access journal will be interesting to watch.

According to Garson, electronic only journals are more likely to evolve when the print version of a journal ceases being published. Lustria and Case list 11 electronic only SPARC partnership publications with varying feature scores ranging from 10 to 26 based on a total sum of 35 value-added features. In their analysis the subscription based alternative journals tend to occupy the lower range. Both *Organic Letters* and *Evolutionary Ecology Research* are subscription-based and offer both print and online versions. On the same scale *Evolutionary Ecology Research* and *Organic Letters* show scores of 8 and 15 respectively (243-245). In spite of these rankings the journals have been a success although this can hardly be attributed to any value-added features.

Searing and Estabrook in their assessment of the opinions of chemists towards issues in scholarly communication are of the opinion that by explaining the Tempe principles in terms that appeal to authors' interests they can be convinced to move in the directions advocated by these principles (90-93). Ward and colleagues have surveyed the efforts of academic institutions in addressing the scholarly communication crisis at their institutions. They have shown that while much has been done to raise awareness of these issues little has changed so far on campuses with regard to publishing habits, the tenure-granting process or responses to increasing serials prices (382-384).

SPARC has been instrumental in leading change and is now moving forward in its advocacy for open access and institutional repositories. It should be easier for librarians to promote such initiatives which are closer to the interests of faculty who seek a larger readership for their published research. It is unclear at this stage how and if this will have any impact on the scholarly communication crisis. However, the barrier-free dissemination and preservation of research results should resonate well with the mission of librarians who may find a more fitting role as change agents on campuses promoting open access.

### **Concluding comments:**

This study has shown the effectiveness of SPARC partnerships with two widely different journals as seen from the perspective of Canadian authors. Although the Alternative Program was started with the expectation that libraries would cancel the higher priced journal titles, libraries have found themselves unable to do so. [Recent ARL statistics](#) show a moderation in the unit costs of serials although total expenditures on serials continue to increase. This may be a reflection of the present trend in libraries to enter into package deals with publishers as part of consortia agreements. In this context promoting low-priced alternative journals can be seen as part of a wide-ranging strategy by SPARC to effect change in the scholarly communications arena. Librarians need to participate in these initiatives while advocating for more reasonable serials pricing.

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### **Acknowledgements**

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## APPENDIX

### List of Survey Questions

1. Faculty/ Grad Student/ Post-Doc/ Other (please specify)
2. Number of years of research experience
3. How were you introduced to this journal. Check all that apply:
  - Publisher announcement
  - Conference
  - Colleague
  - Librarian
  - Other (please specify)
4. Which of the following features led you to publish in this journal? Check all that apply.
  - Faster publication
  - Known editor
  - High impact factor
  - Electronic submission of articles
  - Graphical abstracts
  - Multimedia enhancements
  - My library subscribes to this journal
5. How often do you read this journal?
  - Daily/Weekly/Monthly/Less
  - Weekly

6. Have you heard of SPARC ( Scholarly Publishing and Academic Resources Coalition)?

Yes/No

7. As an author do you ever consider the price of a journal in which you publish?

Yes/No

8. As an author would you publish again in this journal?

Yes/No

9. Do you have any other comments you would like to add?