

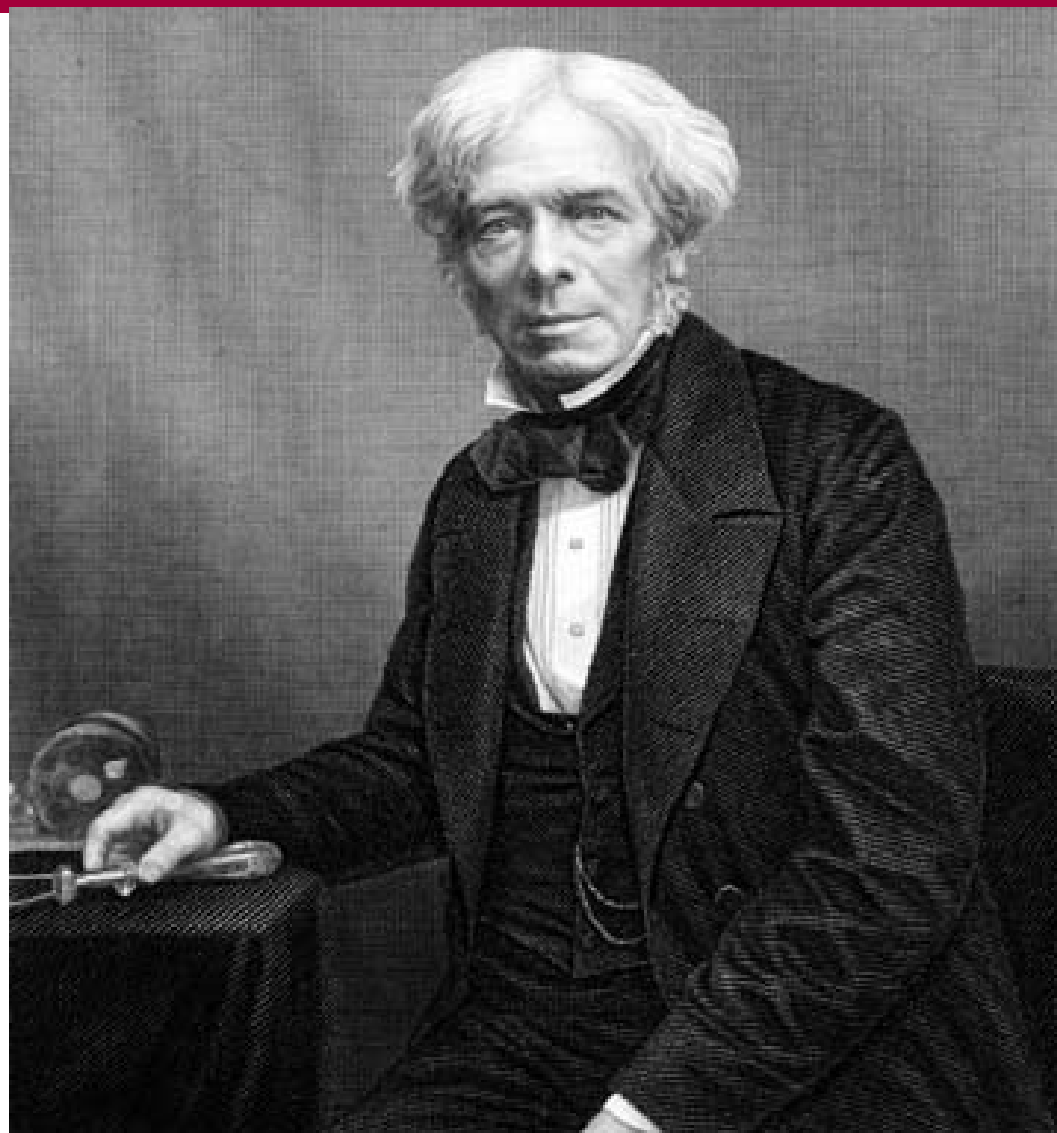
A Learned Society perspective on Open Access publishing models

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Michael Faraday

"Work, Finish, Publish"

RSC Publishing



RSC – Mission statement

“ To foster the chemical sciences by the dissemination of chemical knowledge ... ”

- publishing is a central charter objective

How does publishing contribute?

- Dissemination of scientific information
- Quality control
- Scientific and ethical standards
- Services to membership
- Providing funding and infrastructure for charitable activities
 - World's 100 most disadvantaged countries get our front-list journals and archive for free
 - Promoting chemistry (e.g. education at schools)

RSC Publishing Portfolio

- Primarily a web-based information provider:
 - 30 Journals, highest quality (168 year archive)
 - eBook Collection (>800 books)
 - Chemistry World / Education in Chemistry (magazines)
 - Databases, such as Analytical Abstracts
 - ChemSpider <<NEW TO RSC 2009>>
- *Note: Chemistry World, free to members. Education in Chemistry, free to all UK schools. ChemSpider, free to all*

What is RSC Publishing?

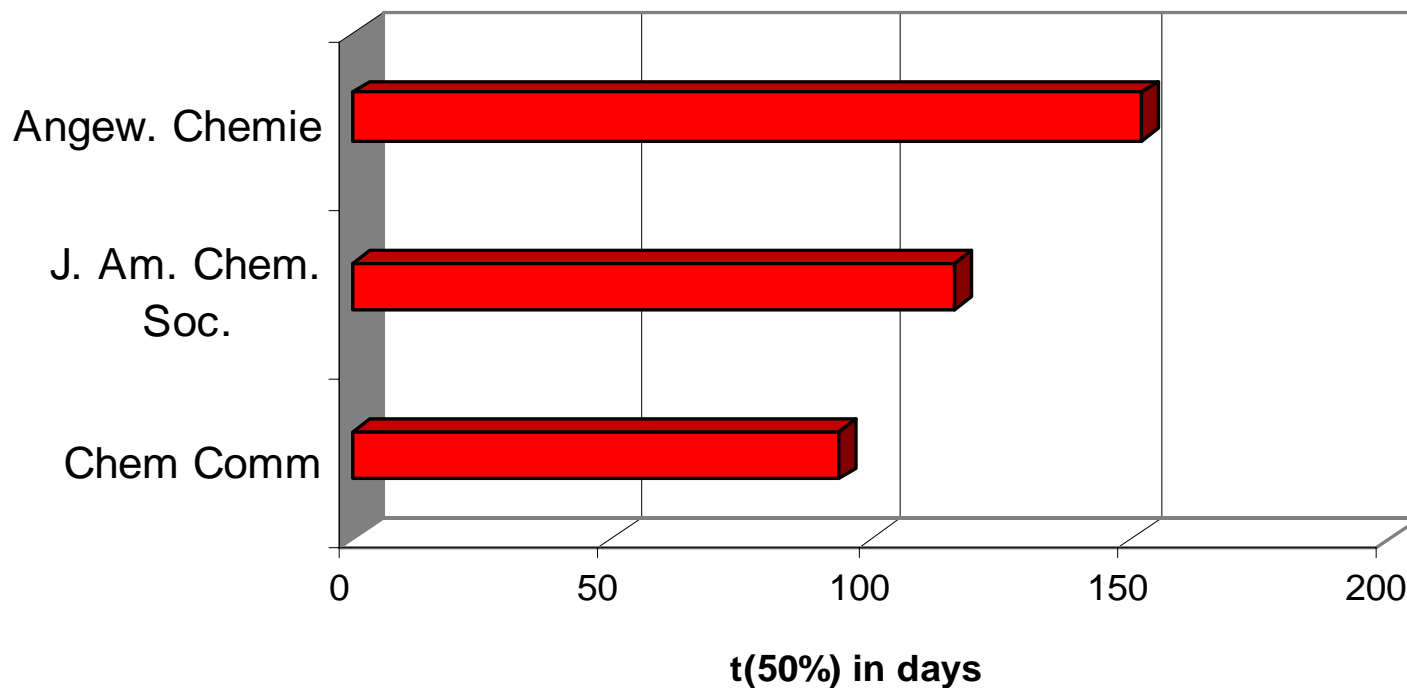
- A fast-growing prestigious publisher
- International: 90% overseas sales
- International: 90% authors non-UK
- In a very competitive environment
 - commercial publishers, and other societies
- Surplus supports a large amount of RSC's society activities (+ publishing investments)
- A very complex and innovative business!
- c.200 publishing staff, mainly in Cambridge

Peer Review

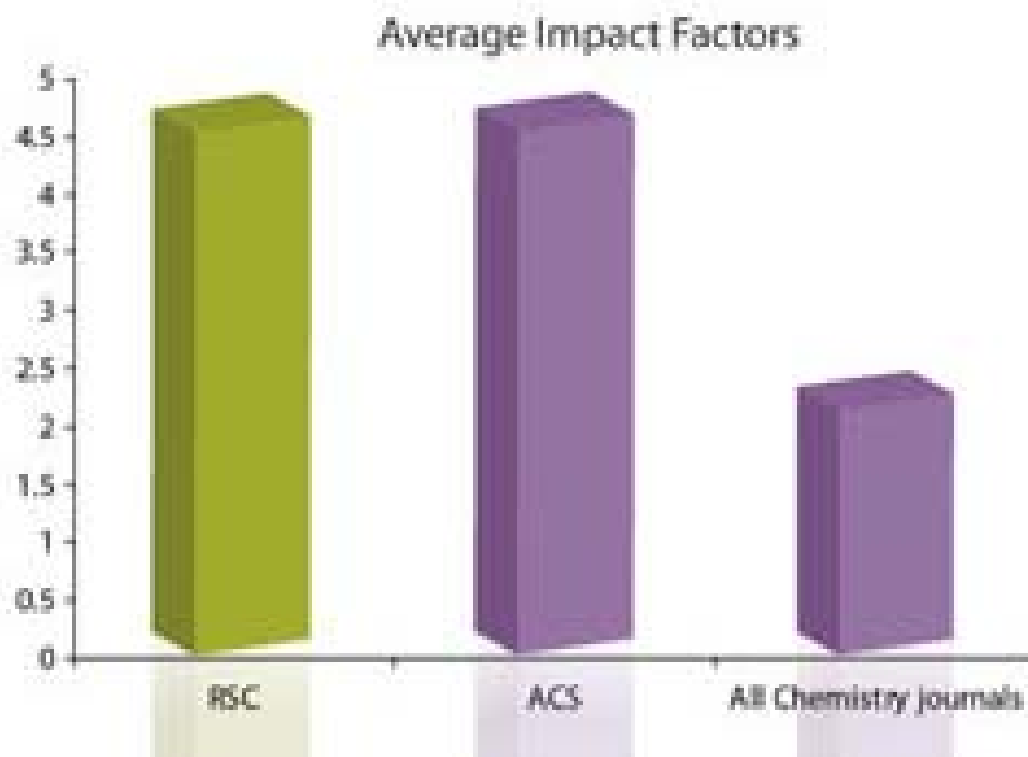
- Independent and impartial peer review, central to scientific publishing
 - Managed by professional editors in-house
 - Supported by Associate Editors
 - Dedicated group of loyal referees
 - Ensure highest quality standards, and also outstanding speed for handling submissions
 - Exceptional ‘customer services’
- *This all ‘costs’, but provides results...*

RSC journals: speed

Median receipt to print publication times
for communications - general chemistry



RSC Impact Factors



RSC Publishing

RSC and ACS average impact factors now both 4.7
All commercial publisher (Wiley, Elsevier, ...) significantly lower

RSC and RSC Publishing

- Clearly and established, successful, and growing scientific publisher
- Worthwhile use of surplus generated from publishing activities
- Shares principles of maximising visibility of scientific content to ‘advance the chemical sciences’
- So... views on Open Access?

RSC Position

- Open to change... but...
- ... must be sustainable, and satisfy central pillars of scientific publishing:
 - Registration
 - Certification
 - Accessibility
 - Archiving

OA: Benefits ?

- OA originally promoted to provide access to anyone who wants to read the articles?
 - Usage for OA articles is seen to increase
 - Citations for OA articles does not increase*
- Interpretation?
 - *Those who conduct and progress research already have good access*
 - *Extra readership is from those not actively involved in research*

Research chemistry for a non-chemist?

PAPER

www.rsc.org/molecularbiosystems | Molecular BioSystems

Chemical genetics suggests a critical role for lysyl oxidase in zebrafish notochord morphogenesis†

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As a result of a chemical genetic screen for modulators of metalloprotease activity, we report that 2-mercaptopyridine-*N*-oxide induces a conspicuous undulating notochord defect in zebrafish embryos, a phenocopy of the *leviathan* mutant. The location of the chemically-induced wavy notochord correlated with the timing of application, thus defining a narrow chemical sensitivity window during segmentation stages. Microscopic observations revealed that notochord undulations appeared during the phase of notochord cell vacuolation and notochord elongation. Notochord cells become swollen as well as disorganized, while electron microscopy revealed disrupted organization of collagen fibrils in the surrounding sheath. We demonstrate by assay in zebrafish extracts that 2-mercaptopyridine-*N*-oxide inhibits lysyl oxidase. Thus, we provide insight into notochord morphogenesis and reveal novel compounds for lysyl oxidase inhibition. Taken together, these data indicate the utility of small molecule compounds in defining the dynamic

Real driver for OA ?

- Is accessibility still the main driver for OA?
 - Or is funding the main issue?
 - If funding:
 - Some mismatch between funding of research and funding for research information (dissemination and access)
 - Also clear mismatch between quality and price of existing publications:
 - 21 RSC journals (package A): £18,511, Impact Factors ave 4.7
 - 5 'Tetrahedron' journals: £32,224*, Impact Factors ave 2.8
- ... RSC = more content, higher quality, 43% less cost

Principal 'OA' style options

- Range of 'OA' style options:
 - Open Access Journals
 - Author pays and/or sponsor supported
 - Delayed Open Access
 - Subscription access first, free access after fixed time
 - Hybrid: Open Access 'per article'
 - authors select to pay to OA their individual paper
 - Open Archives: Publisher + Repositories
 - Institutional, regional, personal, subject, ...

Open Access

- Considerably less interest in migration to Open Access journals compared to 2-5 years ago
- Requires subscription costs (library budget) to be effectively moved / migrated towards author fees
- Too soon to know if an author-pays OA model will really prove viable and sustainable (without ongoing sponsorship or external investment)
- Cannot discount model, but certainly appropriate funding is not in place right now for full market sustainability
- Hybrid approach is allowing market conditions to steer discussion

RSC position, if OA imposed

- If OA / Author Pays journals were mandated, without appropriate funding for authors:
 - Loss of journals will mean loss of support for quality control (peer review) and loss of value added by journal (authority)
 - Loss of revenue will severely impact on RSC's ability to fund society activities (e.g. education)
 - Some societies will inevitably disappear

Delayed open access

- No author charge
- Established subscription model for immediate access, with free access after given time period
- Appropriate 'delay' for one subject won't necessarily fit another (life sciences vs mathematics)
- Many publishers offer this, including RSC

Hybrid approach

- Authors can pay to have their article made freely available to all
- Allows those that want to pay / can pay, to do so
 - does not discriminate against developing nations
- Decision made after peer review
 - no influence on editorial decision (avoids ‘pay to publish’)
- RSC supports this model “RSC Open Science”
 - Comms £1,000, Articles £1,600, Reviews £2,500
 - 15% discount to members, and package A/B subscribers
- But very low up take from authors

Institutional repositories

- Publishers pay for and manage entire publication process. Upon publication, authors deposit a version of their paper in an 'open' repository
- Repository costs are unclear, but not insignificant
 - Set-up: £3,900 - £963,000
 - Annual running cost: £2,884 - £161,400
 - Cases where overheads not fully factored in
 - Examples of money redirected from research funding to pay for the archiving (repository) infrastructure

RSC position: Repositories

- Sustainability?
 - Publishers and societies more enduring than chemistry departments?
 - Over the past 10 years 26 HEIs in the UK have completely ceased offering provision in chemistry
 - Who curates the archive of a closed department?

RSC position : Repositories

- Long Term Implications
 - Obligatory self-archiving, in a freely accessible repository, combined with cross-repository search mechanisms, will inevitably create the scenario where librarians feel able to cancel subscriptions (e.g. when a high proportion of journal content is freely available in a 'good enough' version)
 - Who then supports the peer review, and the established publishing framework?
 - Is this really desirable?

Overall: RSC position

- Access is not the issue
 - RSC is committed to the dissemination of research and to public education
- RSC makes an enormously valuable contribution to the research community and to the public
 - Highest quality chemistry journals
 - 90% of authors and revenue from outside the UK
 - Surplus is spent entirely on *advancing the chemical sciences*

RSC position

- Whatever solutions arise, access should be to the authoritative version on a publisher's website:
 - Accessible to researchers worldwide
 - Certified quality of content (and validated version being accessed)
 - Registered discovery / work to the appropriate scientists (authors)
 - Archived in perpetuity

Some unanswered questions:

- First world vs Third world
 - Ability to pay = ability to publish?
- Academia vs Industry
 - Shortfall from industry, who rarely publish but read extensively
- Administration / multiple payments
 - Chasing unpaid author invoices, for relatively small amounts
- Impartiality 'pay to publish'
 - Perhaps no issue for RSC, but Bentham example shows what can happen (especially for commercial organisations?)
- Long term viability
 - Main issue sustainability, and hence content accessibility in, say, 168 years time?



Questions?