Qualitätssicherung-peer-review-Verfahren

What Have the Publishers Ever Done for Us?

- Quality Control/Adding Value
- Product Development
- Infrastructure Investment
- Partnering the Scientific Community
Quality Control/ Adding Value

The Mechanisms of Peer Review

Who and What is Involved?

What Goes In Must Come Out?

What Happens Without QC?

Peer-Review / QC Mechanisms

- Individual Academics/Industrialists as Editors
  Publishers as Producers/Distributors
  e.g. ACS Journals, APS Journals, Microporous and Mesoporous Materials

- Boards of Academics as Editors
  Additional Publishing Staff in Support
  e.g. Science, EurJOC, EurJIC
Who and What is Involved in Peer Review?

- 80 papers/month: 30 published (37%), 20 rejected without review, 60 reviewed
- ca. 15% of rejected authors appeal, 90% of accepted manuscripts need revision
- 180 referees/reports, ca. 600 emails, 150 letters, 400 faxes, 30 articles edited for language/content, author proofs, design, production
- 4 Editors (Ph.D.s), 10 Copy Editors, 2 Production Editors, Secretariat
- Angew. Chem. Int. is ca. 3 times the size
- In ca. 25% of cases the referees agree with each other
Vested interests and „nepotism“ have to be filtered out — Relationship management

Less constructive referee reports have to be edited or interpreted e.g.

„This manuscript needs to be severely reduced, or totally oxidised“

„This manuscript fills a much-needed gap in the scientific literature“

What Goes in Must Come Out?

All manuscripts are edited for content (by scientists) and the language is polished (by native English speakers)

All figures are checked for content
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All literature citations are checked for completeness

Articles (e.g. reviews or highlights) on hot topics are invited — editors follow the trends
What Happens Without Peer Review?

The Journal of Unpublished Chemistry is a new international journal for the communication of chemistry which is inappropriate for submission to any other publication.

Articles include:

- Upon Cleaning Glassware: Chromic Acid or „Smash-it-and-bin-it?"
- The Effects of Inert-Gas Balloon Colours Upon Reaction Yields
- Great Results: How to Achieve Them With Statistics
The „Ginsparg“ Pre-print Server

- 35,000 Submissions per year, 2 million visitors per week
- $300,000 Running Costs p.a. + Hardware

„If someone from Caltech tried to submit a paper on perpetual motion, it would appear“

„This simply means that people who read the server have to be extra cautious about what to believe“

Paul Ginsparg, Physics World, August 2001

Infrastructure Investments

- Editorial Offices: Wiley-VCH employs over 50 Ph.D. scientists in the journal editorial function in Weinheim
- Web platforms: the development of Wiley-Interscience has so far cost Wiley >US$ 30 million (exl. content preparation)
- Wiley organises and supports over 400 editorial offices, worldwide
- Wiley-VCH prints and distributes over 120,000 pages in over 900 issues per year
Partnering the Scientific Community

Society journals: members, magazines, e.g.

- Physikalische Blätter (DPG)
- Nachrichten aus Chemie (GDCh)
- Chemie Ingenieur Technik (Dechema, VDI-GVC)
- Advanced Engineering Materials (DGM, SF2M)

- contribute to member services and the growth of the scientific societies

- Significant earnings for societies from publishing
- Co-development of new journals, e.g. European journals of chemistry

What Will Publishers Do For Us?

- Apply, monitor, and administer the peer-review and QC mechanisms
- Maximise dissemination of (correct) scientific results
- Remain major employers of scientists
- Continuously develop, modify, and improve information products for scientific communities (and fund this process)
- Work with scientific organisations to enhance their services

What Will Change?

- Print distribution infrastructure will decrease in importance and value
- Publishers will have to increasingly add value to the products, rather than just „collect and distribute“
- Common data formats/publishing platforms will be required
- The number of special interest journals founded will decrease
- Smaller „niche“ journals will be increasingly absorbed by larger, more general, ones