The Chemistry Preprint Server: An Experiment in Scientific Communication

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WORKSHOP ON OAi AND PEER REVIEW JOURNALS IN EUROPE

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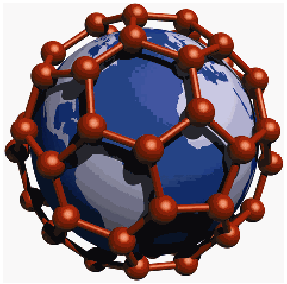
Outline of Presentation

- Introduction to ChemWeb.com
- Chemistry Preprint Server
  - Overview
  - Submission procedure
  - Browsing and searching
  - Where we are now
- Future Directions
- Conclusions
- Questions & Discussion

ChemWeb.com

- Online resource for the chemical community
- Free registration and membership
- Access to essential services and information
  - Journals, Databases, *The Alchemist* Magazine, Shopping Mall, Conference Centre, Careers Centre, Forums



ChemWeb.com

- Offer free services - temporary & permanent
  - Access to journals
  - AutoNom and Beilstein Abstracts
- Encourage member interaction - e.g. forums
- Exploit web technology and functionality - e.g. structure searching
- Over 250,000 members, 2.5 million page impressions per month

Ideal host for the Chemistry Preprint Server!

Chemistry Preprint Server

- Freely available and permanent web archive and distribution medium for research articles
- Scientific articles freely available for public access prior to formal review
- Preprint NOT prepublication
- The first Chemistry Preprint Server!
  - Modelled on very successful arXiv preprint server, run by LANL, for mathematics and physics

http://preprint.chemweb.com

Launch of the CPS

- Launched 21 August 2000 at the ACS National Meeting
- 20 Preprints submitted prior to launch
- Positive response at the meeting
- Primary concerns were issues of prior publication and quality control

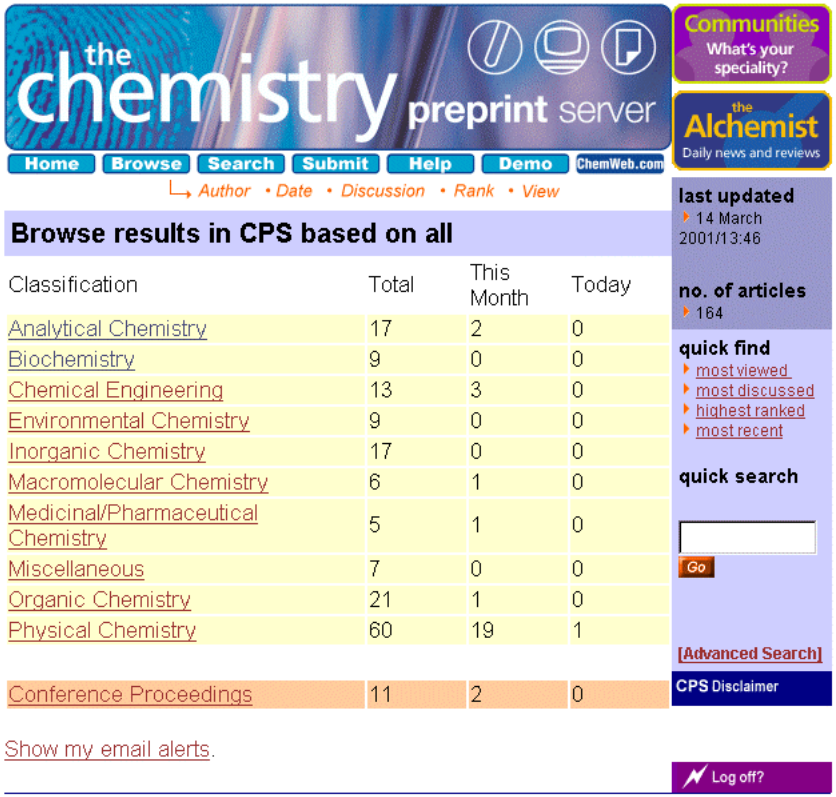
CPS Procedure (1)

- **Author uploads preprint:**
  - **Article, meta-data (abstract, author details etc) & supplementary files submitted**
  - **File types supported include PDF, MS Word, Postscript, RTF and HTML**
  - **Author selects classification**
  - **Automatic conversion to PDF**
  - **Article screened by 'editor'**

- **Author revisions possible (version control)**
  - **Option to redirect to online version at publisher's site following publication**

CPS Procedure (2)

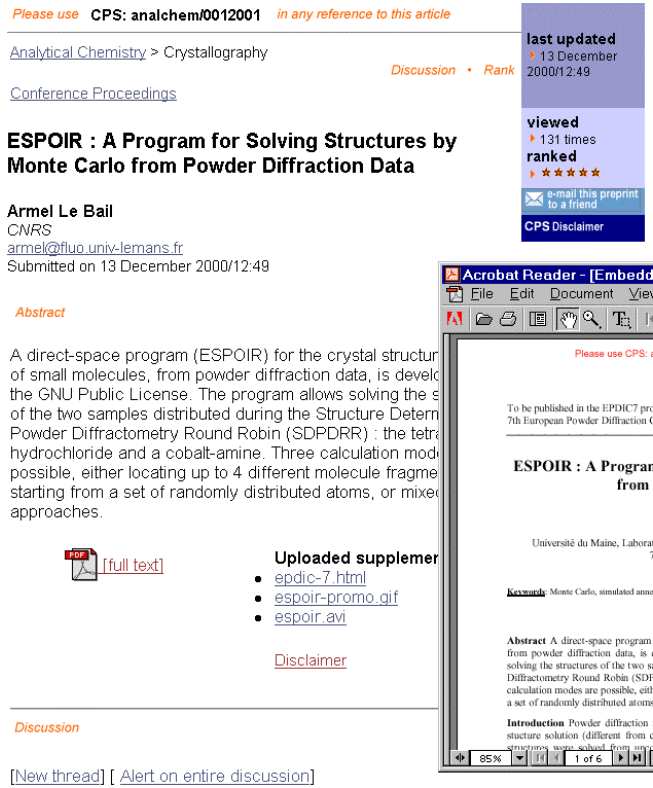
- 10 Classifications:
  - Analytical Chemistry
  - Biochemistry
  - Chemical Engineering
  - Environmental Chemistry
  - Inorganic Chemistry
  - Macromolecular Chemistry
  - Medicinal Chemistry
  - Organic Chemistry
  - Physical Chemistry
  - Miscellaneous

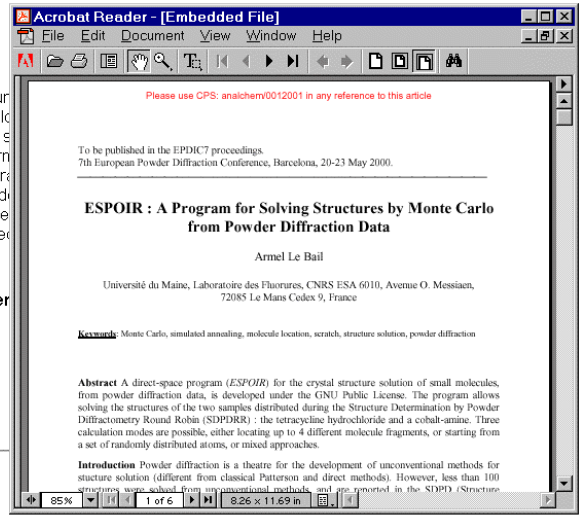


- New Conference Proceedings section
  - Submit pre-conference abstracts or post-conference reports

CPS Procedure (3)

- **Every article is given a unique identifier**
  - **“Friendly URL” & Citation Reference**



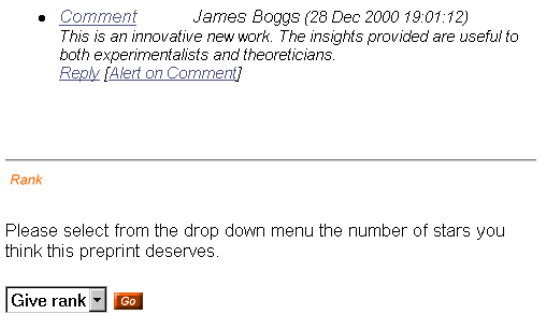


http://preprint.chemweb.com/category/YYMMNNN

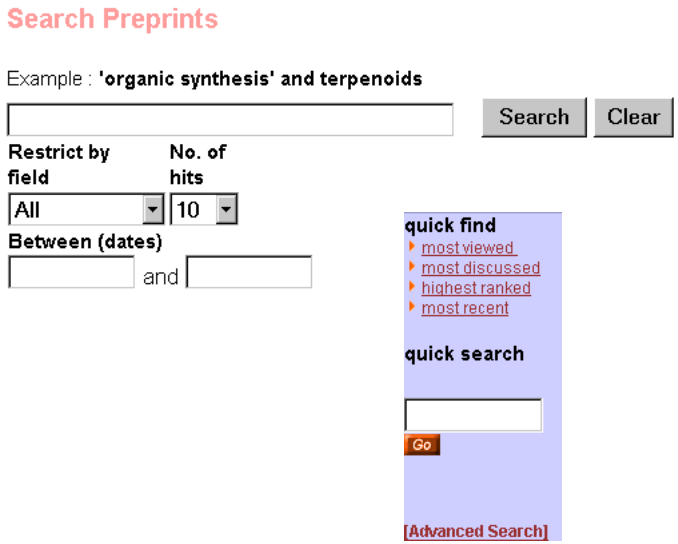
CPS: category/YYMMNNN

CPS Procedure (4)

- **Users can discuss & rank articles**

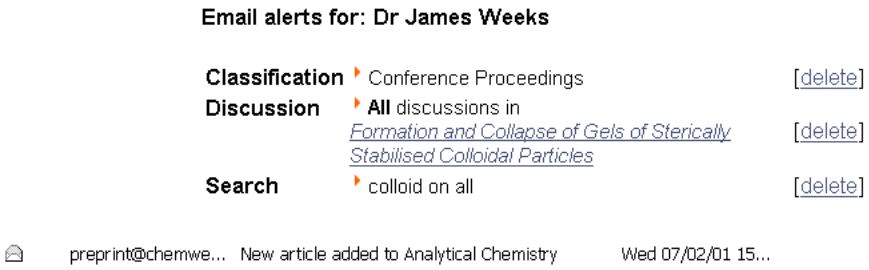


- **Quick and advanced searching and browsing**
  - **Comprehensive searching across all fields**
  - **Users can access most recent, most viewed, most discussed & highest ranked articles**

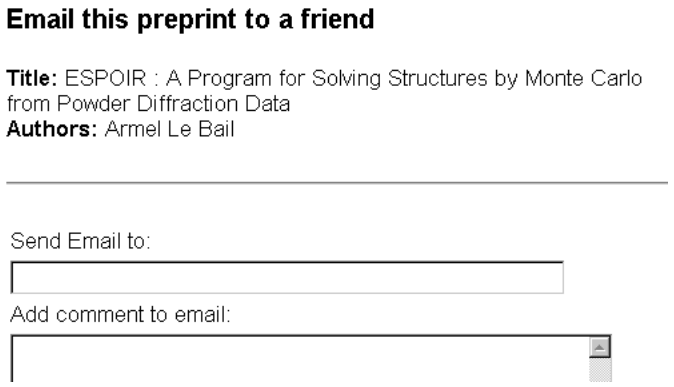


CPS Procedure (5)

- **Individual user profile - email alerts:**
  - **Searches for key words and phrases**
  - **New articles added to a particular classification**
  - **New threads added into a discussion group**

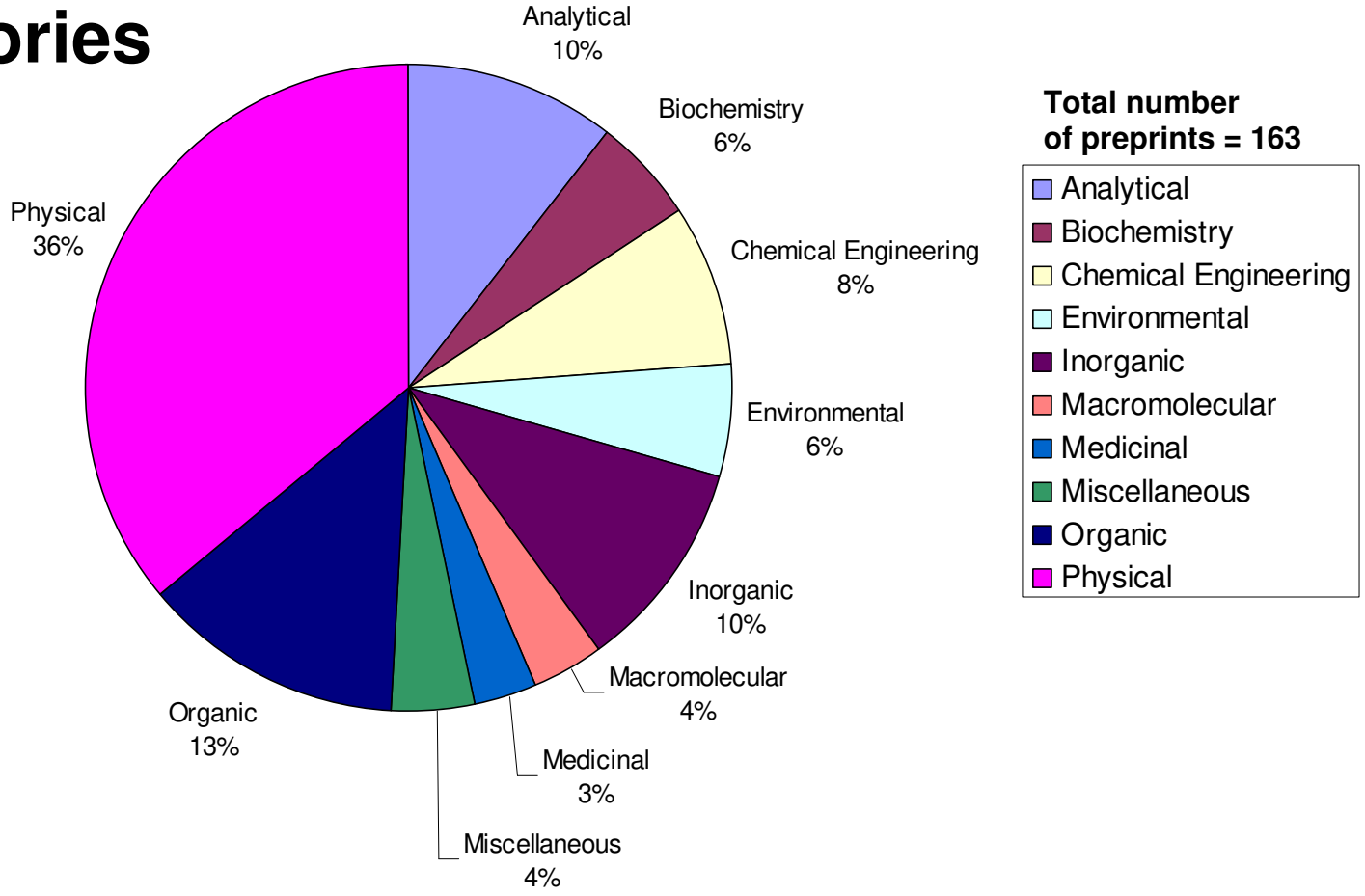


- **Recommend preprint to a friend**



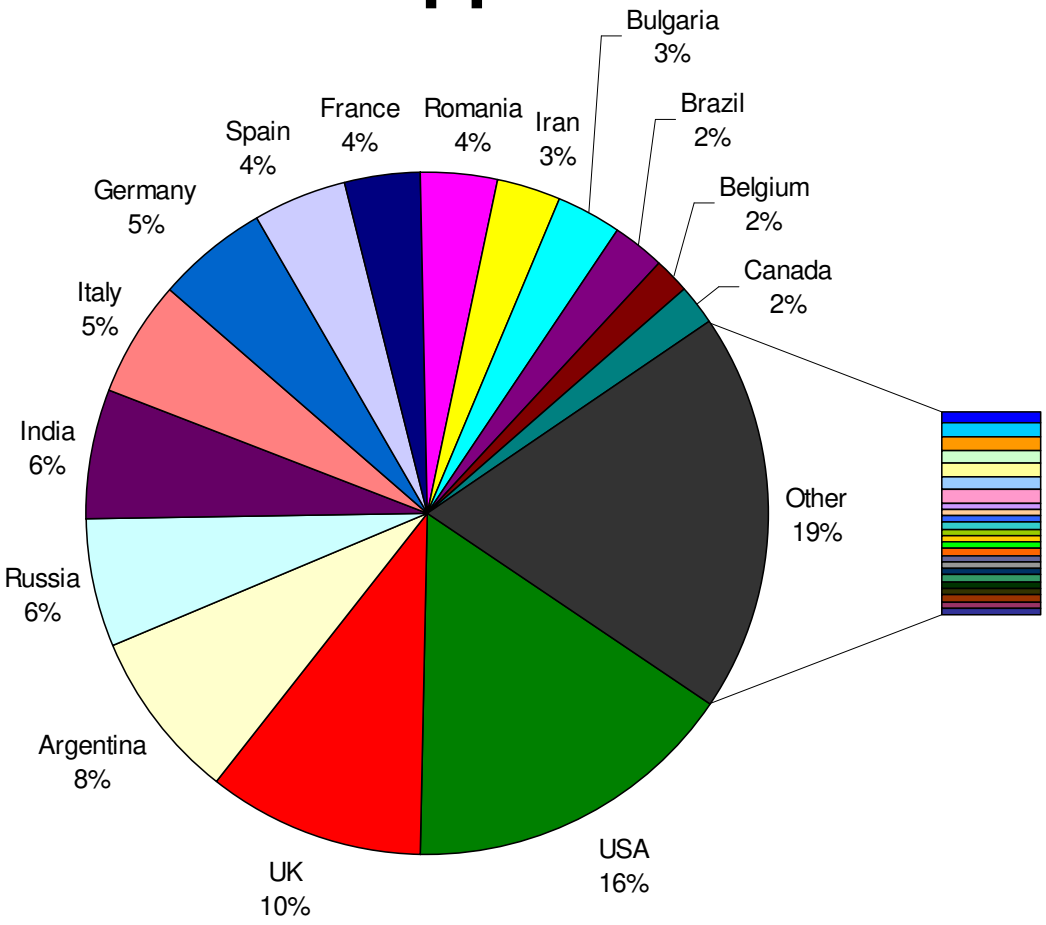
CPS - Where We Are Now (1)

- **Over 160 articles submitted in all ten categories**



CPS - Where We Are Now (2)

- **World-wide appeal to the chemistry community**



Total number of countries = 39

USA	**UK**
Argentina	**Russia**
India	**Italy**
Germany	**Spain**
France	**Romania**
Iran	**Bulgaria**
Brazil	**Belgium**
Canada	Malaysia
Sweden	China
Israel	South Africa
Poland	New Zealand
Lithuania	Hungary
Egypt	Cuba
Marocco	Finland
Japan	Netherlands
Eire	Czech Republic
Switzerland	Armenia
Croatia	Ukraine
Norway	Australia
Tunisia	

CPS - Where We Are Now (3)

- Each of the top 20 “most viewed” preprints has been viewed by more than 500 individuals
  - Top article has over 2000 viewings
- Over 100,000 page impressions per month
- Limited postings to the online discussions

Future Directions

Compliance with Santa Fe Convention for Open Archives Initiative

- Implement meta-data protocols in the immediate future
- Harvest data from Los Alamos (arXiv) preprint server
- US Department of Energy initiative to develop search engine for preprints (http://www.osti.gov/preprints/index.html)

- **Automatic submission of preprints to journals**
  - Author selects journal (publisher-neutral) for article submission when satisfied the article is complete
- **Access the CPS on WAP and Palm devices**

Conclusions

- At present, the CPS is still an experiment in scientific communication
- Early signs indicate a very positive response from the chemistry community
- Further enhancement: compliance with the Open Archives Initiative
- Exciting possibilities for future development, further enhancing chemistry communication

Thank you for your attention!

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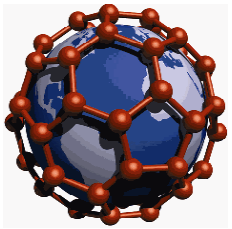
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