

„Get dynamic!“ E-education tools and e-services to reach the users

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Virtual library

„Digital libraries

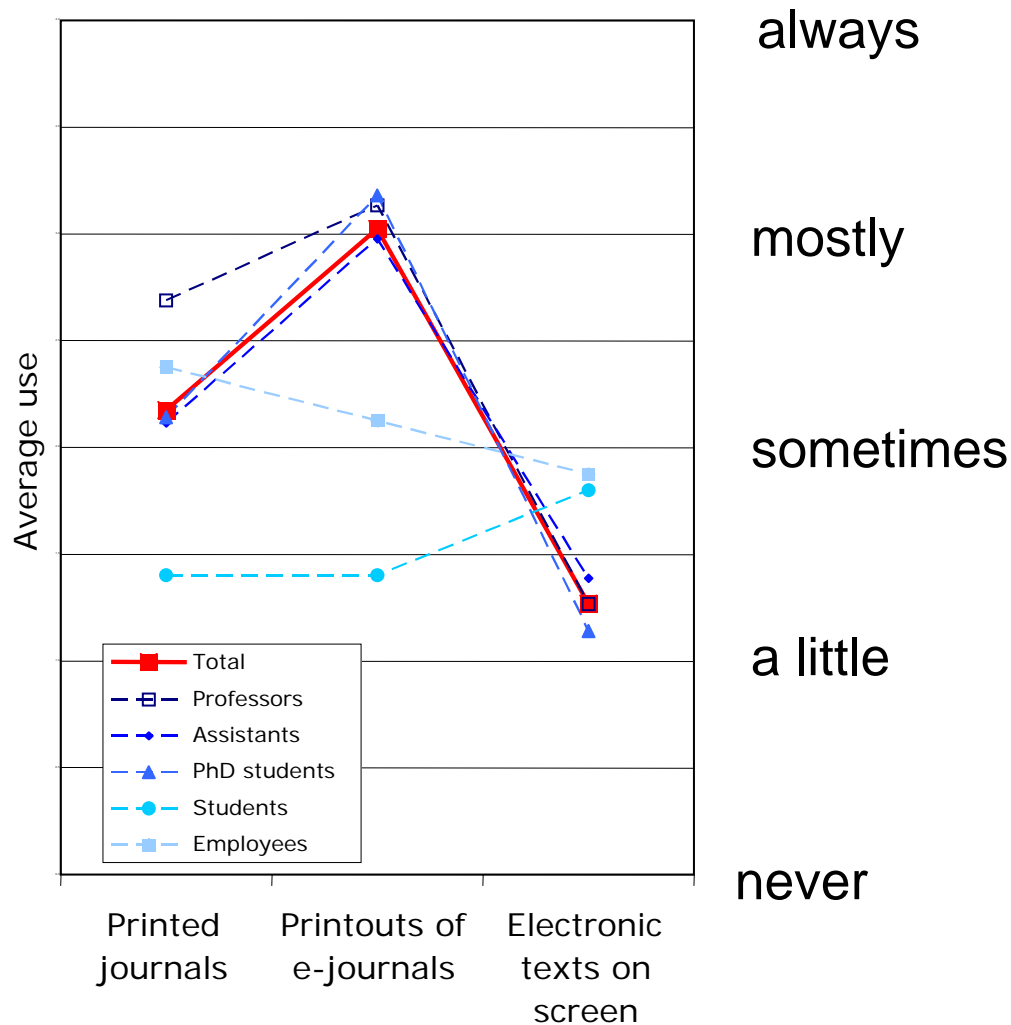
- electronic media in various forms :
Electronic library
- library services shared in a distributed environment (consortia) : Virtual library
- holdings and services integrated in uniform interface with enhanced value“

Endres, Fellner : Digitale Bibliotheken, dpunkt-Verlag (2000)

Situation at ETHZ

- ETHZ executive board decision (1999) :
One print subscription only
- Cooperative financing of e-journals by libraries
- 6000 e-journals
- 2000 chemistry/biology/ physics/
pharmacy e-journals

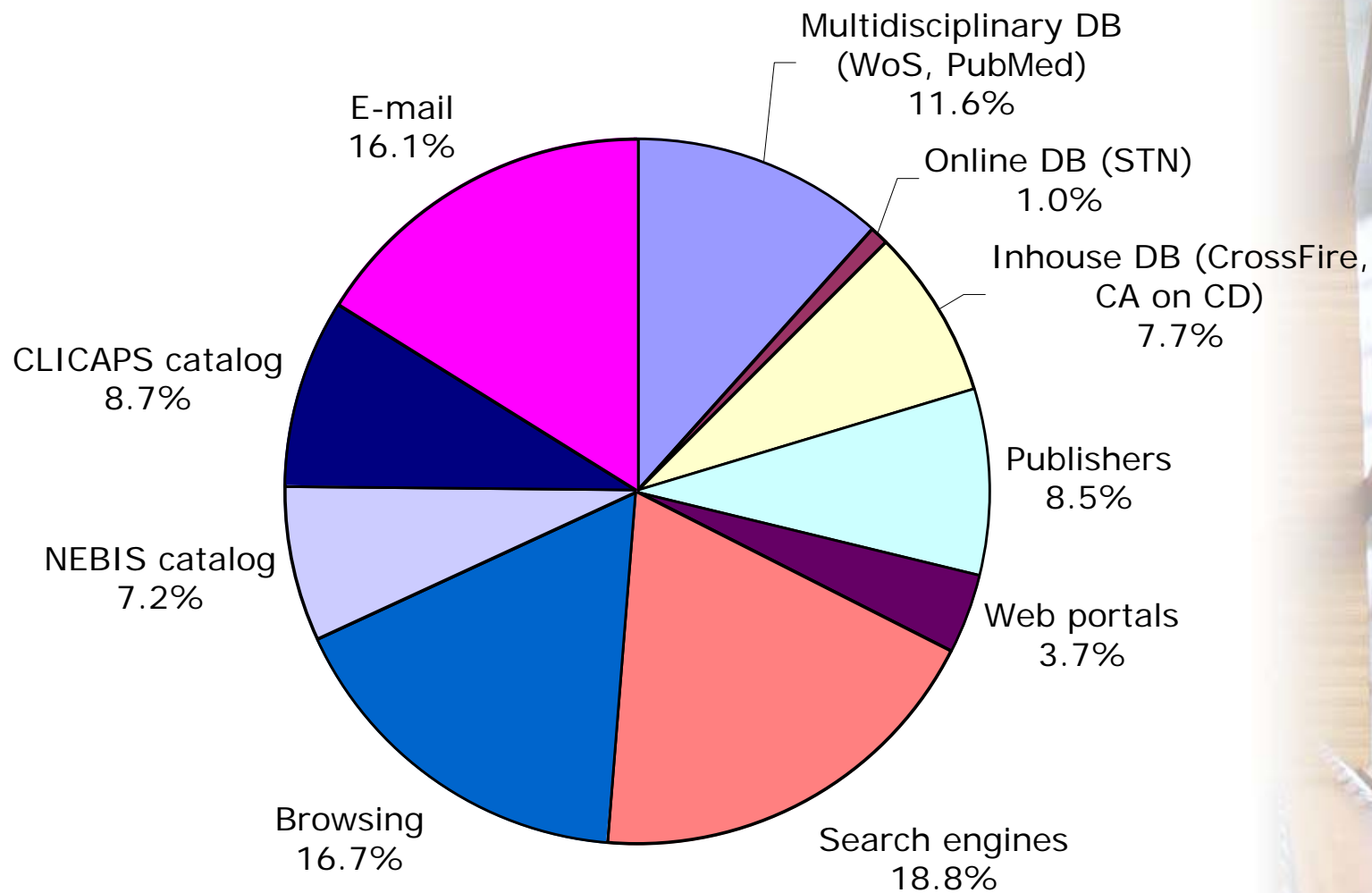
Reading habits of chemists



User Survey in Chemistry Department

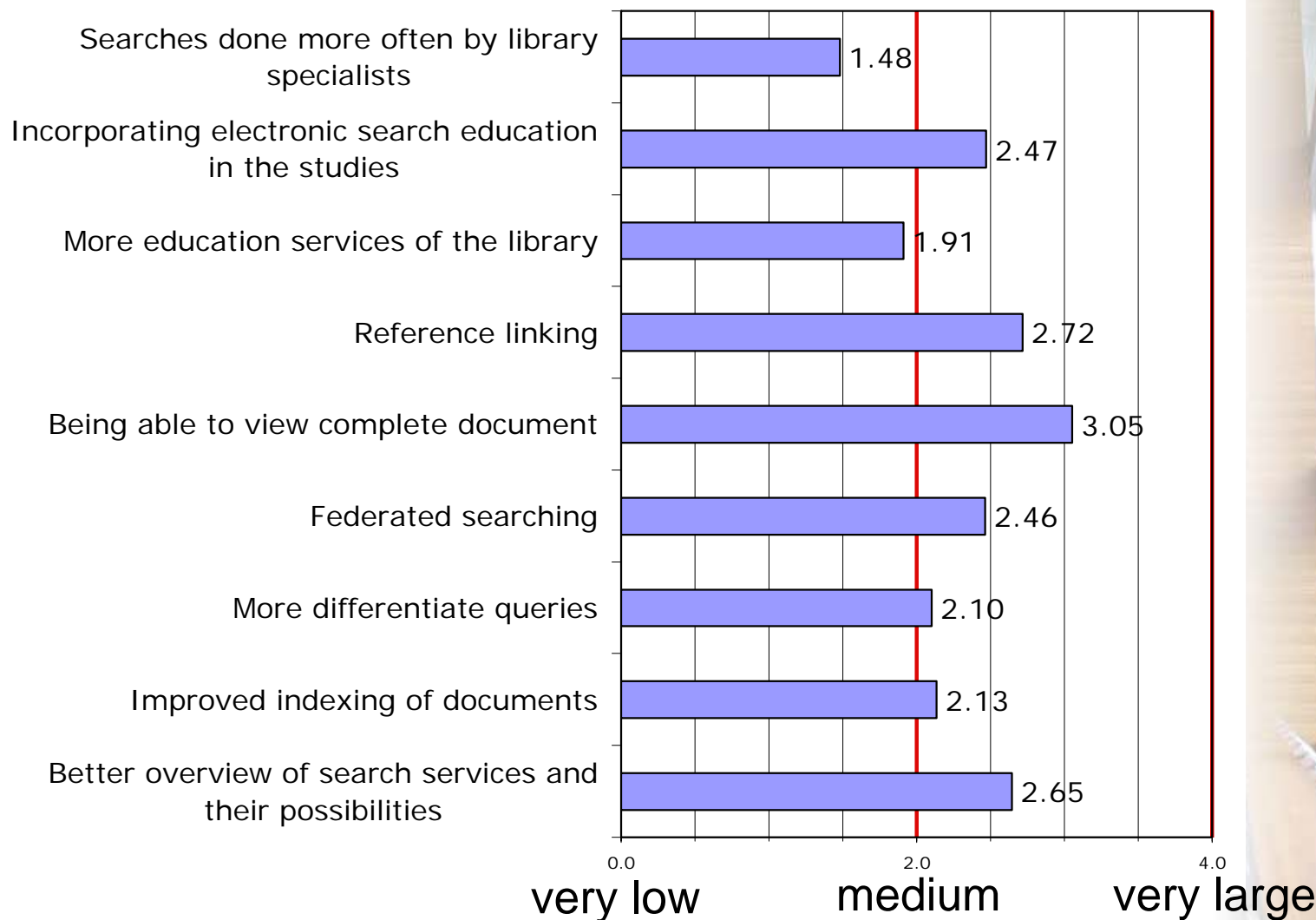
- Reason : Information sources increasingly available at workbench
- Use of electronic scientific information
 - Demography: PhD students, assistants, professors, scientific employees
 - 17 question clusters
 - 178 questionnaires returned (34%)
 - Around Christmas 2001

Use of electronic search services

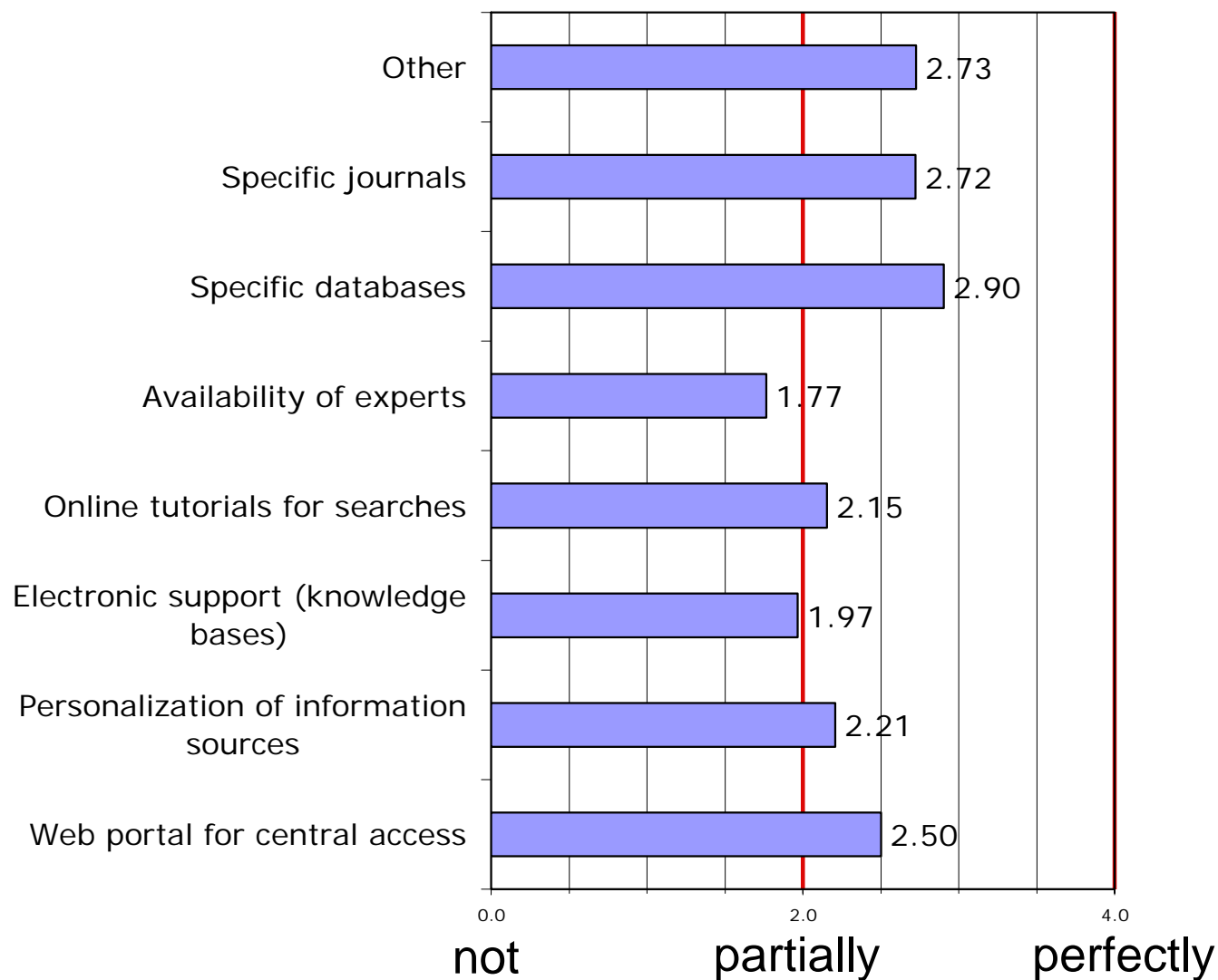


Based on 1335 mentions

Improving searches



Desired e-sources & e-services



Strategy

Improve quality of information use by

- Support, training, education
 - electronic media and tools
- E-services
 - subject specific
 - personalization
 - portal functions



E-education tools

- German project
„Vernetztes Studium - Chemie“
(Networks for Chemistry Education)
- BMBF/FIZ Chemie
- Basic Syllabus :
„Würzburger Modell“, Eurobachelor
- 19 Groups: 16 DE; 2 UK, 1 CH
- 9 Subject areas:
Chemical information/chemoinformatics
(Prof. J. Gasteiger, Univ. Erlangen)

„Vernetztes Studium - Chemie“

- Modular (VLU)
- XML
- Meta information
- Chemical information
 - ~3000 objects: text, images, links, multimedia
 - Basic, source, problem modules

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Beachten Sie, dass wir darauf verzichtet haben, H-Atome zu zeichnen, da diese von der Suchsoftware bei einer solchen Struktur automatisch angenommen werden ("alle freien Valenzen werden mit H aufgefüllt").

Das explizite Zeichnen von H-Atomen bedeutet nicht

E-services :

Architecture of a virtual library

- Dynamic content
- Personalization
- Linking and interfacing
- Meta information
- Federated searching



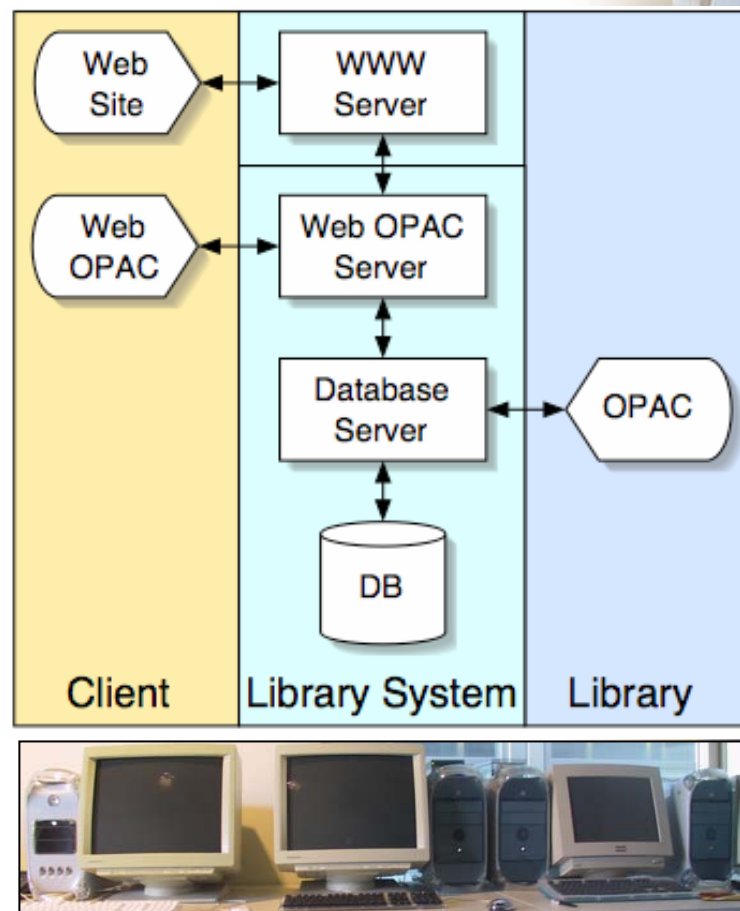
Dynamic content

- Must be input once into databases :
Formalization
- Managed independently
- Control of workflow :
Publication - Expiration - Archive
- Selection, classification :
Same data, different views
- Consistent usability
- Additional functionality for users :
Personalization, rating



Dynamic content : Architecture

- Library information systems as data back-end
- e.g., CLICAPS
 - Standard library functions
 - Added functions



Dynamic content : Example e-journals



Online journals

[Deutsch](#) [Home](#) > [Online journals](#)

About 1800 online journals covering the subjects of biology, chemistry, pharmacy and physics are available to you.

The online journals are licensed by the ETH library. The Chemistry Biology Information Center contributes about SFr. 300'000.- to the total annual subscription.

Alphabetic list of journal titles

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Search for an online journal

Journals on all media (print, microfilm, online) can also be searched in the [CLICAPS catalog](#).

Journals by subject

Biology	Chemistry	Related fields
Biotechnology	Analytical Chemistry	Computer Science
Botany: Plant Biology	Biochemistry	Economy: Society
Cell Biology	Chemical Engineering	Electronics: Electrical
General Biology Topics	Chemical Technology	Engineering
Genetics	General Chemistry	Energy
Microbiology	Topics	Environment: Health
Molecular Biology	Geochemistry: Geology	Food Science
Biophysics	Inorganic Chemistry	Mathematics
Zoology: Physiology	Macromolecular	Medicine

Online journals

[Home](#) > [Online journals](#) > **N**

Alphabet: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Legend

CLICAPS	Full record of journal according to CLICAPS catalog, including link to NEBIS for placing orders.
Free	No access restrictions
ethz.ch	Access only for ETH Zürich (by IP domain ethz.ch)
ETH limited	Only for ETH Zürich - limited access
Consortium	Access provided by Consortium of Swiss Academic Libraries
Password	See special access limitations
Register	Free access. You have to register first
No Access	No access presently

Journals (sorted by short title)

[Nano Lett.](#) (2001 ff.) Vol. 1 ff. - American Chemical Society .
[CLICAPS ethz.ch](#)

[Nanostruct. Mater.](#) (1995-1999) Vol. 5-12 - Pergamon .
[CLICAPS ethz.ch](#)

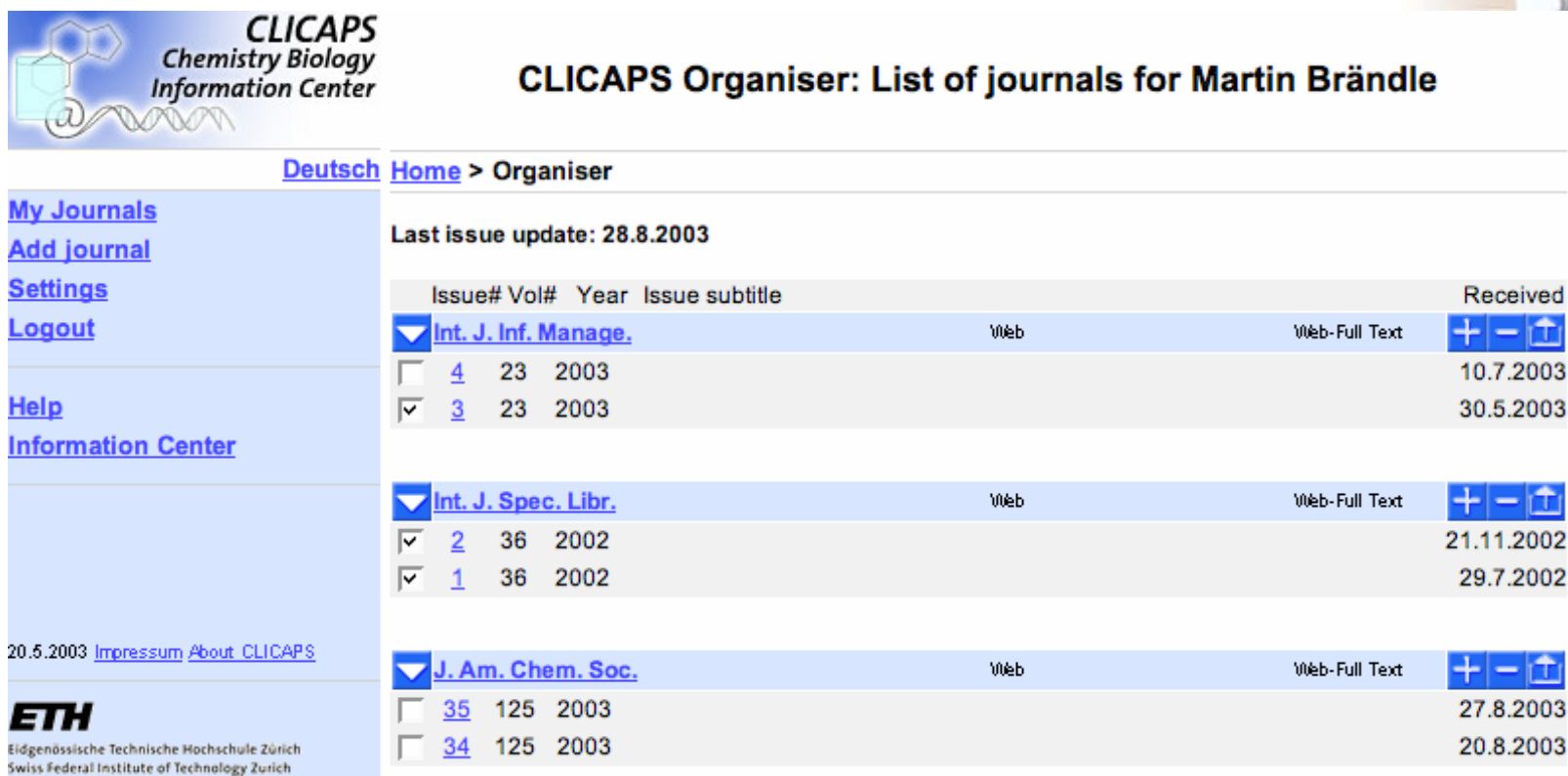
[Nanotechnology](#) (1990 ff.) Vol. 1 ff. - Institute of Physics .
[CLICAPS ethz.ch](#)

[Nat. Biotechnol.](#) (1996 ff.) Vol. 14(n3) ff. - Nature Publishing Group .
[CLICAPS ethz.ch](#)

[Nat. Cell Biol.](#) (1999 ff.) Vol. 1 ff. - Nature Publishing Group .
[CLICAPS ethz.ch](#)

Personalization

- e.g., Current awareness of e-journals
- Outlook:
Databases, search profiles, links, e-books, news



CLICAPS
Chemistry Biology
Information Center

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20.5.2003 [Impressum](#) [About CLICAPS](#)

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Last issue update: 28.8.2003

Issue#	Vol#	Year	Issue subtitle	Received
Int. J. Inf. Manage.				
<input type="checkbox"/>	4	23	2003	10.7.2003
<input checked="" type="checkbox"/>	3	23	2003	30.5.2003
Int. J. Spec. Libr.				
<input checked="" type="checkbox"/>	2	36	2002	21.11.2002
<input checked="" type="checkbox"/>	1	36	2002	29.7.2002
J. Am. Chem. Soc.				
<input type="checkbox"/>	35	125	2003	27.8.2003
<input type="checkbox"/>	34	125	2003	20.8.2003

Linking and interfaces

Reference linking

- Important part of virtual library
- e.g., Vertical linking
2^o - 1^o lit.
- Chemistry : also data linking (XML, CML)

Citation	
Document Type	Journal
Authors	Corey, E. J.; Roberts, Bryan E.
CODEN	JACSAT
Journal Title	<u>J.Amer.Chem.Soc.</u>
Language Code	EN
(Series) Volume	119
Number	51
Publication Year	1997
Page	12425 - 12431

Abstract

Title Total Synthesis of Dysidiolide

Journal of
**The American
Chemical Society**

Select Decade Select Volume Select Iss
1998-1999 1997/Vol 119 Iss. 51/1

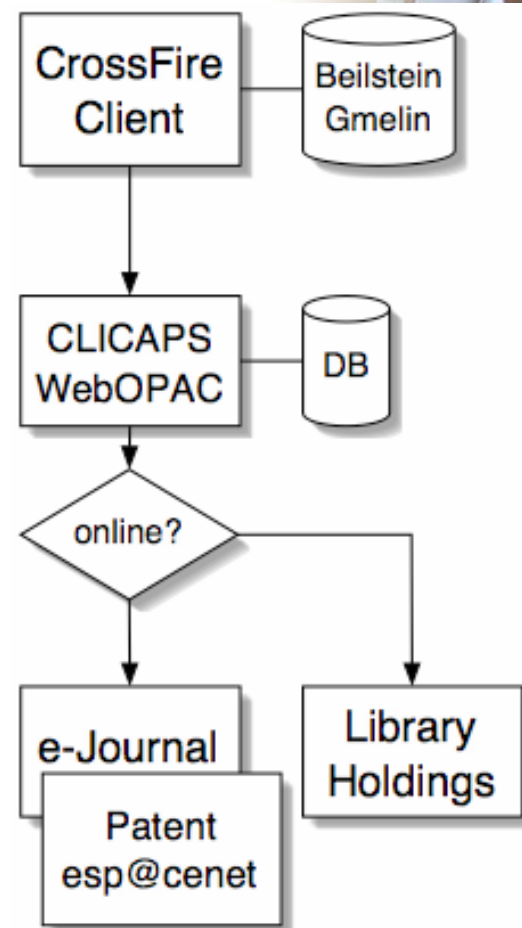
Journal of the American Chemical Society is the world's most advances in all areas of chemical research.

[Display printer-friendly version](#)

Journal of the American Chemical Society Table o

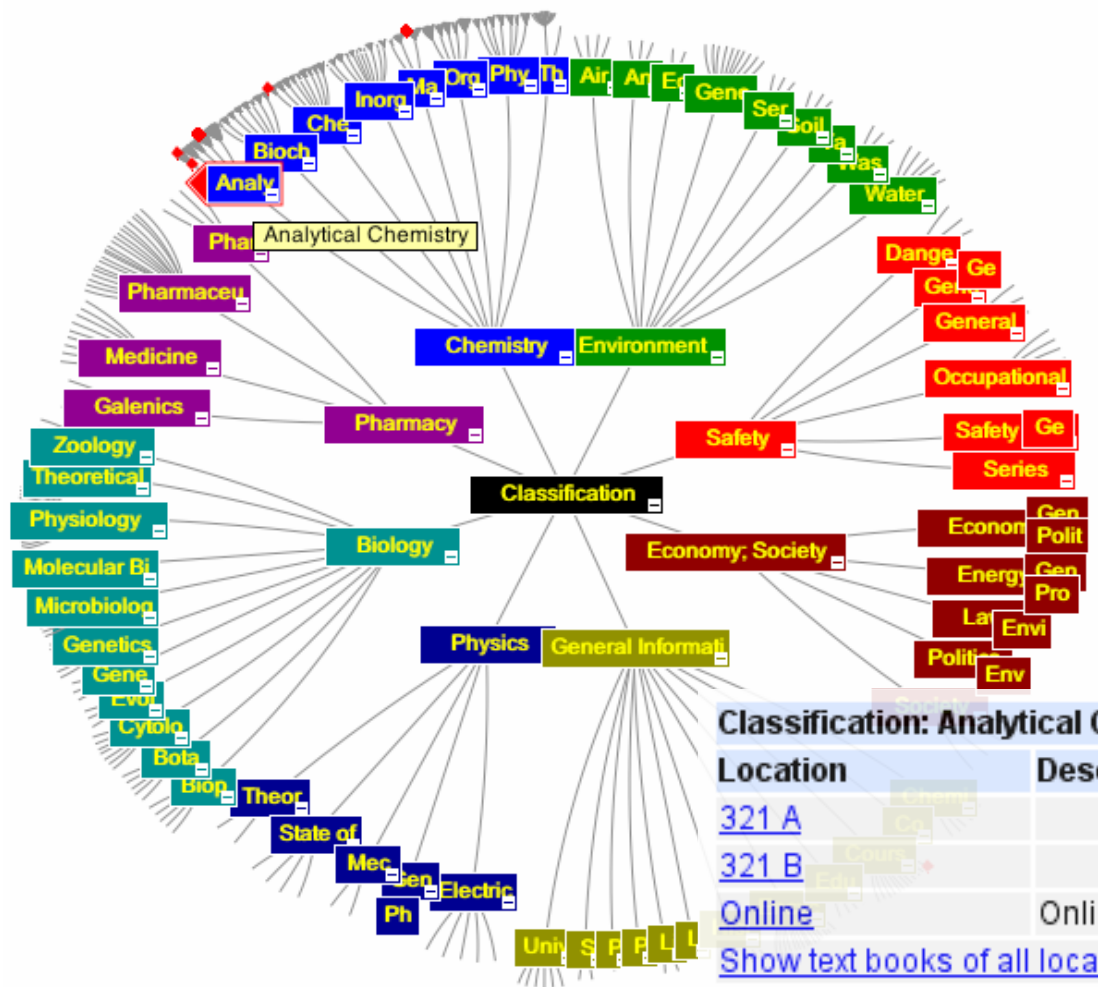
Total Synthesis of Dysidiolide
E. J. Corey and and Bryan E. Roberts
pp 12425 - 12431; (Article) DOI: [10.1021/ja973023y](https://doi.org/10.1021/ja973023y)

[Abstract](#) Full: [HTML](#) / [PDF](#) (262K) [Supporting Info](#)



Meta information : Classification

Home > Search in Classification (Star Tree)



- Visualization : StarTree Java Applet (Inxight Software Inc.)
- Both printed and online media classified

Classification: Analytical Chemistry > Spectroscopy > Laser Spectroscopy

Location	Description
321 A	
321 B	
Online	Online
Show text books of all locations	

Meta information (2)

E-Books

[Home](#) > E-Books

Alphabetic list of e-books

• Title • Author(s) [A](#)[B](#)[C](#)[D](#)[E](#)[F](#)[G](#)[H](#)[I](#)[J](#)[K](#)[L](#)[M](#)[N](#)[O](#)[P](#)[Q](#)[R](#)[S](#)[T](#)[U](#)[V](#)[W](#)[X](#)[Y](#)[Z](#)

Search an e-book

Series Author Title:

Text books and periodicals on all media (print, microfilm, online) can also be searched in the [CLICAPS catalog](#).

[Acquisitions](#)

E-books by subject

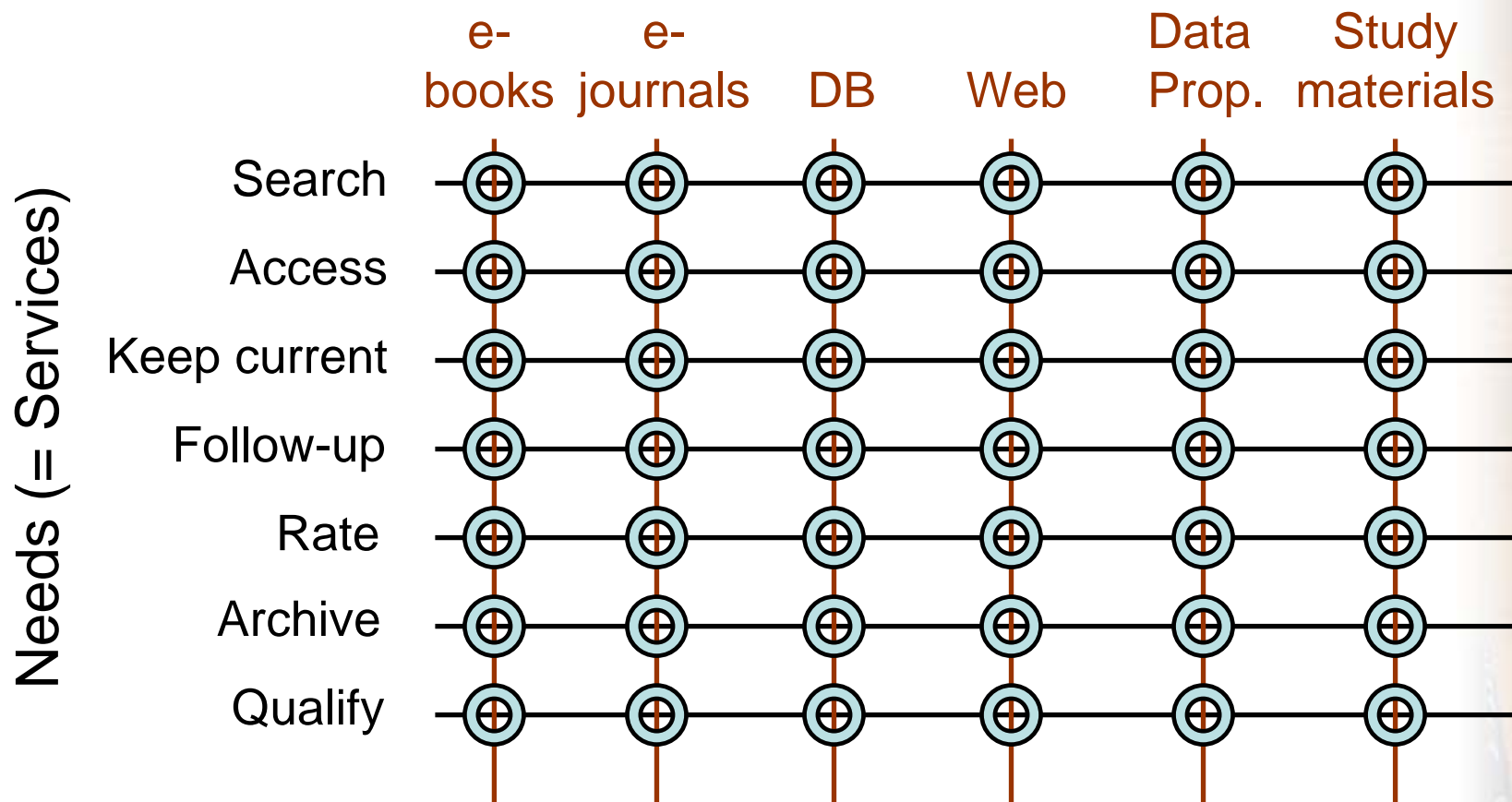
Analytical chemistry	Macromolecular chemistry; materials and colloid chemistry
Biochemistry	Organic chemistry
Biology	Pharmacy
Chemical engineering; chemical technology	Physical chemistry
Economy; Society	Physics
Environment	Safety
General information	Theoretical chemistry
Inorganic chemistry	

(presently ~500 e-books in CLICAPS)

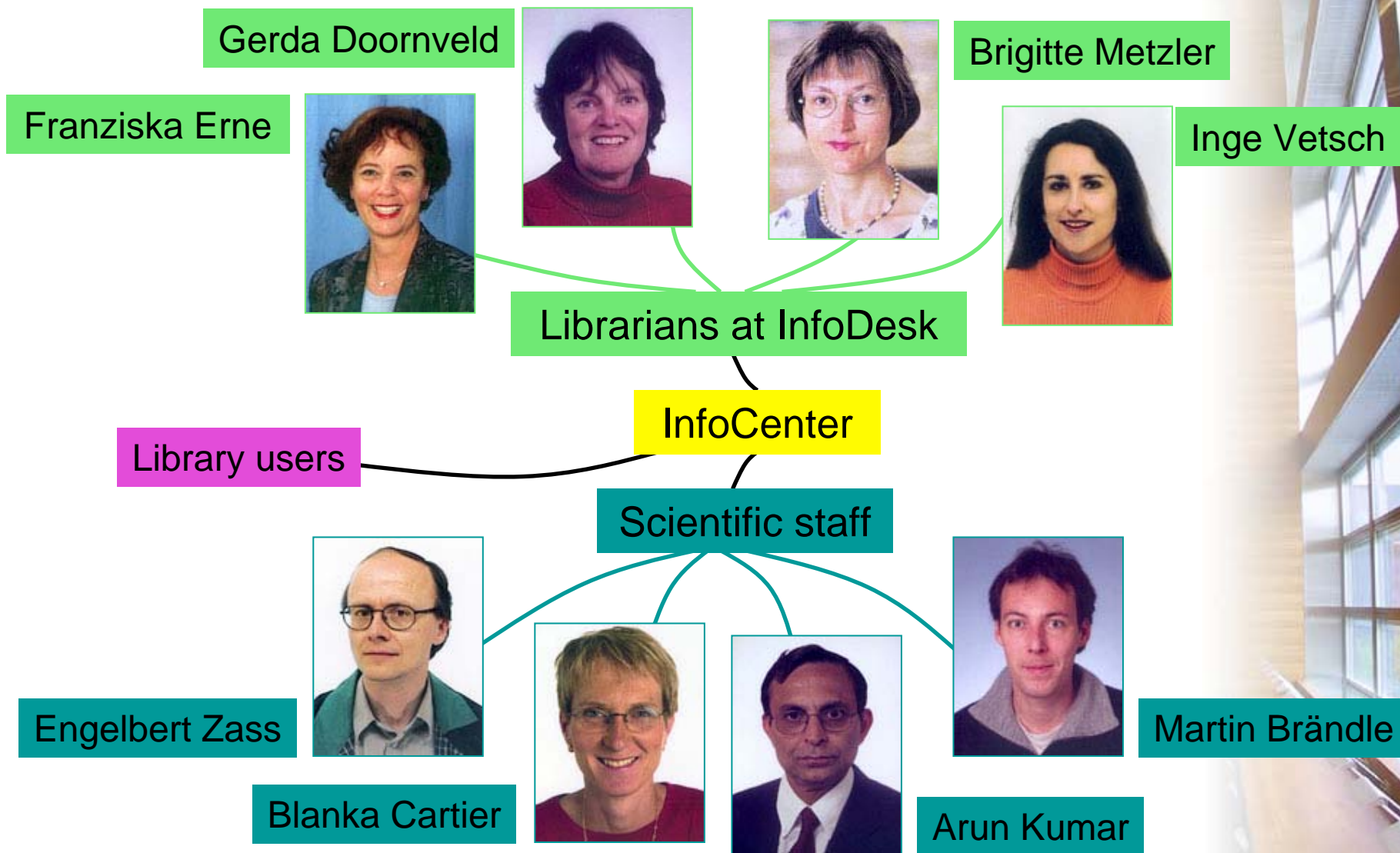
- Creation of classes
- Prototype : General purpose thesaurus
 - Polyhierarchic
 - Link lists
 - Standard study texts
 - Databases
 - Properties
 - Profile generation

Conclusions

Connect Content and User Needs : Portal



Don't forget the people!

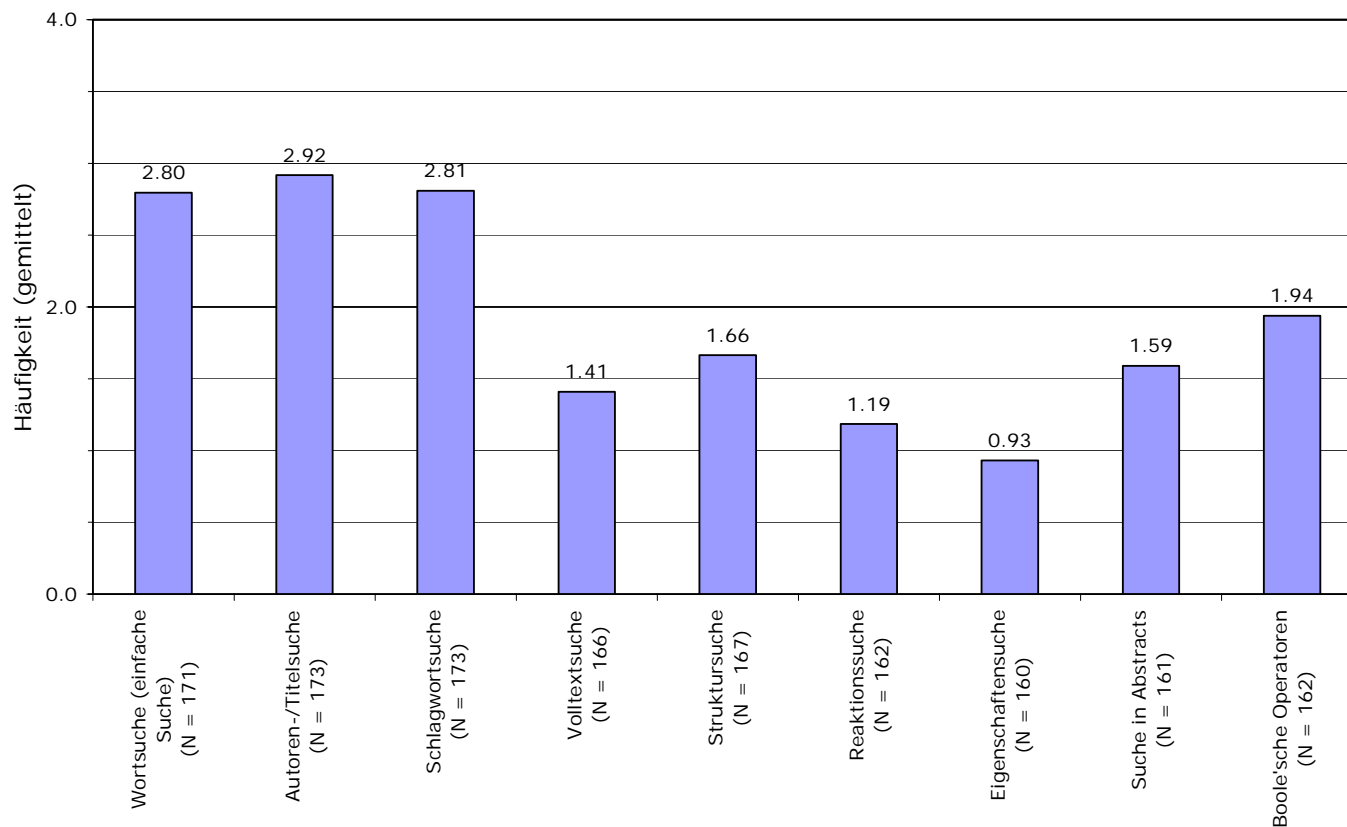


URLs

- Website: www.infochembio.ethz.ch
- WebOPAC: www.clicaps.ethz.ch



Results: Search techniques



very often

sometimes

never

- Most often author/title searches
- Chemistry specific search techniques rare

Problems encountered when doing searches

- Rephrasing the query: 71%
- Too much information: 65%
- Uncertain, if results contain all relevant information: 62%
- Hard digging-through to the right document: 52%
- Use is too complicated: 15%