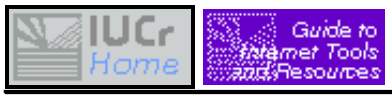

Crystallographer's Guide to Internet Tools and Resources

Speakers and tutors at the InterNet Workshops held on the 13th August 1996 during the IUCr XVII Congress and General Assembly in Seattle have contributed to and maintain this guide.

Availability

The *Guide* is available in several formats:

- As a distributed hypertext document over the World Wide Web at URL **http://www.unige.ch/crystal/w3vlc/int.index.html** and its mirror servers. The W3 version is updated continuously.
- As files in *Postscript* format from **ftp://ftp.unige.ch/pub/soft/crystal/guide** anonymous ftp server. A4 and letter size documents are found in subdirectories **psA4** and **psletter** respectively and correspond to the *Edition of September 1996*.
- As a printed document, *Edition of September 1996*, distributed by Polycrystal Book Service, P.O. Box 3439, Dayton, OH 45401, USA. Phone/Fax: (1)–513–223–9070. E–mail: polybook@dnaco.net

| Top | Contents | Author | Subject | Accessories |

Table of Contents

| Conferencing | Crystallography | E–mail | File handling | Programming | Searching | Security | Servers | World Wide Web |

World Wide Web – [Contents]

- Introduction, 11
- Search engines on the WWW, 23
  - AltaVista WWW search engine, 25
  - WhoWhere? WWW e–mail index, 28
  - Yahoo! WWW search engine, 27
- Crystallography World Wide – W3 Virtual Library: Crystallography, 130
- HTML and hypertext, 12

- Addressing – URLs and URNs, 14
- W3 browsers, 16
- Non–latin W3 browsers, 18
- W3 authoring, 21
- W3 Common Gateway Interface (CGI), 30
- Java application language, 106
- Perl application language, 110
- VRML – Virtual Reality Modelling Language, 108
- ftp – WWW Interface, 98
- Mirror servers, 100
- IUCr WWW Style
    - Standard layout for IUCr WWW pages, 142
    - Style for IUCr Commission WWW pages, 143
        - Example of original web page of the IUCr Commission on Charge, Spin and Momentum Densities, 148
        - Example of amended web page conforming to suggested style guidelines, 150
    - Icons for use on IUCr WWW pages

Searching – [Contents]

- Search engines on the WWW, 23
    - AltaVista WWW search engine, 25
    - WhoWhere? WWW e–mail index, 28
    - Yahoo! WWW search engine, 27
- Internet File search – Archie, 33
- World Directory of Crystallographers,
    - General Information, 139
    - Registration, 139
    - To retrieve a name
    - Official list of keywords
    - List of National Editors
    - Information for the National Editors

Conferencing – [Contents]

- List servers (mailing lists)
    - General Principles, 42
    - Listserv commands, 43
    - Exchanging Information, 45
    - Crystallography Related Distribution Lists, 46
- Newsgroups
    - General Introduction, 49
        - Graphical Installation and Setup of a Newsreading Program, 52
        - Graphical Example Use of a Newsreading Program, 56
    - Crystallography Related Newsgroups with Example

Discussions, 62
1. Problems with Polaroid Film, 65
2. Want to solve a structure?, 66
3. Help prevent ORTEP of the year, 68
- Creating New Internet Newsgroups, 74
- Future Possibilities for the Newsgroups, 79
- News–reading Software Available on the Internet, 81

- Text interactive virtual reality – MOO, 86
- Teleconferencing – MBONE, 84
- Conferences on Crystallography, 117

File handling – [Contents]

- File transfer – ftp
  - Introduction, 88
  - Command Line Interface, 91
  - Graphic User Interface, 95
  - WWW Interface, 98
- File – Compression, packing and encoding, 104
- Archie – Internet File search, 33
- Mirror servers, 100

E–mail – [Contents]

- E–mail and multi–media extensions, 38
- File – Compression, packing and encoding, 104
- PGP – Public Key Cryptography, 102
- List servers (mailing lists)
  - General Principles, 42
  - Listserv commands, 43
  - Exchanging Information, 45
  - Crystallography Related Distribution Lists, 46
- WhoWhere? WWW e–mail index, 28
- World Directory of Crystallographers
  - General Information, 139
  - Registration, 139
  - To retrieve a name
  - Official list of keywords
  - List of National Editors
  - Information for the National Editors
- MIME – Multipurpose Internet Mail Enclosures, 38

Programming – [Contents]

- W3 Common Gateway Interface (CGI), 30
- Java application language, 106
- Perl application language, 110

- VRML – Virtual Reality Modelling Language, 108

Security – [Contents]

- File – Compression, packing and encoding, 104
- PGP – Public Key Cryptography, 102

Servers – [Contents]

- Archie – Internet File search servers, 33
- W3 Common Gateway Interface (CGI), 30
- Mirror servers, 100

Crystallographic Applications – [Contents]

- Conferences on Crystallography, 117
- Crystallography Related Distribution Lists, 46
- Crystallographic Societies and Associations, 123
- Crystallography World Wide – W3 Virtual Library: Crystallography, 130
- Electronic Publishing in Science, 132
- IUCr Journals – submission and consultation, 136
- Newsgroups on crystallography, 62
- Java examples of rotating molecules, 106
- Perl
    - for Crystallographers, 110
    - for Crystallographers on the WWW, 112
- VRML examples of rotating molecules, 108
- World Directory of Crystallographers
    - General Information, 139
    - Registration, 139
    - To retrieve a name
    - Official list of keywords
    - List of National Editors
    - Information for the National Editors
- IUCr WWW Style
    - Standard layout for IUCr WWW pages, 142
    - Style for IUCr Commission WWW pages, 143
        - Example of original web page of the IUCr Commission on Charge, Spin and Momentum Densities, 148
        - Example of amended web page conforming to suggested style guidelines, 150
    - Icons for use on IUCr WWW pages

| Top | Contents | Author | Subject | Accessories |

Author Index

Lachlan **Cranswick**
| Newsgroups |
Kate **Crennell**
| Crystallographic Societies and Associations |
Yves **Epelboin**
| ftp | Listserv | World Directory of Crystallographers |
Howard **Flack**
| Compression | Crystallography World Wide | E–mail | Encoding | E–Publishing | MBONE | Mirror | MOO | Packing | PGP | WWW |
Yuri **Grin**
| Addressing – URLs and URNs | HTML and hypertext |
John C. **Huffman** and John N. **Huffman**
| Java |
Ralf W. **Grosse Kunstleve**
| AltaVista | Search engines on the WWW | WhoWhere? | Yahoo! |
Alan **Hewat**
| VRML |
Arnt **Kern**
| Archie |
Armel **Le Bail**
| VRML |
Yvon **Le Page**
| Conferences on Crystallography |
Brian **McMahon**
| IUCr Journals | IUCr WWW Style |
Craig **Taverner**
| CGI | Perl | W3 browsers | W3 authoring |
Hidehiro **Uekusa**
| Non–latin W3 browsers |

| Top | Contents | Author | Subject | Accessories |

Subject Index

- Addressing – URLs and URNs, 14
- AltaVista WWW search engine, 25
- Archie File Search, 33
- Authoring – W3, 21
- Browsers – W3, 16
- Browsers – W3 – non–latin, 18
- Common Gateway Interface (CGI) – W3, 30
- Compression of files, 104

- Conferences on Crystallography, 117
- Cryptography, Public Key PGP, 102
- Crystallographic Societies and Associations, 123
- Crystallography World Wide – W3 Virtual Library: Crystallography, 130
- Electronic Publishing in Science, 132
- E–mail and multi–media extensions, 38
- Encoding of files, 104
- File – Compression, packing and encoding, 104
- ftp – file transfer
  - Introduction, 88
  - Command Line Interface, 91
  - Graphic User Interface, 95
  - WWW Interface, 98
- HTML and hypertext, 12
- IUCr Journals – submission and consultation, 136
- IUCr WWW Style
  - Standard layout for IUCr WWW pages, 142
  - Style for IUCr Commission WWW pages, 143
    - Example of original web page of the IUCr Commission on Charge, Spin and Momentum Densities, 148
    - Example of amended web page conforming to suggested style guidelines, 150
  - Icons for use on IUCr WWW pages
- Java application language, 106
- List servers (Mailing lists)
  - General Principles, 42
  - Listserv commands, 43
  - Exchanging Information, 45
  - Crystallography Related Distribution Lists, 46
- MBONE – Enabling live, multiparty, multimedia communication, 84
- MIME – Multipurpose Internet Mail Enclosures, 38
- Mirror servers, 100
- MOO – Interactive virtual reality for conferences and forums, 86
- Newsgroups
  - General Introduction, 49
    - Graphical Installation and Setup of a Newsreading Program, 52
    - Graphical Example Use of a Newsreading Program, 56
  - Crystallography Related Newsgroups with Example Discussions, 62
    1. Problems with Polaroid Film, 65
    2. Want to solve a structure?, 66
    3. Help prevent ORTEP of the year, 68
  - Creating New Internet Newsgroups, 74
  - Future Possibilities for the Newsgroups, 79
  - News–reading Software Available on the Internet, 81

- Non−latin W3 browsers, 18
- Packing of files, 104
- Perl application language, 110
- PGP − Public Key Cryptography, 102
- Publishing, electronic, in Science, 132
- Search engines on the WWW, 23
- Teleconferencing on the Internet, 84
- URLs and URNs − W3 addressing, 14
- VRML − Virtual Reality Modelling Language, 108
- WhoWhere? WWW e−mail index, 28
- World Directory of Crystallographers
    - General Information, 139
    - Registration, 139
    - To retrieve a name
    - Official list of keywords
    - List of National Editors
    - Information for the National Editors
- World Wide Web − a short Introduction, 11
- W3 Virtual Library: Crystallography − Crystallography World Wide, 130
- W3 authoring, 21
- W3 browsers, 16
- W3 Common Gateway Interface (CGI), 30
- Yahoo! WWW search engine, 27

| Top | Contents | Author | Subject | Accessories |

Accessories

- Template for author's

24th September 1996 − © Howard Flack − **Not to be copied or reproduced without permission**