

## HPLC – link list (Torsten Beyer)

Some useful links in the field of HPLC and analytical chemistry in general as well.

### 1. Chemical data

SOLV-DB

<http://solvdb.ncms.org>

Osiris Property Explorer

<http://www.organic-chemistry.org/prog/peo>

ChemExper

<http://www.chemexper.com>

ASTM (with costs)

<http://www.astm.org/Standard/>

NIST Libraries of Peptide Tandem Mass Spectra

<http://peptide.nist.gov>

NIST Chemistry WebBook

<http://webbook.nist.gov/chemistry>

Drugbank

<http://www.drugbank.ca>

### 2. Applications / methods

#### 2.1. Authorities and institutions

EPA

<http://www.epa.gov/fem/methcollectns.htm>

FDA

<http://www.fda.gov/Food/FoodScienceResearch/LaboratoryMethods/>

DIN/ISO/EN methods (with costs)

<http://www.beuth.de/en/>

GESTIS – Analytical methods

[http://www.dguv.de/ifa/de/gestis/analytical\\_methods](http://www.dguv.de/ifa/de/gestis/analytical_methods)

#### 2.2. Manufacturers of analytical instruments and columns (shortlist)

Agilent Literature Library

<http://www.chem.agilent.com/en-US/search/library/>

Knauer Applications

<http://www.knauer.net/applications>

Macherey Nagel Application Database

<http://www.mn-net.com/apps>

Phenomenex Application Database

<http://www.phenomenex.com/Application>

Restek Searchable Chromatogram Library (LC)

<http://www.restek.com/chromatogram/search?s=type:LC>

Supelco HPLC Applications

<http://www.sigmaaldrich.com/analytical-chromatography/applications-search.html>

Thermo Scientific (Dionex Application Notes)

<http://www.dionex.com/en-us/documents/application-notes-updates/lp-71593.html>

<http://dlibrary.dionex.com/Public/Search.aspx> (Dionex Applications Library)

Waters

[http://www.waters.com/waters/libraryList.htm?cid=511436&filter=documenttype|APN T&locale=en\\_EN](http://www.waters.com/waters/libraryList.htm?cid=511436&filter=documenttype|APN T&locale=en_EN) (literature)

<http://www.waters.com/waters/nav.htm?cid=134658314> (Application Notebooks)

### 2.3. Journals and web portals

LCGC Featured Applications

<http://www.chromatographyonline.com/LCGC-Application-Notes>

LCGC Online - Application Notebook Archiv

<http://www.chromatographyonline.com/sourceissues?sourcelist=34>

### 3. Troubleshooting

Chromatography Forum

<http://www.chromforum.org>

Google Group "sci.chem.analytical"

<https://groups.google.com/forum/#!forum/sci.chem.analytical>

LCGC: LC Troubleshooting (John W. Dolan)

[http://www.chromatographyonline.com/search/apachesolr\\_search/troubleshooting?filters=sm\\_pubAuthor%3A%22John%20W.%20Dolan%22](http://www.chromatographyonline.com/search/apachesolr_search/troubleshooting?filters=sm_pubAuthor%3A%22John%20W.%20Dolan%22)

Separation Science HPLC solutions (John W. Dolan)

<http://www.sepscience.com/hplcsolutions001>

Chromacademy HPLC Troubleshooting

[http://www.chromacademy.com/hplc\\_troubleshooting.html](http://www.chromacademy.com/hplc_troubleshooting.html)

Chromedia LC Troubleshooting

<http://www.chromedia.org/chromedia?waxtrapp=lxsaqEsHqnOxmOIIecCxBwBdC&subNav=pmxgzFsHqnOxmOIIecCxBwBdCA>

Agilent Troubleshooting Videos

<http://www.chem.agilent.com/en-US/Products-Services/Columns-Sample-Preparation/LC-LC-MS-Columns/pages/lctroubleshootingvideos.aspx>

Agilent Technical Support for instruments

<http://www.chem.agilent.com/en-US/Technical-Support/Instruments-Systems/Liquid-Chromatography/Pages/default.aspx>

Knauer

[http://www.knauer.net/fileadmin/user\\_upload/produkte/files/Dokumente/application\\_notes/vsp0003n\\_HPLC\\_troubleshooting\\_guide.pdf](http://www.knauer.net/fileadmin/user_upload/produkte/files/Dokumente/application_notes/vsp0003n_HPLC_troubleshooting_guide.pdf)

Macherey-Nagel

<http://www.mn-net.com/ChromatographyServices/Troubleshooting/HPLCTroubleshooting/tabid/11836/language/de-DE/Default.aspx>

Perkin-Elmer (Webcast HPLC Troubleshooting, registration required, free of charge)

<http://shop.perkinelmer.de/Registration/FormBuilder.htm?FormID=HPLCWebCast2>

Phenomenex (HPLC Troubleshooting Guide, PDF)

<https://phenomenex.blob.core.windows.net/documents/a8cb7bc3-eb65-4244-8910-faeb1818df8c.pdf?returnURL=/Search>

Restek (FAQ HPLC and UHPLC)

[http://www.restek.com/Pages/faq\\_lc](http://www.restek.com/Pages/faq_lc)

Shimadzu

<http://www.shimadzu.com/an/hplc/support/faq/index.html> (tips for daily HPLC analysis)

[http://www.shimadzu.com/an/lc\\_worldtalk/index.html](http://www.shimadzu.com/an/lc_worldtalk/index.html) (“LC World Talk”, registration required)

Supelco (HPLC Troubleshooting Guide)

<http://www.sigmaaldrich.com/content/dam/sigma-aldrich/docs/Supelco/Bulletin/4497.pdf>

Waters (registration required)

[http://www.waters.com/waters/keywordSearch.htm?cid=505548&q=troubleshooting&locale=de\\_DE&filter=searchcontentcategory|KLIB](http://www.waters.com/waters/keywordSearch.htm?cid=505548&q=troubleshooting&locale=de_DE&filter=searchcontentcategory|KLIB)

#### **4. Background information and theory**

Chemgapedia

<http://www.chemgapedia.de>

Analytical Training Solutions (with costs)

<http://www.analyticaltraining-solutions.org/?pak=5575226378897885>

Chromacademy - HPLC-Training (limited free “Lite Membership”, full access with costs)

<http://www.chromacademy.com/hplc-training.html>

Chromedia LC Basics (mostly with costs)

<http://www.chromedia.org/chromedia?waxtrapp=yqegzCsHqnOxmOIIcCbC>

Agilent LC Handbook (Guide to LC Columns and Method Development)

<http://www.chem.agilent.com/Library/primers/Public/LC-Handbook-Complete-2.pdf>

UHPLC Simulation Sheet

<http://www.uplc.info>

Waters Reversed Phase Column Selectivity Chart (also for columns of other manufacturers)

<http://www.waters.com/waters/selectivitychart>

Comparison Guide to C18 Reversed Phase HPLC Columns

[http://www.crawfordscientific.com/downloads/pdf\\_new/Grace/grace\\_hplc\\_columns\\_introduction.pdf](http://www.crawfordscientific.com/downloads/pdf_new/Grace/grace_hplc_columns_introduction.pdf)

## 5. Literature

### 5.1 Publishing companies for journals, books and databases:

American Chemical Society ACS

<http://pubs.acs.org>

Elsevier

<http://www.sciencedirect.com>

Springer

<http://www.springer.com>

Wiley

<http://onlinelibrary.wiley.com>

### 5.2. Scientific journals (full access with costs)

Analyst (ISSN 0003-2654)

<http://pubs.rsc.org/en/journals/journalissues/an>

Analytica Chimica Acta (ISSN: 0003-2670)

<http://www.sciencedirect.com/science/journal/00032670>

Analytical Biochemistry (ISSN 0003-2697)

<http://www.sciencedirect.com/science/journal/00032697>

Analytical Chemistry (ISSN 1520-6882)

<http://pubs.acs.org/journal/ancham>

Analytical Letters (ISSN 1532-236X)

<http://www.tandfonline.com/toc/lanl20/current>

Analytical Methods (ISSN 1759-9660)

<http://pubs.rsc.org/en/journals/journalissues/ay>

Analytical Sciences (ISSN 0910-6340)

<http://www.jsac.or.jp/analsci>

Biomedical Chromatography (ISSN 1099-0801)

[http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1099-0801](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1099-0801)

Chirality (ISSN 1520-636X)

[http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1520-636X](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1520-636X)

Chromatographia (ISSN 1612-1112)

<http://www.springerlink.com/content/1612-1112>

Environmental Science and Technology (ISSN 0013-936X)

<http://pubs.acs.org/journal/esthag>

International Journal of Environmental Analytical Chemistry (ISSN 1029-0397)

<http://www.tandfonline.com/toc/geac20/current>

Journal of Agricultural and Food Chemistry (ISSN 0021-8561)

<http://pubs.acs.org/journal/jafcau>

Journal of AOAC International (ISSN 1944-7922)

<http://aoac.publisher.ingentaconnect.com/content/aoac/jaoac>

Journal of Chromatographic Science (ISSN 1945-239X)

<http://chromsci.oxfordjournals.org>

Journal of Chromatography A (ISSN 0021-9673)  
<http://www.sciencedirect.com/science/journal/00219673>

Journal of Chromatography B (ISSN 1570-0232)  
<http://www.sciencedirect.com/science/journal/15700232>

Journal of Liquid Chromatography & Related Technologies (ISSN 1520-572X)  
<http://www.tandfonline.com/toc/ljlc20/current>

Journal of Pharmaceutical and Biomedical Analysis (ISSN 0731-7085)  
<http://www.sciencedirect.com/science/journal/07317085>

Journal of Separation Science (ISSN 1615-9314)  
[http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1615-9314](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1615-9314)

Separation Science and Technology (ISSN 1520-5754)  
<http://www.tandfonline.com/toc/lsst20/current>

Talanta (ISSN 0039-9140)  
<http://www.sciencedirect.com/science/journal/00399140>

Trends in Analytical Chemistry (ISSN 0165-9936)  
<http://www.sciencedirect.com/science/journal/01659936>

### **5.3. OpenAccess Journals:**

Analytical Chemistry Insights (ISSN 1177-3901)  
<http://www.la-press.com/analytical-chemistry-insights-journal-j1>

Chromatography Research International (ISSN 2090-3510)  
<http://www.hindawi.com/journals/cr/>

Eurasian Journal of Analytical Chemistry (ISSN 1306-3057)  
<http://www.eurasianjournals.com/index.php/ejac>

International Journal of Analytical and Bioanalytical Chemistry (ISSN 2231-5012)  
<http://urpjournals.com/journals.php?journalID=6>

International Journal of Analytical Chemistry (ISSN 1687-8760)  
<http://www.hindawi.com/journals/ijac>

Journal of Chromatography & Separation Techniques (ISSN 2157-7064)  
<http://www.omicsonline.org/jcgsthome.php>

Open Analytical Chemistry Journal (ISSN: 1874-0650)  
<http://www.benthamscience.com/open/toacj/>

### **5.4. Free commercial journals and web pages with focus on chromatography**

LCGC  
<http://www.chromatographyonline.com>  
(LCGC North America, LCGC Europe, The Column, The Peak)

Chromatography Today (ISSN: 1752-8070)  
<http://www.chromatographytoday.com>

Separation Science  
<http://www.sepscience.com>

SeparationsNow  
<http://www.separationsnow.com>

## 5.5. Literature search engines

Google Scholar <http://scholar.google.com>

Google Books <http://books.google.com>

## 6. Databases with costs

### 6.1. STN databases

- ANABSTR (Analytical Abstracts database)
- FSTA (Food Science Technology Abstracts)
- SPECINFO (Spectral database Information System)
- WATER (Water Resources Abstracts)

See: [http://www.stn-international.de/sum\\_sheets.html](http://www.stn-international.de/sum_sheets.html)

### 6.2. Data on chemical media

Römpp  
<http://www.roempp.com>

### 6.3. Literature

Chromatography Abstracts (discontinued)  
<http://www.rsc.org/publishing/currentawareness/chra>

## 7. Apps

Agilent LC Calculator (iOS)  
<http://itunes.apple.com/us/app/lc-calculator/id355827606>

HPLC Troubleshooting App (iOS)  
<http://kduoapps.com/app/hplc-app>

Sigma-Aldrich HPLC Calculator Android, iOS)  
<http://www.sigmaaldrich.com/technical-service-home/web-tool-box/mobile-apps-center.html>

Thermo HPLC Troubleshooting Guide (Android)  
<https://play.google.com/store/apps/details?id=com.thermoscientific.troubleshootingguide>

## 8. Social Media

LinkedIn  
<http://www.linkedin.com>

ResearchGate  
[www.researchgate.net](http://www.researchgate.net)

## **9. Twitter pages (examples):**

Restek

<https://twitter.com/Restek>

Shimadzu Europa

<http://twitter.com/ShimadzuEurope>

## **10. Facebook pages (examples):**

Shimadzu

<http://www.facebook.com/ShimadzuCorp>

Thermo Scientific

<http://www.facebook.com/thermoscientific>