Chemical Engineering Link Collection

About this site

Hot topic in chemical engineering:

"Access to the world's oil supplies is a principal factor behind US government policy, as the events of the two past years have unmistakably shown." (Chemistry & Industry - 17 January 2005)

Control of Middle East energy sources and chemical feedstocks, oil and natural gas, is vital for western economies and lifestyles.

Peak oil:

- $80 Oil, Here We Come!!! by Bill Powers
- Target Iran by Dale Allen Pfeiffer
- Oil, Geopolitics, and the Coming War with Iran by professor Michael T. Klare, Hampshire College
- Princeton - Ken Deffeyes: Peak oil was there December 16th 2005

Operation Iraqi Liberation (OIL) and Russmo (American cartoonist)

Main Topics:

Search for information and information sites
Chemical reaction engineering
Unit operations
Plant Design, Engineering, Process Economics, Equipment Modelling and Simulation
Computers in Chemical Engineering
Biochemistry and Food Science
Chemical industry
Energy
Book stores and Publishers
Journals
Other link collections
Miscellaneous
Detailed Topics:

Search for information and information sites

- Search engines
- CA
- Publications
- Patent links
- Chemicals and chemical products
- Physical and thermodynamic properties and reaction data

Chemical reaction engineering

Unit operations

- Distillation and absorption
- Heat and mass transfer

Chemical reaction engineering

- Fluid mechanics
- Adsorption and chromatography
- Ion exchange and ion-exchange resins
- Metal extraction
- Particle technology
- Solid-liquid separations

Modelling and Simulation

- Modelling and simulation (in general)
- Steady-state flowsheet simulation
- Dynamic simulation
- Molecular modelling and computational chemistry
- Computational fluid dynamics (CFD)
- Chemometrics
- Optimization, genetic algorithms
- Artificial intelligence: Neural networks, fuzzy logic
- Artificial intelligence: Knowledge-based systems, Expert systems
based reasoning
• Mathematical programs (Matlab, Mathcad…)
• Environmental, health, safety and quality (EHSQ) models
• Production planning, logistics, and scheduling models
• Process control
• Process automation systems
• Operator training and support systems
• Parameter estimation
• Experimental planning
• Process integration
• Process synthesis
• Data reconciliation
• Algorithms
• Parallel computing
• Visualization
• CSC guides

Chemical engineering links, patent links, chemical industry links

Biochemistry and Food Science

Chemical industry

Energy

Book stores and Publishers

Journals

Other link collections

Miscellaneous

Search for information and information sites

General search

• AltaVista
• Infoseek
• Debriefing
• Dogpile
• Search Adobe PDF
• Encyclopedia Britannica (ktp, soj)
• Google (ktp)
• Google Scholar (soj)
CA

ChemicalEngineeringLinks.com

• STNEasy

Publications

ChemicalEngineeringLinks.com

• Compendex (Engineering village) (soj)
• Industrial&Engineering Chemistry Research
• ACS Publications
• Journal of Chemical & Engineering Data

ChemicalEngineeringLinks.com

• Wiley-VCH (e.g. Chemical Engineering Technology)
• Ullmann contents and search (license required for full
• Kirk-Othmer contents and search (license required for
• Chemical Market Reporter Online
• EBSCO (ktp, soj)
• dotchem (including the following journals)
  • Chemical Week
  • Chemical Engineering
  • Modern Plastics
  • Adhesives Age
  • Modern Paint & Coatings
  • Soap & Cosmetics
  • Today's Refinery

Patents

ChemicalEngineeringLinks.com

• European patents (ktp, soj)
• U.S. Patent Office
• Patent search links (about.com)
• Patent offices around the world (about.com)
• Espacenet (links to Japan, world...):
  • Austria
  • Belgium
  • Switzerland
  • Cyprus

ChemicalEngineeringLinks.com

• Germany
• Denmark
• Spain
• Finland
• France
• Great Britain
• Greece
• Ireland
• Italy
• Liechtenstein
• Luxembourg
• Monaco
• Holland
• Portugal
• Sweden

ChemicalEngineeringLinks.com

Chemicals and chemical products

• Chemical Economics Handbook report abstracts (ktp)
• Chemfinder (direct link to other data sources with a si
ChemicalEngineeringLinks.com

- Various databases by Chemweb (catalysis, beilstein...)
- Merck chemicals (catalogue, also material safety data)
- U.S. Environmental Protection Agency
- Chemencyclopedia
- CHEMnetBASE (ktp)

Physical and thermodynamic properties and reaction data

- NIST Chemistry webbook (ktp)
- NIST search by chemical name (ktp, soj)
- CRC Chemistry-Physics-Mathematics Handbook (ktp)
- CHEMnetBASE (CRC Chemical Databases Online) (ktp)
- Fundamental physical constants
- Some properties of compounds (Finnish)
- CRC Handbook of Chemistry and Physics

Mathematics

- Encyclopedia of Mathematics
- About.com (mathematics links)
- The Integrator
- Simpson's Rule Numerical Integrator (Note: Power($z^2$))
- Simpson's Numerical Integrator 2
- QuickMath
- Numerical Methods and Programming (about.com)
- Mathematical software archive
- MATHnetBASE (CRC Mathematics Resources Onlin
- STATSnBASE (CRC Statistical Resources Online)

Physics

- Encyclopedia of Physics
- About.com (physics links)

Chemistry

- Encyclopedia of Chemistry
- MolecularUniverse
- About.com (chemistry links)
- Chemical engineering links - About.com
- Physical chemistry - liquid properties
- Molecular weight calculation
- Molecular weight calculator
- Basic organic chemistry nomenclature and 3D models

Others

- Ullmann's Encyclopedia of Industrial Chemistry (tab)
- Kirk-Othmer's Encyclopedia of chemical technology (ktp, soj)
- Units converter (ktp, soj)
- Units converter 2
- Currency converter (ktp, soj)
Chemical engineering links, patent links, chemical industry links

- **Currency converter** (Yahoo)
- **World time converter**
- **AIChE search**
- **How to find out in chemical and process engineering**
- **ENGnetBASE** (CRC Engineering Handbooks Online)
- **ENVIROnetBASE** (CRC Environmental Resources Online)
- **Tekniikka ja talous** (ktp)
- **Talouslää** (ktp)

**Periodic tables**

- **Periodic table of elements**
- **Periodic table of elements 2**
- **About.com links to periodic tables**

**Chemical reaction engineering**

- **Parameter estimation example** (Chemical reaction eng Excel, ModEst)
- **The rates of chemical reactions**
- **Chemical kinetics simulation**
- **Teaching kinetics**
- **Chemical Kinetics and Reaction Mechanisms**
- **Kinetics**
- **Enzyme kinetics of invertase**
- **Enzyme kinetics of invertase 2**
- **Equilibrium: Le Chatelier's principle**
- **Chemical kinetics simulator by IBM**
- **Sheffield Chemputer**
- **Catalysis**
- **Chemical rxn Engineering** (Fogler)
- **Chemical Reactor Design Course** (University of Clevel
- **Chemical Reaction Engineering lecture notes** (Oklaho
- **Chemical Reaction Engineering Excel examples** (Okla
- **Chemical Reactor Analysis and Design Fundamentals**
- **Eurokin**
- **Catalysis, zeolites, etc:**
  - Catalysis and zeolites images
  - Monoliths
  - ZSM-5 in MTG process
  - What are zeolites?
  - Zeolites and shape selective catalysis
  - ZSM-5 - molecule of the month
  - Zeolyst.com
  - Zeolitit
  - Crystal structures
Unit operations

Distillation and absorption

- Distillation and Petroleum Refining Technology
- Distillation - an introduction
- Mass transfer operations and distillation trays (Frank
- Distillation - overview
- Fractionation Research Inc.
- Distillation - About.com

Heat and mass transfer

- About.com (heat and mass transfer links)

Fluid mechanics

- Fluid mechanics links - About.com

Adsorption and chromatography

- International Adsorption Society
- Gas adsorption analysis (for specific surface area and
- Adsorption phenomena
- Chromatography (about.com)
- Phasex - supercritical fluids
- Textbook on High Performance Liquid Chromatogr
- Adsorption links - About.com
- Langmuir, Freundlich...
Ion exchange and ion-exchange resins

- Rohm and Haas
- Finex
- Ion-exchange.com
- Diaion
- Lewatit
- Ion exchange in practice (Dartmouth College)
- Ion exchangers (Rensselaer)
- Properties of ion exchange resins (Rensselaer)

Metal extraction

- Metal extraction library (Acorga)
- Cognis - solvent extraction reagents
- Cognis company site
- Outokumpu Research - hydrometallurgy
- Copper history etc

Particle technology

- Particle technology links - About.com

Solid-liquid separations (see also above)

- Solid-liquid separation (filtration, centrifugation, sedimentation)
- American Filtration and Separations Society
- Membrane technology links - About.com

Back to main topics

Plant Design, Engineering, Process Economics, Equipment

- Mass Transfer and Reactor Equipment (supplier links)
- Equipment and services (About.com)
- MyPlant.com
- Process economics links - About.com
Modelling and Simulation

**SUBCONTENTS**

- Modelling and simulation (in general)
- Steady-state flowsheet simulation
- Dynamic simulation
- Molecular modelling and computational chemistry
- Computational fluid dynamics (CFD)
- Chemometrics
- Optimization, genetic algorithms
- Artificial intelligence: Neural networks, fuzzy logic
- Artificial intelligence: Knowledge-based systems, Expert reasoning, case-based reasoning
- Mathematical programs (Matlab, Mathcad…)
- Environmental, health, safety and quality (EHSQ) models
- Production planning, logistics, and scheduling models
- Process control
- Process automation systems
- Operator training and support systems
- Parameter estimation
- Experimental planning
- Process integration
- Process synthesis
- Data reconciliation
- Algorithms
- Parallel computing
- Visualization
- CSC guides

**Modelling and Simulation (in general)**

- Prosessiteknikan peruskäsitteet (Martti Pekkanen)
- Generic process modeling (Martti Pekkanen)
- Balance and conservation (Martti Pekkanen)
- Process simulation links - About.com
- Process modelling links - About.com
- CAPE.NET (European organization for Computer Ait
- CAPE-21
- CAPE-OPEN
- CACHE Corporation
Steady state flowsheet simulation

- Simulators:
  - Aspen Plus,
  - Pro/II,
  - ProSim Plus,
  - HYSIM,
  - METSIM,
  - CHEMCAD,
  - Ariane (energy, ProSim site),
  - MASSBAL,
  - WinGEMS (pulp and paper),
  - FlowMac (pulp and paper),
  - FLOWBAT,
  - PulpSim (pulp and paper),
  - Prosim (energy),
  - Balas (pulp and paper),
  - gPROMS,
  - RAMI (pulp and paper, PI Group),
  - Solvo (energy, Fortum Power and Heat)

Dynamic simulation

- Simulators:
  - CHEMCAD REACS,
  - CHEMCAD DCOLUMN,
  - CHEMCAD BATCH,
  - ProSim BatchReactor,
  - ProSim BatchColumn,
  - PROSimulator (Neste Engineering),
  - Aspen Chromatography,
  - Aspen ADSIM (adsorption),
  - Aspen Dynamics,
  - Batch Plus,
  - BATCHFRAC,
  - MATLAB,
  - Aspen OTISS,
  - APROS,
  - ModEst,
  - gPROMS,
  - Simulink for MATLAB
  - Femlab

"Flowbat"
Molecular modeling and computational chemistry

- [Chemweb - Alchemist](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [Computational chemistry - presentation](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [AIChE Computational Molecular Science and Engineering](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)

Software:
- [Insight II](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [Quanta/CHARMm](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [Cerius2](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [WHAT IF](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [METEOR](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)

[Chemweb](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)

- [Spartan](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [TITAN](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [SPARTAN](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [CAMEO](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [Protein Explorer](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm) (free)
- [Chime](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm) (free)
- [Rasmol](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm) (free)
- [ICM](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)

[Chemweb](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)

- [VMD](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm) (Visual Molecular Dynamics, free)
- [ChemDraw](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [Chem3D](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [MOLGEN](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [MOVIEMOL](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [GCG](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [SRS](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [Gaussian](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm) (developer: John A. Pople, Nobel Laureate in Chemistry)

[Chemweb](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)

- [MDL](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm) (ISIS, Chime) (ktp, soj)

[Chemweb](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)

- [Beilstein database](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [Cambridge Structural Database](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [GROMACS](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm) (free)
- [X-PLOR](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm) (free)
- [HyperChem](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [HyperChem Lite](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm) (good for undergraduate education)
- [CACHe](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm) (good for undergraduate education, see CAChe Discover)

[Chemweb](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)

- [List of CSC's chemistry software](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)

---

Computational fluid dynamics (CFD)

- [What is CFD?](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [CFD links](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [CFD links (About.com)](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [CFD literature](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [CFD links to links](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)

Programs:
- [FINFLO](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [FLUENT](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [FIDAP](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
- [ELMER](http://www2.lut.fi/kete/teke/teke/celinks/celinks.htm)
Chemometrics

- What is chemometrics?
- One definition (Eigenvector Research, Inc.)
- Wiley chemometrics world
- Dalhousie University
- Amara wavelet page
- Predict.dk
- Wavelet.org
- Chemweb - Alchemist
- Software:
  - Modde,
  - Simca,
  - The Unscrambler,
  - PLS_Toolbox for MATLAB,
  - PLS_Toolbox for MATLAB(2),
  - Pirouette,
  - MINITAB,
  - Sirius,
  - Xtricor,
  - Chemometrix Toolbox for MATLAB,
  - Factor Analysis Toolbox for MATLAB,
  - Chemetrica

Optimization, genetic algorithms

- What are genetic algorithms?
- Geneettiset algoritmit
- Optimization tree
- Optimization Technology Center
- Optimization Online
- Software:
  - Lindo,
  - GAMS (suomeksi),
  - AMPL,
  - XPRESS-MP,
  - linear programming (commercial links),
  - HYSYS.RTO+
  - linear programming (commercial links),
  - HYSYS.RTO+.
ChemicalEngineeringLinks.com ModEst, 
gPROMS, 
GeneHunter, 
MINOPT, 
MaBOS, 
TechnoLogix, 
AMPL, 
CPLEX, 
XPpressMP, 
NAG, 
MINOS, 
SNOPT, 
NPSOL, 
LSSOL, 
QPOPT, 
FATCOP, 
GAMS, 
LINGO, 
NETOPT, 
MLBranch, 
ROMeo, 
Optimization Toolbox for MATLAB, 
FLOWBAT, 
Prosim (energy), 
Balas (pulp and paper), 
GA-HEN (heat-exchanger networks based on genetic 
optimization software (numerous), 
see also production planning and scheduling software simulation 
• Optimization terms 
• Optimization links

ChemicalEngineeringLinks.com BACK TO CONTENTS

Artificial intelligence: neural networks, fuzzy logic

• What are neural networks and fuzzy logic?
• Neural network Software: 
  SOM-Toolbox for MATLAB (NN), 
  NeuralWorks, 
  NeuralSIM, 
  Neural Network Toolbox for MATLAB, 
  BrainMaker, 
  NETLAB (to MATLAB, free), 
  NeuroShell, 
  commercial software list
• Fuzzy logic software: 
  Fuzzy Logic Toolbox for MATLAB, 
  TILShell, 
  fuzzyTECH, 
  STATISTICA Neural Networks,
Artificial Intelligence: knowledge-based systems, expert systems, reasoning, case-based reasoning

- CompInfo - The Computer Information Center
- Compinfo - Beginners, Glossary and Background
- What are expert systems?
- Software:
  - G2 Classic
  - Optegrity

Mathematical software

- Software:
  - MATLAB products/toolboxes list (Matlab-ohje, suomeksi)
  - ModEst
  - POLYMATH (Polymath-ohje, suomeksi)
- Polymath to Matlab - generate Matlab code easily (example)
- Differential equations
  - Nonlinear equations - multiple
  - Nonlinear equation - single
- MATHEMATICA
- Mathcad
- Excel (Excel-ohje, suomeksi)
- Maple
- SPSS Science software:
  - SigmaPlot,
  - PeakFit,
  - TableCurve...

Environmental, health, safety, and quality (EHSQ) models

- Software:
  - VISUAL FLOW (safety),
  - NeurOn-Line (quality),

Production planning, logistics, and scheduling models
• Software:
  - MaBOS,
  - TechnoLogix,
  - Aspen MIMI,
  - CPLEX,
  - gBSS and SUPERBATCH (scheduling, http://www.psie"
  - MINOPT,
  - VirtECS Design,
  - VirtECS Scheduler (scheduling),
  - BSched (scheduling),
  - MINLP software list
  - ModelEnterprise
  - Giraffe Production Systems

BACK TO CONTENTS

Process control

• Process control links - About.com
• Software:
  - PROSimulator (Neste Engineering),
  - APROS (VTT Automation),
  - ExperTune,
  - TuneUp
  - NAPCON (Neste Engineering),
  - Control System Toolbox for MATLAB,
  - Model Predictive Control Toolbox for MATLAB,
  - Robust Control Toolbox for MATLAB,
  - NeurOn-Line

BACK TO CONTENTS

Process data analysis systems

• Software:
  - FactNet,
  - KCL-WEDGE,
  - DATACON,
  - PLS_Toolbox for MATLAB,
  - PLS_Toolbox for MATLAB(2),
  - STATISTICA Process Analysis

BACK TO CONTENTS

Process automation systems

• Software:
Operator training and support systems

- Software:
  - ODYSSEO
  - PROSimulator (Neste Engineering)
  - HYSYS.OTS+
  - Aspen OTISS
  - APROS (VTT Automation)

Parameter estimation

- What is parameter estimation?
- Parameter estimation
- Software assessment report
- Software:
  - ModEst
  - EASY-FIT
  - DataFit
  - POLYMATH, (Polymath-ohje, suomeksi)
  - SigmaPlot
  - Statistics Toolbox for MATLAB
  - Optimization Toolbox for MATLAB
  - Parameter estimation example (Chemical reaction eng Excel, ModEst)

Experimental planning

- What is experimental design?
- What is experimental design (2)? (pdf)
- What is design of experiments (DOE)?
- What is design of experiments (2)? The three major aspects: Response Surface Design, Factorial Design, Taguchi
- Why Use Design of Experiments?
- Design of Experiments Course
- Taguchi vs. Classical DOE
- Software:
  - ModEst
  - Design-Ease
  - Design-Expert
  - MultiSimplex
Process integration

- Process integration, pinch technology
- Introduction to Pinch Technology (Linnhoff March)
- Latest news on process integration, software...
- Software (process integration):
  - Prosim (energy),
  - Balas (pulp and paper),
  - Aspen Plus,
  - Pro/II,
  - ProSim Plus,
  - HYSIM,
  - Process Integration software list
- Software (pinch):
  - HEXTRAN (heat),
  - Ariane (heat, ProSim site),
  - HX-Net,
  - Aspen Pinch,
  - GA-HEN,
  - SuperTarget,
  - PinchExpress,
  - ProSteam,
  - WaterPinch

Process synthesis

- Software:
  - MAGNETS,
  - PROSYN,
  - SYNHEAT
Data reconciliation

- What is data reconciliation?
- What is data reconciliation (2)?
- Software:
  - DATACON,
  - VALI

Algorithms

Parallel computing

- What is parallel computing?

General scientific visualization

- Visualization Development Environments 2000 - Elect
- Scientific Visualization in CSC - Scientific Computing
- Scientific visualization - animation (presentation in Finnish)
- Software for specific purposes, see above: molecular modeling
- Software:
  - FUNCS (visualization and animation, CSC),
  - ELMERPost (ELMER postprocessor, CSC),
  - AVS,
  - IDL,
  - IRIS Explorer,
  - OpenDX

CSC guides

- Numeeriset menetelmät käytännössä
- Fortran 90/95 (esimerkkiohjelmia)
- CSC:n "Matemaattiset ohjelmistot" -opas, - pdf-versi
- Optimointitehtävien ratkaiseminen
- English-Finnish Fortran dictionary
- MATLAB-opas (Matlab-ohje, suomeksi, LUT
- Käytännön ohjeita ohjelmankehitykseen
Chemical engineering links, patent links, chemical industry links

Computers in Chemical Engineering

Fortran

- Lahey Fortran resources
- Fortran library
- Netlib (collection of mathematical software, papers and
  programs)
- CSC-opas Fortran 90/95 (esimerkkiohjelmia)
- English-Finnish Fortran dictionary
- Fortran Market

Biochemistry and Food Science

- Harvard Biochemistry links
- Dairy Science and Technology
- Enzyme nomenclature
- Functional Foods from Finland (FFFF)
- OurFood - database of foof and related sciences (index)
- Food - what is it?
- FOODnetBASE

Chemical industry

- World
• Finland

Chemical Industry Federation of Finland (Finnish con
Kemiallistenkinn yhdistys
Tekes
CSC Scientific Computing

Companies (ktp):

Aga
Ahlström
Arizona Chemical
Borealis
Chematur Ecoplaning
CTS Engineering
Danisco-Cultor
DowSuomi (Hamina)
Dynea (Neste Chemicals-Dyno-Nordkemi merger, new
6, 2001)
Dynoresin (see Dynea)
Eka Chemicals
Finex
Finnish Chemicals
Finnish Peroxides
Finzymes
Forcit
Forchem (Rauma Forest Chemicals)
Fortum
Henkel Finland
Hercocin
J.M. Huber
JPI Engineering
Kemira
Kiilto
Larox
Leiras
Metsä-Botnia
Mondo Minerals
M-real
Neson (Danisco subsidiary)
Neste Chemicals (see Dynea)
Nordkemi
Norlatek
Noviant (J.M. Huber)
OMG Kokkola Chemicals
Omya
Orion
Outokumpu
Partek
PI Consulting
Primalco
Raisio
Rintekno
Säteri
StoraEnso
Sulmu
ChemicalEngineeringLinks.com

Sunila
Suomen Karbonaatti (Nordkalk)
Teknos-Winter
Tikkurila
UPM Kymmene
Uponor
Vaahto Group
Woikoski

ChemicalEngineeringLinks.com

Xyrofin (see Danisco)
Zeofinn (J.M. Huber)

Back to main topics

ChemicalEngineeringLinks.com

Energy

• BP World Energy Review June 2005
• Gasoline FAQs - comprehensive
• World Nuclear Association
• Petroleum refining processes
• Uranium production
• California Energy Commission

Back to main topics

ChemicalEngineeringLinks.com

Book stores and Publishers

Book stores

• Directtextbook (one single search in many booksellers,
• Amazon
• Bol.com (not in Finland since 04.03.2002)
• Barnes&Noble
• Akateeminen
• Suomalainen (sometimes seems to be very expensive)

Publishers

• Prentice Hall
• American Chemical Society (ACS) publications
Chemical engineering links, patent links, chemical industry links

Journals

- LUT library links to various journals (ktp, soj)
- HUT library links
- LUT library and journal databases (ktp, soj)
- New Jour - electronic journal links
- Journal impact factors
- ABI/Inform (ktp, soj)

Other link collections

- Helsinki University of Technology
- Chemdex
- Chemfinder
- University of Liverpool
- Sheffield
- Vaahtera links - chemistry
- Finelib
- Multimedia chemistry links
- http://www.chemengg.com (Chemical engineering directory)
Miscellaneous

- Altavista translator
- History of Chemical Engineering
- History of Chemical Engineering, A chemical engineer's resource page
- Howstuffworks (TV, radio, cellular phones etc.)
- Download.com
- Engines of Our Ingenuity
- Chemweb virtual congress auditorium and library
- Chemweb
- Technical writing guide links
- Virtual chemistry laboratory
- Greek letters
- Chemical engineer's resource page
- NIST Engineering statistics handbook
- Academic Press Dictionary of Science and Technology
- Encyclopedia.com
- A dictionary of units and measurements
- Large numbers
- Online Resources for Scientific Writing
- Writing Guidelines for Engineering and Science Studies
- Industrial thesaurus
- Nobel Prize in Chemistry
- Innocentive (chemists around the world solve the problem in the chemical industry $$$$$$
- The New York Times
- www.dontfly.org (flying impact calculator)
- Microsoft Word -ohje
- Kimmo Klemola's energy blog

Back to main topics

Kimmo Klemola
04.07.2006
"State of Mathematical Modelling and Simulation in the Finnish Process Industry, Universities and Research Centres".

Suggestions for new sites and other comments to Kimmo Klemola (Fornam.Surname@lut.fi).

Kimmo Klemola, Dr. Tech. (Chem. Eng.), Lappeenranta, Finland