Table 1

<table>
<thead>
<tr>
<th>School/Contact</th>
<th>Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babson Park, MA</td>
<td></td>
</tr>
<tr>
<td>Baldwin Wallace College</td>
<td>course: The U.S. Chemical Industry; UG; offered as elective for general student body text: Dynamics of the U.S. Chemical Industry; S.B. Greenbaum, &quot;Bringing the Chemical Industry into the ClassRoom&quot;, CHEMTECH, June 1994, p9.</td>
</tr>
<tr>
<td>Berea, OH</td>
<td></td>
</tr>
<tr>
<td>Sheldon B. Greenbaum</td>
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<tr>
<td><a href="mailto:RTNG29D@prodigy.com">RTNG29D@prodigy.com</a></td>
<td></td>
</tr>
<tr>
<td>Cal Poly University</td>
<td>program: B.S. Chemistry - Industrial Chemistry Option; emerging focus on interaction with paint and coatings industry texts: Chenier, Emerson</td>
</tr>
<tr>
<td>Pomona, CA</td>
<td></td>
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<tr>
<td>Prof. Ernie Simpson</td>
<td></td>
</tr>
<tr>
<td>(909) 869-3671</td>
<td></td>
</tr>
</tbody>
</table>
Clarkson University, Potsdam, NY
Dr. Richard Partch
(address: partch@agent.clarkson.edu)
(315) 268-2351

Industrial Chemistry course; industrial speakers in special seminar; also "Semester in Industry" program: Industrial Hygiene (UG)

Colby College, Waterville, ME

College of St. Elizabeth, Morristown, NJ
Dr. Divalkar Masilamani
(address: (201) 538-2705(h))

Industrial Chemistry course

Eastern Illinois University, Charleston, IL
Dr. Jonathan Blitz
(address: (217) 581-6369, cfjpb@eiu.edu)

Industrial Chemistry course (planned)

Harvey Mudd College, Pomona, CA
Dr. Gerald Van Hecke
(address: (909) 607-3935, Gerald_VanHecke@hmc.edu)

Industrial Chemistry course; UG juniors and seniors focuses on roles of chemists in industry
texts: A. Heaton and/ or Clausen and Mattson
Iowa State University                course: Industrial and  
Ames, IA                              Engineering Chemistry;  
Dr. G. L. Schrader                   chemistry and ChemE students  
(515) 294-0519                       in same class; process  
schrader@iastate.edu               chemistry  

text: in preparation by Schrader  
G. L. Schrader, R.L. Pigford, and B.C. Gates, "Integrating  
Chemistry and Engineering: a Course in Industrial and Engineering  

Keene State University              program: B.S. Industrial  
Keene, NH                            Chemistry  
Dr. Howard Bohm                     
hbohm@keene.edu

J. P. Jasinski and R.E. Miller, "Industrial Chemistry. A Series  
of New Courses at the Undergraduate Level", J. Chem. Ed., 62, 742  
(1985)
Marshall University
Huntington, WV
Dr. Harry Persinger
(304) 696-4358
persingh@marshall.edu
course: Industrial Chemistry
UG/graduate level; includes business lectures and laboratory work
text: Chenier

Michigan Technological University
Houghton, MI
Dr. David Leddy
(906) 487-3305
dgleddy@mtu.edu
program: B.S. Industrial Chemistry; focuses on interface between traditional chemistry and chemical engineering (dormant); emphasis now on process analytical chemistry

Penn State University
University Park, PA
Dr. Chunshan Song
(814) 863-4466
csong@psu.edu
course: Industrial Organic Chemistry; UG; offered in Fuel Science Program for students in Energy and Fuels Engineering Option in Chemical Engineering (planned).

Polytechnic University
Brooklyn, NY
Dr. Edward Weil
(718) 260-3715
eweil@photon.poly.edu
Course: Industrial Chemistry (planned)
Rensselaer Polytechnic Institute  
Troy, NY  
Dr. Mark P. Wentland  
(518) 276-2234  
wentmp@rpi.edu

course: medicinal chemistry; G and UG chemistry, biology, and biochemistry majors; organic chemistry of drug discovery and development

Saint Bonaventure University  
Saint Bonaventure, NY  
Dr. Justin W. Diehl (emeritus)  
(716) 373-1721 (h)

course: Industrial Chemistry  
focuses on walking the BS/MS chemist through the entry level years of employment (dormant)

South Dakota State University  
Brookings, SD

course: Decision Making and Technology; case study approach; modules for use in courses beyond first semester of General Chemistry


Texas State Technical College  
Waco, TX  
Dr. Kirk P. Hunter  
(817) 867-2980  
khunter@tstc.edu

text: Chenier
University of Alabama, Tuscaloosa, AL

Course: Intensive short course to help BS graduates be better prepared for industry.


University of California-Davis, Davis, CA

Course: Careers in Chemistry UG/G; speakers from industry.

University of Central Oklahoma, Edmond, OK

Course: Industrial Chemistry; UG juniors and seniors; focuses on teaching chemistry students how to solve function (solve problems) in industry.

Text written by instructor.

University of Delaware, Newark, DE

Course: Industrial Chemistry; seniors and graduate students; focuses on industrial process chemistry.

Texts: Weisermel & Arpe, Buchner.

University of Detroit, Detroit, MI

Course: Industrial Chemistry.

University of Houston-Downtown   B.S. in Industrial Chemistry
Houston, TX
Dr. Byron Christmas
(713) 221-8169

University of Massachusetts -  course: Industrial Chemistry;
Lowell                             UG; considering M.S. in
Lowell, MA                         Industrial Chemistry

University of Tennessee -          course: The Chemist in
Chatanooga                         Industry; UG seniors
Chatanooga, TN
Dr. T. A. Orofino
(427) 267-1063 (h)

T. A. Orofino, "The Chemist in Industry: An Introductory Course",

University of West Florida        Course: Industrial Chemistry
Pensacola, FL                       (planned)
Dr. Tim Royappa
(904) 474-2028
royappa@uwf.edu

University of Wisconsin-Eau Claire program: Chemistry/with a
Eau Claire, WI  Business Emphasis; focuses on
careers outside of R&D,
Dr. Philip J. Chenier
(715) 836-4360  marketing, management, etc.
cheniepj@uwec.edu

text: Chenier
P.J. Chenier, "Teaching Industrial Chemistry and Business at the
Western Carolina University    program: B.S. Industrial
Culowhee, NC                  Chemistry; "chemistry major
Dr. Roger Bacon              with business minor"
(704) 227-7260
bacon@wcu.edu

U. S. course: Industrial Chemistry

G.W. Campbell, "Education and Training of Chemists for the

Graduate Courses/Programs

Indiana University-Purdue Univ. program: M.S. Industrial
Indianapolis, IN                Chemistry with industrial
                                 co-op

W. K. Fife, "A Successful MS Industrial Co-op Program with a

Lehigh University program: M.S. for industrial
Bethlehem, PA                   chemists
N. D. Heindel
(215) 758-3464
ndh0@ns.cc.lehigh.edu

gopher://gopher.inform.umd.edu/11/EdRes/Faculty_Resources_and_
Support/ChemConference/Paper08.txt
Polytechnic University
Brooklyn, NY
program: M.S. in Industrial Chemistry (dormant)

University of Central Florida
Orlando, FL
Dr. Guy Mattson
(407) 823-0003
program: M. S. Industrial Chemistry course: UG Industrial Chemistry

University of Chicago
Chicago, IL
Northwestern University
Evanston, IL
Dr. Mukund S. Chorghade
(847) 360-9175
ztsu70a@prodigy.com
course: Industrial Chemistry; graduate level; natural products, pharmaceuticals, and agrochemicals
text: notes by instructor (to be completed in 1997)

University of Delaware
Dr. Manuel Panar
(302) 477-0623
panar@udel.edu
course: Industrial Practice; G; a non-technical course offered to near-exit chemistry graduate students to help them understand the "industrial culture"

University of Massachusetts - Amherst
Amherst, MA
course: Industrial Seminar series; Graduate level
University of Minnesota
Minneapolis, MN
course: Industrial Chemistry; G; taught by three scientists from 3M
more information available from melton@utdallas.edu

University of North Texas
Denton, TX
program: M.S. Industrial Chemistry focuses on upgrades for students currently employed in industry
Susan Tribble
(817) 565-3554

University of Texas at Arlington
Arlington, TX
courses: Industrial Chemistry, Unit Operations, Regulatory Aspects of Chemical Industry, Economics Program: Ph.D. in Applied Chemistry
http://www.utachem.uta.edu

University of Texas at Dallas
Richardson, TX
course: Industrial Chemistry; program: Doctor of Chemistry; prepares doctoral level problem solvers for industry
Dr. Lynn Melton
(214) 883-2913
melton@utdallas.edu
text: Clausen and Mattsen
http://www.utdallas.edu/dept/chemistry
Outside U.S.

Australia
University of New South Wales
Sydney, Australia

program: B.S. Industrial Chemistry in School of Chemical Engineering and Industrial Chemistry; prepares problem solvers for industry; also M.S. Applied Science program

http://www.ceic.unsw.edu.au/

Canada
Queen's University
Kingston, Ontario, Canada

Dr. Ralph Whitney
(613) 545-2641
whitney@chem.QueensU.CA

program: B.S. Engineering Chemistry; accredited as science and engineering program; in existence for over 100 years

Canada
University of Victoria
Victoria, B.C., Canada

Dr. Martin Hocking
HOCKINGM@UVVM.UVIC.CA

text: Modern Chemical Technology and Emission Control, by Martin Hocking

India
Dr. Narayan Bhat
nbhat@unlinfo2.unl.edu
(210) 381-3371

text: White
Israel

program: Industrial Chemistry;
in secondary schools


Italy

course: Industrial Chemistry


Italy

program: Industrial Chemistry


Spain

course: Industrial Chemistry

text: Industrial Chemistry Course (Curso de Quimica Technica) J. Costa, Curso de Quimica Technica, (Reverte, Barcelona, Spain, 1984).

United Kingdom

Liverpool John Moores University

course: Industrial Chemistry

Liverpool, England

Dr. C. A. Heaton

text: Heaton
University of East Anglia  

course: each year six industrial chemists each spend a week on campus

University of Glasgow  

Glasgow, Scotland  

Costandi Audeh  

75562.570@Compuserve.COM  

(graduated in 1955)

University of York  

Professor Bruce Gilbert  

course: Industrial Chemistry

Dr. Alan E. Comyns  

21 Churchward Close  

Chester CH2 2BG  

England  

01244 382688  

101453.3265@CompuServe.COM

contact in UK; trying to raise profile of industrial chemistry in UK universities
Industrial Sites

Various Industries                 course: Industrial Chemistry
Dr. Harold Wittcoff               (4-5 day short course);
(914) 631-2828                     overview of chemical industry

text: Wittcoff

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Various Industries                 course: Chemistry and the
Dr. Robert A. Smiley               Chemical Industry (3 day short
(302) 764-0392                     course); A Practical Guide for
SmileyRA@aol.com                   Engineers, Plant Operators,

and Others

text: copies of 120 slides; each participant is given a copy of
Chenier
Industrial Hygiene

California State University        module: NIOSH instructional
Long Beach, CA                        module


School of Public Health        course: Industrial Chemistry;
UCLA                           graduate course in Unit Processes, taught as part of
Los Angeles, CA              Industrial Hygiene program
Dr. Shane S. Que Hee         squehee@ucla.edu

text: Recognition of Health Hazards in Industry: A Review of Materials and Processes by W. A. Burgess

American Chemical Society

Planning for a Career in Industry: Suggestions for Undergraduate Majors in Chemistry, Biochemistry, and Related Disciplines, Prepared and Issued Jointly by the American Chemical Society Committee on Professional Training and the ACS Committee on Corporation Associates, (1996), available through ACS, contains advice to undergraduates considering careers in industry, and extensive bibliography of resources on careers.
Table 2

=========================================

Industrial Chemistry References
Phil Chenier
University of Wisconsin-Eau Claire

Books


Thompson, R. Industrial Inorganic Chemicals; 2nd ed.; Royal Society of Chemistry: Cambridge, 1996.


Wiseman, P. Petrochemicals; Ellis Horwood Limited: Chichester, 1986.
Multi-Volume Works

Chemical Economics Handbook; Stanford Research Institute International: Menlo Park, CA, present.


Periodicals


Chemical Marketing Reporter; Schnell Publishing Co.: New York. Contains many informative articles in each issue and up-to-date chemical prices each week.


**Government Documents**

Annual Survey of Manufactures; U.S. Department of Commerce, Bureau of the Census, each year.


**The Internet**

ChemExpo is the chemical industry's source for over 20,000 chemicals, latest news, chemical profiles, business briefs, a directory of chemical products and companies, forums, a calendar of events, a business card exchange, and a column on people and jobs.
http://www.chemexpo.com

Chemistry and Industry magazine has a web site that contains news and features from the current issue, plus hundreds of articles from past issues. It has a searchable database of jobs in chemistry, a list of meetings, and daily science news.
http://ci.mond.org

A chemical engineering page has relevant text on various topics involving industrial chemistry.
http://www.che.ufl.edu/WWW-CHE/index.html

Full texts of U.S. patents, 1994 to present, are available.
http://town.hall.org/patent/patent.html
ACS Information can be obtained easily and covers a multitude of information on chemistry, chemists, chemical education, and the chemical industry.
http://www.acs.org/

The Environmental Protection Agency has a series of factsheets on hazardous chemicals.
gopher://ecosys.drdr.virginia.edu:70/11/library/gen/toxics

A searchable hazardous chemicals database is available from the University of Akron.
http://odin.chemistry.uakron.edu/cgi-bin/wwwwais

The Journal of Chemical Education has useful information on many topics related to teaching chemistry.
http://jchemed.chem.wisc.edu

Material Safety Data Sheets contain health and safety information on thousands of chemicals. These are available at a number of locations. Some of the sites are alphabetical by chemical name. Some allow the user to key in a chemical name.

   Vermont Safety Information
   http://hazard.com/
   University of Utah
   http://listeria.nwfsc.noaa.gov/msds.html
   Oxford University
   http://physchem.ox.ac.uk/msds/
   U.S. Dept. of Commerce
   http://research.nwfsc.noaa.gov/msds.html

Pesticide information is readily obtainable on the Extoxnet.
http://ace.orst.edu/info/extoxnet

Some Chemistry Resources on the Internet by Gary Wiggins, Indiana University, is the best, most up-to-date, and complete compilation of all resources dealing with chemistry on the Internet.
http://www.rpi.edu/dept/chem/cheminfo/chemres.html
Videotapes

Available from Films for the Humanities & Sciences, Princeton, NJ.
- Chemicals from NaCl
- Polyethylene
- Out of the Air
- Soaps
- Glues
- Limestone

Man-made Macromolecules, Open University, BBC-TV.

Manufactured Fibers, American Fiber Manufacturers Association, Washington, DC.

Vinyl the Versatile Plastic: Issues and Answers, The Vinyl Environmental Resource Center, Akron, OH.

Audio Courses


Table 3
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Industrial Chemistry References

Lynn Melton
University of Texas at Dallas

Supplement to Phil Chenier's List


