

The NCSU Libraries Newsletter

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NCSU Libraries Collections Updates

CHEMICAL ENGINEERING ENCYCLOPEDIAS NOW ONLINE

Two major chemical engineering encyclopedias are now available online to the NCSU community. The *Kirk-Othmer Encyclopedia of Chemical Technology* and *Ullmann's Encyclopedia of Industrial Chemistry* have long been the recognized authorities in the field. The NCSU Libraries now provides online access via Wiley InterScience to both of these resources.

Kirk-Othmer is one of the most comprehensive chemical engineering encyclopedias and is an excellent starting place for background information and state-of-the art reviews. For many years it has been the principal English-language encyclopedia, covering chemical substances, fundamental principles, and manufacturing processes.

Ullmann's provides a broader coverage than *Kirk-Othmer* in all areas of industrial chemistry and chemical engineering, including materials science, polymer engineering, and biotechnology.

They join many other online encyclopedias and handbooks available in the NCSU Libraries. From the Libraries' main Web page, go to "[Browse Subjects/Chemical Engineering/Reference Tools](#)" for a detailed list.

MACHINERY'S HANDBOOK, TWENTY-SEVENTH EDITION

Machinery's Handbook, twenty-seventh edition, is now available online to the NCSU community via Knovel. Included with the handbook is the online version of its companion volume, *Guide to the Use of Tables and Formulas in Machinery's Handbook*, twenty-seventh edition. First-time users may have to install a FileOpen plug-in to Adobe Acrobat to gain access to the online book. Included in the handbook are more than one hundred interactive tables on things such as:

- Allowable Working Stresses for Compression Springs
- Cutting Rates for Band Saws
- Cutting Rates for CO₂ and YAG Lasers
- Force-Deflection Relationships
- Phase Diagram of Carbon Steel
- Physical Properties of Heat-Treated Steels

- Recommended Design Stresses in Bending for Helical Torsion Springs
- Selection of V-Belt Cross Sections
- Stress-Concentration Factors
- Tool-Life vs. Cutting Speed
- Viscosity vs. Temperature—SAE Oils

The text of the handbook is arranged into chapters entitled:

- Mechanics and Strength of Materials
- Properties, Treatment, and Testing of Materials
- Dimensioning, Gaging, and Measuring
- Tooling and Toolmaking
- Machining Operations
- Manufacturing Processes
- Fasteners
- Threads and Threading
- Gears, Splines and Cams
- Machine Elements
- Measuring Units

Machinery's Handbook is one of many online handbooks available in the NCSU Libraries. Go to "[Browse Subjects/Mechanical Engineering/Reference Tools](#)" Web page for a detailed list.

ELECTRONIC MATERIALS INFORMATION SERVICE (EMIS) DATA REVIEWS SERIES NOW ONLINE

The entire *Institution of Electrical Engineers Electronic Materials Information Service (EMIS) Data Reviews* series is available online to the NCSU community through Knovel. This series offers guidance on the most appropriate materials to use for particular applications, based entirely on input from experts in the field. According to the *Engineering Science and Education Journal*, "There is a great deal of factual information in this [series] that cannot be obtained easily from other sources. The authors are all renowned scientists from the world's most important research facilities in both the public and industrial sectors."

The titles that comprise the EMIS series include:

- *Physical Properties of Liquid Crystals: Nematics*
- *Properties of Aluminium Gallium Arsenide*

- *Properties of Amorphous Carbon*
- *Properties of Amorphous Silicon and its Alloys*
- *Properties of Crystalline Silicon*
- *Properties of Gallium Arsenide* (Third Edition)
- *Properties of Group III Nitrides*
- *Properties of III-V Quantum Wells and Superlattices*
- *Properties of Indium Phosphide*
- *Properties of Lattice-Matched and Strained Indium Gallium Arsenide*
- *Properties of Lithium Niobate*
- *Properties of Metal Silicides*
- *Properties of Narrow Gap Cadmium-based Compounds*

- *Properties of Porous Silicon*
- *Properties of Silicon Carbide*
- *Properties of Silicon Germanium and SiGe: Carbon*
- *Properties of Wide Bandgap II-VI Semiconductors*
- *Properties, Growth and Applications of Diamond*
- *Properties, Processing and Applications of Gallium Nitride and Related Semiconductors*
- *Properties, Processing and Applications of Glass and Rare Earth-Doped Glasses for Optical Fibres*
- *Properties, Processing and Applications of Indium Phosphide* ◆

NCSU Libraries Hosts Photography Exhibit

From October 15, 2005, through January 8, 2006, the NCSU Libraries will host the exhibit *Diana Walker: Photojournalist*, which was produced by the Smithsonian's National Museum of American History, Behring Center, and organized for travel by the Smithsonian Institution Traveling Exhibition Service.

The exhibit comprises eighty-three color and black-and-white photographs depicting life at the White House from the Ford through the Clinton administrations, as well as portraits of other noteworthy people and events. Walker's images will be familiar to many viewers: President Nelson Mandela of South Africa showing the Clintons the cell he occupied for years at the Robben Island Prison; Nancy Reagan and Raisa Gorbachev having tea in 1985; and Tipper and Al Gore kissing at the 2000 Democratic National Convention. *Time* and other magazine covers and page layouts are in the exhibit, documenting the transformation of individual photographs into iconic publishing moments. For more information, go to <http://www.lib.ncsu.edu/exhibits/dianawalker/>. ◆

Jan Karon To Appear at Friends of the Library Event

The Friends of the Library and Quail Ridge Books and Music of Raleigh will offer a special reading by Jan Karon, author of *Light from Heaven*, the last book in the Mitford series. The reading will be held on November 14, 2005, at 7:30 P.M., in the McKimmon Center.

Karon, author of the hugely popular Mitford series set in North Carolina, will discuss her latest and final book in the series. The novel answers questions readers have asked since the series began nearly a decade ago. This event is free to all FOL Members, NC State students with a valid student ID, and to those purchasing *Light from Heaven* from Quail Ridge Books and Music. Tickets are \$5 for the general public and can be purchased at the Friends of the Library office, Quail Ridge Books and Music, or at the door. For information, call the Friends office at 515-5882, Monday through Friday, 8:00 A.M. to 5:00 P.M., or go to <http://www.lib.ncsu.edu/friends>. ◆