#### 59th Annual Meeting

of the

University of Illinois Foundation



Dedication

of the

**Grainger Engineering Library Information Center** 

## SCHEDULE OF ACTIVITIES October 13-14-15, 1994 on the Urbana-Champaign Campus

#### OCTOBER 13

Thursday Evening 6:00 p.m.

Mardi Gras Cocktail Buffet Reception Until 9:30 p.m. Assembly Hall, Arena 1800 South First St., Champaign

Laissez le bon temps rouler.

Say hello to The Big Easy. The Crescent City. It's Nwah-luns, never New Or-LEENS.

Begin your weekend with the fun, favors and flavors of our Mardi Gras carnival. There'll be beads and doubloons and Cajun and Creole cuisine: andouille and boudin sausage, filé gumbo, jambalaya, and étoufée. Talk about good!

Illinois's own hot sauce — Medicare 7, 8 or 9 — will play jazz and blues for listenin' and Dixieland for dancin'.

So join our carnival krew... and *let the good times roll*. Casual Attire is encouraged.

Your hosts for the evening are Foundation President Gayl S. Pyatt and Mr. Richard M. Pyatt; Foundation Executive Director and Mrs. B. A. Nugent; University President and Mrs. Stanley O. Ikenberry; Chicago Chancellor and Mrs. James J. Stukel; and, Urbana-Champaign Chancellor and Mrs. Michael Aiken.

#### **OCTOBER 14**

Friday Morning 7:30 a.m.

Registration and Continental Breakfast Krannert Center, Lobby

8:45 a.m.

Annual U of I Foundation Business Meeting Krannert Center, Tryon Festival Theatre

## Welcome

by Gayl S. Pyatt and B. A. Nugent.

Annual Financial Report of Private Giving through the Foundation and to the University by Craig S. Bazzani, Chief Financial Officer of the University and Treasurer of the U of I Foundation,

#### Gateway to a New Era

A look at how a major university-wide fund drive of historic proportions and opportunity will help position the University of Illinois for future achievement.

### 11:45 a.m.

State of the University Luncheon Illini Union, Illini Rooms

Luncheon hosted by the U of I Board of Trustees.

Remarks by University President Stanley O. Ikenberry.

Friday Afternoon 2:30 p.m.

Dedication of Grainger Engineering Library Information Center

Main Reading Room, Second Floor

Accessing in a New Era is the focus of this celebration of the new engineering library dedicated to the memory of alumnus William Wallace Grainger, a 1919 graduate and founder of W. W. Grainger, Inc. The \$34 million project was funded primarily by a gift of \$18.7 million from The Grainger Foundation. The gift has created the largest engineering library in the nation and sets a new standard of excellence in information management and access and opens a new era in innovative research opportunity.

Grainger Center stands as a model for academic technical libraries. Its users include not only the academic community but the international engineering and scientific community as well. With cutting edge computer-based communications technology, the Grainger Center is redefining the role of the traditional library by serving scholars and business professionals worldwide through electronic access to information.

The facility follows in the grand tradition of libraries and the rich architectural tradition of the Urbana-Champaign campus while embracing tomorrow's technologies.

Hands-on demonstrations of these new technologies as well as tours throughout Grainger Center will be held immediately after the dedication until 4:30 p.m.

## Friday Evening 6:00 p.m.

Champagne Reception and Membership Dinner Krannert Center, Lobby

Honoring members of the Foundation and Presidents Council.

Hosted by the Officers and Directors of the University of Illinois Foundation.

Foundation President Gayl S. Pyatt, presiding.

9:15 p.m.

Cordials and Coffee Lobby

#### **OCTOBER 15**

Saturday Morning 10:30 a.m.

**Pre-Game Picnic Luncheon** The President's House, Gardens

Hosted by President and Mrs. Stanley O. Ikenberry.

Saturday Afternoon 1:30 p.m.

**Illinois vs. Iowa** Memorial Stadium, Zuppke Field

Schedule is subject to alteration due to change in football kick-off time affected by television coverage.

#### **Special Sessions**

#### National Advocates Luncheon and Meeting

Thursday, October 13, at 11:30 a.m. Krannert Center, Foellinger Great Hall, Stage

Foundation Board of Directors Meeting and annual organization session.

Friday, October 14, at 10:30 a.m. Harker Hall, Executive Conference Room

#### **Hospitality** Center

Thursday, October 13, 1:00 p.m. until 5:00 p.m. Friday, October 14, 8:00 a.m. until 5:00 p.m. Illini Union, Presidents Lounge and Pine Lounge Saturday, October 15, 8:00 a.m. until 12 noon Harker Hall, Lobby





## Accessing in a New Era

# **Grainger Engineering Library Information Center**

University of Illinois at Urbana-Champaign

In the building plan of the greater University of Illinois, we hope that there will be included a design of an Engineering Library.... The need...has been noticed by many.... A library of this kind should not only have ample space for bookracks but also for filing cabinets for blueprints and for photographs of minor as well as of great engineering accomplishments. The atmosphere of such a library would be more conducive to hard work...especially in the evening. The need for our library is apparent....

C.H. Clarahan Editor-in-Chief, *The Technograph* March 1918



## In the Grand Tradition of America's Great Libraries

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"The Grainger Library introduces a new era for the library as a tool for scholarship. There is little doubt that it will mark Illinois as a leader in information technology for some time to come."

Michael Aiken Chancellor Urbana-Champaign Campus The Grainger Engineering Library Information Center is a gathering place for students, faculty, researchers, and scholars at the heart of the Engineering Campus of the University of Illinois at Urbana-Champaign. Since opening in March 1994, "the Grainger" has become a lively center for the discovery and development of new knowledge in all phases of engineering, the physical sciences, electronic communications, and library technology.

While the Grainger Center is recognized as the largest engineering library in the United States, and while it houses many thousands of volumes, along with reading rooms, classrooms, and conference rooms, its greatest significance resides in the inquiring mind of each student who seeks to discover the world's wealth of scientific and engineering knowledge. At the Grainger, as at few libraries in the entire world, the world's knowledge is within fingertips' reach.

Even though the gracious design of nationally recognized architect Evans Woollen places the Grainger Center squarely within the grand tradition of American public libraries; even though the Grainger's intricate detailing and magnificent craftsmanship echo the campus's Georgian architectural tradition; and even though the vibrant interior colors resonate with the youthful excitement of learning and discovery, the Grainger is in fact one of the most technologically advanced information management centers in the nation.

Though crafted and born into the grand tradition, the Grainger points the way so far into the future of technological information management that many of its current capabilities can meet needs that have not yet been fully articulated.



## A Grand Tradition Comes of Age

"The concentration on building large on-site collections...to serve the needs of scholars and students has begun to give way to the idea of a university library as a gateway to knowledge and information that is accessible from any computer...."

Robert Wedgeworth University Librarian



The University Library is the largest public university library in the United States. It comprises 42 divisions, including the Grainger Center, which alone houses approximately 225,000 volumes and several specialized collections:

- Standards collection: ANSI and non-ANSI domestic and certain foreign standards that govern industrial production.
- Microforms: major society publications, NASA publications, and U.S. Department of Energy publications.
- The reference collection: handbooks, encyclopedias, dictionaries, directories, standards and specifications, and tabular data in all engineering fields. Database of the collection is available.

But the University Library is world renowned for more than the size and scope of its collections — it was also the first library in the world to implement a computerized circulation system, appropriate to the University's position among the world's preeminent computing centers. From early leadership in electronic computing in the 1940s to the distinction of being among the first American universities to maintain an on-campus supercomputing center, Illinois has earned world recognition in computing technology. The Grainger is a worthy heir to both these proud legacies and has been called "the model for all future academic technical libraries."

**Computer Hardware.** The Grainger houses 60 on-line computers, including seven information kiosk terminals. All offer public access and comprehensive information retrieval capabilities from local and remote electronic, bibliographic, numeric, textual, graphic, and video databases, whether they reside within the Grainger, elsewhere on campus, or at off-site locations worldwide. In all, information retrieval is possible through approximately 100 user terminals in the Grainger Center, 30 of which can accommodate advanced scientific computing, and 20 that can accommodate full-text document imaging and multimedia applications.

With as many as 800 available computer hookups, nearly every table, carrel, and desk in the Grainger is wired to the University's computer system and through it to the world. Thus, library users can bring their own laptop computers and access all the systems, networks, and databases.

**Networks.** The Grainger Center is equipped with six network servers accessing CD-ROM, Worldwide Web, Gopher, SQL databases, printing services, and more.

**Databases.** The Grainger offers access to approximately 450 remote and local on-line databases containing more than 75 million references to scientific and engineering literature on campus, throughout Illinois, and at universities and libraries across the country and around the world.







Information materials take the forms of periodical literature citations, tables of contents, and full-text documents. The databases include:

- INSPEC, which provides comprehensive access to journal and report literature in electrical engineering, computer sciences, and physics.
- The IEEE/IEE Publications CD-ROM database, which contains the full text of all publications since 1989 from the Institute of Electrical and Electronic Engineers and the British Institution of Electrical Engineers.
- COMPENDEX (Comprehensive Engineering Index), which covers journal and conference literature in virtually every field of engineering. Materials published in the last two years can be delivered as full text on-line or by fax within two working days.
- The Encyclopaedia Britannica, which is available as full text on-line.
- Current Contents, which contains the tables of contents of 7,000 journals, all available on-line within two weeks of publication.
- Literally hundreds of subject-specific commercial databases, including Aerospace, Metals, Energy, and Chemistry; as well as nine databases produced by H.W. Wilson & Co., such as the Applied Science and Technology Index. All are available on-line, and some can be accessed from remote connections.

In addition, the Grainger is generating a specialized database to help library users navigate the holdings of the main University Library, one of the world's largest academic collections. Included in this database are the tables of contents of all new journals in the Grainger Center's collections and all College of Engineering class notes on reserve throughout the campus library system.

## Access in the Electronic Information Age

Amid the electronic wonders of one of America's most extensive and technologically advanced information retrieval centers is also one of America's most accessible libraries. Central to the technology and the philosophy of the Grainger is its role as an academic library, emphasizing accessibility to scientist and student alike.

New users are invited to become familiar with the Grainger Center by exploring the building with a multimedia tour presented at computer kiosks located on each floor. By simply touching the screen, library patrons can bring up a visual directory of the entire building, tour the center, locate materials by call number, or learn about the individual who made it all possible, W.W. Grainger.

The main circulation desk offers not only state-of-the-art electronic document delivery and interlibrary loan services, but the same traditional circulation services offered by libraries for a century. "The creation of knowledge is the business of a university, but without access, knowledge is academic."

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William R. Schowalter Dean College of Engineering Some materials already can be accessed without even visiting the Grainger Center. Coursework materials on "special reserve" for students are digitized, so that books and articles can be read on the computer screen or printed out at personal computers at home, office, or residence hall. Eventually many more materials will become available on-line to campus users and beyond through electronic access.

But the resources offered by the Grainger are not restricted to those housed in the Center. Through remote and local on-line databases, the Grainger can locate and deliver scientific and engineering literature from major university and public libraries across the country and around the world.

And the computerized search process through which library users access these databases is as "forgiving" as any traditional librarian. For example, the computer will respond to a misspelled title with a screen thesaurus of similarly spelled words, offering hints to get the user back on track. And in subject searches, the computer will propose keywords or synonyms in addition to the user's subject keywords.

But today's electronic wonders may well be supplanted by tomorrow's technology. Recognizing the inevitability of rapid advances, the Grainger's spaces and infrastructure are amenable to changes in library and information services in the next century. The computer system, for example, can already accommodate voice recognition, which allows computers to recognize the voices of regular users—even though the technology itself is still largely experimental.

# The Research Library in the Electronic Information Age

The research functions of the Grainger Engineering Library Information Center focus on technological information access and retrieval and the growing interface between traditional library functions and those characterizing the electronic information age. It serves as the laboratory for all of the University's libraries and will shape how they can be used in the electronic age. The Center's research facilities and hardware are available to all students, staff, faculty, and visiting scholars and experts.

**The Computer and Multimedia Laboratory** houses 50 comprehensive advanced computing workstations, each incorporating multiple networks and digital text facilities for learning and research. The equipment provides access to electronic, visual, audiovisual, and multimedia resources, as well as to database and file servers and network printers for research and instruction purposes. It is the largest of five networked computer workstation labs in the College of Engineering.



"[The Grainger] will play a leadership role in the application of emerging information technologies."

William Mischo Head Librarian Grainger Center The Digital Imaging Lab is dedicated to the development of cuttingedge multimedia software, featuring special capabilities for the creation of video imagery. Much of the Grainger's kiosk software was developed here. The laboratory is equipped with advanced scanning and optical character recognition software, as well as visualization software so that multimedia materials can be integrated into classroom presentations and publications. A self-service component is available for trained users, and on-site training is also available.

In the Usability Laboratory, researchers examine information retrieval software and hardware and library users' behaviors in order to refine library technology for improved access. All of the technologies used in the Grainger Center were tested and applied here, including the kiosk technology. Among the current projects is the adaptation of the Grainger's kiosk technology for use elsewhere in the University and in libraries across the country; development of sophisticated Worldwide Web server and Mosaic software; and studies of computer voice recognition systems, which will become part of the Center's internal information systems.

In the Information Retrieval Research Laboratory, visiting library scholars and engineers from Illinois and elsewhere are welcome to study the information technologies used in the Grainger. With the laboratory's hardware, software, and networking appointments, researchers can refine those technologies and adapt them for use in libraries around the world.

# The Academic Library in the Electronic Information Age

As a learning center for the students of Illinois, the Grainger includes a variety of teaching and meeting facilities. Seminar and conference rooms contain state-of-the-art equipment for classes, professional meetings, and ensemble research projects; group studies, reading rooms, and individual carrels are outfitted with network connections to provide full access to laptop computers.

In addition to these facilities, the Grainger Center also offers several specialized teaching laboratories that are available to students and faculty for classes, meetings, and technical sessions:

The Microcomputer Laboratory is outfitted with microcomputers designed primarily for word processing, electronic mail, and similar applications. The lab can be used in connection with projects underway in the Communications Skills Laboratory.

**The Communications Skills Laboratory** is an electronic version of the traditional "writers workshop." The laboratory offers special counseling and practice exercises to help improve students' writing skills.



In the Instructional Services Laboratories, librarians train Grainger patrons in the use of library resources and technologies. With a computer workstation at every seat, these labs emphasize hands-on training with state-of-the-art bibliographic databases and equipment.

In the On-Line Search Facilities, Grainger Center librarians work with individual researchers to devise strategies for comprehensive literature searches using the Dialog, STN, and BRS information supermarkets. These laboratories also function as demonstration areas and sites in which small groups can search the periodical index databases and the on-line catalog.

As the largest engineering library in the United States, the Grainger Center accommodates 1,200 patrons, amounting to some 20 percent of the 7,400 students and 515 faculty in the College of Engineering. The Grainger's user statistics also indicate that it will be a strong participant in the University Library system, long the most actively used university library in the world. Recent engineering library statistics for one year indicate that the Grainger already serves more than 900,000 patrons yearly:

- 500,000 individual users, both on-site and through electronic access via dial-in computers, telephone searches, electronic mail, and the campus networks.
- 275,000 on-line catalog transactions by library users.
- 150,000 on-line transactions by library staff.
- 5,000 + CD-ROM searches.
- 100,000 searches through the library's local databases and feebased search services.

## A Grand Tradition of Giving

The fortunes of W.W. Grainger began with a book. After completing a bachelor's degree in electrical engineering at the University of Illinois in 1919, William Wallace Grainger launched a mail-order business with a small catalog showing electrical supplies and components. Through the years, his eight-page catalog grew to thousands of pages. And W.W. Grainger, Inc., became a national leader. Through it all, however, Grainger himself honored an overriding professional commitment: to make technology accessible to everyone.

The commitment that found its first expression in a modest catalog has now culminated in the largest engineering library in the United States, equipped with state-of-the-art information retrieval technology. Dedicated on October 14, 1994, the Grainger Engineering Library Information Center is a fitting legacy to W. W. Grainger in that







The Grainger Engineering Library Information Center was constructed with private gift funds of \$18.7 million from The Grainger Foundation of Skokie, Illinois, David W. Grainger, President. A number of important individual gifts from faculty, alumni, and friends were also pivotal in expediting the Grainger Center. Various preconstruction projects were supported by state funds of \$8.3 million.

To maintain and upgrade computer systems in a timely manner, the University Library and the College of Engineering have established a permanent endowment fund with a goal of \$5 million. Major gifts of equipment to the Grainger Center and corporate gifts to the endowment fund have been received from:

- · Autotron, Inc.
- Dataware/BRS
- Chrysler Corporation
- Digital Equipment Corporation
- Engineering Information Inc.
- · Ford Motor Company
- GTE
- Henneman Raufeisen & Associates Inc.

- · Hewlett-Packard
- IBM
- Lynch Asphalt Company, Inc.
- Microsoft
- NCR
- Northern Illinois Water Corp.

Special recognition is accorded Emerson Schroeder of Hilton Head Island, South Carolina, a mechanical engineering graduate of the Class of 1928, who has made provision for a \$1.2 million gift to the Grainger Endowment Fund.

its key is accessibility, and its most advanced computer systems are dedicated to enhancing access to worldwide resources.

The Grainger Engineering Library Information Center is indeed a capstone to W.W. Grainger's personal commitment to access. As a charter member of the University of Illinois Presidents Council and the University of Illinois Foundation, W.W. Grainger's personal gifts for students on both campuses focused on making the educational experience more accessible through special study programs, student achievement awards, grants, and library and teaching equipment.

The lofty principles of W. W. Grainger's philanthropy achieved fullest expression through the foundation established to secure his legacy of giving, and his vision focused very specifically on extending the wealth of his experience to the students and faculty who continue his legacy through his alma mater, the College of Engineering at Urbana-Champaign, now home to:

- The W.W. Grainger Professorship in Electrical Engineering, the first endowed professorship in the college.
- The Grainger Power Engineering Software Laboratory, focal point of one of the ten best power engineering programs in the nation.
- The Grainger Lecture Series.
- · Grainger Fellowships in Power Engineering Research.
- The Grainger Electrical Machinery Laboratory.
- The Advanced Power Applications Laboratory, the only one of its kind in the United States.

But this long and magnificent tradition of giving—to create access—has indeed found its fullest expression in this library. And through it, W.W. Grainger, who began with his eight-page catalog of electrical supplies, now achieves a place of honor in the information age. Today the largest engineering library in the nation carries his name and continues his vision.

# **Epilogue: The Tradition Lives On**

Flexibility and access will govern the evolution of the Grainger Center as collections grow, new technologies are introduced, the scope of knowledge expands, and the focus of education shifts. But the more things change, the more they remain the same. And the Grainger Engineering Library Information Center has opened a window to the past that has long been close to the hearts of Illini.

That window looks out upon an Engineering Quadrangle whose heritage dates to the time that W.W. Grainger was on campus. The quadrangle was originally envisioned as a unifying element to a campus that was growing vigorously—if somewhat haphazardly. Spanning the disance between Engineering Hall (1894) and the old Mechanical and Drill Hall (1872), the quadrangle was to serve as a central commons, an area of peace and tranquility amid the bustle of the fast-growing campus.

Today the Grainger Engineering Library Information Center occupies the site of the old Mechanical and Drill Hall, the University's first permanent engineering building. Once again the North Campus has a strong, working central focus; and once again an Engineering Quadrangle is envisioned. Just as the traditional and the contemporary are joined together in the architecture of the Grainger, so too will the Engineering Quadrangle join the old and the new, bringing together the historical landmarks in which the greatness of the University of Illinois College of Engineering was built, and those that have succeeded it, serving as the stage for the college's rise to national and international renown. The past is indeed prelude to the future.









SCHEDULE OF ACTIVITIES October 13-14-15, 1994 on the Urbana-Champaign (

## **OCTOBER 13**

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Produced by the University of Illinois Foundation in honor of the dedication of the Grainger Engineering Library Information Center October 14, 1994