



# Citations

## The Library of the Future: Science Fiction Today, Science Fact Tomorrow

by Mark Allan, Assistant Professor, New Library Reference, [mallan@lib.nmsu.edu](mailto:mallan@lib.nmsu.edu)

**Jules Verne** depicted underwater exploration with astonishing accuracy, and he also predicted travel to the moon, although with much less accuracy. His contemporary **H.G. Wells** was the first to use the phrase "atomic bomb" -- in 1913. **Arthur C. Clark** foresaw geosynchronous communication satellites and 3D Geographic Information Systems. **William Gibson** described a global computer network and cyberspace.

Many science fiction writers have written of ideas and/or technologies which have subsequently come to be validated or implemented. On the other hand, an even longer list of authors and their envisioned inventions have been demonstrated impossible, unpractical, too expensive, or perhaps have not been rendered workable quite yet.

With the publication of this article, I am attempting to predict the future of technology in libraries. In doing so, I am relying heavily upon data graciously supplied by **Steve Gilheany** of Archive Builders, who was a speaker at this year's Library Learning Conference in Taos, sponsored by both the Southwest Regional Library Service System and the New Mexico Library Association.

This is a personal vision, not to be attributed to that of my colleagues at this institution or elsewhere, unless they are cited in the following text. And while some of my ruminations may appear otherworldly to many, perhaps the future will subsequently reveal that some of the following predictions are lodged somewhere near the mark.

(Science... continued on page 2)



*Reference librarian Roger Steeb helps NMSU students Amy Lucero and Damian Wasson locate electronic information*

**Happy New Year! As our world approaches the next millennium, we hope that you will enjoy this look at technological innovations and the future of libraries.**

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## Science...

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### *Data Storage*

Data storage costs are dropping by 40% per year, and will continue to do so for the foreseeable future, according to **Steve Gilheany** at Archive Builders. Currently the cost to store one gigabyte (equivalent to storing 2 filing cabinets of scanned documents) is approximately \$60.00. By 2025, the cost for storing one gigabyte (equivalent to storing 2 filing cabinets of scanned documents) will be effectively nothing. Instead, storage costs will be measured in terabytes (equivalent to storing for 2000 filing cabinets of scanned documents), and the cost to store one terabyte of data will be but 18 cents. These figures, of course, do not take into account the labor costs for scanning documents already in a print format, but by that time, the majority of information will already be available in an electronic format.

### *Computer Processing at the Speed of Light*

Using light as an alternative to electricity would greatly speed computer processing. Gilheany notes that currently, fiber optics allows data to be transmitted at 320 Gigabits per second, and laboratory research with fiber optics has exceeded the transmission of 1 Terabit per second. Fiberless processing using light as a medium may also become a reality. An experiment at the California Institute of Technology used a phenomenon known as quantum entanglement to "teleport" a light beam across a room (thereby creating at a distance a light beam with the same attributes of the original). An application of this process would be the construction of computers that operate at the speed of light. In any event, technology will provide for the ability to search ever vaster quantities of digitized information, and the search and transmission of desired information may take place in the blink of an eye.

### *Nanotechnology*

The use of nanotechnology, which involves the creation of machinery at the molecular level (fully functional machines composed of a few atoms), will drastically change the way we live. Besides having unlimited day-to-day applications in all aspects of life, nanotechnology will

## Coming Soon, Paperless Interlibrary Loan

**Starting on June 1, 1999**, Interlibrary Loan/Document Delivery Services (ILL/DDS) will only accept electronic requests. While this is a huge step, it will enable ILL/DDS to provide improved service that will be more convenient for the user, and will be much faster, since electronic requests come immediately to the ILL/DDS Office.

All paper forms will be removed from public service areas on April 1, 1999. Electronic workforms can be accessed at the URL <http://lib.nmsu.edu:80/depts/illdds/index.html> on the Library telnet menu, and through the FirstSearch Interlibrary Loan option. Anyone needing assistance in accessing the electronic forms may stop by the ILL/DDS Office on the second floor of Branson Library. For more information, please contact **Jivonna Stewart** at 646-6915.

impact the field of information science. Data storage will be dramatically increased. The invention of very small computers, perhaps no bigger than the size of a microbe, will drastically increase the speed of information processing by lessening the distance between computer components. Furthermore, the energy required to operate such devices would be exceedingly small, perhaps also generated on the molecular level.

### *The Human Factor*

Despite the "gee-whiz" nature of the previously discussed technological developments of the future, we must also take into account the effect of man as a social animal with regard to these developments. The Internet is a case in point. We are still catching up with the technology in a variety of areas, such as with our social and legal traditions with regard to copyright, censorship, and other important issues. The expense of currently making the transition to a networked society, as well as the expense in developments (Science... continued on page 10)



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*Patricia Steeb and Stephen Mihalic create video on the use of the Book Dryer/Insect Exterminator*

## Lights! Cameras! ... Freezer!

by Marah deMeule, Instructor, Archives, [marahde@lib.nmsu.edu](mailto:marahde@lib.nmsu.edu)

**It's not a** conventional leading man -- weighing hundreds of pounds, unable to fit through doorways, and renowned for its ability to exterminate insects. But the Rio Grande Historical Collection (RGHC)'s Wei T'o Book Dryer/Insect Exterminator is the subject of an instructional videotape aimed at research libraries and preservation staffs. The RGHC's **Patricia Steeb** co-stars in the video, which she is helping to produce.

The Wei T'o freezer is one of over thirty such machines used at research libraries across the US and Canada. These machines are typically found in libraries which house substantial rare book and manuscript holdings, such as the Newberry, Harvard, and Stanford University libraries. Invented by **Dr. Dick Smith**, the creator of Wei T'o "Soft Spray" deacidification solution, the machine handles two distinct functions: extermination of insects and deactivation of living fungi, and freeze-drying of wet materials.

The RGHC uses the freezer routinely for extermination. Manuscript collections may be retrieved from less-than-ideal storage environments, such as barns or garages, so they are frozen on arrival to prevent any potential infestation. The freezer very rapidly lowers temperatures to below -30 F, and maintains these temperatures for the 24

hours needed to exterminate threats such as cockroaches and silverfish.

This "flash freezing" crystallizes the body fluids of insects, their larvae, eggs, and pupae. If a slower freezing process were used, their systems would have time to adapt by producing a form of anti-freeze, which allows the insects to go into dormancy. Steeb monitors the activities of the freezer throughout the three-stage cycle, including shifts in relative humidity, and the levels of air circulation. Thermocouples, or thin wire strands that sense temperature levels, are placed throughout the compartment and inside the collection materials. Displays on the control panel allow Steeb to determine if the temperatures have reached the appropriate level, even inside books or folders.

The freeze-drying function is used in response to disasters involving water damage to collection materials. In October, NMSU's Biology Department museum suffered a flood in its collection area. Many of their journals were dampened, including a number of issues printed on coated-paper stock. Patricia and other Library staff members **Tim Blevins, Marah deMeule, Jean Dickinson, Marie Garcia, Roger Steeb**, and

(Lights... continued on page 6)

## Library Offers New and Improved Article Databases

by Nancy Turner, Assistant Professor  
New Library Reference, [nturner@lib.nmsu.edu](mailto:nturner@lib.nmsu.edu)

**Electronic access** to full-text journals and newspapers is getting better all the time thanks to the addition and enhancement of two important article databases at the NMSU Library.

### *Lexis-Nexis*

This year the Library joined with a mega-consortium of almost 700 other universities and colleges in subscribing to the rich electronic database *Lexis-Nexis Academic Universe*.

Over 5,000 titles are represented in this database, strong in business and company news, health, medical, and legal information. Newspapers, journals, stock reports, the *Code of Federal Regulations*, law reviews, and broadcast transcripts are accessible through full text keyword searching.

Searching by SIC code, byline, or keyword are possibilities, as are limits by region, date, or media type. *Lexis-Nexis* provides the capability for emailing, printing, or downloading records to a disk.

*Academic Universe* is produced by the Congressional Information Service, a respected publisher of reference materials. It is provided at the discounted rate of under \$1.52 per student per year through site advertising (with tight restrictions) and the great number of participants in the academic consortia.

In addition to personal assistance provided at the Reference desks, a printed help sheet for using *Lexis-Nexis* is available in the Reference areas of both libraries. The access to full-fledged *Lexis-Nexis* is available from one workstation within each Reference department.

Access to *Lexis-Nexis* is available to University

The Library welcomes four new employees. **Joe Chavez** and **Cooky Ortiz** have joined the staff of the Administrative Office in New Library. Joe is the Records Specialist and Cooky is the Administrative Secretary II. **Jean Dickinson** is the new Assistant Collection Services Librarian in Branson Library. She received her M.L.S. degree from the University of Arizona in 1995. **Nancy Turner** has joined the New Library Reference staff as Electronic Resources Coordinator. She received her M.L.S. in 1993 from Clark Atlanta University. Nancy received recognition as New Mexico's 1998 "MCI Cybrarian of the Year."

**Marah deMeule**, Assistant Archivist, passed the admission examination for the Academy of Certified Archivists, and is now a member of the Academy.

**Molly Molloy**, Interim Head of Collection Services, was the subject of an article in the English language newspaper *The News*, published in Mexico City. Molly's web page, "Internet resources for Latin America," is one of the most heavily used sites in the world on this subject. It is on the Library's home page at <http://lib.nmsu.edu/subject/bord/laguia/>.

faculty, staff, and students. Our current license requires that *Lexis-Nexis* users be identified as a member of the campus community via computers located on the NMSU main campus or by logging on to the Internet via Aggie Access software. Help for off-campus users is available at <http://lib.nmsu.edu/resources/offcamp>.

### *ProQuest Upgrade*

Benefiting from the New Mexico State Legislature's allocation of \$400,000 towards statewide access through libraries of electronic databases, the Library will upgrade to UMI's premiere product, *ProQuest Research Library*. An easy-to-use interface provides access to over two thousand journals and popular magazines,

(Databases... continued on page 8)

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# Essay Contest Winners Visualize Library of the Future

We thank every entrant in the Library's Millennium Eagle Contest for sharing his or her vision of the future of libraries with us. Congratulations to the winners, **Kimberly Chappelle**, an NMSU student, **Jamie Bronstein**, an NMSU faculty member, and **Candice Lisle**, a member of the NMSU classified staff, who have all agreed to share their essays with the readers of *Citations*.

## The Library of the Future

by Kimberly Chappelle, NMSU Student

**Anyone who's opened** his eyes the last decade has undoubtedly seen how advanced technology has become. In a matter of seconds, any resource in the world, in any written modern and even ancient language, can be reached. Truly, the world can now say that no piece of knowledge is unreachable.

Why do we have libraries? Until the last several years, libraries were our only resource for information. Now that an unlimited amount of information is available to just about anyone, it seems libraries will soon become a relic of the old information age. Now that we've entered into the new age, libraries must adapt to the environment to survive.

(Library... continued on page 8)

## A Library is a Valuable Public Space

by Jamie Bronstein, Assistant Professor  
NMSU History Department

**Before it closed** this year, the dome of the British Library Reading Room saw generations of scholars -- **Karl Marx** among them -- pause in the midst of their study to contemplate its height, as if waiting for some kind of divine inspiration. Every afternoon at four o'clock their peace was interrupted by a small group of tourists who entered silently and were allowed to gaze for a few moments at this lovely atmosphere of painful thought.

On a spring day, the New York Public Library's steps still welcome lunchtime crowds looking for

(Space... continued on page 10)

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## The Library of the Future

by Candice Lisle, Administrative Secretary  
NMSU Center for Counseling and Student Development

**How do you envision the library of the future?** I envision the library of the future to no longer be isolated geographically and limited to the resources it can obtain. The library of the future will be connected to every library in the world with access to all the materials of each.

Text will be offered on differing formats specified to the needs of the user and the available technologies of the time, for example, DVD, CD-ROM, on-line, cassette tapes, and books. Blind and dyslexic users will have access to hand-held text player/readers which will read books to them vocally. Busy executives will be able to read books, newspapers, and magazines on-line through their laptop computers. Printout of any text such as recipes, illustrations, or articles would be obtainable. Any fees or charges would be added to the patron's on-line account or subtracted directly from their checking account through on-line billing.

*What is the most important thing that the NMSU Library can do for in the coming millennium?* Stay flexible and open to change. The NMSU Library is already flexible and using available technologies. Storage media will change and personnel will be needed to assist in the upcoming changes. Putting the Thomas Branigan Memorial Library's catalog on-line with the NMSU Library was a big step in the right direction. Lack of popular books at the NMSU Library was an issue, and that pretty much took care of that.

Obtain videotapes for circulation and in-library video players for use in research, classes, and self-improvement. Many teleconferences and classes are being videotaped, and it would be nice to have access to these. In conclusion, I see the library of the future as having unlimited resources through access to all the libraries of the world, and assisting by distributing this information to the potential user.

## Lights...

(continued from page 3)

**Cheryl Wilson** transported the volumes and prepared them for freeze-drying. During this process, fans inside the machine circulate the freezing air rapidly, moving the water vapor towards the evaporator. The super-cold (-50 to -60F) evaporator makes the water vapor condense in the form of frost. This process is a slow one, lasting for weeks or even months, depending on the quantity of materials, their composition, and the degree of saturation. But freeze-drying offers benefits which air-drying simply can not. Sublimation, which is the process of evaporation from a solid (ice) directly to a vapor, causes minimal distortion or warping of materials. The sub-zero temperatures preclude the chance of mold outbreaks.

Preparation for the videotape filming began last year, as Steeb revised and edited Dick Smith's operating manual, adapting the text into a scripted monologue. This monologue was recorded by **Helen Edgington** of NMSU's Center for Educational Development, and serves as the voice-over for the video.

Actual filming began in October. **Stephen Mihalic**, a television production aide for KRWG and senior Journalism student, set up the shoot's lighting and equipment. Mihalic and Steeb determined which "scenes" needed to be filmed to illustrate the instructions given by the voice-over. As Steeb demonstrated the procedures involved in operating freezing and drying cycles, Mihalic recorded her actions. He filmed from different angles and used multiple takes to ensure that all the steps were clearly visible.

Mihalic is currently editing the videotape footage, matching images to the voice-over. Additional footage will be recorded as needed to supplement the script. By December, the video will be complete. Its world premiere broadcast will be held at a future Library staff meeting.

## Electronic...

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bined list of 130 titles published by Academic Press. IDEAL is available through the Electronic Journals page of the library web at <http://lib.nmsu.edu/resources/scijour.html>.

This page also provides access to e-journal packages from the American Institute of Physics, the American Mathematical Society, Cambridge University Press, Institute of Physics, Oxford University Press and others. In some cases, we have electronic access to all titles from a publisher; in other cases, we can get abstracts and tables of contents for all titles, but full-text access is restricted to those titles we subscribe to in print.

Journal publishers' packages are just one mode of access to electronic subscriptions. Our electronic journals page also lists over eighty titles that we have access to based on our print subscriptions. As e-versions of a title become available, the publishers notify us and we add the link to the electronic title to our list. We currently have records for many electronic titles in our online catalog and in the coming year, we will migrate to a new system that will provide direct links to the electronic version of a journal via the web.

*Why is this so complicated?* The interconnected worlds of scholarly research, information technology, and the publishing marketplace are changing rapidly. Academic libraries face a confusing array of choices as they struggle to provide the information researchers need at affordable costs. Libraries are also working to provide access to scholarly research in more innovative ways.

In addition to electronic journal packages, the library provides access to several databases that include many full-text articles, such as *Proquest Direct* and *Lexis-Nexis Academic Universe*. The popular citation database for the sciences, *SciSearch*, now includes links to a growing number of full-text articles from Elsevier, Academic Press, and other important journals. *SciSearch* (the web interface to *Science Citation Index*) is an excellent example of the innovative work of the digital library developers at Los Alamos National Laboratory (LANL). LANL is currently negotiating with several major sci/tech publishers to add more full-text content to the database.

The NMSU Library will continue to develop its web pages into effective gateways to the fast-changing array of electronic resources.

### References:

Lee Ketcham-Van Orsdel and Kathleen Born, "E-Journals Come of Age: 38th Annual Report Periodical Price Survey 1998," *Library Journal* 123 (April 15, 1998): 40-45.

### Web addresses:

Electronic Journals  
<http://lib.nmsu.edu/resources/scijour.html>

### Article Databases

<http://lib.nmsu.edu/article.html>

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## Developments in Electronic Journals, Other Resources

by Molly Molloy, Assistant Professor  
Collection Services, [mmolloy@lib.nmsu.edu](mailto:mmolloy@lib.nmsu.edu)

**Electronic resources now** consume more than 17% of the materials budget of the Library. We will spend about \$400,000 in 1998-1999 for access to electronic products in several formats. The different types of resources are outlined below, with a few specific examples of each:

- ◆ Bibliographic/reference databases via the web -- *FirstSearch*, which includes over 60 general and subject specific databases such as *Worldcat*, *ERIC*, *Medline*, and *Econlit*. Most of the *FirstSearch* databases provide citations, abstracts, or other bibliographic information.
- ◆ Article databases via the web combining citations, abstracts, full text, full image formats -- *Proquest Direct*
- ◆ Full text databases via the web -- *Lexis-Nexis Academic Universe*, *Ethnic Newswatch* -- Full-text articles from hundreds of newspapers, magazines, and legal resources.
- ◆ CD-ROMs (networked and stand-alone, citations and abstracts, full text) -- *Psychlit*, *Biosis*, *Compact Disclosure*, *Computer Select*
- ◆ Electronic journal packages (web access to full text) -- IDEAL Academic Press Electronic Journals, American Institute of Physics Journals.

During the last year, the Library has increased the number of databases that are accessible via the World Wide Web, making it possible for NMSU students, faculty, and staff to use these products from their homes and offices. But these products are not free just because they are accessed through the Internet. On the contrary, commercial academic publishers and information vendors are taking advantage of new technologies to create and sell value-added products that may be more costly for libraries to acquire. We buy most of these electronic resources by subscription and our access is governed by detailed license agreements with publishers and vendors. We project that we will spend nearly \$250,000 on web-based information products for 1998-1999.

This shift in our budget means that we may have fewer books and journals available on the library shelves.

*What about electronic journals? Aren't they much cheaper than traditional subscriptions?* If only that were true! At the same time that we have increased the portion of our materials budget for electronic products, prices for traditional print academic journals, especially in the scientific and technical fields, continue to inflate by more than 10% each year. While there are some "electronic only" journal titles and many of these are free, the majority of e-journals of interest to academic libraries are electronic versions of print titles.

The pricing for the electronic version of a print title can vary considerably. EBSCO, a major journal subscription vendor, reported that of the 2,200 e-journal titles in its database, about half were free with the print subscription. For many others, the e-version comes with the print for a 10-20 percent surcharge. There are very few discounts for a library choosing to get only the electronic version of a title; in most cases, the electronic version is sold for the same price as the print (*Library Journal*, "Periodical Price Survey 1998," April 15, 1998).

The current marketplace for scholarly journal publishing offers a confusing array of options for access to traditional print and electronic information. One trend is for publishers to offer large packages of e-journals to library networks or consortia in which the entire electronic contents of the package are provided to all members based on pooling their various print subscriptions.

For example, we purchase access to the Academic Press IDEAL electronic journal collection through the Library Services Alliance of New Mexico, a consortium of academic and government libraries. Academic Press publishes 175 titles in all; we subscribe to eighty of those titles in paper. All Alliance members combined subscribe to about 130 of the 175 titles. In exchange for a surcharge of about 20% over the regular cost of our print subscriptions, we get a discount on our print subscriptions and electronic access to the full text of this com-

(Electronic... continued on page 6)

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## Library...

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Certainly, Internet access. Without such a resource even now, a library is incomplete and outdated. And without the Internet in the future, the library will surely lose any chance of remaining an information resource.

In nature, many species of animals learned that living together in societies promoted the well-being of all the animals in the group; instead of competing against each other, they learned to take on separate roles to promote the survival of the entire community. I believe the libraries of the future must do the same; they must network, they must join together as one unit. When libraries put their resources together, each library in the association suddenly multiplies its capabilities. The interlibrary loan system is a good starting point to begin the association.

Perhaps another way to increase the amount of written materials available to each library is for each library to specialize in a particular field. Of course, each library will house its area's own local history, general reference section, and selection of classic and staple works, but if each library focused on collecting books on a specific topic or field of study, the amount of material available to the public would heighten, too. Of course, a networking system similar to interlibrary loan would have to be set in place to make subject materials not found at one's closest library quickly available to a patron. The networking system would have to be efficient, and also accessible through the Internet, so the patron would be able to select the item he or she is looking for at his or her convenience, and get a date and place for pick-up of the materials. It would be like catalog shopping for books.

For this Internet system to work, it is imperative that as many libraries as possible join under one association to create a unified electronic card catalog system that's readily accessible to each patron. The patron would be able to access the catalog system on the World Wide Web, both at home and at each individual library's computer center.

Books do have advantages over computers. Books are portable, require no electricity, and don't induce carpal tunnel syndrome. Books only require a piece of paper to hold one's place, no electronic addresses. Books are classic, able to be enjoyed by everyone regardless of socio-economic background. In addition, books are the medium through which fiction is furnished. Fiction provides a diversion. It's interesting to read; it passes time. After all, how many of us bring along books while traveling?

This may have to be the library's "wild card." Promot-

ing new novels, displaying the New York Times' Best Sellers, can contribute to the success of the public library in the future. Plus publicizing the inventory of motivational books and self-help books could motivate patrons to visit. Giving them a personal motivation to come in (in this case, saying we have the materials you need to be successful with your life, with school, with business) would bring in more patrons to the library. Also, advertising the image of the library as a resource for information and entertainment may encourage new patrons to visit the library. The key is to erase the traditional image of the library as a boring place for studious people, and replace it with a new one that shows the library as exciting, fun, and a resource for one's personal success.

The New Mexico State University Library, as with almost all university libraries, has a particularly different demographic, students. To find what could most attract students to their own library, we can look at what attracts students to any other place. Very popular nowadays are coffeehouses, quiet, comfortable places where one can relax and read and talk. Perhaps if NMSU incorporates all the above features with soft couches, it would become a more appealing place to go.

The key to success for all businesses, and libraries too, for that matter, is building an image and meeting the patrons' expectations. Certainly, libraries will be able to meet a newer image, but instilling that image into the public will take time and money. Advertising is a crucial element to success, and will be to libraries as well. But as long as we can provide the need for libraries and the demand for the services a library provides, funding for advertising will always appear.

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## Databases...

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from *ABA Journal* to *Zymurgy*. *ProQuest* can be searched in many ways, including full-text keyword, author, publication title, and article type. Most articles are available in PDF format, retaining images, graphs, and text as they appear in the original print version. Information retrieved can be printed, electronically mailed, or downloaded to a floppy disk.

Access to *ProQuest* will be available as before, with local and remote access via the Library's web site. Go to <http://library.nmsu.edu/articles.html>. For additional information, help sheets with tips for successful searching on the many electronic resources available at the NMSU Library are available at the Reference desks (New Library and Branson), via email at [answers@lib.nmsu.edu](mailto:answers@lib.nmsu.edu), or by calling a Reference librarian at the New Library at 646-5792 or at Branson Library at 646-5971.

# Libraries in the Forefront of Technological Innovation

by Jeanette Smith, Professor, Dean's Office, [jcsmith@lib.nmsu.edu](mailto:jcsmith@lib.nmsu.edu)

**Libraries have existed** for as long as people have communicated through the written word. Over the ages, librarians have collected, organized, provided access to, and preserved information using many different technologies and many different formats, from physical to virtual. They are the specialists in the "information" component of information technology.

Libraries have always been in the forefront in adopting technological innovations to fulfill their missions. Early library collections included the clay and stone tablets of antiquity, which gave way to the more user-friendly media of papyrus, parchment, and paper. The scroll was supplanted by the codex, or book, and the printed book (still a mainstay of most library collections) replaced the handwritten manuscript after Gutenberg's movable type revolutionized popular access to printed materials. The invention of photography made possible microfilm and microfiche, which enabled libraries to store and preserve large amounts

of information in very little space.

Electronic media developed from audiovisual formats to machine-readable magnetic tape, the floppy disc, the compact disc, and on-line digital libraries. Even before the advent of electronic collections, libraries used computers to catalog and circulate their collections. Today's state-of-the-art information technology brings us the world of text and graphics on the World Wide Web, as well as recent innovations such as the portable personalized electronic book.

The concept of "library" transcends any particular format or technology. While our role is evolving from that of gatekeeper to that of webmaster, guide, teacher, and cybrarian, librarians will continue to be the acknowledged experts in collecting, organizing, providing access, and preserving information from our past, present, and future, regardless of format. Libraries are necessary for the development and preservation of Earth's civilizations and cultures, and are essential for the quantum leaps in research and knowledge that will expand our consciousness, spark our imaginations, transform our lives, and take us to the stars.

## Library Fights High Journal Costs

**The NMSU Library** recently became a founding member of the Scholarly Publishing & Academic Resource Coalition (SPARC), a newly formed alliance of libraries that aims to reduce the price of scholarly journals, ensure fair use of electronic resources, and apply new technologies to improve the process of scholarly communication. Launched with support from the membership of the Association of Research Libraries (ARL), SPARC has begun creating partnerships with publishers who are developing high-quality but economical alternatives to existing high-priced publications.

According to **Dr. Charles Townley**, Dean of the University Library, "Membership in SPARC is an important first step in encouraging alternatives to high-priced journals, the kind of competition that will bring skyrocketing journal prices back to earth. Delivery time will be shortened, and libraries will be able to offer more economical access to this perennial problem."

SPARC's initial publishing partnership with the American Chemical Society (ACS) will create three new journal titles in the next three years. The first new journal, tentatively entitled *Organic Chemistry Letters*, is slated to be available next summer. This journal will include "Articles ASAP" (As Soon As Publishable), an enhanced feature developed by the ACS for all of its peer-reviewed journals. ASAP releases journal articles on the World Wide Web as soon as they are finished, accelerating publication by two to eleven weeks over print.

SPARC has approximately 100 founding members. Its development is being guided by a steering committee chaired by **Ken Frazier**, Director of the General Library of the University of Wisconsin at Madison. In addition to ARL, SPARC's efforts are endorsed by leading academic organizations including the Association of American Universities, the Association of College and Research Libraries, the Big 12 Provosts, the Canadian Association of Research Libraries, and the National Association of State Universities and Land Grant Colleges. For more information, contact Dean Townley at 646-1508.

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## Science...

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yet to come, cannot be overlooked. Both the monetary factor and the continual refinement of technologies mean that different organizations will be at different points of development on the technological scale, based upon what time they last invested in what was then "the state of the art."

### *The Library of the Future*

What do the previous factors portend for the libraries of the future? At least for the next few generations, libraries will continue to be what they are today -- collections of information in a variety of media. Print will continue to be important, as copyright prevents the entrance of published material into the public domain for at least 50 years. User preference cannot be ignored as far as to what formats (print or a variety of digital forms of data) are commonly utilized. Expense will play a factor in the conversion of print material into electronic formats and the ability to access networked information. Consortia of libraries will become even more important, thereby allowing consortium members to buy information access "in bulk" at lower prices.

However, the continual advance in technology, as well as the community which the library serves, will make each individual library unique among its peers. The library will continue to serve the functions of providing an archive for data, as well as a nexus to access and distribute information physically and virtually, locally and globally. In my opinion, the library of the future will be more of the same, as well as so much more!

**Steve Gilheany's** WWW site is located at <http://www.ArchiveBuilders.com>.



Have you seen Info-Latinoamerica yet? Check it out at <http://lib.nmsu.edu/resources.html>.

## Space...

(continued from page 5)

a place to sit and open that brown bag -- and if there is time, to come inside and browse the latest exhibit of art or photography. The Boston Public Library is often a refuge for men and women seeking to escape the cold, turning book pages to pass the long hours before being forced back onto the streets. Libraries are filled with monumental tables, marble lions, WPA murals. They are places for people.

The libraries at New Mexico State University have neither marble lions nor domes, but they too are gathering places. Hopeful students gather in chairs at desks, highlighting textbooks and conferring over projects. Research librarians still know which heavy volume holds which arcane fact. Paperbound journals offering latest results of research still beckon the historian and the literature professor. Microfilmed newspapers still offer up their little slices of past days and weeks. The stacks still hint at the chance of finding something fascinating that one was not even looking for.

As the millennium approaches, and university libraries' budgets shrink, while publications continue to grow, those who have all but ended their own romance with the book urge libraries into an alien shape. They imagine rows of individuals staring blankly into the screens of library-based computer terminals - but what would be the point, when hypertext volumes and electronic journals are accessible from home?

In the name of community, it is time for libraries to claim back their solidity, rescuing both librarians and their patrons from being marginalized in the infinite smallness of electronic space. They must remember and cultivate their roles as grand public spaces, as sites of culture superior to any site on the World Wide Web. They must be entrepots for knowledge, drawing in both the casual learner and the committed scholar to sit and stay a while, in a comfortable chair under a pleasant light. When it is knowledge and not just information that we seek, the library should be where it may still be found.



*Jean Dickinson saves damaged books*

## Emergency Preparedness Workshop Recovers Books

by Jean Dickinson, Instructor  
Collection Services, [jedickin@lib.nmsu.edu](mailto:jedickin@lib.nmsu.edu)

The "Emergency Preparedness and Recovery Workshop" held in Santa Fe in October was a chance for me to get a memorable (and wet) start to my new job as Assistant Collection Services Librarian.

The two-day workshop, conducted by **Tom Clareson** of the AMIGOS Bibliographic Council, was co-sponsored by the New Mexico Preservation Alliance. It took place at the New Mexico State Library, a spacious new building created by the same architect as NMSU's New Library. Librarians from all over New Mexico attended.

Mr. Clareson has given this particular workshop about forty-five times throughout the country. The necessity for this kind of awareness is obvious, especially considering the latest occurrences on campus and in the Branson Library. The last time it rained heavily in Las Cruces, there was a leak onto stacks on Branson's fourth floor, and in late October, Library staff helped the Biology Department save flood-damaged books and journals, the results of a mishap in an experiment going on a floor above.

Clareson showed us many dramatic examples of what kinds of damage can happen to a library's materials, and we gave him a few examples of our own: the NMSU Library has had plenty of problems with leaks; the library in Cochiti had a roof cave in under the weight of snow one year; Mesa Public Library in Los Alamos had carpets that wrinkled under the action of their powerful swamp coolers; and people have had mud slides and rats, leaky skylights, mold, and deer mice with Hanta Virus.

We had a very wet hands-on experience saving large trash cans full of soaked books, CDs, and photographs, since variations of water damage are the most likely of disasters to occur.

Of primary importance is knowing what steps to take before an emergency happens, as Clareson pointed out to us -- what materials are available for mitigating a disaster, how to prioritize, and which emergency services in your town to turn to for help. In November, I took a tour of the Branson Library with one of the building inspectors to get a better idea of where all our potential problem areas are. In the coming months, I hope to help reinstitute the Library's "Disaster Recovery Teams," so everyone will be ready to step in and help prevent irreparable damage to our collection.

### Regular Library Hours 1999

#### Spring Semester

Sunday	12:00 noon-12:00 midnight
Monday-Thurs.	7:30 a.m.-12:00 midnight
Friday	7:30 a.m.-6:00 p.m.
Saturday	11:00 a.m.-6:00 p.m.

#### Summer Sessions

Sunday	12:00 noon-10:00 p.m.
Monday-Wed.	7:30 a.m.-10:00 p.m.
Thursday	7:30 a.m.-8:00 p.m.
Friday	7:30 a.m.-6:00 p.m.
Saturday	12:00 noon-6:00 p.m.

*Library hours are subject to change. Watch for special hours during campus breaks and finals week. During finals week, only one library may be open. The libraries are closed on University holidays. Please call 646-4749 for the current schedule.*

## Quality and Access — A Matter of Money

by Charles Townley, Dean, [ctownley@lib.nmsu.edu](mailto:ctownley@lib.nmsu.edu)

**New Mexico State University** recently learned that authors from its College of Engineering ranked second among U.S. universities in the quality of engineering publications. The prestigious Institute for Scientific Information established this ranking for New Mexico State University on the basis of its relative impact index, the number of citations by others to papers by New Mexico State University authors. The College of Engineering achieved the distinction of being one of only five institutions in the Rocky Mountain and Southwest areas to rank in the top ten of any physical or social science field. The University of Texas at Austin appeared in two fields, while the University of Arizona, University of Colorado at Boulder, and the University of Utah appeared on one each. Within the engineering fields, the highest impact for papers from NMSU was in civil engineering, electrical and electronic engineering, environmental engineering, and instrumentation.

This ranking is a major victory for publishing quality and the academic reputation of New Mexico State University. The relative impact ranking measures how frequently cited publications by NMSU authors are, not the number of articles published. The ranking is a true measure of quality, not quantity. Good work is cited by others. Poor work is not. Congratulations to Engineering for a job well done.

Quality research and teaching begin with access to high quality publications such as those written by NMSU faculty. These

quality publications announce the latest developments in science, summarize knowledge, and identify areas for future research. The NMSU Library is committed to providing user-focused knowledge and services for the campus community. We are working to improve our selection to more closely meet user needs. We are now providing a mix of printed and electronic resources that represents what we believe is the best combination of resources to achieve the University's mission. We also provide ready access to materials we do not have immediately available. And we are developing services that help our users identify and evaluate the most pertinent information and knowledge for their needs.

As we all know, quality is not cheap. Publications cost money and our library budget is comparatively small. But this year may be a time of change. Our first opportunity came in the spring when the students recommended a permanent tuition increase of \$200,000. The regents matched this with a \$300,000 grant. This has permitted us to maintain the materials budget in this academic year. Over the summer and fall, the University administration, along with support from other institutions and the New Mexico Consortium of Academic Libraries, pressed our needs at the Commission Of Higher Education. The Commission has now recommended a \$4.91 million dollar increase in the library formula statewide. If this is approved, New Mexico State University will receive almost \$1.4 million for library materials.

In the coming legislative session, we will need your support. I encourage all readers to contact their local legislators and make their views known regarding library materials. With your help, we can guarantee access to the kind of quality publications in which our world-class faculty choose to publish.

In the next issue of *Citations*: Grant awards support innovative Library projects.

Is it time to renew your annual membership in Library Associates? Call Ann Palormo at 646-5731.



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