



Wanted: Academic Chemistry Librarians at Research Institutions

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Mission of an Academic Chemistry Library

- To support chemical information research and educational needs on campus
- Methods to accomplish this mission are undergoing rapid change



Traditional Library Roles

- Select new materials
- Provide bibliographic access to materials
- Store and archive materials
- Offer reference assistance



In Transition Period

- We are now in a transition period where we must still provide traditional library collections and services
- While we are in the process of building digital libraries for the future
- Doing both at the same time is exciting, challenging, and is labor-intensive



Academic Chemistry Librarianship is a Great Niche

- Information-intensive user population
- Broad range of research areas and educational activities
- Large and complex databases
- Cutting edge interfaces
- Expensive resources



The Pipeline

- Chronic Shortage of Academic Chemistry Librarians
- Few library school students have a degree in chemistry or in any of the sciences
- Competition with industry for talent



Career Pathway for Academic Chemistry Librarians

- Reference & Instruction
- Bibliographer/Subject Specialist
- Unit Head
- Head of Science Library
- Associate Director of Public Services or Collections
- Library Director



Qualifications Needed

- Knowledge of chemical information resources
- Understand local programmatic needs
- Strong analytical and problem-solving skills
- Fund management skills



Qualifications Needed

- Advanced online searching skills
- Technical expertise in using computers
- Excellent interpersonal and communication skills
- Flexibility and ability to adapt easily to change
- Academic degree in chemistry is highly desired



Job Responsibilities: Collection Development

- Learn about research areas and educational activities within the Chemistry Department
- Collection Development Policy Statement
- RLG Conspectus Levels



Job Responsibilities: Collection Development

- Formulate budget requests
- Evaluate expenditures and reallocate as needed



Job Responsibilities: Collection Development

- Moving from ownership to leased access
- From one payment to ongoing payments
- We are in the process of reselecting our collections
 - Multiple versions available
 - Most abstracts and indexes now electronic
 - Reference items and books becoming available electronically
 - Journals
 - Moving from print to digital and from “Just in Case” to “Just in Time”
 - Print versions will soon be a luxury
 - Digital access to all years of core journals



Job Responsibilities: Collection Development

- Use traditional selection methods of publishers ads, catalogs, and approval plans
- Digital selection methods for content are serendipitous and include such things as:
 - Listservs postings, news announcements, articles, meta-sites
 - Discover while surfing the web
 - Use NetMind
 - Check web pages of peer institutions and professional organizations
- More collaboration is needed



Job Responsibilities: Licenses and Contracts

- Large new overhead cost for libraries
- Definition of a site
- “Base dollars” based on previous expenditures
- No cancellation clauses
- Embargoes on content
- Remote/proxy access limitations
- No or poor management reports
- Unrealistic timeframes for contract changes



Job Responsibilities: Acquisitions

- Orders, tracking, and receiving process is different for print and electronic resources. Many exceptions exist for electronic resources. Public services librarians are helping to devise workflows.
- Vendors Have Not Kept Pace With Changes. Going Direct to Publishers Has Higher Overhead Cost.
- Implementation of Integrated Library Systems (Acquisitions, Cataloging, Serials, Circulation) and providing bibliographic access to digital resources compete for staff time.



Job Responsibilities: Acquisitions

■ New Challenges

- Orders, tracking, and receiving process is different for print and electronic resources. Many exceptions exist for electronic resources. Public services librarians are helping to devise new workflows.



Job Responsibilities: Cataloging

- While well-established methods exist for cataloging print resources, practices vary for e-resources
 - Full, partial, no cataloging
 - Web pages that are produced manually or database/OPAC driven
 - Area that was once the responsibility of technical services staff has fallen to public services staff such as Chemistry Librarians



Job Responsibilities: Storing & Archiving Materials

- Information Explosion
- Library Stacks are Saturated
- Preservation Needed for Older/Heavily Used Materials
- Libraries Traditionally Archived Materials
 - Digital Versions With Lease-only Access Pose Threat to this Paradigm
 - LOCKSS Project (Decentralized Archiving Model)
<http://lockss.stanford.edu/>



Job Responsibilities: Services

- Circulation & Reserves
 - "My Circulation"
- Reference
 - In person or via email
 - Virtual assistance
- Document Delivery
 - End-user initiated
 - Staff verifies requests, chooses supplier



Job Responsibilities: Services

- Users search online sources themselves
- Librarians train, consult, and do complex searches
- Promotion and training aids needed from producers
- Many users lack information literacy skills
 - More difficult now that resources are digital
 - Attitude: only have enough time to consult online resources
 - More e-seminars and web guides need to be developed by librarians to help users acquire needed skills when they have the need to know



Job Responsibilities: Online Searching

- Increasingly Intuitive But Many Revised Annually
- Many Different Interfaces
- Seamless Interfaces
- Full-Text Searching
- 2D/3D Structure Searching
- Reaction Searching
- Numeric Data Searching
- Post-Search Processing
- Exporting Results
- Alerts



Job Responsibilities: Online Searching

- The Next Wave: Intelligent Search Interfaces and Personal Information Agents
- Evolution of Web Sites to Portals
- The Real Challenge Will Be for Libraries to Build Interfaces to Deal With Many Different Types of Resources



Career Path

- How I became an academic chemistry librarian