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PRESIDENT'S COLUMN

Kay G. Johnson

The 2010 Annual GSIS Meeting in Denver began on October 30 with the ever popular and successful Geoscience Librarianship 101. Thanks go to the coordinator Clara McLeod for her hard work and to presenters Lisa Dunn, Adonna Fleming, Lura Joseph, and Linda Zellmer. The class was full with 46 attendees, who appreciated the content and cost (free) of the class. The meeting culminated with the Technical Session "Geoscience Information Services: "Peak" Performances," on Tuesday, November 2. Janet Dombrowski, Topical Session Convener, led the effort to put together an outstanding group of presenters covering diverse topics from geospatial data projects to science library training and outreach. Janet not only convened the session, but also is our newsletter editor and web site manager. And she does a terrific job with all three! Thank you, Janet!

The experimental Professional Issues Round Table on Monday turned out to be more

popular than Jan Heagy and I imagined, with very active table discussions requiring no facilitation on our part. Many thanks go to the Geological Society of London for sponsoring the Round Table. Follow-up on the sessions will be forthcoming either in a future *GSIS Newsletter* or on the GSIS web site.

Judie Triplehorn and her International Initiatives Committee raised over \$500 at the silent auction. Other volunteers who made the reception a success are the chairs of the awards committees: Best Paper Award Committee Chair, Carol La Russa; Best Reference Work Award Committee Chair, Angelique Jenks-Brown; Distinguished Service Award Chair, Patricia Yocum; and Best Guidebook Award Subcommittee Chair, Erin Palmer. Jim O'Donnell provided the awards certificates.

It takes a lot of volunteers to put together a meeting of this magnitude. Secretary Elaine Adams took detailed minutes for the Executive Board and Business Meetings. April Love stepped in for Chair, Darin Buri,

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(President's Column continued from page 1)

to manage the GSIS Exhibits. Shaun Hardy's publicity was an important contribution to the success of Geoscience Librarianship 101.

Lura Joseph, Guidebooks Committee Chair, brought the committee's ideas for improving and expanding access to guidebooks to the Business Meeting. Rusty Kimball, Nominating Committee Chair, is following up on ideas to provide electronic elections.

In addition to everyone above, Dr. Logan Ivy also deserves thanks for leading an interesting tour of the Vertebrate Paleontology storage and lab area at the Denver Museum of Nature and Science.

Congratulations and thanks goes out to Cynthia Prosser, the new GSIS Secretary, and Lisa Johnson, the new GSIS Vice-President. Lisa not only gave a terrific topical session presentation on the Minnesota Geological Survey Institutional Repository, but she is already finding sponsors for next year's meeting. Lisa and Cynthia bring welcome energy and creativity to their positions.

A special thank you goes to our retiring officers, Rusty Kimball, recent Past President; Jan Heagy, recent President; and Elaine Adams, recent Secretary. All of them have gone beyond their officer duties to fulfill other roles in GSIS. Jan is a tough act to follow as GSIS President. She did a wonderful job leading the meetings and mentoring me. Another retiring person, in the most literal of definitions, is Carolyn Laffoon, who is retiring from Purdue and from hosting the Geonet list in May. Carolyn is a longtime, invaluable member of GSIS and we will miss her. If you want to host and moderate Geonet, please get in touch with me.

Now that we're looking forward to 2011, I will be consulting with Jan on committee appointments and contacting people. The board and committees will follow up on ideas raised during the GSIS Meeting. Some of the exciting upcoming initiatives discussed during the meeting include experimenting with webinars, reaching out to international constituents, and forging stronger relationships with other geoscience groups. The Denver meeting began a synergy between GSIS members and members of the GSA Geoinformatics Division.

The best part of conferences is networking and socializing with our colleagues. I had a wonderful time getting to know people at the conference and learning about the biggest challenges and rewards in geoscience librarianship. Thanks to all of you for making the Geoscience Information Society an outstanding organization on so many levels.

VICE PRESIDENT'S COLUMN

Lisa Johnston

Hi GSIS Members

As Kay mentions, we had a very successful conference this year in Denver! I am looking forward to planning next year's activities and we are well on our way for GSA 2011 right here in my home town, Minneapolis, MN October 8-13. Next year's theme is "The Past is the Key to the Future," a fitting theme for those of us in the library profession who have watched the recent rise in interest of digital preservation and data management issues, like the new NSF requirements (outlined by ARL at <http://www.arl.org/rtl/eresearch/escien/nsf/>). As we look toward next year, several key things were highlighted at GSA in Denver to help in our conference planning for 2011. First, Rusty Kimball, our victorious Past President, has stepped up to take on the role of Technical Session Convener and

Proceedings Editor for 2011. As a past convener, I look forward to working closely with Rusty and sharing our GSIS experiences. Next, I spoke with many potential sponsors in the exhibit hall and plan to raise funds this year to provide a forum for sponsors to share their news in a Vendor Update and Collection Development Forum. Also, we had such great feedback from this year, we will continue the Professional Issues Roundtable in Minneapolis and there will be a chance for you to submit ideas for table topics as we get closer to next October. Finally, there was a shared desire for collaboration and partnership with the Geoinformatics Division. Next year we hope to bring together our shared expertise on the topic of data curation and preservation in a technical session or short course.

I welcome the input and assistance from any interested members to serve on a Conference Planning Committee for 2011. Please contact Kay and myself by email ASAP.

Lisa Johnston
Vice President (President-Elect)
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IMMEDIATE PAST PRESIDENT'S COLUMN

Jan Heagy

It is hard to believe that my tenure as GSIS President has come to a close. I really enjoyed working with the Executive Board, Committee Chairs, and other GSIS volunteers. I am delighted to continue on as Past-President.

Our new Executive Board is ready to begin work and I know that 2011 will be a great year for our organization. The GSIS Professional Issues Round Table at the Denver annual convention generated a lot of great ideas and enthusiastic responses to our call for member participation in the coming year.

As Past President I will be chairing the Nominating Committee. I need two committee members. I am also seeking nominations for Vice President, President-Elect and Treasurer for our 2011 election. If you have an interest in this committee, or if you have suggestions for nominations, please let me know. My e-mail address is: jan.heagy@exxonmobil.com.

Let's get ready for a wonderful 2011!!

2011 GSIS Executive Board



From left: Kay Johnson, incoming President; Elaine Adams, outgoing Secretary; Jan Heagy, Immediate Past President; Rusty Kimball, outgoing Immediate Past President; Janet Dombrowski, Newsletter Editor; Lisa Johnston, Vice President/President-Elect; Cynthia Prosser, incoming Secretary. Not present: Angelique Jenks-Brown, Treasurer.

(All photos by Shaun Hardy unless otherwise noted.)

**2010 GEOSCIENCE INFORMATION
SOCIETY
ANNUAL BUSINESS MEETING
Sunday, October 31, 9:30AM – 12:30 PM,
Hyatt Colorado Convention Center,
Capitol Ballroom 1**

The meeting was called to order at 9:35am by Jan Heagy, President.

I. Introduction of Executive Board: Heagy introduced the incoming and outgoing association officers:

- Vice-President, President Elect 2010
(Kay Johnson)
- Vice-President, President Elect 2011
(Lisa Johnston)
- Secretary 2010 (Elaine Adams)
- Secretary Elect 2011 (Cynthia Prosser)
- Treasurer (Angelique Jenks-Brown)
- Immediate Past President (Rusty
Kimball)
- Newsletter Editor (Janet Dombrowski)
- Publications Manager (Ellie Clement)

II. Welcome and general introductions
(All): After welcoming remarks by Heagy, members in attendance introduced themselves.

III. Approvals :
The 2010 Business Meeting agenda was approved without change. The minutes of the 2009 Business Meeting were approved without change



President Jan Heagy chaired the GSIS Business Meeting on Sunday morning.

IV. Reports

GSIS General: How many people had the kind of year they anticipated in January? The majority of members had changes in plans, adaptations and adjustments to new conditions, and the acquisition of new responsibilities. Heagy noted that even with all the workplace changes, there are lots of opportunities to participate in GSIS and urged members to participate in any way you can. The organization had lots of empty committee chair positions this year. Heagy encouraged members to indicate committee assignment interest on the signup sheets at each table noting that involvement is the best way to network and get full benefits from our organization.

Treasurer's report: Jenks-Brown was unable to attend the conference to give her report, but her report appears in the *GSIS Newsletter*.

Archives: Anne Huber was also not able to be here, but noted that her report was published in the last *GSIS Newsletter*.

Exhibits: Committee members Donna Dirlam and April Love will be putting up the GSIS

booth. Please sign up for booth time during tonight's reception in the Exhibit Hall. We have volunteers from the local area to cover the booth during GSIS events.

Membership: Heagy noted that there was no Committee Chair this year and thanked the Secretary for helping out with membership issues.

Best Paper Award: Carol La Russa announced the award winner: Linda R. Musser for her paper "Progress in Citation of Geoscience Data" which appeared in the *GSIS Proceedings*, v. 39, 2010, p.55-58.

Best Reference Work: Heagy will be presenting the award on behalf of the Committee at reception. The Mary B. Ansari Best Reference Work Award for 2010 goes to S. Ross Taylor and Scott McLennan for *Planetary Crusts: Their Composition, Origin and Evolution*. Cambridge University Press, 2009.

Distinguished Service Award: Sharon Tahirkheli will present the award on behalf of Committee Chair Patricia Yocum. The 2010 Mary B. Ansari Distinguished Service Award goes to Julie Hallmark, Professor Emeritus, University of Texas.

Award Certificates: Jim O'Donnell noted that he still needs signatures on some certificates. He will be contacting the appropriate parties.

Guidebooks: Lura Joseph will be presenting the award on behalf of the subcommittee. This year's winner is Southworth, Scott; Brezinski, D. K.; Orndorff, R.C.; Repetski, J.E.; and Denenny, D.M. *Geology of the Chesapeake and Ohio Canal National Historical Park and Potomac River corridor, District of Columbia, Maryland, West Virginia, and Virginia* U.S. Geological Survey Professional Paper 1691, 2008.

Joseph also reported on ideas the Guidebooks Committee developed for making more of a presence on the GSIS web site, e.g. links for finding guidebooks, links to criteria for the award and how to nominate. This topic will be further discussed under New Business.

Information Resources: There was no Committee Chair this year and no report.

Nominating: Kimball reported sending out 100 ballots and receiving 50 back. This topic will be discussed further under New Business.

Preservation: No Committee Chair.

International Initiatives: Judie Triplehorn reported that she sent out information to 41 international organizations but received no responses. Libraries in foreign countries are not held in high regard right now. She noted that last year's winner got a visa but no funding to attend the conference. If you have items for the Silent Auction fundraiser, please give them to Judie or the other International Initiatives Committee members Dorothy McGarry and Dena Hanson.

Web Site: Janet Dombrowski described how she worked with a library school student to redesign the GSIS web site. The student came up with the redesign template and Janet is now looking at how to put up our content within new framework.

Publications: *GSIS Newsletter* Reviews editor Carol La Russa asked members for recommendations of publications for review, especially grey literature items. *GSIS Newsletter* Editor Janet Dombrowski asked for more member news contributions, especially news about changing responsibilities, job moves, etc. Although many newsletters are changing to a single column formation, the *GSIS Newsletter* will

maintain the double column format. Jody Foote reported that publication of the 2009 *Proceedings* is in progress and hopes they'll out in time to be in your holiday stocking.

Geonet Moderator: Carolyn Laffoon announced that she will be retiring in May, 2011 and asked for someone to take on the list moderator role.

Topical Session report: Our sponsored topical session will be Tuesday morning (November 2) at 8 am. There were a good number of paper submissions and the final session roster includes papers from outside GSIS. Information resources featured in some papers will be published in the *GSIS Newsletter*.

Publicity: Shaun Hardy has handled publicity for Geoscience 101 for five years now and would like to swap with someone else. It's not a hard job, basically sending out press releases, contacting library schools in the meeting area, taking pictures, and sending out follow up press releases. During the meeting Adonna Fleming agreed to take on publicity if Hardy would remain as photographer.

Geoscience Librarianship 101: Clara McLeod reported on the 6th workshop held Saturday, October 30th. There were 46 registered attendees including four students and one recent graduate. Evaluations indicate that providing the workshop is a valuable service and students felt encouraged to look into geosciences librarianship. The workshop added Adonna Fleming, who was instrumental in getting GL 101 started, as an instructor this year in addition to Lisa Dunn, Lura Joseph, and Linda Zellmer. McLeod also thanked Shaun Hardy for publicity and Lisa Dunn for local arrangements.

CUAC meeting: McLeod reported that the CUAC (Cartographic Users Advisory

Council) meeting was held in June this year and hosted by George Mason University-Arlington, Virginia. The program included speakers from 11 agencies, including 2 speakers from the USGS. Presentations focused on matters concerning maps (printed and digital), data archiving and delivery. A full report will appear in the *GSIS Newsletter* and be distributed on Geonet when the minutes are finalized.

Conference updates: Kay Johnson announced that a few tickets are still available for the GSIS luncheon and that ten people have signed up for the Wednesday field trip to the Denver Museum of Nature and Science. Those wishing to travel to the Museum in a group should meet in the lobby of Grand Hyatt. Admission to the museum is \$11 and bus fare is \$2 each way.

V. Old Business: our old business is New Business of how to invigorate the organization.

VI. New Business:

Guidebooks: The University of New Hampshire is digitizing the guidebooks for the New England Intercollegiate Geological Conference. The NEIGC has noticed a drop-off in sales of guidebooks after the meeting. Is it libraries who have stopped buying or individuals? Noga suggested that purchasing information is hard to find. Joseph commented that many institutions have problems with buying from small vendors. Mary Scott would like to see links created to online guidebooks. Noga would like to see better information about forthcoming guidebooks and suggested posting the information on Geonet. Joseph suggested funneling new and forthcoming guidebook information to her for posting on Geonet and announcing in the *GSIS Newsletter* with purchase information. Referring back to the

earlier report about ideas for improving the guidebook information on the GSIS web site, it was suggested that the Guidebook Committee post the list of ideas on the GSIS web site and request feedback.

Nominating: Kimball noted the work involved in sending out paper ballots for GSIS elections and asked if the group would consider going to electronic balloting using software such as Survey Monkey. Discussion considered various software packages that could be used, possible roadblocks such as needing a subscription to the survey software, and whether the GSIS bylaws would need to be changed provide for electronic voting. Heagy volunteered to review the bylaws and report back to the group.

Ocean Drilling Program: Kimball is the liaison to Texas A&M's Integrated Ocean Drilling Program. Administrators of the program are discussing digitizing back to day one. Currently the program is producing content on DVDs. Are people using the DVDs? Kimball will send out a survey.

International Initiatives: Committee members will gather Monday at 9 am. at the GSIS booth in the Exhibit Hall then move to another location for their meeting.

2011 Topical Session: Dombrowski called attention to the need for a convener for the topical session in Minneapolis. Kimball volunteered.

2011 GSIS Conference in Minneapolis: Lisa Johnston briefed us on plans for next year's conference. The conference will be held October 9-12. GSA's conference theme for next year is "The Past is the Key to the Future." Are we interested in developing a short course on data management with the GSA Geoinformatics Division? Johnston has ideas for specifics within course. Anyone

interested in participating in planning please contact Johnston. She's been developing a workshop at her institution on data management. Huffine commented that he and Mary Scott had attended a Geoinformatics Division session yesterday and see a definite opportunity for collaboration with that group. He suggested co-sponsoring a reception next year as a first step since this year our two receptions are held concurrently and there is not a good opportunity for cross over. Huffine also suggested that GSIS members who are also GSA members consider joining the Geoinformatics Division. Dombrowski pointed out the Geoinformatics session this afternoon from 1:30-3 pm on data preservation. Huffine noted that members of Geoinformatics seem to be geologists who've been conscripted to be computer scientists or rather, subject specialists with computer expertise. It is definitely a computer science based conversation. However, he sees cross pollination opportunities with GSIS in the development of thesauri and ontologies.

WebEx meeting: Heagy, looking for more ways for members to participate in a meaningful way and to make GSIS more accessible for those who cannot attend the annual conference, proposed offering a WebEx session on information resources and how different institutions are dealing with vendor moves in pricing and services. Huffine commented that a possible journal article could be coupled with a WebEx session. Joseph suggested sending out Geonet message to gauge interest in such a session before investing the time and energy to organize it.

National Library for Geosciences: Huffine reported that the USGS is forwarding a proposal to make the USGS Library a National Library for Geosciences. The proposal requests no appropriation, so there would be no budget. However, content

authorizations similar to those of the National Library of Medicine would be set-up. The proposal has support from ALA, AGI, and GSA. USGS is trying to show why they need legislative authorities and what can be done with them, and how our nation is being poorly served by having a bureau library rather than a national library.

Huffine observed that recent reorganizations within the USGS were positive overall for the library. The library has been redefined within bureau and where it had been operated by regional directors now it has been brought back under a national library director in support of research. This move in effect raised the library two levels within USGS. By 2012 Huffine expects that the library budget will be defined as separate item in the overall USGS budget.

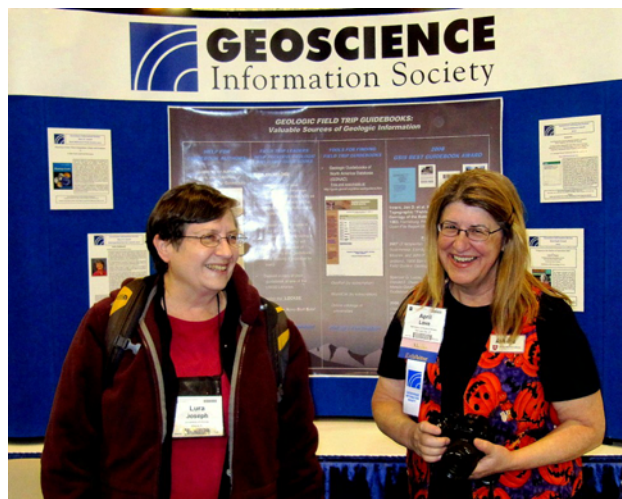
Digitization: Joseph, who did a major study (2006) on the quality of graphics in 35 digitized Elsevier earth and planetary titles, stated that the publisher has said they have finished the rescanning project to upgrade images in the ScienceDirect backfiles. Joseph did another study and confirms that the rescanning has improved the graphics especially photos. However, the bad news is that Elsevier rescanned materials published in 1994 and earlier. Born digital didn't start until 1999 or so, so graphics in journals published 1994-98 are still as bad as ever. Also, the algorithm to find bad graphics didn't really find line graphs, so print backup is still needed.

Committee size: Noga asked what is the size of committees these days? He remembers some discussion from a previous meeting. Heagy answered that membership had agreed on three to a committee unless there was a need for more such as for the Guidebook Committee. However, she noted that some committees this year had zero.

Support for conference attendance: Hardy asked if the Executive Board had discussed support for conference attendance. He thinks that hundreds of dollars in conference attendance support could be an incentive for new members. Heagy would like an ad hoc committee to study how to sponsor student attendance in meaningful way, although it may mean limiting eligibility to students within the region of the meeting. Suggestions ranged from finding vendors who would underwrite sponsorship to tying financial support to time support to man exhibit booth or other support activities.

Pacific Section: Connie Manson announced that the Pacific Section will be meeting following the conclusion of the business meeting downstairs in the hotel's restaurant.

VII. Adjournment: Heagy thanked everyone for their participation. Jim O'Donnell made the motion to adjourn, Noga seconded, and the motion carried. The meeting was adjourned at 11:30 am.



Members Lura Joseph and April Love chat at the GIS exhibit booth.

GSIS-GSA Technical Session Report

By Janet Dombrowski

2010 Technical Session Coordinator

This year's session, "Geoscience Information Services: "Peak" Performances," garnered good attendance by GSIS members and other GSA attendees. Thank you to everyone who contributed to our paper and poster sessions at the conference. Abstracts are posted at http://gsa.confex.com/gsa/2010AM/finalprogram/session_26089.htm.

Guest speakers included Lee Allison, Arizona Geological Survey; Lisa Ballagh, National Snow and Ice Data Center; and Lina Ma, Oregon Department of Geology and Mineral Industries. Allison described the Arizona Survey's role in deploying the National Geothermal Data System. Ballagh described mapping approaches used to demonstrate data to various audiences. Ma described the six year project collecting and describing the best available geologic data to build a statewide map.

GSIS members presented on geoscience database comparisons (Linda Zellmer); the USGS Publications Warehouse (Richard Huffine); the hosting of State Survey publications by an Institutional Repository (Lisa Johnston); the quality and accessibility of supplementary materials in geoscience



Timekeeper Rusty Kimball and Convener Janet Dombrowski kept the session on track.

WELCOME NEW MEMBERS!

Kathryn Lage

University of Colorado,
Boulder

Kevin Lindstrom

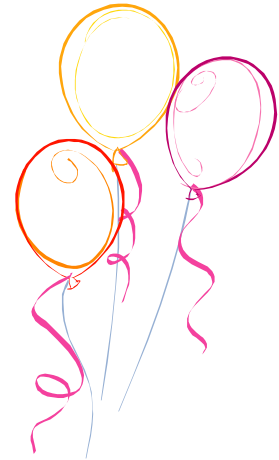
University of British
Columbia, Vancouver,
Canada

Patricia Roncevich

Barco Law Library,
University of Pittsburgh

Emily C. Wild

USGS, Denver



Returning member:

Gordon S. (Pete) Banholzer

NASA Goddard Space Flight Center

journals (Nancy Sprague); and image quality in geology publications in the HathiTrust Digital Library (Scott McEathron). Talks focusing on geoscience librarians and libraries included the librarians' role in development of GIS metadata for geospatial data portals (Adonna Fleming); results from a survey to determine characteristics of a geoscience libraries and related technology/ user-driven strategies (Lisa Dunn); and training and outreach efforts by the USGS Library in Denver (Emily Wild).

Maxine Schmidt of the University of Massachusetts' Science and Engineering Library wrapped up the session by relating her library's experiences in educating librarians without a science background in e-Science. Of particular interest was the description of the "Science Boot Camp for Librarians" they developed.

GSIS RECEPTION AND AWARDS

The reception was well attended by GSIS members, prospective members, awardees, and speakers. It was a fine opportunity to network and make new friends.



Vice President Kay Johnson shows off her donation—a photograph of the New River Valley.



Miriam Kennard at the buffet table.



Carol La Russa accepts the Best Paper Award on behalf of Linda R. Musser from President Jan Heagy for Musser's article, "Progress in the Citation of Geoscience Data," which was published in volume 39 of *Proceedings of the Geoscience Information Society*.



Jim O'Donnell catches up with colleagues at the Reception.



Louise Deis and Judie Triplehorn register donated items for the Silent Auction.



Jim O'Donnell presents the Best Website Award to Dr. Andrew Smith, Natural History Museum of London, for the Echinoid Directory. url: <http://www.nhm.ac.uk/research-curation/research/projects/echinoid-directory/>.



Jan Heagy presents the Best Reference Award to Susan Francis of Cambridge University Press, accepting on the behalf of S. Ross Taylor and Scott McLennan, authors of "Planetary Crusts: Their Composition, Origin and Evolution."



Lura Joseph presents the Best Guidebook Award to Scott Southworth for *Geology of the Chesapeake and Ohio Canal National Historical Park and Potomac River Corridor, District of Columbia, Maryland, West Virginia, and Virginia*. Co-authored by D. K. Brezinski, R.C. Orndorff, J.E. Repetski., and D.M. Denenny and published as U.S. Geological Survey Professional Paper 1691, 2008. Available online at <http://pubs.usgs.gov/pp/1691/>.



Dorothy McGarry peruses items at the Silent Auction.

Awards continue on next page.

**Julie Hallmark,
2010 Distinguished Service Awardee**

**Remarks by Miriam Kennard at the GSIS
Award Luncheon**

Denver, November 1, 2010

Julie Hallmark was unable to attend. Miriam Kennard, University of North Carolina, accepted the award on Julie's behalf and offered the following remarks.

I'm sorry Julie is unable to be here to accept this award. I am honored to accept on her behalf.

I first met Julie 30 years ago in 1980, when I attended my first GSIS meeting. At that time, Julie was Past President of the Society. I got to know her well over the years, from the papers she presented, her active participation in discussions, and our overlapping service on the GeoRef Advisory Board Committee of AGI, which met twice a year. I was on that committee with Julie for 6 years; she served on it many more years.

We often shared a room together at meetings.

She was one of the original members of GSIS back in the mid 1960's. When I roomed with Julie in 2005, it was her 40th year as a member of GSIS.

The things that stand out to me about Julie are her tremendous enthusiasm for the profession and field of geoscience information. She presented many papers at our meetings, authored many others, and received two GSIS Best Paper Awards. Much of her interest was in scholarly communication -- how geologists learn about publications, use the literature and communicate. One of her early papers dealt with how to improve the GeoRef database and make it more useful and user friendly.



Sharon Tahirkheli presents the Ansari Distinguished Service Award to Miriam Kennard, accepting on behalf of Awardee Julie Hallmark.

She also had a keen interest in international issues and worked to foster communication and cooperation among international geoscience librarians and information professionals.

There was also, of course, her mentoring of students over the years. As a professor of Information Science at the School of Information at the University of Texas, Austin, she taught science information courses and actively promoted the geosciences to her students. I can think of two of her students, Steve Hiller and Jan Heagy, who became active in GSIS.

Julie is very sorry she couldn't be at our meeting to accept the award in person. I'd like to read from some emails which convey her thoughts on receiving the Ansari Distinguished Service Award.

Monday July 19, 2010

Dear Patricia,

I am thrilled and delighted by this honor. Thank you so very much.

Decades ago, I was hired by Southern Methodist University to work for the Southwest Center for Advanced Studies (now UT Dallas) as their science librarian. At that time the Center had no information services so we used a delivery service to transport books and articles to the Center each day. As a former chemist, I knew nothing whatsoever about geology so I figured I'd better get with it! I started taking classes at SMU and soon fell in love with the discipline. I was hooked! We also learned practical tips for field trips such as "If you're climbing up a steep escarpment, be sure to toss up a stone or two before reaching the top."

Over the years I met so many wonderful friends and colleagues, participating in projects such as the Union List of Field Trip Guidebooks and the Proceedings. I miss you all and would so love to join the gang at the Denver conference.

Julie

Wednesday, October 13, 2010

*Dear Miriam,
How I wish I could be there in person to receive this prestigious award! I'm still walking on air. Please give all my friends in GSIS my very best regards and love.*

*All the best,
Julie*

Friday, October 15, 2010

*Dear Miriam,
I received my wonderful little plaque and am so delighted to have it! I've installed it in a place where everyone who visits me will immediately see it. I'm still so thrilled with this honor and wish so much I could be with all of you at the GSIS conference.*

*Very best wishes,
Julie*

I think it is clear how excited Julie is to receive this prestigious award. Congratulations and best wishes to her!

LITERATURE REVIEWS



Carol J. La Russa

Butkovich, Nancy J. (2010). How Much Space Does a Library Need? Justifying Collections Space in an Electronic Age. *Issues in Science and Technology Librarianship*, no. 62. <http://www.istl.org/10-summer/refereed1.html>.

Butkovich describes a study done as a result of plans at her institution (The Pennsylvania State University) to merge the Physical Science Library and the Mathematics Library with a resulting loss of space for collections. Eberly College of Science administrators believed that a five year collection would be adequate because all needed resources are online. The Mathematics Department faculty disagreed with this assessment. To shed some light on this situation the author conducted a study of astronomy, chemistry, mathematics, physics, and statistics faculty publications. Each faculty member's name was searched in Web of Science and the three most recent publications were selected. Two sample years (2002 and 2007) were studied. Cited references from these publications were exported into Excel and their publication dates were converted to ages. Cumulative percentages were totaled until they reached 70%, 80%, and 90% for each department. The age at which 70% of the citations were covered ranged from eight years for the 2002 astronomy publications to twenty-five years for the 2007 mathematics publications. For the 90% target the ages ranged from twenty years for 2002 and 2007 astronomy publications to forty-five years for 2007 mathematics publications. Citation data demonstrated that, contrary to College of of

(Continued on page 16)

REMEMBERING BARBARA HANER

Friends, family, and colleagues gathered on December 5, 2010 in the Container Garden of the Rancho Santa Ana Botanical Gardens, Claremont, California to remember, honor, and celebrate the life of Barbara Elizabeth Haner (September 19, 1942 – November 19, 2010). During the service, led by long time family friend Reverend Rachel Nyback, those gathered shared their memories of the energetic, cheerful and courageous woman who, as her husband remarked, remained a British citizen to the end.

We first met Barbara when she became UCLA's Earth, Space, and Atmospheric Sciences Librarian in 1995, following a seven-year tenure at UC Riverside as a Science Reference Librarian in the Physical Sciences Library. As soon as she arrived at UCLA, Barbara began familiarizing herself with the faculty in her departments and their research and instructional specialties. She followed up her paper and internet investigations with personal visits to each faculty member in his or her office, forging close and mutually supportive relations that served her well until her retirement in 2002. She reinforced these collegial ties to the department by attending the various Earth and Space Sciences and Institute for Geophysics and Planetary Physics seminars and providing feedback and advice on additional resources to graduate students practicing their first professional presentations. In addition to developing and managing collections in her disciplines, she taught classes and served on the reference desk at the Science and Engineering Library. She developed a web site on mines and mining resources in Southern California that became very popular with on and off-campus mining enthusiasts!

Professionally, Barbara was very involved with the Geoscience Information Society.



(Photo by Martin Hewitt.)

In 1994, she planned the annual GIS¹ meeting in Seattle, while serving as Vice-President/President Elect. The Symposium topic was “Changing Gateways: the Impact of Technology on Geoscience Information Exchange.” She was also on the International Relations Committee, Best Reference Book Committee, and Sixth Union List of Geological Guidebooks Committee, as well as serving as the Society's first Press Officer. She was also active in the Western Association of Map Libraries, serving as a Geological Editor and member of the Publications Committee.

Barbara published extensively, with focus on the information seeking and citation behaviors of geology faculty and students, as

¹ The original abbreviation for the Geoscience Information Society, GIS, was amended to GISIS during the 2002 Annual Business Meeting to avoid confusion with geographic information systems.

well as botanical and, most recently, genealogical topics. Her paper, "Guidebook Citation Patterns in the Geological Journal Literature: a comparison between 1985 and 1967," won the 1991 GIS Best Paper Award. Her paper, "Morphology and Sediments of Redondo Submarine Fan, Southern California," which appeared in the September 1971 issue of the *Geological Society of America Bulletin*, was considered a major advance in the field, noted for showing how her data from the modern Redondo submarine fan could be matched with that gleaned from ancient turbidites.

In April 2002, Barbara retired from UCLA. In preparation for her retirement, Barbara completely revised her collection development policy statements. Her revised policy statements assisted the Head of Collection Development in making collection management decisions during 2003-04 and served as an invaluable training document for her replacement. The policy statements include information on the extent to which Geology and EMS collect materials by topic, on cooperative collection policies with other UC's, and on the research and teaching interests of each faculty member in the departments. The announcement of her retirement in the USC Geology Alumni Newsletter included her best guess that: "*I expect to be in Herefordshire, England in a black and white framed sixteenth cottage in the village of Pencombe for six months of the year. We will be in the USA for the rest of the time but expect to be traveling as my husband Dave (also a USC alum), retired from teaching at Cal Poly Pomona, still does consulting for JPL including research on Hawaii.*" During her months in England, she pursued her interest in genealogy and local history, participating in the Bromyard & District Local History Society, and contributing to GENUKI, United Kingdom and Ireland Genealogy. While stateside, she

spent time with her children and grandchildren in northern California. As she anticipated, Barbara and Dave travelled widely, including visits to Machu Picchu and Tasmania.

Barbara is survived by her husband of 44 years, David Haner, and their daughters Michelle Haner and Suzanne Scherzinger, and their families.

Elaine Adams and Anita Colby, UCLA

(Literature Reviews continued from page 14)

administration beliefs, a five-year collection would contain less than 50% of the cited references for all subjects, and for mathematics it would contain less than 23%. The data plus local politics resulted in astronomy, astrophysics, chemistry, and physics being allocated space for about twenty years of onsite collections. Mathematics and statistics were allocated space for forty years.

Winterman, Brian and J.B. Hill. (2010). Continued Viability: A Review of the Life Sciences Library at Indiana University in a Time of Institutional Change and Proposed Branch Library Downsizing. *Science & Technology Libraries*, 29(3), 200-215.

Winterman and Hill begin with a short history of academic branch libraries. Departmental branch libraries were common by the 1880s and 1890s. In 1983 Association of Research Libraries members averaged 10.72 branches per system. Between 1940 and 1980 the trend was fewer branch and departmental libraries and more centralized science libraries. The advantages of branch libraries relate to their physical proximity to the departments they serve. The advantages

of more centralized libraries have been better funding, greater facility control, larger and more comprehensive collections, longer hours, and efficiencies due to less duplication collections and staffing.

The authors describe the situation of branch libraries at Indiana University. Currently there are 25 libraries that are mostly located in the buildings of the departments they serve. The Indiana University has been rethinking library services and facilities to adapt to the digital age and questioning the necessity to have materials located near researchers. Many print materials have been placed in remote storage and libraries have moved to a delivery model. Anecdotal evidence suggests faculty and graduate students are not physically using libraries as much as they used to. In 2008 a group was appointed to review the number of science libraries on campus. The group collected quantitative and qualitative data for the review. They also conducted a branch library survey.

The authors next focus on the Life Sciences Library, the origins of which date back to 1954 when several departmental collections were united to form the Biology Library. This library was renovated and enlarged from three to five levels in the 1990s and, with the addition of the Medical Library collection, it became the Life Sciences Library in 1998. The backdrop to the review of the Life Sciences Library was the idea commonly held by university administration that most items would be either online or available through delivery mechanisms and there would therefore be less need for the facility. The quantitative data seems to contradict this idea. The number of visitors using the library has risen between 2000 and 2008. The number of reference questions is also up. However circulation is down, probably reflecting the move to electronic reserves and

periodicals. Qualitative data show the usual branch strengths and weaknesses. A user survey indicated students rely more on the library than faculty. Users as a whole were very satisfied with the library but undergrads wanted more computer resources and group study space; graduate students wanted the previous items and more meeting spaces and access to collections; and faculty wanted more onsite collections, but most indicated they rarely visit the library.

As a result of the review the Life Sciences Library was downsized. The biology faculty voted to use the majority of former library space for teaching labs. Because the library is considered important to undergraduate students it was not closed. It now consists of a small reference collection, a few print journals, and a 4,000 volume circulating collection. Only a small quiet study area remains. Some users complain of the inconvenience of waiting for materials to be retrieved from remote storage. The situation is especially hard for undergraduates who have time constraints. The individual and group study spaces are also missed.

Brown, Cecilia and June M. Abbas. (2010). Institutional Digital Repositories for Science and Technology: A View from the Laboratory. *Journal of Library Administration*, 50(3), 181-213.

Brown and Abbas report on their survey of earth and biological sciences faculty at the University of Oklahoma regarding their views on institutional digital repositories (IRs). Twenty faculty members with a wide range of years of service and faculty rank were selected for in-depth, video-recorded interviews lasting forty to sixty minutes. Participants' personal web sites and five most recent publications were examined for evidence of utilization of web resources.

Interviewee responses indicated that half were not familiar with the concept of IRs. Eleven of the participants have links to PDFs of their publications on their web sites and are aware that they may be in violation of copyright. Nineteen of the twenty participants made use of web resources within their five most recent publications. Participants expressed 100% support for IRs but had concerns about the pragmatic issues (time, effort, money) and utility. They saw the value of an IR for sharing data, course materials, and information. Faculty would like to see the following content in an IR: student theses and dissertations (80% of participants), PDFs of their own publications (50%), raw data (30%), and course syllabi (45%). Seventy percent of the participants expressed concerns about potential theft of their intellectual property. Eighty-five percent were willing to convert their files to the preferred IR format. Seventy-five percent wanted someone else to deal with copyright. Seventy percent thought the IR might be useful for finding on-campus collaborators. Just over half the participants thought the IR should be “totally open.” About 80% want a mechanism to withdraw items from the depository. Seventy-seven percent wanted to track usage of the IR.

Horava, Tony. (2010). Challenges and Possibilities for Collection Management in a Digital Age. *Library Resources & Technical Services*, 54(3), 142-152.

Horava examines how collection management is changing and becoming more complicated in the digital age. In the pre-digital age size of the collection (volume counts) and scope were major considerations. The universe of available publications was finite and it was possible to create a collection that matched the needs of the institution. Collection management also

included making decisions about weeding, cancelling serials, storage, and preservation. Although these activities are still important they need to be understood in the context of the changing information landscape. In the past quality and quantity of the collection brought the most institutional prestige, but now library collections have expanded to include four levels: physically owned documents; physical documents owned by other libraries and available via ILL; purchased or subscribed electronic documents; and “free” electronic documents. This situation necessitates the reformulation of our practices of selecting, acquiring, and disseminating a collection. Content needs to be assessed, not just for quality, but for its potential to be shared, repurposed, etc. Horava sees the need for libraries to provide for deep mining of their collection content.

The core values of the library have included: equity of access, intellectual freedom, open access, stewardship, and trustworthiness. Equity of access is threatened by greater protection of intellectual property rights. Open access as a value has taken hold in libraries. The author sees that one of the key paradoxes faced by libraries is how long they can financially sustain both their support for open access and their commitment to the purchase of materials from scholarly publishers. Stewardship in a digital age requires certifiable standards for preservation, careful planning, and long-term commitment. Trust remains important as the universe of information becomes more complex.

Scholarly communication issues in the digital age include: new forms of communication like wikis and blogs, the importance of retaining author rights and copyright issues, knowledge management, how to create virtual physical spaces where library resources can integrate into scholarly

communication behavior, and the need to more fully exploit special collections. Issues for acquisitions include: the rising proportion of library budgets spent on electronic materials at the expense of books, institutional licenses, consortial licensing with loss of local autonomy, and the need to streamline acquisitions procedures. Issues for access and delivery include: facing the reality that items unavailable online will very often not be used and the need to show how library resources lead to effective learning. Horava states that libraries, “need to focus on the ways our patrons communicate, search, share, and repurpose information if we want to remain effective and successful.” Libraries need a, “broader approach that emphasizes building innovative bridges between intellectual works and the people using them in new ways to solve new problems.” He outlines the following new approach: focus on sustainability, consider what a collection does rather than what a collection is, align change with parent institutions, make strategic decisions about which formats to support, and change current practices to add value for our users. Seek the right balance between competition and collaboration and establish creative partnerships with publishers and vendors. Measure the collection in new ways, exploit our new understanding of the collection to the best of our ability, and enable collection development librarians to expand their skills and expertise.

Conway, Paul. (2010). Preservation in the Age of Google: Digitization, Digital Preservation, and Dilemmas. *The Library Quarterly*, 80(1), 61-79.

Conway looks at the role of preservation within the context of the environment of digital technologies. In the Google information universe content that is not

digital does not exist and digital content with no impact probably will not survive. The author differentiates “digitization for preservation,” which creates new digital products, from “digital preservation,” which protects the value of digital products no matter what their original form was. He defines digital preservation as, “activities that result in the creation of digital products worthy of long-term preservation.” He sees four dilemmas for preservation activities. The “environmental dilemma” relates to the success of proper storage conditions as the primary and most cost-effective preservation strategy and the resulting large library investments in storage facilities. The dilemma becomes how to allocate whatever funding is left for other preservation activities. The “quality dilemma” refers to how the principle of quality applies to the preservation of digital objects and to digitization for preservation. It includes the conflict of quality of digitization vs. cost of digitization. The “non-book dilemma” refers to the problems involved in preserving magnetic audiotape, videotape, acetate-based films, etc. There are risks in digitizing these materials when there are no standards for conversion, but “benign neglect” of these objects also carries risk of loss. The “expertise dilemma” is the high level of expertise and organizational skills need for digitization and for preservation of digital objects vs. the level of expertise currently available.

Conway makes five recommendations for cultural heritage organizations: 1) Preservation quality environments and buildings should retain a high claim on resources because the preservation of the original objects buys time for careful decision making. 2) Shift resources from item-level treatment of books to preservation of audio-visual resources which are deteriorating rapidly. 3) “Embrace digital technologies for

collection building and collection management.” 4) “Orient digitization decisions toward increasing impact and distinctiveness at home while leveraging digitization works already completed elsewhere.” 5) “Reassert leadership regarding standards and best practices for digital collection building on par with the kind of leadership that now exists in the digital preservation arena.”

GEOSCIENCE JOURNAL PRICES Compiled by Michael Mark Noga

The attached table (pages 21-26) is a compilation of geoscience journal prices that were gathered up to the beginning of December 2010. Prices come from invoices, serial vendor databases, publisher’s web sites, and journal issues. Prices vary depending on the subscription sources and payment date, especially for journals which are not priced in U.S. dollars. Each journal price history comes from a consistent source as much as possible.

Prices may refer to print subscriptions, print and electronic subscriptions, online-only subscriptions, or journal package subscriptions. The goal is to maintain a consistent price history for each title.

Journals were included in this list if they meet two criteria: 1) the subject fits broadly in the geosciences; and 2) sufficient price data are available. The latest title of each journal is used.

The 2009, 2010, and 2011 subscription prices and the % price changes for 237 journals are included in the table. The pool price change (5%) represents the increase in funds needed to retain this particular set of journals. The average price change per journal drops from 8% to 5% if *Scientific American* is excluded.

Prices for several noncommercial journals will be published in an upcoming *GSIS Newsletter*. There is so much variability in journal pricing now that the table should just be used to look at trends, not to gauge specific prices for a library.

GEOSCIENCE JOURNAL PRICES

Compiled by Michael Mark Noga

Journal Title	Price			% Price Change	% Price Change
	2009	2010	2011	2009/2010	2010/2011
AAPG Bulletin	350	385	385	10%	0%
Alcheringa	173	201	253	16%	26%
American Journal of Science	185	200	200	8%	0%
American Mineralogist	825	875	900	6%	3%
American Scientist	70	75	75	7%	0%
Annales de Paleontologie	726	678	814	-7%	20%
Annales Geophysicae	2893	3161	2411	9%	-24%
Annals of Glaciology	419	328	455	-22%	39%
Annual Review of Earth Planetary Sci	234	234	240	0%	3%
Antarctic Science	835	865	915	4%	6%
Applied Earth Science	384	411	432	7%	5%
Applied Geochemistry	1439	1497	1557	4%	4%
Arctic	155	200	200	29%	0%
Arctic Antarctic and Alpine Research	230	255	255	11%	0%
Astronomy and Geophysics	406	430	456	6%	6%
Atlantic Geology	75	75	75	0%	0%
Australian Journal of Earth Sciences	1449	1500	1530	4%	2%
Basin Research	1378	1461	1549	6%	6%
Biogeochemistry	2524	2587	2706	2%	5%
Boreas	372	387	407	4%	5%
Bulletin of Eng Geol & the Eenvt	647	708	741	9%	5%
Bulletin of Marine Science	505	505	580	0%	15%
Bulletin of Volcanology	1873	1976	2067	5%	5%
Canadian Journal of Earth Sciences	1215	1325	1445	9%	9%
Canadian Mineralogist	495	525	550	6%	5%
Carbonates and Evaporites	400	418	418	5%	0%
CATENA	1712	1780	1851	4%	4%
Chemical Geology	4751	4941	5139	4%	4%
Chemie der Erde	480	507	569	6%	12%
Clay Minerals	421	380	392	-10%	3%
Climate Dynamics	4033	4658	4888	15%	5%
Climatic Change	3317	3499	4026	5%	15%
Computational Geosciences	487	514	538	6%	5%
Computers & Geosciences	2702	2810	2922	4%	4%
Continental Shelf Research	2663	2770	2881	4%	4%
Contrib of Mineral & Petrology	4810	4906	5129	2%	5%
Coral Reefs	1324	1397	1505	6%	8%
Deep Sea Research Pts. I & II	6137	6364	6619	4%	4%
Doklady Earth Science Sections	5939	6355	6800	7%	7%
Earth and Envi Sci. Trans Roy Soc Edinburgh	384	390	406	2%	4%

Journal Title	Price			% Price Change	% Price Change
	2009	2010	2011	2009/2010	2010/2011
Earth & Planetary Science Letters	4698	4886	5081	4%	4%
Earth Moon and Planets	1194	1295	1335	8%	3%
Earth-Science Reviews	1773	1933	2068	9%	7%
Earthquake Science	846	893	976	6%	9%
Ecosystems	751	792	828	5%	5%
Elements	150	150	170	0%	13%
Environmental Fluid Mechanics	264	279	292	6%	5%
Environmental Earth Sciences	3449	3898	4077	13%	5%
Estuarine Coastal and Shelf Science	2888	3004	3124	4%	4%
Eurasian Soil Science	4477	4790	5125	7%	7%
Evolution	671	712	755	6%	6%
Facies	552	582	609	5%	5%
Geoarchaeology	1799	1907	2022	6%	6%
Geochemistry: Exploration, Env't, Analysis	452	450	464	0%	3%
Geochemistry International	5198	5468	5851	5%	7%
Geochimica et Cosmochim Acta	3262	3392	3511	4%	4%
Geoderma	3073	3196	3324	4%	4%
Geofluids	761	800	848	5%	6%
Geoforum	1341	1408	1500	5%	7%
Geografiska Annaler A: Phys Geog	427	453	481	6%	6%
Geological Journal	1596	1692	1794	6%	6%
Geological Magazine	792	823	1000	4%	22%
Geology of Ore Deposits	1993	2133	2282	7%	7%
Geology	700	800	800	14%	0%
Geology Today	841	892	946	6%	6%
Geomagnetism and Aeronomy	1643	1758	1881	7%	7%
Geo-Marine Letters	1235	1303	1363	6%	5%
Geomicrobiology Journal	1302	1348	1375	4%	2%
Geomorphology	2533	2660	2766	5%	4%
Geophysical Journal International	2272	2408	2553	6%	6%
Geophysical Prospecting	1329	1409	1494	6%	6%
Geosphere	85	200	200	135%	0%
Geotectonics	1214	1299	1390	7%	7%
Geothermics	1432	1514	1575	6%	4%
Global and Planetary Change	1946	2024	2105	4%	4%
Ground Water	507	538	571	6%	6%
Ground Water Monitoring & Remed	251	267	284	6%	6%
Grundwasser	235	248	259	6%	4%
GSA Abstracts with Programs	150	120	120	-20%	0%
GSA Bulletin	700	800	800	14%	0%
Hydrogeology Journal	1131	1244	1301	10%	5%
Hydrological Processes	4631	4909	5204	6%	6%
Icarus	3956	4114	4279	4%	4%

Journal Title	Price			% Price Change	% Price Change
	2009	2010	2011	2009/2010	2010/2011
International J of Rock Mech/Min Sci	3250	3380	3515	4%	4%
International Journ of Coal Geology	2505	2605	2709	4%	4%
International Journal of Earth Sciences	1440	1519	1637	5%	8%
Island Arc	1123	1191	1262	6%	6%
Izvestiya Atmos & Oceanic Physics	1845	1974	2112	7%	7%
Izvestiya Physics of Solid Earth	1755	1878	2009	7%	7%
Journal of African Earth Sciences	2882	2941	3044	2%	4%
Journal of Applied Geophysics	1371	1426	1483	4%	4%
Journal of Asian Earth Sciences	1454	1527	1603	5%	5%
Journal of Atmos and Solar-Terr Phys	4150	4179	4325	1%	3%
Journal of Climate	755	785	825	4%	5%
Journal of Coastal Research	499	519	519	4%	0%
Journal of Foraminiferal Research	175	175	175	0%	0%
Journal of Geochemical Exploration	1722	1791	1863	4%	4%
Journal of Geodesy	1406	1765	1846	26%	5%
Journal of Geology	191	197	213	3%	8%
Journal of Geodynamics	2019	2047	2119	1%	4%
Journal of Glaciology	476	496	514	4%	4%
Journal of Glaciology and Geocryology	86	86	115	0%	34%
Journal of Hydrology	6430	6687	6954	4%	4%
Journal of Marine Research	160	160	160	0%	0%
Journal of Micropalaeontology	277	328	350	18%	7%
Journal of Mining Science	620	682	710	10%	4%
Journal of Molluscan Studies	620	682	710	10%	4%
Journal of Mountain Science	565	596	686	5%	15%
Journal of Ocean University of China	622	656	686	5%	5%
Journal of Oceanography	1128	1190	1190	5%	0%
Journal of Paleontology	330	330	330	0%	0%
Journal of Petroleum Geology	624	662	702	6%	6%
Journal of Petroleum Science and Eng	2196	2284	2398	4%	5%
Journal of Petrology	1672	1840	1913	10%	4%
Journal of Physical Oceanography	645	670	695	4%	4%
Journal of Quaternary Science	1929	2045	2168	6%	6%
Journal of Sedimentary Research	625	625	650	0%	4%
Journal of Seismology	490	517	541	6%	5%
Journal of Soils and Sediments	343	430	463	25%	8%
Journal of South Amer Earth Sci	1215	1264	1315	4%	4%
Journal of Structural Geology	1925	2002	2082	4%	4%
Journal of Systematic Palaeontology	360	326	333	-9%	2%
Journal of the Atmos Sciences	755	785	755	4%	-4%
Journal of the Geol Soc of London	1570	1730	1782	10%	3%
Journal of Vertebrate Paleontology	270	428	437	59%	2%
Journal of Volcanol & Geotherm Res	3600	3744	3894	4%	4%
Landslides	403	425	445	5%	5%

Journal Title	Price			% Price Change	% Price Change
	2009	2010	2011	2009/2010	2010/2011
Leading Edge	135	145	155	7%	7%
Lethaia	318	334	355	5%	6%
Limnology & Oceanography package	975	1025	1025	5%	0%
Lithos	1881	1956	2034	4%	4%
Lithosphere	350	350	350	0%	0%
Marine and Petroleum Geology	2450	2549	2651	4%	4%
Marine Chemistry	2705	2813	2926	4%	4%
Marine Environmental Research	1939	2017	2098	4%	4%
Marine Geodesy	551	605	617	10%	2%
Marine Geology	4420	4569	4729	3%	4%
Marine Geophysical Researches	745	786	822	6%	5%
Marine Micropaleontology	1710	1778	1849	4%	4%
Marine Pollution Bulletin	1667	1817	1908	9%	5%
Mathematical Geosciences	1290	1361	1424	6%	5%
Meteoritics and Planetary Science	1100	1200	1272	9%	6%
Mineral Processing & Extractive Metallurgy	384	411	432	7%	5%
Mineralium Deposita	1909	2014	2107	6%	5%
Mineralogical Magazine	673	607	626	-10%	3%
Mineralogical Record	190	190	190	0%	0%
Mineralogy and Petrology	1693	1786	1868	5%	5%
Minerals Engineering	1664	1814	1905	9%	5%
Mining Technology	384	411	432	7%	5%
Molluscan Research	120	150	165	25%	10%
Moscow University Geology Bulletin	2565	2745	2937	7%	7%
Moscow University Soil Science Bulletin	2258	2416	2585	7%	7%
Natural Hazards	1629	1719	1798	6%	5%
Natural Resources Research	514	542	567	5%	5%
Nature	2920	3095	3280	6%	6%
Nature Geoscience	3060	3520	4048	15%	15%
Nautilus	85	88	88	4%	0%
New Zealand J of Geol & Geoph	340	350	340	3%	-3%
New Zealand J of Mar & Freshwater Res	340	350	340	3%	-3%
Ocean & Coastal Management	1677	1919	1996	14%	4%
Ocean Dynamics	521	550	690	6%	25%
Ocean Modelling	677	718	757	6%	5%
Ocean Science Journal	448	473	480	6%	1%
Oceanology of Russian Acad Science	1686	1804	1930	7%	7%
Oil and Gas Science Technology	646	660	687	2%	4%
Ore Geology Reviews	1169	1227	1288	5%	5%
Organic Geochemistry	3768	3919	4076	4%	4%
Origins of Life & Evol of Biosphere	826	843	882	2%	5%

Journal Title	Price			% Price Change	% Price Change
	2009	2010	2011	2009/2010	2010/2011
Palaeo, Palaeo, Palaeo	4678	4865	5060	4%	4%
Palaeobiodiversity & Palaeoenvironments	174	175	182	1%	4%
Palaeontology	1014	1075	1140	6%	6%
Palaeoworld	532	553	575	4%	4%
Palaaios	415	415	450	0%	8%
Palaontologische Zeitschrift	447	447	468	0%	5%
Paleobiology	200	200	209	0%	5%
Paleontological Journal	5619	6012	6433	7%	7%
Permafrost & Periglacial Processes	1260	1336	1417	6%	6%
Petroleum Chemistry	5797	6203	6637	7%	7%
Petroleum Geoscience	484	508	600	5%	18%
Petroleum Science & Technology	5223	5406	6406	4%	18%
Petrology	2016	2517	2308	25%	-8%
Physical Geography	495	520	549	5%	6%
Physical Oceanography	941	993	1039	6%	5%
Physics and Chem of the Earth	3042	3116	3241	2%	4%
Physics and Chemistry of Minerals	2797	2951	3395	6%	15%
Physics of the Earth & Planet Inter	3293	3405	3541	3%	4%
Planetary and Space Science	3983	4011	4151	1%	3%
Polar Geography	394	408	416	4%	2%
Polar Record	410	426	447	4%	5%
Polar Science	689	717	742	4%	3%
Powder Diffraction	205	205	215	0%	5%
Precambrian Research	3269	3392	3528	4%	4%
Proceedings of the Geologists' Association	589	613	638	4%	4%
Proceedings of Yorkshire Geo Soc	239	300	309	26%	3%
Progress in Oceanography	3178	3277	3408	3%	4%
Pure and Applied Geophysics	3624	3696	3639	2%	-2%
Quarterly J of Eng Geo & Hydrogeo	796	826	851	4%	3%
Quaternary Geochronology	438	460	492	5%	7%
Quaternary International	1254	1304	1350	4%	4%
Quaternary Research	876	911	947	4%	4%
Quaternary Science Reviews	2289	2403	2523	5%	5%
Radiocarbon	210	225	280	7%	24%
Regional Environmental Change	310	327	376	5%	15%
Remote Sensing of Environment	3292	3457	3595	5%	4%
Reservoir	71	71	75	0%	6%
Resource Geology	410	435	470	6%	8%
Review of Palaeobotany & Palynology	2792	2825	2924	1%	4%
Revue de Micropaleontologie	212	273	300	29%	10%
Revista Espanola de Palentologia	107	107	107	0%	0%
Rivista Italiana di Paleontologia e Strat	296	296	296	0%	0%
Rock Mech and Rock Eng	877	965	1009	10%	5%

Journal Title	Price			% Price Change	% Price Change
	2009	2010	2011	2009/2010	2010/2011
Rocks & Minerals	164	172	184	5%	7%
Russian Geology and Geophysics	1090	1112	1156	2%	4%
Russian Journal of Pacific Geology	1300	1391	1488	7%	7%
Russian Meteorology and Hydrology	2841	3040	3523	7%	16%
Science	835	910	990	9%	9%
Scientific American	40	40	300	0%	650%
Sedimentary Geology	3749	3858	3993	3%	3%
Sedimentology	1650	1766	1872	7%	6%
Seismic Instruments	723	774	828	7%	7%
Seismological Research Letters	150	150	157	0%	5%
Shale Shaker	35	35	50	0%	43%
Soil Science	542	590	644	9%	9%
Soil Science Soc of America Journal	650	650	673	0%	4%
Solar Physics	4803	5067	5300	5%	5%
Solar System Research	3285	3515	3761	7%	7%
South African Journal of Geology	233	250	270	7%	8%
Stratigraphy and Geological Correl.	2023	2165	2317	7%	7%
Surveys in Geophysics	945	997	1043	6%	5%
Swiss Journal of Earth Sciences	964	983	998	2%	2%
Tectonophysics	6137	6229	6447	1%	3%
Tellus	455	476	496	5%	4%
Terra Nova	1139	1208	1293	6%	7%
Vadose Zone Journal	325	325	347	0%	7%
Veliger	120	120	120	0%	0%
Water Research	5777	6008	6217	4%	3%
AVERAGE PRICE CHANGE PER JOURNAL				6%	8%
AVERAGE PRICE CHANGE FOR POOL				5%	5%

Note: The average price change of the overall pool of journals measures the increase in funds needed to purchase this particular pool of journals. This measure dampens the effect of a large % price increase of a specific journal.