1989 Survey Helps GSA Plan for the '90s

Each of the 4986 attendees at the 1989 GSA Annual Meeting in St. Louis received a questionnaire. Of these, 915 were completed, giving us an excellent 18.4% response rate. A similar questionnaire for nonattendees appeared in the December issue of GSA News & Information. We received 838 responses, which we estimate as a 12.0% response rate.

Those who responded to the questionnaire were eligible for prize drawings. Congratulations to the many winners whose names were announced in the June issue. The main winner, however, is the GSA membership because the answers we received to our recent survey will be the basis on which we make decisions for the years ahead.

Highlights
- Both groups identified Montreal, New Orleans, and Toronto as the most popular options for the 1995 Annual Meeting site.
- The decision to periodically repeat a meeting site met with approval from 60.4% of the attendees and 68.5% of the nonattendees.
- Denver was overwhelmingly approved by over 70% of each group as acceptable as the repeat site.
- Over 30% of each group was interested in having volunteered presentations occur on Sunday. Neither group showed interest in a five-day meeting.
- Theme sessions are preferred by 48.9% of the attendees and 53.2% of the nonattendee group.
- The change in the abstracts deadline was enthusiastically received by 72.4% of the attendees and 61.6% of the nonattendees.

1989 Annual Meeting Questionnaire—Responses Received

Registrait Profile

<table>
<thead>
<tr>
<th>1. Registration status</th>
<th>Attendees</th>
<th>Nonattendees</th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Professional</td>
<td>689</td>
<td>747</td>
<td>89.14%</td>
<td>75.30%</td>
</tr>
<tr>
<td>2. Student Associate</td>
<td>201</td>
<td>82</td>
<td>9.79%</td>
<td>21.97%</td>
</tr>
<tr>
<td>3. Guest</td>
<td>22</td>
<td>--</td>
<td>2.40%</td>
<td>--</td>
</tr>
<tr>
<td>4. No answer</td>
<td>3</td>
<td>9</td>
<td>0.33%</td>
<td>1.07%</td>
</tr>
</tbody>
</table>

GSAMember

| 1. Yes                  | 527       | 75.60%       | 365       | 29.92%       |
| 2. No                   | 164       | 17.92%       | 23        | 1.89%        |
| 3. No answer            | 224       | 24.48%       | 52        | 4.26%        |

<table>
<thead>
<tr>
<th>2. Age bracket</th>
<th>Attendees</th>
<th>Nonattendees</th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Under 25</td>
<td>30</td>
<td>3.28%</td>
<td>10</td>
<td>1.19%</td>
</tr>
<tr>
<td>2. 25-35</td>
<td>301</td>
<td>32.90%</td>
<td>232</td>
<td>27.68%</td>
</tr>
<tr>
<td>3. 36-45</td>
<td>256</td>
<td>27.98%</td>
<td>253</td>
<td>30.19%</td>
</tr>
<tr>
<td>4. 46-60</td>
<td>242</td>
<td>26.45%</td>
<td>226</td>
<td>26.97%</td>
</tr>
<tr>
<td>5. Over 60</td>
<td>85</td>
<td>9.29%</td>
<td>115</td>
<td>13.72%</td>
</tr>
<tr>
<td>6. No answer</td>
<td>1</td>
<td>0.11%</td>
<td>2</td>
<td>0.24%</td>
</tr>
</tbody>
</table>

3. Primary daily responsibilities (all that apply)

| 1. Professor           | 464       | 40.49%       | 365       | 29.92%       |
| 2. Department Chair    | 45        | 3.93%        | 23        | 1.89%        |
| 3. Dean, VP, Provost   | 13        | 1.13%        | 6         | 0.49%        |
| 4. Student             | 188       | 16.40%       | 86        | 7.05%        |
| 5. Owner/Partner/Officer | 29       | 2.53%        | 52        | 4.26%        |
| 6. Manager             | 29        | 2.53%        | 57        | 4.67%        |
| 7. Chief/Sr. Geologist | 49        | 4.28%        | 122       | 10.00%       |
| 8. Geologist           | 173       | 15.10%       | 316       | 25.90%       |
| 9. Geophysicist        | 9         | 0.79%        | 35        | 2.87%        |
| 10. Other              | 112       | 9.77%        | 152       | 12.46%       |
| 11. No answer          | 35        | 3.05%        | 6         | 0.49%        |

4. Location of primary address (GSA Section)

| 1. Cordilleran          | 136       | 14.86%       | 255       | 30.43%       |
| 2. Rocky Mountain       | 92        | 10.05%       | 178       | 21.24%       |
| 3. North-Central        | 237       | 25.90%       | 70        | 8.35%        |
| 4. South-Central        | 94        | 10.27%       | 90        | 10.74%       |
| 5. Northeastern         | 181       | 19.78%       | 132       | 15.75%       |
| 6. Southeastern         | 159       | 17.38%       | 106       | 12.65%       |
| 7. Other                | 9         | 0.98%        | 2         | 0.24%        |
| 8. No answer            | 7         | 0.77%        | 5         | 0.60%        |

1989 Survey continued on p. 174
5. How important is the meeting site as a factor in your decision to attend the Annual Meeting?

<table>
<thead>
<tr>
<th></th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Very</td>
<td>218</td>
<td>354</td>
</tr>
<tr>
<td>2. Little</td>
<td>151</td>
<td>366</td>
</tr>
<tr>
<td>3. Somewhat</td>
<td>459</td>
<td>94</td>
</tr>
<tr>
<td>4. Not a factor</td>
<td>82</td>
<td>23</td>
</tr>
<tr>
<td>5. No answer</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

6. GSA has chosen the following future annual meeting sites. Please check all the ones you are likely to attend (all that apply)

<table>
<thead>
<tr>
<th></th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1990 Dallas</td>
<td>361</td>
<td>269</td>
</tr>
<tr>
<td>2. 1991 San Diego</td>
<td>336</td>
<td>430</td>
</tr>
<tr>
<td>3. 1992 Cincinnati</td>
<td>239</td>
<td>123</td>
</tr>
<tr>
<td>4. 1993 Boston</td>
<td>287</td>
<td>254</td>
</tr>
<tr>
<td>5. 1994 Seattle</td>
<td>272</td>
<td>364</td>
</tr>
<tr>
<td>6. All of the above</td>
<td>291</td>
<td>54</td>
</tr>
<tr>
<td>7. None of the above</td>
<td>23</td>
<td>72</td>
</tr>
<tr>
<td>8. No answer</td>
<td>9</td>
<td>16</td>
</tr>
</tbody>
</table>

7. GSA is considering sites for 1995. Please identify the host city in which you would most likely attend the Annual Meeting.

<table>
<thead>
<tr>
<th>City</th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Atlanta</td>
<td>101</td>
<td>103</td>
</tr>
<tr>
<td>2. Montreal</td>
<td>249</td>
<td>167</td>
</tr>
<tr>
<td>3. New Orleans</td>
<td>196</td>
<td>161</td>
</tr>
<tr>
<td>4. Orlando</td>
<td>76</td>
<td>75</td>
</tr>
<tr>
<td>5. Toronto</td>
<td>184</td>
<td>117</td>
</tr>
<tr>
<td>6. None of the above</td>
<td>64</td>
<td>207</td>
</tr>
<tr>
<td>7. No answer</td>
<td>45</td>
<td>8</td>
</tr>
</tbody>
</table>

8. GSA is considering holding meetings in one city on a frequent, regular cycle, with alternative cities for the years in between. Which cycle do you prefer?

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Every other year</td>
<td>141</td>
<td>148</td>
</tr>
<tr>
<td>2. Every third year</td>
<td>248</td>
<td>267</td>
</tr>
<tr>
<td>3. Every fourth year</td>
<td>134</td>
<td>133</td>
</tr>
<tr>
<td>4. Do not repeat</td>
<td>348</td>
<td>252</td>
</tr>
<tr>
<td>5. No answer</td>
<td>45</td>
<td>38</td>
</tr>
</tbody>
</table>

9. GSA is considering naming Denver as the city to be repeated on a regular cycle. Do you agree or disagree with this idea?

<table>
<thead>
<tr>
<th></th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agree</td>
<td>669</td>
<td>650</td>
</tr>
<tr>
<td>2. Disagree</td>
<td>201</td>
<td>161</td>
</tr>
<tr>
<td>3. No answer</td>
<td>45</td>
<td>27</td>
</tr>
</tbody>
</table>

10. Currently the official meeting days are Monday through Tuesday. In order that registrants may take better advantage of Saturday discounted airfares, GSA is considering starting the Annual Meeting earlier. Assuming a four-day meeting, do you favor starting the meeting with volunteered papers beginning on (check one)

<table>
<thead>
<tr>
<th>Day</th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Saturday</td>
<td>161</td>
<td>130</td>
</tr>
<tr>
<td>2. Sunday</td>
<td>355</td>
<td>278</td>
</tr>
<tr>
<td>3. Neither</td>
<td>13</td>
<td>397</td>
</tr>
<tr>
<td>4. Keep Monday</td>
<td>357</td>
<td>1</td>
</tr>
<tr>
<td>5. No answer</td>
<td>29</td>
<td>32</td>
</tr>
</tbody>
</table>

11. Regardless of the starting day, are you in favor of volunteered papers being presented for a five-day period?

<table>
<thead>
<tr>
<th></th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yes</td>
<td>229</td>
<td>279</td>
</tr>
<tr>
<td>2. No</td>
<td>644</td>
<td>527</td>
</tr>
<tr>
<td>3. No answer</td>
<td>42</td>
<td>32</td>
</tr>
</tbody>
</table>

12. Do you prefer theme sessions (volunteered papers organized by scientific topic) to discipline sessions (volunteered papers organized by scientific classification)?

<table>
<thead>
<tr>
<th></th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yes</td>
<td>448</td>
<td>446</td>
</tr>
<tr>
<td>2. No</td>
<td>86</td>
<td>44</td>
</tr>
<tr>
<td>3. No preference</td>
<td>346</td>
<td>320</td>
</tr>
<tr>
<td>4. No answer</td>
<td>35</td>
<td>28</td>
</tr>
</tbody>
</table>

13. This year the abstracts deadline was on July 19 (five weeks closer to the start of the meeting than any previous year). Do you like this change?

<table>
<thead>
<tr>
<th></th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yes</td>
<td>663</td>
<td>517</td>
</tr>
<tr>
<td>2. No</td>
<td>44</td>
<td>37</td>
</tr>
<tr>
<td>3. Don't care</td>
<td>191</td>
<td>279</td>
</tr>
<tr>
<td>4. No answer</td>
<td>17</td>
<td>5</td>
</tr>
</tbody>
</table>

14. The July abstracts deadline meant that speakers were not selected until August 19. As a result, speaker notification cards became available the third week in August, and the 1989 program schedule first appeared in the September issue of GSA News & Information. Did the later release of information affect your decision to attend the meeting or your ability to obtain travel funds?

<table>
<thead>
<tr>
<th></th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yes</td>
<td>77</td>
<td>61</td>
</tr>
<tr>
<td>2. No</td>
<td>813</td>
<td>746</td>
</tr>
<tr>
<td>3. No answer</td>
<td>25</td>
<td>31</td>
</tr>
</tbody>
</table>

1989 Survey continued on p. 175
1989 Survey continued from p. 174

<table>
<thead>
<tr>
<th>15. What is your primary use of the abstracts volume?</th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>(check one)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. On-site</td>
<td>308</td>
<td>33.66%</td>
</tr>
<tr>
<td>2. Postmeeting</td>
<td>429</td>
<td>46.89%</td>
</tr>
<tr>
<td>3. Other</td>
<td>137</td>
<td>14.97%</td>
</tr>
<tr>
<td>4. No answer</td>
<td>41</td>
<td>4.48%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16. Over what period of time are you most likely to use the abstracts volume for research purposes? (check one)</th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1 month to 1 year</td>
<td>298</td>
<td>32.57%</td>
</tr>
<tr>
<td>2. 1 year to 4 years</td>
<td>403</td>
<td>44.04%</td>
</tr>
<tr>
<td>3. Over 4 years</td>
<td>162</td>
<td>17.70%</td>
</tr>
<tr>
<td>4. No answer</td>
<td>52</td>
<td>5.68%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>17. How often do you use the abstracts volume as an independent reference work citation in your publication?</th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Very frequently</td>
<td>29</td>
<td>3.17%</td>
</tr>
<tr>
<td>2. Frequently</td>
<td>331</td>
<td>36.17%</td>
</tr>
<tr>
<td>3. Rarely</td>
<td>422</td>
<td>46.12%</td>
</tr>
<tr>
<td>4. Never</td>
<td>85</td>
<td>9.29%</td>
</tr>
<tr>
<td>5. No answer</td>
<td>48</td>
<td>5.25%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>18. Considering your overall use of the abstracts volume, do you prefer having it organized by (check one)</th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sessions</td>
<td>386</td>
<td>42.19%</td>
</tr>
<tr>
<td>2. Alphabetically</td>
<td>272</td>
<td>29.73%</td>
</tr>
<tr>
<td>3. Either</td>
<td>216</td>
<td>23.61%</td>
</tr>
<tr>
<td>4. No answer</td>
<td>41</td>
<td>4.48%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>19. How frequently do you attend GSA section meetings?</th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1989 was first year</td>
<td>88</td>
<td>9.62%</td>
</tr>
<tr>
<td>2. Every year</td>
<td>278</td>
<td>30.38%</td>
</tr>
<tr>
<td>3. Every other year</td>
<td>200</td>
<td>21.86%</td>
</tr>
<tr>
<td>4. Every 3 to 5 years</td>
<td>175</td>
<td>19.13%</td>
</tr>
<tr>
<td>5. Rarely or never</td>
<td>151</td>
<td>16.50%</td>
</tr>
<tr>
<td>6. No answer</td>
<td>23</td>
<td>2.51%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>20. If you attend a section meeting, how likely is it that you will attend a GSA annual meeting in the same year?</th>
<th>Attendees</th>
<th>Nonattendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Very likely</td>
<td>229</td>
<td>25.03%</td>
</tr>
<tr>
<td>2. Likely</td>
<td>337</td>
<td>36.83%</td>
</tr>
<tr>
<td>3. Unlikely</td>
<td>212</td>
<td>23.17%</td>
</tr>
<tr>
<td>4. Never</td>
<td>16</td>
<td>1.75%</td>
</tr>
<tr>
<td>5. No answer</td>
<td>121</td>
<td>13.22%</td>
</tr>
</tbody>
</table>

Interested in the Remote Sensing Employment Market?

GSA Joins Forces with ERIM

GSA is a sponsor of the Environmental Research Institute of Michigan's (ERIM) 8th Thematic Conference on Geologic Remote Sensing: Exploration, Engineering, and Environment, scheduled for Denver April 27 to May 3, 1991. As part of this affiliation, the 8th Thematic Conference is using GSA's Employment Service as part of its program.

Looking for a new job? Register with GSA's Employment Service and combine possibilities of interviewing at the GSA annual meeting and the ERIM 8th Thematic Conference. Contact GSA Membership Services for more details.

Employers, looking for good people? The GSA Employment Service will be enhanced by potential employees participating in GSA annual meetings and the ERIM 8th Thematic Conference. Contact the Membership Services Department at GSA for more details.

How to use this service

You can now interview at the GSA annual meeting AND the ERIM 8th Thematic Conference. When filling out the GSA Employment Service form, make sure that you list REMOTE SENSING (code 620) as one of your discipline interests. This is how we will do our special 8th Thematic Conference match-up! Also remember that your GSA Employment Service registration is good for one year. So signing up from now until early August lets you get matchups at the time of the 1990 GSA Annual Meeting and the ERIM 8th Thematic Conference. Signing up between November and March 1 lets you get matchups at the time of the 8th Thematic Conference and the 1991 GSA Annual Meeting. Act now to take advantage of this offer!

Besides the opportunity to interview at these meetings, GSA will provide matches for prospective employees at any time during their registration upon request by prospective employers.

Meet leaders in geologic remote sensing at the 8th Thematic Conference. For further information on the ERIM 8th Thematic Conference, contact Robert Rogers, Environmental Research Institute of Michigan, P.O. Box 8618, Ann Arbor, MI 48107-8618; (313) 994-1200, ext. 3382. Abstracts are due soon, so request a call for papers and meeting announcement.
DNAG Progress

There's good news on a number of fronts. The DNAG volume *The Arctic Region* went to the printer on May 4 and should be printed and available by the end of August. The final pages for *Surface Water Hydrology* are expected any moment (early May); this book should be at the printer by the time you receive this. The last chapter for the Caribbean volume is being typeset, and as soon as galleys are seen and checked, the final pages can be prepared. This volume should be off to the printer sometime in June. It will be the twentieth volume completed; ten more are still in the works and must be fully in our hands and in production before the end of the year when the DNAG Project will be terminated, by decree of the GSA Executive Committee and the GSA Foundation. If you have laggards holding up your volume, let them know they have very little time left to get their pygidia in motion.

The first 15 chapters for the DNAG volume *The Cordilleran Orogen: Alaska* have been received from the USGS editors, so this book has now made a major step forward. One more chapter has been completed for the Centennial Special Volume on engineering geology; there are only two or three to go to complete this book. The chapter on water resources by Jack Sharp and colleagues for the Gulf of Mexico volume has been received in final form. Nine more translations of chapters for *Economic Geology: Mexico* have been received, only five more remain to complete the translation of this book.

More kudos

Now that the last chapter of the Caribbean volume is into production, it’s time to thank the many patient contributors to that volume. This is another of the volumes that required substantial international cooperation; Jim Case and Gabriel Dengo did a fine job of shepherding all of the pieces through to completion. Among the 48 authors are representa-

tives from Colombia, Costa Rica, France, Guatemala, Jamaica, Mexico, The Netherlands, Puerto Rico, Trinidad and Tobago, the U.K., and Venezuela. These authors bring the total number of participants in completed DNAG volumes to 1534.

P. E. Baker  J. F. Lewis
S. F. Barrett  E. G. Lidiak
D. Beets  E. Lopez-Ramos
A. Bellizzi  W. D. MacDonald
Ph. Bouysse  P. Mann
C. L. Bowland  C. Martin F.
R. Bueno-Salazar  F. Maurrasse
K. Burke  R. C. Maury
M. J. Carr  W. R. McCann
J. E. Case  A. A. Meyerhoff
G. Dengo  H. A. Meyerhoff
T. W. Donnelly  A. E. L. Morris
G. Draper  W. D. Pennington
N. T. Edgar  J. L. Pindell
R. C. Finch  H. Schellekens
P. J. Fox  C. Schubert
R. F. Giegengack  R. Shagam
T. L. Holcombe  A. L. Smith
G. S. Horne  R. E. Stoiber
T. Jackson  I. Taner
S. E. Kesler  G. Wedge
G. Klaver  G. K. Westbrook
J. W. Ladd  D. Westercamp
E. Levy  G. A. Young

PEOPLE

Member Christopher J. Chalokwu of the geology department at Auburn University has received a Fulbright Grant to lecture at the University of Ghana in Legon and to conduct petrologic research on the Freetown Layered Complex in Sierra Leone.

Fellow W. Barclay Kamb has been named the first Barbara and Stanley R. Rawn, Jr. Professor of Geology and Geophysics at the California Institute of Technology.

Fellow Donald D. Runnells has been elected Chair of the Department of Geological Sciences of the University of Colorado, Boulder. Runnells was also recently elected to the Water Science and Technology Board of the National Research Council/National Academy of Science.

In Memoriam

Howard A. Coombs
Seattle, Washington
March 12, 1990

Adol Pabst
Berkeley, California
April 16, 1990

John S. Vh
Spokane, Washington
March 22, 1990
851 Comments

852–864 Lithology and biostratigraphy of Franciscan-like chert and associated rocks in west-central Baja California, Mexico
Richard Sedlock and Yukio Isozaki

865–876 Sedimentologic and dynamic differences between hot and cold laharian debris flows of Mayon Volcano, Philippines
A. Tevij Arguden and Kelvin S. Rodolfo

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676 Correction
Environmental Geology Award Established

In cooperation with the American Association of State Geologists, GSA will make an annual award for the best environmental geology paper published each year either by GSA or by one of the state geological surveys. The John C. Frye Environmental Geology Award will be a cash prize from the endowment income of the Foundation’s John C. Frye Memorial Fund. Selection of the recipient each year will be made by the Association of State Geologists in coordination with GSA.

The choice of this particular type of award and the selecting group are particularly fitting in view of John Frye's career. After receiving a Ph.D. degree in 1938 from the University of Iowa, John worked with the Ground Water Division of the U.S. Geological Survey until 1942. At that time he joined the Kansas State Geological Survey where he spent the next twelve years, the last nine of which were as Director. In 1954 he was appointed Chief of the Illinois State Geological Survey, a position he held for the next twenty years. Upon retirement in 1974 he began a second career as Executive Director of GSA. He died shortly after his retirement from GSA in 1982.

One of John Frye’s major interests was environmental geology, a term that had its origin in the Illinois Survey during his tenure. Environmental geology provided a means of focusing public and professional interest on the application of geology to society. He was one of the first to bring attention to the interrelationships of man and the environment, as viewed through the science of geology. This sub-discipline of geology now enjoys wide acceptance as the public becomes more aware of and shows more concern for its natural surroundings. Today, most geological surveys, both in this country and elsewhere, place strong emphasis on this subject.

At the 75th anniversary of the Illinois State Geological Survey in 1980, John Frye said, “In the next few decades, geologic data and advisory input will be needed more urgently than has ever been the case.... When we view an exponentially increasing population set in apposition to finite mineral and land resources, the urgency of the situation becomes apparent.”

John Frye extended his environmental activities and interests well beyond the boundaries of his state survey. He served on many national committees dealing with radioactive waste management, environmental sciences, and problems of the environment.

The John C. Frye Environmental Geology Award is a most appropriate tribute to a state geologist who pioneered this now extremely important part of geoscience. Friends of John Frye and GSA members interested in supporting the stimulation and recognition of excellent work in environmental geology are encouraged to send contributions to the GSA Foundation designated for the John C. Frye Memorial Fund.

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North-Central Section symposium

On April 27, the North-Central Section meeting at Macomb, Illinois, sponsored a special symposium on "Earth Science Education in the 1990's" organized by Larry Wiedman of Monmouth College, Illinois. The symposium grew out of activities of the North-Central Section Education Committee chaired by John Klasner of Western Illinois University. Initially, a modest audience of perhaps 30 teachers was expected, but the symposium was publicized widely in the region and ended up attracting 250 participants! The majority of these were elementary, middle, and high school teachers from Wisconsin, Illinois, and Iowa. This powerful response suggests that such programs might be profitably developed by the other regional sections at future meetings. Section meetings are prime opportunities to reach the grassroots of the public education structure and develop contacts that will lead to improving the quality and reforming the content of public education in geosciences. Congratulations to Larry and John for starting what may be a very productive trend for GSA education-related activities.

Some thoughts on partnering

Earlier this year I was asked to speak to representatives of federal agencies regarding what "the Fed" can do to assist in the upgrading of science education in the public schools. One thought came to mind that could apply to businesses as well as schools. All major employment projections for the next couple of decades stress the need to attract more black and Hispanic students to careers in science to fill the widening gap between supply and demand for qualified scientists at all career levels. Many federal agencies and large geoscience-oriented businesses (engineering and environmental consulting firms, petroleum and mining industries, etc.) are located in large cities. What if each organization adopted a school district with a strong minority population and developed a partnering structure, in cooperation with school officials, that would provide support and encouragement in science (not just geoscience) related activities for talented minority students from about third grade through high school. Continuing mentor relationships, support of science clubs, assistance to teachers with public-domain scientific concepts, contacts for both human and material resources, and clearly identified availability and concern expressed by an organization can be good for science and good PR for the profession.

Free brochures on geoscience careers available from GSA

Two outstanding and colorful brochures outlining opportunities for careers in the geosciences have recently become available, one produced jointly by GSA, AGI, and AAPG, and the other by the Colorado School of Mines. You or a teacher friend can help spread the word about opportunities to make a difference by selecting careers in the geosciences. Simply contact GSA by mail or phone for free copies in any quantity. Get involved.

Conference on High-Level Radioactive Waste Management
Scheduled for Las Vegas, Nevada

The 1991 International High-Level Radioactive Waste Management Conference will be held April 28–May 3, 1991, in Las Vegas, Nevada. The conference will be a forum for presentation of scientific and technical information related to public safety in the management and disposal of high-level radioactive wastes. The Geological Society of America is one of the co-sponsors of the 1991 conference.

Extended summaries (1500-2000 words) of proposed papers for the meeting are due September 6, 1990. For further information, contact Lloyd W. McClure, WINCO/USDOE, DP-323, Room GA-045, 1000 Independence Ave., SW, Washington, DC 20585; (202) 586-6122; fax 202-586-1348.
NEW GSA MEMBERS

The following 977 Members have been elected to Membership by Council action during the period from March 1989, through February 1990 (*indicates transfer from Student Associate to Member).

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Humberto Padilla
Young-Surk Park
Ronald L. Parker
William C. Parker

*Kevin Parks
*G. Peter Parsley
David M. Patrick
Claud W. Patterson

*Dianne J. Pavlick
*Barbara L. Pavlik

*Edward C. Pearcy
*Edward S. Pennock

Douglas E. Perry
Lee E. Petersen

*Jonathan W. Peterson
Pascal A. Philippot
Jean G. Pier
Brenda S. Pierce

Neil Piggott
Wade A. Pigott
L. Dale Pinel

James N. Piper
Thomas Pisciotto
William D. Platts

*Mark J. Pontius
Jami M. Poor

*Suzanne Wall Porter
*Clay E. Postlethwaite

*William L. Power
*Matt J. Pranter
*Carol S. Prentice

*Pamela J. Price
*Terrence M. Quinn
Timothy J. Quinn

*Judith K. Racloff
Virginia M. Ragan

*Khaled B. Ranaan
Andrew V. Raiford

*L. Bruce Railback
Karen E. Ramsey
Charles J. Randall
Mark A. Randazzo

*Helen R. Rasmussen
*Sara L. Rathburn
Henry W. Rauch
Michael R. Raugh

*Brian R. Reck

*Douglas G. Reddy
Philip C. Reed

Patty Rehn
David C. Reid

*Mark E. Reid
Per Reimann
Gregory J. Keller
Peter S. Rencsar

*Margarite R. Reno
*James F. Renner

*Rebecca Renner
Robert E. Rentschler

Michael W. Ressel
Timothy J. Reston
John J.G. Reymer

*Suzanne Reynolds

*Stephen M. Richard
Marion L. Rideout

*Uwe Ring
Douglas J. Ritchey

*Robert W. Ritz
Paul A. Roberts

*Timothy H. Roberts
Hugh S. Robertson
Bruce A. Robinson

*Rory A. Robinson
Dennis L. Roder
Daniel O. Roeser

*James L. Rogers
Jay D. Romic

*Nancy Rose
Seth E. Rose

Gary Rosenberg
Mario E. Rossi

*Victor Rossinsky, Jr.
Keith S. Rossolov
Christine M.
Rothen

Peter J. Rubens
Stephen C. Ruppel

*Charles W. Russell
Paul T. Russell

*David M. Ryan

Jeffrey G. Ryan

Paul L. Rydel

*Paul E. Sacks
Joe A. Salfty

John F. Nelson Salvinio

Gertrude E. Samuel

*Charles M. Sanders

*Richard B. Sanders
Joseph Santangelo

*Peter E. Sauer

Michael L. Savarese
Peter L. Schafer

Stephen E. Scheckler
Keith E. Schilling

John P. Schlosser
Stefan Schmidt

*Casey S. Schmidt
Melvin E. Schmidt

Robert D. Schmitt
Diane C. Schnabel

Christopher A. Scholz

*Trudy J. Schroeter
Kenneth C. Schulte

Marjorie S. Schulz

*Barry A. Schwartz
Greg W. Scott
Kevin M. Scott

Thomas M. Scott
Robert R. Seal

Kimberly A. Seelig

Steven C. Semken
C. David Senor

Keith C. Seramur
John E. Seave

Carole Sforza

Warren D. Sharp

*Herbert R. Shaw

Russell D. Shaw

Valois R. Shea-Albin
Patricia A. Sheahan
Peter R. Sheldon

Les E. Shephard

Amy W. Sheridan
Samuel A. Singleton

*Paul J. Sikora

Alan H. Simmons

Arthurd M. Simmons
Andrew Simon
Donald H. Simpson

David K. Sivill

Karen C. Sixt

Erik Skov

Robert A. Skramstad

Kristina L. Skrine

*Michael P. Sleeman

Arthur E. Slingsby
Gary M. Smarth

Christine D. Smith

*David Lee Smith
Karen P. Smith
Marian M. Smith

W. Ronald Smyth

Dimitrios Sokoutis

Iickho Song

Praphat

Sophaphongphophaphat
Frank S. Spear

*Charles W. Sprague

*Mark S. Springer

*Margaret W. Staub

William V. Stauder

Hubert Staudigl

*Jennifer J. Steen

Carl K. Steffensen

Jeffrey T. Stephenson

Robert A. Stettler

Jeffrey D. Stevenson

Mike A. Stevenson

Carrie E. Stewart

*Alice L. Stever

*Paul R. Stoddard

Christopher J. Stohr

*Linda Stone

David A. Stoner

Lynne E. Stopen

*Lowell D. Stott

Susan G. Stover

*Mark D. Strobel

Robert H. Strong

*Amy Jean Strunk

Kermut Studley

Edgar A. Stutz

Jonathan C. Stutzman

Wen-June Su

*Marc W. Sullivan

*Wendolyn R. Sumner

Robert Scott Sumson

Frederick M. Surowiec

Edward H.

Sussenguth, III

Keiko Susuki-Kamata

Roger J. Suthren

Hugh A. Swarman

*Robin L. Sweeney

Stephen S. Syfrett

Eugene R. Syrewicz

Mohamed-Ali Tadkod

William J. Tafuri

Guy H. Tanz

Daniel E. Taylor

*Doug S. Taylor

Edward M. Taylor

Subhas Tella

*Janet L. Thigpen

*Edward F. Thomas

George M. Thomas

Berke L. Thompson

Diana M. Thompson

*Gordon D. Thompson

Hporace Thompson

*Joel B. Thompson

*Troy R. Thompson

*L. Harvey Thorleifson

Brian J. Todd

Alberto P. Toledo

Reynold J. Tomes

Todd J. Trany

Jack W. Travis

Michael I. Treesh

Jane S. Tribble

Charles W. Trione

R. Joseph Trojan

Paulette K. Troyer

Laurence G. Trudell

*James B. Truman

*Frederick C. Tuck

Brian E. Tucker

*William L. Turner, Jr.

Stanley C. Tyler

*Paul J. Umhoefer

Kristen L. Underwood

Azfil Unus

Jaye E. Up De Graff

Richard E. Utne

Zenon Valin

Victor V. Van Beuren

Dale A. Van Dam

Eric M. Van Heyde

James D. Vaughn

David R. Veblen

*Anne I. Veeger

*Cynthia Venn

*Michael E. Villeneuve

Lynn E. Vogel

Andrews H. Vogt

Jeffrey A. Volk

Frederick R. Vonner

Craig A. Vrabel

W. Michael Wade

*John Wakabayashi

Wayne T. Walker

*Maud M. Walsh

*Pong Wang

Lauck W. Ward

Robert H. Washburn

Paul A. Washington

Douglas R. Waterman

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NEW GSA STUDENT ASSOCIATES

The following 956 Student Associates became affiliated with the Society during the period from March 1989, through February 1990.

Lon D. Abbott
Mark B. Abbott
Robert H. Abrams
Anne F. Ackerman
Donald C. Adams
Laurel J. Adams
Rasool Aftabi
Abinash Agrawal
Jose M. Aguirre
Martin R. Aguirre
Mohamed K. Ahmed
Willaim T. Akers
David W. Alberg
Linda S. Albertzart
Alton L. Albin
Lynn B. Albright
Mahesh P. Albuquerque
Dennis J. Alexander
Jim S. Alexopoulos
Carlos A. Alfonsou
Stephen T. Algar
Michael P. Algro
Saif A. Alhakims
Bryan K. Allen
Cristina M. Allen
Hamad A. Alsaad
Shiv K. Ambardar
Clifford P. Ambers
Barbara A. amEinde
David Anderson
Steven W. Anderson
Suzanne P. Anderson
William P. Anderson, Jr.
William E. Andrews
Kevin M. Ansdel
Manuel De J.
Aragon-Arreola
Carlo A. Arcilla
Greg B. Arehart
John C. Armentrout
Allan E. Armitage
Antonio M. Arribas
Joaquin Arroyo-Cabrales
Rolf S. Arvidson
Jahangir Asadi

Daniel R. R. Askren
Elizabeth D. Atkins
Ronald E. Augustin
Victoria F. Avery
Jennifer C. Aydelotte
Clifford A. Baines III
Dean M. Ballotti
Phillip J. Bandy
Douglas E. Barden
Linda T. Barnes
Matt Barnett
Deborah L. Barr
James Lyle
Leonard Barton
Carvel Bass
Todd F. Battey
Denise A. Battles
William K. Baty
Rita M. Bauer
Jennifer L. Baysinger
David L. Beadle
Harriet G. Beale
Stanley T. Beames
Brian L. Beard
Victoria M. Becker
Michael G. Beikirch
Paul Belasky
Richard H. Bell
Richard A. Bennett
J. Brent Bennington
Bret L. Berglund
Jeanette Bergman
Clyde Bernal
Barrie L. Bernstein
James M. Berry
Andis D. Benzins
Kailash P. Bhatt
Arshad M. Bhutta
Roberto E. Biaggi
Amy L. Biondich
Bruce P. Birge, Jr.
Kayllynn M. Bishop
Bren E. Blackburn
Terri L. Bland
Ruth E. Blake

Scott M. Blanchard
Daniel F. Blankenau
Allan R. Blaske
Judson M. Blazek
Wouter Bleeker
Veronica L. Blette
William L. Blewett
Daniel R. Block
Marianne E. Blom
Sabine C. Boardman
Robert T. Bobo
Barbara M. Bock
Brian E. Bodenbender
Adam Boers
Stefan S. Boettcher
Yvette L. Bordeaux
Robert H. Borowsky
William B. Boston
Bret D. Boundy
Theresa M. Boundy
Scott A. Bowman
Keven C. Boyd
Elizabeth W. Boyer
James J. Brady
Richard T. Brandley
Michael L. Bratrud
Hans-Martin Braun
Hayden L. Bridwell
Douglas R. Britton
Todd H. Brobst
Cheryl L. Brown
Justin P. Brown
Stephen C. Brown
Wanda L. Brownlee
Thomas C. Brudos
Craig B. Bruno
Frank R. Brunton
Stephen J. Brunton
Joel B. Bruvoort
Michael A. Bruzzone
Peter G. Buchanan
Andrew R. Buckland
Thomas P. Buerkert
Bruce E. Bulman
Armando Burciaga

Robert M. Burger
Scott A. Burner
Ann Burns
Jonathan L. Burr
Emelia A. Burt
William J. Bussard
David R. Byers
Barbara J. Byron
Sherry L. Cady
Kenneth G. Caldeira
Arthur R. Calderwood
Marta L. Calvache
Grissell Camacho
Desiree M. Campbell
Tuqiang Cao
Duane A. Carey
Christine Carlson
Christopher P. Carlson
Victoria L.
Carlson-Fosco
Antonio M. Carrillo
Camela A. Carstaphe
Paul J. Catanzariti
Gang Chai
Bill Chaisson
Mark Chandler
Nathan T. Charlton
David C. Chase
Leslie L. Chau
Zi-Qiang Chen
Tracey L. Chester
Elizabeth W. Chinn
Jung-Chan Choi
Beth Anne Christensen
Douglas H. Clark
Tonya D. Clayton
Drew M. Clemons
Steve A. Clementi, Jr.
Brooke P. Clements
Peter D. Clift
Donald L. Coble
Matthew J. Cochrane
Becky J. Coel
Matthew W. Colker
Ronald B. Cole

James W. Collister
Herminio Concepcion, Jr.
Terrence D. Conlon
Marc Constantin
Timothy W. Cook
Craig E. Cooper
Jon W. Cooper
Edward J. Corbett
Clifton Cornelison
Kevin Cornwell
Samuel G. Coronado
Jeffrey T. Cottingham
Mathew A. Cotton
Angela J. Coulton
Brent A. Couzens
Patience A. Cowie
B. Lea Cox
David A. Coyle
Dale Crissman
David A. Crown
Ronald A. Crowson
Daniel T. Cullinan
William A. Curry
Sarah F. Curtis
Julie M. Curtiss
John J. Cutright
Yongsan Dai
Timothy D. Dalby
Michael W. Dane
Eric J. Daniels
Brett V. Danko
Rick L. Dare
Terri-Lynn Day
Jeanne L. DeLanois
Jennette C. DeLeeuw
Gian L. Delia
Kathy L. De Luca
Antonio Damatteis
Anna M. Dennis
Marlyn L. DeRosa
Mark W. De Wit
David W. Dilkes
Jeremy S. Dillon
Samuel R. Diner

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New Student Associates  continued from p. 184

Steve W. Dobbs  Katie C. Forman  Judy M. Harmon  Linda C. Ivany
Carl B. Dotson  Zorka A. Poster  Peter J. Harries  R. Bradford Jackson
Carl N. Drummond  Bruce W. Fouke  Therese R. Harris-O’Connell  Gerhard K. W. Jacob
Peter A. Drzewiecki  Kendall B. FOUNTAIN  Charles P. Hart  Pamela D. Jacobs
Christopher P. R. Dsa  Troy D. Fowler  Forrest E. Harvey  Peter M. Jacobs
Yijun Du  Miranda S. Fram  James L. Harvey  Thomas S. James
Yubuo Du  Ludwig J. Frank II  Deborah R. Hassler  Taekuen Jang
Matthew Duke  Tracy D. Frank  Kendall L. Hauser  Gary E. Jaroslow
Diana G. Duncan  Kathy N. Fraracci  Richard B. Havrilla  David L. Jeffery
Joel G. Duncan  William T. Frederick  William B. Hawkins, Jr.  Anne-Marie Jepsen
Robert T. Duncan  Samuel J. Friedmann  Laura A. Hayes  Yueqin Jin
Thomas L. Dunn  William J. Friedmann, Jr.  Garrett B. Hazelton  Mary K. Johns
James M. Durbin  Julie K. Friez  Thomas S. T. Heah  Bradford J. Johnson
Roger B. Durham  David Froehlich  Kevin M. Hedinger  Gerald W. Johnson
Janet F. Dyson  Madeleine M. Fulford  Adam W. Heft  Peggy S. Johnson
Louis S. Eaton  George Furriss  Patricia E. Helland  Victoria M. Jordan
Suzanne K. Eckel  Jerry M. Gehr  John L. Heely  Katheryn M. Joiner
Kate Edgar  Jennifer A. Gano  Adam W. Heft  Harry M. Jol
Cheryl A. Edwards  John H. Ganter  Patricia E. Helland  Alene M. Jones
Walter W. Edwards  Jon O. Garbisch  Marion J. Henry  Carolyn E. Jones
John M. Eisler  Geoffrey G. Gardner  Virginia S. Hensley  Carolin E. Jones
Mark F. Eisen  Elizabeth A. Garner  Harvey Henson, Jr.  Charles E. Jones
Harold V. Ekstrom  Gregory N. Gerke  Theresa R. Henson  Perry M. Jones
Roger F. Elconin  Bibeck Gosh  F. Vincent Heryn  James W. Jordan
Diana F. Elder  Tamara L. Gibbons  Marc A. Herpfer  Rhonda K. Joseph
Brian P. Elias  E. Gay Gibson  Charles N. Herrick  Aine A. Joyce-Hasham
Pamela J. Ellerman  Sandra J. Giesler  John M. Herzog  Sue C. Kahle
R. James Elliot  Julia A. Gilbert  Alexander E. Hess  Robert M. Kalin
Aley El-Din K. El-Shazly  Jacques Giraudau  Mahlon T. Hewitt III  Joseph F. Karls
James C. Ely  Linda R. B. Glaman  Robert J. Hickey III  Allah B. Kausar
Juliana Erato  Paul E. Glubczynski  Kathryn V. Hieger  Gina N. Keenan
Stuart C. Erickson  Todd T. Gmitro  Albert J. Hilly  Carla B. Keith
William C. Erler  Anne R. Gogola  David S. Hirt  David C. Keith
Nancy K. Esmerian  Helge M. Gommernann  Richard A. Hisert  Daniel L. Kelleher
Emmett Evanoff  Victor M. Gonzalez  David E. Hobbs  Stephen P. Kellerman
Gordon C. Evans  Erik L. Gonzalez-Caver  Margaret A. Hodgin  Mark O. Kelly
William L. Evans III  Peter T. Goodman  Joanne L. Hoffard  Kirt A. Kempter
Barbara J. Everett  Dibakar Goswami  Don F. Hoirup, Jr.  Naila Khairallah
Phillip D. Everhart  Molly H. Gowen  Eric J. Holdener  Mohammad A. Khan
Douglas D. Everson  Wendy J. Graber  Gregory J. Holk  Diann S. Kiesel
Timothy J. Fagan  Robert W. Graves  Lynne Holland  Lynn A. Kieselhorst
Timothy R. Fahrer  James D. Green, Jr.  Scott D. Holmes  Crystal E. Killen
Monica M. Farek  Martha C. Green  Harry E. Holthaus, Jr.  Douglas S. Kilmer
Randy L. Farmerie  Robert G. Grenier  Mary E. Hoover  Hye S. Kim
James Farquhar  Chris A. Greytak  Brian D. Hopp  Seong P. Kim
William H. Farrand  Robert Gribble  Linda L. Horn  Samuel C. Kindervater
Elaine P. Farrell  Jonathan E. Grimes  Dwight A. Hornbacher  Robert W. King
Joe Fassio  Jeffrey A. Groen  Marcie R. Horowitz  Virginia L. King
Anna K. Fayon  Todd W. Grunwald  Martha A. House  John A. Kipp, Jr.
David L. Feckley  Michael D. Guebert  P. Kyle House  Gerd Kirchner
Sharon N. Feldstein  Linda C. Gunderesen  Alan E. Hubbard  Kimberly S. Kirchoff-Stein
Xiaohong Feng  Michael J. Gunderson  Edward M. Huber  Paul D. Kirk
Zhaoding Feng  Dennis W. Haas  George J. Hudak III  Donna Kirkwood
Scott J. Ferguson  Elizabeth A. Hadly  David L. Hunt  Ellen K. Kirschner
Gabriel M. Filippelli  G. Ted Haessler  Jeanne Hunt  Patrick B. Klages
Christian C. Finch  Marc J. Haga  Gary K. Hurban  Paul D. Klipfel
Robert E. Fisher  Donald B. Hall  Meer T. Husain  Margaret L. Kneller
Thomas Fleming  Fraser K. Hamilton  Theodore L. Huscher  Joseph Knight
Timothy P. Fleming  John M. Hanchar  Quentin S. Huss  Jeffrey R. Knott
Charles D. Fletcher  Mohammad Haneef  Frederick E. Hutson  Harold R. Knox
Frank P. Florence  Jennifer L. Hare  Kristin T. Huysken  Ari L. Kogut
Kevin M. Foley  Ali Hariry  Ebeenero O. Ifekoya  Elaine Kotler
Edward Kouadio  continued on p. 186

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New Student Associates continued from p. 185

Ana L. G. Macario
Paola Macchiariol
Robert I. Macfie
Donald B. MacGowan
H. Elizabeth MacLellan
Daniel E. Madsen
Lori A. Maher
Cecil P. Majors
Mark P. Mallamo
David H. Malone
Mitchell J. Malone
Paul C. Manega
Angela R. Maness
Lunjin Mao
Rebecca A. Markel
John J. Marra
Antoinette J. Marsh
Jeffrey S. Marshall
Louise D. Marshall
John W. Marsolais
Anthony J. Martin
David J. Martin
Harriet Martin
Laurie E. Martin
Scott E. Martin
Albert Martinez
Alfonso V. Martinez
Daniel R. Martinoni
Kevin G. Marty
Gary L. Mast
Alan R. Matthews
James Matthews
Jane M. Matty
John A. Mavrogenes
Helmut Mayer
John R. McArthur
Robert L. McCall
Austin V. McClain
Cathy J. McCormack
Diane K. McDaniel
David W. McDonald
Gregory D. McDonald
Mitchell G. McGinnis
Robert W. McGrath
Allen J. McGrew
Joe R. McHam
Cindy L. McIveren
John P. McKiness
Curtis R. McKinney
Jill P. McMahon
Ronald L. McNeil
Brendan A. McNulty
Lawrence McTierman
Donna J. Mease
Ellen L. Mecray
Irene L. Meglis
Roger A. Melick
Rebecca K. Melling
Nancy Merritt-Watson
Kevin J. Meurer
Grant A. Meyer
Qingmin Miao
Joseph M. Michaletz
Melody D. Mierisch
Elizabeth J. Miksa
David W. Millen
Christopher A. Miller
David E. Miller
Henry A. Miller
Jeffrey D. Miller
Marcus E. Milling, Jr.
Elizabeth Millner
Andrew M. Miner
Conrado R. Miranda
Richard W. Mitchell
Thomas L. Mitchell
Martha N. Mixon
Roberto S. Molina-Garza
Sarah W. Molloy
Philipp C. Molzer
H. Curtis Monger
Rogelio Monreal
Ann L. Montgomery
Daniel J. Moore
Michael D. Moore
Shirley A. Morikawa
Charles F. Morrison
Eric T. Morton
Jed L. Moshenberg
Billy E. Moss
Ann E. Moulding
Yiorgos G. Moussouris
Edna L. Mueller
Karl J. Mueller
Barry E. Muller
Kevin R. Mulligan
Sandor G. Muslow
Barbara J. Munn
John E. Murnane
Kevin B. Murphy
Valerie M. Murray
Dean C. Musfeldt
Douglas L. Musser
Maria Mutti
Stephen C. Myers
Diane Nahr
John E. Nay
Majd Suleiman
Nahad
L. Gayle Nelms
Storr L. Nelson
Karen L. Nesbit
Kathleen A. Nicoll
Lee C. Nordt
Ronald W. Novak
Patrick S. O'Boyle
Jinyong Oh
Susan Oleson-Elliott
Jeffrey A. Olsenholle
John J. O'Rourke
Steven A. Osterberg
Kim-Marie Panacovsky
Bonnie M. Packer
Clay H. Padginton
Matthew L. Paige
Heikki S. Panka
Luis M. Paredes-Mejia
Sarah J. Parkin
David L. Parkinson
Shannon M. Parsons
Suresh C. Patel
Uyen P. Patel
Gagan B. Patnaik
David D. Patton
Eugene A. Pavia
Paige R. Peapples
Teufelir Peare
Robert E. Pearson
Aristo M. Pelayo
Chris N. Penzel
Bruce D. Perry
Chiara Pezzani
Cipolita D. Phillips
Philip M. Piccoli
Frank W. Pickell
Jayne A. Pietrowski
Harold T. Pile
Junior A. Pinnix
Nicholas Pinter
Carlos Pirmez
Susan L. Pittenger
Dede L. Pitts
Bruce A. Pletsch
Ernesto C. Podaca
John S. Pollard
Ruben D. Ponciano
Gregory B. Pool
Nancy M. Porrino
Stephen S. Potts
Susan M. Power
Ellen J. Prager
Shari J. Pruce
Henry S. Prellwitz
Norman D. Prettyman
Shawn G. Price
Lynn L. Pryer
Wayne D. Pudney
Eriks M. Puris
Qu Qi
Jai Quade
Andrew I. Quarles
John J. Quinn
Eric M. Radje
Jahandar Ramezani
Namin
Eric Ramsay
Elizabeth A. Ramsey
Richard H. Raymond
Scott M. Readnour
Stanley E. Reeder
Joseph F. Reese
Carolyn Relf
James R. Rice
Ian J. Richards
Paul J. L. Richards
John E. Ries
Bonnie J. Rippere
Terrell W. Rippstein
John S. Risch
George B. Roberts
Dawn M. Robinson
Steven R. Robinson
James K. Roche
Budi Rochmano
Michael W. Rockow
Melissa Rogers
Robert M. Rohlf
Steven R. Roof
Jill L. Rosenberg
Pamela J. Roths
Robert R. Ruscitto II
James H. Rusk, Jr.
Luigi Russo
Ian D. Rutherfurd
Sandra Ryan
Bernhardt Saini-Bidukat
David B. Saja
Qazi Salahuddin
Geoffrey V. Saldivar
Janet L. Saltzman
Maria M. Sampayo
Ernest Sanchez
Julia T. Sankey
Hernan Santos
Joseph I. Satterfield
Robert A. Sattler
Lynne A. Saunders
Mark E. Savoca
Oswald Sawicki
Leon T. Sawyko III
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Mary Jo Schabel
Stephen J. Schafer
Jeffrey D. Scheerhorn
Lily A. Schinke
Thomas G. Schmitz
Cynthia E. Schneider
Ronald C. Schott
Daniel P. Schrag
Matthew E. Schramm
Kathryn A. Schubel
Mitchell D. Schulte
Greg J. Schurter
Patrizia P. Schuster
Rudolph M. Schuster, Jr.
Stefanie Schwertfeger
David A. Scorgie
Nobukazu Seama
Marylin P. Segall
Jeffery C.Seitz
Lisa A. Senior
Aristides Sfekis
Peng Sha
Stephen G. Shank
Russell S. Shapiro
Saxon E. Sharpe
Thomas H. Shaw
Jonathan D. Shenk
Warren Shepard
Lisa D. Shepard
David M. Sherer
Sarah C. Sherwood
Tom Shober
Daniel B. Shrum
Shamim A. Siddiqui
Bradley S. Singer
David A. Sinson
Andrew P. Skypeck
Trond Skyseth
Michael W. Slattery
L. Cirbus Sloan
John R. Smerekanzic
Brian D. Smith
Caryn H. Smith
Grant A. Smith
Jennifer A. Smith
Loren H. Smith
Richard Edwin Smith
Tad M. Smith
Vera A. Smith
William R. Smith
S. Kim Smulling
Hilde Snoeckx
Gregory A. Snyder
Leslie J. Sontag
James Sousa
Barbara J. Souter
Peter A. Souza
Christopher Spoel
Abraham E. Springer
Linda S. Spry
Kevin R. Stank
Robbie J. Stanley
Michael A. Starcher
Kenneth J. Stark
Charles L. Stebbins, Jr.
Alison M. Steele
William L. Stefan
Eric J. Steig
Daniel J. Stettner
Peter W. Stewart
Harald Stollhofen
Ronald A. Stone
Lawrence J. Strom
Charles L. Stuart III
Matthew A. Stuk
Muzaffer Sultan
Dawn Y. Sumner
Alan L. Supple
Daniel W. Sutton
Donald S. Sweetkind
Robert F. Swenson
Christopher S. Swezy
James E. Swierc
Kent M. Syverson
Anna Szatari
Nur I. Taib
Jean A. Tangeman
Lawrence H. Tanner
Robert R. Tarver
Ann M. Tattersall
Robert E. Taylor II
Alexander W. Taylor
James T. Taylor
Wendy L. Taylor
John M. Tedesco
Jeffrey H. Templeton
Lani M. Terry
Valery J. Terwilliger
Pierre P. Theriault
Eric B. Thomer
Andrew L. Thomas
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New Student Associates continued from p. 186
Mary Ann Thomas
Rene O. Thomsen
Stuart N. Thomson
Mark W. Thurber
Richard L. Tibbits
Basil Tikoff
Christopher A. Toles
Nita J. Tolia
A. Kurt Tollestrup
Gustave I. Tolson
Steven M. Traher
Suzanne G. Traub
Daniel E. Trawick
Charles W. Tremper
Andrew T. Truax
Wendy E. True
Dale M. Tshudy
David M. Tuck
Robertino Turello
Mary E. Turner
Natasha P. Unrigar
Heidi A. Untener
James W. Vaillance
Margaret C. Van
Buskirk
M. Ross Vandervynck
Bradley S. Van Gosen
Julieann Van Nest
Robert J. Van
Wansbergen
Nicholas Van Wyck
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Yousef Vasilich
Luis A. Vega
Denys Vermette
Meenakshi Wachhwa
Karen D. Walker
Thomas M. Walker
Thomas N. Wallis
Shing Hau Wang
Wei-Hau Wang
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Kurt J. Zappettello
Dazheng Zhang
Jiaxiang Zhang
Guozhu Zhao
Mark E. Zimmerman

GSA Council Actions—Spring 1990

Council nominates the following actions taken at its meeting on May 12, 1990, in Boulder, Colorado.

Council Nominations for 1991
Beginning this year, all voting members of the Society will receive a ballot that will list two candidates for the position of vice-president and two candidates for each councilor position. Complete biographical information on all candidates will be mailed with the ballot in August. Listed below are officer and councilor candidates for the term 1991-1993.

Doris M. Curtis; Béllaire, Texas
For Councilor and Vice-President (1991)
Robert D. Hatcher, Jr.; Knoxville, Tennessee
E-an Zen; Reston, Virginia
For Councilor and Treasurer (1991)
Robert L. Fuchs; Denver, Colorado
For Councilor (1991–1993)—Position 1
John D. Bredehoft; Menlo Park, California
John M. Sharp, Jr.; Austin, Texas
For Councilor (1991–1993)—Position 2
Paul D. Fullagar; Chapel Hill, North Carolina
John F. Sutter; Reston, Virginia
For Councilor (1991–1993)—Position 3
Victor R. Baker; Tucson, Arizona
Shirley J. Dress; Santa Cruz, California
For Councilor (1991–1993)—Position 4
Gordon P. Eaton; Ames, Iowa
William J. Hinze; West Lafayette, Indiana

New Honorary Fellows
German K. Müller
Department of Mineralogy and Petrology
University of Heidelberg
D-6900 Heidelberg, West Germany
B. P. Radhakrishna
Geological Society of India
63 Basappa Layout
Gavipuram, Bangalore 560 019, India

Medal and Award Winners for 1990
Penrose Medal
Norman D. Newell
American Museum of Natural History
Central Park West, and 79th Street
New York, New York 10024

Day Medal
William S. Frye
Department of Geology
University of Western Ontario
London, Ontario N6A 5B7, Canada

Young Scientist Award (Donath Medal)
Leigh H. Royden
Department of Earth and Planetary Sciences
Room 54-1014
Massachusetts Institute of Technology
Cambridge, Massachusetts 02139

GSA Distinguished Service Award
William B. Heroy, Jr.
Apartment 610
3901 Montecito Drive
Denton, Texas 76205

Corporate Matters
An amendment is proposed that would update GSA's constitution to provide for the newly established election procedure of listing two candidates for the position of vice-president and two candidates for each councilor position. The amendment, reviewed by the Society's legal counsel, will be submitted to GSA voting members on the ballot to be mailed in August.
Position Available

GSA Coordinator for Educational Programs

The Geological Society of America is committed to educational initiatives and seeks a full-time Coordinator for Educational Programs on the GSA staff in Boulder. A major new thrust for the Society in this area is called the SAGE Program (Scientific Awareness through Geological Education). Direction, development, and coordination of this program will be one of the prime responsibilities of the Coordinator for Educational Programs. The SAGE Program will serve the GSA Committees on Education, Minorities in the Geosciences, and Geology and Public Policy. Initially it will focus on the pre-college and public education sectors, but will have as its overall goal working with all relevant organizations to improve both public literacy about geology and the attractiveness of careers in geosciences.

The Coordinator must be a skilled organizer, motivator, fund raiser, and public spokesperson for quality educational activities. This is an excellent opportunity for a mid-career contribution to the leadership of reform in science education at all levels, with emphasis on the geological sciences.

Qualifications desired:
- Ph.D. in some area of the geological sciences
- Strong personal commitment to science education
- Substantial knowledge of the problems and structure of science education
- Strong interest in public-issue education
- Demonstrated fund-raising ability
- Effective networking capabilities
- Outstanding ability to communicate and motivate
- Ability to work creatively and effectively with individuals and organizations at all levels.

Letters of application should include a full résumé; names, addresses, and telephone numbers of three professional references; and a statement of interest in and qualifications for the position. The salary range is $50,000 to $60,000 depending on qualifications and experience. The desired starting date is early 1991.

Nominations, applications, and supporting materials should be submitted no later than September 30, 1990, to:

Dr. F. Michael Wahl
Executive Director
Geological Society of America
P.O. Box 9140
Boulder, Colorado 80301

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For 1991 GSA Section Meetings

Northeastern/Southeastern Sections
Omni Inner Harbor Hotel
Baltimore, Maryland
March 14–16, 1991

Abstract Deadline:
November 1, 1990

Submit completed abstracts to
Robert W. Ridky
Department of Geology
University of Maryland
College Park, MD 20742
(301) 454-3542

North-Central Section
University of Toledo–Seagate Campus
Toledo, Ohio
April 18–19, 1991

Abstract Deadline:
December 12, 1990

Submit completed abstracts to
D. J. Stierman
Department of Geology
University of Toledo
Toledo, OH 43606
(419) 537-2046

Cordilleran Section
Cathedral Hill Hotel
San Francisco, California
March 25–27, 1991

Abstract Deadline:
November 15, 1990

Submit completed abstracts to
Ivan Wong
Woodward-Clyde Consultants
500 12th St., Suite 100
Oakland, CA 94607
(415) 874-3014

Rocky Mountain/South-Central Sections
University of New Mexico
Albuquerque, New Mexico
April 22–24, 1991

Abstract Deadline:
December 20, 1990

Submit completed abstracts to
Michael Campana or Lee Woodward
Department of Geology
University of New Mexico
Albuquerque, NM 87131
(505) 277-4204

1991 Abstract Form Request

To: GSA Abstracts Coordinator
P.O. Box 9140
Boulder, CO 80301

Please send ______ copies of the 1991 GSA abstract form. I understand that the same form may be used for all 1991 GSA meetings—the four Section Meetings and the Annual Meeting.

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Address __________________________________________
City __________________________ State ________ ZIP ____________
GSA Annual Meetings

1990

GSA Annual Meeting • Dallas, Texas
October 29–November 1, 1990

Abstracts due
July 11

Program, housing, and registration information
August 10

Joint Technical Program Committee
August 10–11

Preregistration due
September 28

For information: GSA Meetings Department, P.O. Box 9140, Boulder, CO 80301, (303) 447-2020

1991

GSA Annual Meeting • San Diego, California
October 21-24, 1991

Call for short course proposals
GSA members and nonmembers are encouraged to submit short course proposals to be reviewed by GSA’s Short Course Committee. All proposals are due by December 1, 1990. For short course proposal guidelines contact:

Edna Collis
Short Course Coordinator
GSA, P.O. Box 9140
Boulder, CO 80301
(303) 447-2020

Future

Dallas October 29–November 1 .... 1990
San Diego October 21–24 ........... 1991
Cincinnati October 26–29 .......... 1992
Boston October 25–28 ............. 1993
Seattle October 24–27 ............ 1994

GSA Section Meetings

1991 Section, Location, Dates

Cordilleran, Cathedral Hill Hotel
San Francisco, California, March 25–27

North-Central, University of Toledo
Toledo, Ohio, April 18–19

Northeastern-Southeastern
Omni Inner Harbor Hotel
Baltimore, Maryland
March 14–16

Rocky Mountain-South-Central
University of New Mexico
Albuquerque, New Mexico
April 22–24

Contact

Raymond Sullivan, Dept. of Geosciences, San Francisco State University,
San Francisco, CA 94132, (415) 338-2061

Lon Ruedisili or Mark Camp, Dept. of Geology, University of Toledo,
Toledo, OH 43606, (419) 537-2009

Emery Cleaves, Maryland Geological Survey, 2300 St. Paul Street,
Baltimore, MD 21218, (301) 554-5504

Juergen Reinhardt, U.S. Geological Survey, 926 National Center, Reston,
VA 22092, (703) 648-6789

G. Randy Keller, Dept. of Geological Sciences, University of Texas at
El Paso, El Paso, TX 79968-0555, (915) 747-5501

John Geissman or Wolfgang Elston, Dept. of Geology, University of
New Mexico, Albuquerque, NM 87131, (505) 277-4204

1992

Cordilleran ................. Eugene, Oregon
North-Central, April 16–17 ...... Iowa City, Iowa
Northeastern ................ Bethlehem, Pennsylvania
Rocky Mountain ............. Ogden, Utah
South-Central, February 24–25 .. Houston, Texas
Southeastern, March 18–20 ...... Winston-Salem, North Carolina
MEETINGS

(Asterisk indicates new or changed information)

1990

9th International Conference on Basement Tectonics, July 2–6, 1990, Canberra, Australia. Information: IB79 ACTS, GPO Box 2200, Canberra, A.C.T. 2601, Australia; phone 062-49-8015; fax 062-573256.


Rocky Mountain Friends of the Pleistocene Field Trip, August 16–19, 1990, southwestern Montana. Information: Robert D. Hall, Dept. of Geology, Indiana University–Indianapolis, 425 University Blvd., Indianapolis, IN 46202-5140; (317) 274-3795 (direct), (317) 274-7484 (dept.).


International Conference on Water Resources in Mountainous Regions, August 27–September 1, 1990, Lausanne, Switzerland. Information: Aurore Perriaux, Laboratory of Geology EPFL, 1015 Lausanne, Switzerland; phone 021-47-23-55; telex 454478 EPFL CH.

AEG General Meeting and 14th International Geochemical Exploration Symposium, August 29–31, 1990, Prague, Czechoslovakia.

Information: Frantisek Mrna, Geological Survey of Prague, 118 21 Praha 1, Malostranske nam. 19, Czechoslovakia.


GOLDTech 4, September 10–12, 1990, Reno, Nevada. Information: Meetings Department, Society for Mining, Metallurgy, and Exploration, P.O. Box 625002, Littleton, CO 80162-5002; (303) 973-9550; fax 303-973-3845; telex 881988.


3rd International Archaean Symposium, September 17–21, 1990, Perth, Western Australia. Information: Susan E. Ho, P.O. Box 435, Nedlands, Western Australia 6009, Australia.

82nd Annual New England Intercollegiate Geological Conference, with field trips in the Gaspé Peninsula, Quebec, September 21–22, 1990, Montreal, Quebec. Information: Walter Trzcinski, Dept. of Geology, University of Montreal, C.P. 6128, Succ. A, Montreal, Quebec H3C 3J7, Canada.


Meetings continued on p. 192
Meetings continued from p. 191

7th International Conference on Geochronology, Cosmochronology and Isotope Geology, September 24-29, 1990, Canberra, Australia. Information: Organizing Committee, ICOG 7, Research School of Earth Sciences, Australian National University, G.P.O. Box 4, Canberra, A.C.T. 2601, Australia; phone 062-49-3406; fax 61-62-490 738; telex 62693.


*Geoscience Data Conference, October 7-9, 1990, Dallas, Texas. Information: Infomat Registration Services, 1950 Stemmons Freeway, Dallas, Texas 75207; (214) 746-3500, fax 214-746-3501.


International Symposium on Environmental Studies on Tropical Rain Forests, October 7-13, 1990, Manaus, Brazil. Information: Organizing Committee-Forest '90, P.O. Box 3591, 2001 Rio de Janeiro, RJ, Brasil; phone 55-21-211-5581; telex 55-21-22395; fax 55-21-252-9269.

Petroleum Computing in the '90s Symposium, October 8-9, 1990, Midland, Texas. Information: Permian Basin Graduate Center, P.O. Box 1518, Midland, TX 79702; (915) 683-2832.

5th Australian Remote Sensing Conference, October 8-12, 1990, Perth, Western Australia. Information: Golden West Conventions, P.O. Box 411, West Perth, W.A. 6005, Australia; phone 619-3227922; telex AA 95380; fax 619-4814029.


*Society of Vertebrate Paleontology 50th Anniversary Meeting, October 10-13, 1990, Lawrence, Kansas. Information: SVP 90, Vertebrate Paleontology Division, Museum of Natural History—Dyche Hall, University of Kansas, Kansas 66045-2454; (913) 864-3216.

Conference on Eastern Regional Ground Water Issues, October 17-19, 1990, Springfield, Massachusetts. Information: FOCUS Eastern Conference, National Water Well Association, P.O. Box 152039, Dept. #017, Columbus, OH 43218; (614) 761-1711.

*Geodynamics of the Arabian Plate, October 20-25, 1990, Safat, Kuwait. Information: Waris E.K. Waris, Dept. of Geology, University of Kuwait, P.O. Box 5969, Safat 13060, Kuwait; or Muawia Barazangi, INSTOC, Sne Hall, Cornell University, Ithaca, NY 14853-1504.


*Alberta Geological Survey Field Trip to the San Juan Basin, October 24-26, Edmonton. Information: Dennis Nikols, Alberta Geological Survey, Alberta Research Council, P.O. Box 8330, Station F, Edmonton, Alberta T6H 5X2, Canada; (403) 438-7622; fax 403-438-3364.

Geological Society of America Annual Meeting, October 29–November 1, 1990, Dallas, Texas. Information: GSA, Meetings Department, P.O. Box 9140, Boulder, CO 80301; (303) 447-2020. (Abstracts deadline: July 11, 1990.)

Petroleum Hydrocarbons and Organic Chemicals in Ground Water: Prevention, Detection and Restoration, October 31–November 2, 1990, Houston, Texas. Information: Petroleum Hydrocarbons Conference, National Water Well Association, P.O. Box 182039, Dept. #017, Columbus, OH 43218; (614) 761-1711.


Supercomputing '90, November 12–16, 1990, New York, New York. Information: Joanne L. Martin, IBM T. J. Watson Research Center, P.O. Box 218, Rt. 134, Yorktown Heights, NY 10598; (914) 945-3285.


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Penrose Conferences continued
Large Lakes and Their Stratigraphic Record, September 9–13, 1990, Lake Tahoe, California. Information: Andrew S. Cohen, Dept. of Geosciences, University of Arizona, Tucson, AZ 85721; (602) 621-4691 (direct), (602) 621-6024 (dept.).

New Methods for Dating of Geomorphic Surfaces, October 12–17, 1990, Mammoth Lakes, California. Information: Fred M. Phillips, Dept. of Geoscience, New Mexico Tech, Socorro, NM 87801; (505) 835-5540 (direct), (505) 835-5634 (dept.).


1991

Society for Mining, Metallurgy, and Exploration Annual Meeting, February 25–28, 1991, Denver, Colorado. Information: Meetings Department, Society for Mining, Metallurgy, and Exploration, P.O. Box 625002, Littleton, CO 80162; (303) 973-9550; fax 303-979-3461.

Second International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics (including special session on the Loma Prieta [Califomia] earthquake of October 17, 1989), March 11–15, 1991, St. Louis, Missouri. Information: Shamsher Prakash, Dept. of Civil Engineering, 308 Butler Carlson Hall, University of Missouri, Rolla, MO 65401-0249; (314) 341-4489; fax 314-341-4729. (Abstracts deadline for Loma Prieta session is July 15, 1990.)


International Symposium on Geophysical Hazards in Developing Countries and Their Environmental Impacts, April 21–27, 1991, Cairo, Egypt. Information: T. S. Murty, Hazards-91, c/o Institute of Ocean Sciences, P.O. Box 6000, Sidney, B.C. V8L 4B2, Canada; (604) 356-6311; telex 04-97281; fax 604-356-6390; Mohammed I. El-Sabh, Hazards-91 Dept. Oceanographie, Universite du Quebec, 300, Allée des Ursulines, Rimouski, Québec G5L 3A1, Canada; (418) 724-1707; telex 051-31623; fax 418-723-7234.


*11th International Symposium on Ostracoda, July 8–13, 1991, Warrnambool, Victoria, Australia. Information: Peter J. Jones, Bureau of Mineral Resources, P.O. Box 378, Canberra A.C.T. 2601, Australia; phone (06) 249 9737; fax 06-257 6465.

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*International Symposium on Debris Flow and Flood Disaster Protection, October 14–20, 1991, Emeishan City, Sichuan Province, China. Information: Tong Yuling, International Research and Training Centre on Erosion and Sedimentation (IRTCES), P.O. Box 366, Beijing, China 100044; phone 8413372; telex 22786 ITCES CN; fax 8412539.


Send notices of meetings of general interest, in format above, to Editor, GSA News & Information, P.O. Box 9140, Boulder, CO 80301.

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