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ASSOCIATION FOR WOMEN GEOSCIENTISTS
To **Encourage** the Participation of Women in the Geosciences,
To **Exchange** Educational, Technical, and Professional Information,
and to **Enhance** the Professional Growth and Advancement of
Women in the Geosciences

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President's Address

Wow, I can't believe so much time has gone by since the convention at Snowbird. I myself have been more than busy working at my job in the environmental consulting industry. I am lucky to have interesting projects, but there are those days when I wonder if I may be devoting more than enough to my career. Isn't there more to life?

I have been occasionally guilty of letting my career consume me. Surely, many of you can sympathize with me on this. I have learned over the years that there is more to life than doing well at my job or making money. Every few weeks I evaluate what I am doing with my time and when I notice that a particular aspect is beginning to dominate (like work), I make sure I take a step back and do something with my husband, my friends, or by myself. Evaluating myself like this also helps me to stay on track and working towards my life goals which includes spending time with people I care about. As they say, when you are gone is anyone going to remember all the long hours you spent at work? No! You will be remembered for the how you affected other peoples lives.

I look back on the times spent on AWG activities and can tell you that I have definitely been affected by those I have met through this fantastic organization. AWG may be a small group but that is part of what makes it great. AWG has changed my life in countless ways. I have made several wonderful friends, received and given a sympathetic ear, found role models, landed a job, received many hugs, and developed a fulfillment that you can't get in just any organization. AWG's members come from many backgrounds and have

much to offer each other. As an example, look at the "Member Profile" column featured in this issue of Gaea, by our At-Large delegates, Joanne Kluessendorf and Pranoti Asher, to get an in-depth look at one of our members.

On to a few business matters at hand. First, we still have a need to recruit members and I encourage you to talk to your co-workers, fellow students, and friends about joining AWG. We lose touch with many of our members after they have moved to a new area. Sometimes our student members leave school and forget to send us their new addresses after they have relocated to attend graduate school or to take a job. The US Postal Service is less than helpful with these matters!

Some people simply do not know that AWG exists -Horrors! Please share your knowledge of AWG with others who may be interested. Our membership drive contest continues. We still have more prizes than recruiters! For details of the contest, see the back cover of the last Gaea. We will continue the contest until all prizes are awarded.

To improve communication within AWG, we continue to use email aliases for every AWG officer, committee and for the AWG Foundation. For committees, these aliases serve as distribution lists for the members of each committee if they have email capabilities. Until we move our web site to its new home, these aliases will have the temporary suffix @akgroup.com. The permanent suffix will eventually be @awg.org. These email distribution lists provide us with the wonderful opportunity to include potential committee members who otherwise cannot attend regular committee meetings held prior to the biannual Board of Directors meetings. If you are interested in being

involved in a committee, please look at the AWG web site for the listing and contact the committee chair and our AWG secretary, Sean Hunt, to join.

Committees provide an umbrella for related activities at the individual and Chapter level and an opportunity for sharing ideas. If you are interested in doing a project through AWG with funding from the AWG Foundation, you must begin by bringing your proposal to the appropriate AWG committee for assistance and approval.

The featured article on "Education Outreach Ideas for Chapters" demonstrates several fine examples of activities that can be accomplished by Chapters and individuals alike. By applying for funding through the AWG Foundation, AWG members may obtain funding for projects like these.

Our next Board of Director's meeting will be held April 24-26, 1998 in Statesboro, Georgia. If you have an idea, a question, or a concern, please contact your delegate so that the issues can be brought to the meeting. This is the manner in which your voice is heard. Your AWG directory and the AWG web site (www.awg.org) has a listing of all the delegates. If you still don't know who your delegate is, you can contact me (my email address is awg-president@akgroup.com). AWG meetings are open to all (including our typical field trip and reception for those who either live nearby or who can travel to the site), and observers are welcome to attend.

Finally, I would like to end by publicly thanking Tanya Atwater for becoming a lifetime AWG member. We sincerely appreciate this investment in AWG.

— Anne Cavazos, AWG President

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Ethics Statement

AWG members shall conduct themselves in an ethical and professional manner.

Gæa

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Member Profiles

After Pranoti Asher and I were elected as at-large delegates, we started to become aware of, and fascinated by, the diversity of talented women and men that make up the AWG membership. As we learned more about our fellow members, we were struck by the problems, ideas, and visions we all shared, but we also learned a lot of new things from them, and we were energized and inspired by their stories. We thought that you would also enjoy discovering the different kinds of people that make AWG such a great organization. For that reason, we decided to write this Member Profile column as a regular feature in *Gæa*. We plan on profiling a broad spectrum of members (there is no typical member) who come from different backgrounds, have had varied life experiences, have been attracted to different fields of geoscience, and have used their talents in a diversity of ways. The profiled members will also talk about the reasons that AWG is important to them and relate any visions they may have for its future. We feel that the Profiles column is an excellent vehicle to further AWG's goals to enhance, exchange, and encourage. We hope that you will enjoy reading about your fellow AWG members. Please feel free to contact us with your comments about this column or to recommend someone for a future profile.

— *Joanne Kluessendorf*

Wendy Lynn Taylor

Although Wendy Taylor has been an AWG member for only a little over a year, I first met her at a Geological Society of America meeting back in 1991 when she was still working on her master's degree. It was actually hard for her advisor to introduce me to her because Wendy was pretty much just a blur most of the time as she scurried between talks, her poster session, and other events. The phrase "bundle of energy" immediately came to mind. As you will see in her profile, Wendy hasn't slowed down a bit and, in fact, it appears that she must have gotten even more energetic because her life is much busier now. "Unbridled enthusiasm" is another phrase that pops into my mind when I think of Wendy. Her enthusiasm really manifests itself

when she talks about her fossils, her outreach education, her museum work, her business....well, just about everything. Read on, and you'll discover why people like Wendy make AWG such a successful organization!

Wendy Lynn Taylor was born on December 17, 1962, in Erie, Pennsylvania. Lucky to have grown up in the country on a grape farm near the shores of Lake Erie, Wendy was interested in rocks and bones as far back as she can remember. Her first memory of the fossils that would eventually become the focus of her professional life dates back to when she was about four years old. Wendy remembers that her mother would let her sit in their driveway and sort through the gravel, where she would pick out the crinoid ossicles and other tiny fossil shells. Wendy confesses that she also "had an 'annoying' habit of having caches of bones (of a very modern age!) behind our hedges and even in the house."

Wendy spent most of her childhood playing in the woods, riding horses ("I had a horse before I had a bicycle"), camping, and fishing. Wendy recalls, "The area where I grew up has very few fossils in the rocks, no shells – just trace fossils such as worm burrows, but I did go 'fossilizing' and spent time doing creek walks and picking up the float in the stream beds. I don't know what in particular sparked my interest in science and geology, but knowing that the rocks around me had been moved by streams and glaciers over great distances and through vast expanses of time was very intriguing. The thrill of discovery has always been a part of it, too."

Always fascinated by nature, Wendy has, at various times, collected rocks, mushrooms, lichens, insects and plants (even slime molds) in addition to her fossils and bones.

Wendy credits a "wonderful" 4th grade teacher as the first person to introduce her to fossils in an academic setting: "She had a coffee tin full of trilobites and corals and brought them out once in a while for show and tell. I can recall thinking that they were the most wonderful things I'd ever seen!" Most of her science teachers in high school were males, but she remembers that they were all very supportive. It wasn't until Wendy entered the State University of New York College at Fredonia that she had women profes-

sors as role models. Wendy remarks, "I had a good start in college initially, but complicated my life by getting married at a very early age to one of my instructors. My marriage failed five years later, and I found myself very depressed and floundering in school. To make matters worse, my ex-husband continued to teach in the same department that I had to finish in. It was through the tremendous support and encouragement of several women professors, as well as my advisor, Dr. Gordon Baird, who, at this low point in my life, spurred me on to finish and to go on to graduate school. These people shared some of their experiences; their triumphs and especially their failures. I came to know how hard it had been for many of them. Through this sharing, they helped me to get past my worst fears and find the courage to start over. Without their support at this critical time, I honestly don't think I would have pushed myself to take that leap of faith."

Wendy did graduate with a Bachelor's degree in Geosciences and Biology from SUNY-Fredonia in 1989. She went on to complete a Master's degree in Geology in 1993 at the University of Rochester, where she also received her Ph.D. in October, 1996. While in graduate school both her teaching skills and service work were recognized. Her research focuses on the documentation of extraordinary fossil assemblages from western New York and southern Ontario, Canada. The fossils Wendy has studied range from beautiful complete crinoids to the isolated plates of the problematic machaeridian. She has even returned to the "disappointing squiggles" of her youth, discovering that they are really quite unique trace fossils, and she is now writing a paper on them! The author of many other papers and articles on her research, Wendy has been awarded for her efforts with an honorable mention in the best paper competition of Palaios. Her research has been supported by research grants from a number of prestigious organizations including the National Science Foundation, Geological Society of America, Paleontological Society, New York State Geological Survey, Sigma Xi and the Smithsonian Institution.

In February, 1995, Wendy was hired as the first Collections Manager at the

Paleontological Research Institution (PRI), a natural history museum located in Ithaca, New York. Here she manages and curates the Nation's seventh largest fossil and shell collection, which contains nearly three million specimens. Her other duties include supervision of collections assistants and volunteers, exhibit design, and personal research. Currently, she is supervising a massive collections reorganization and computerization as well as construction of a new museum addition. Her position was created in as part of a massive collections reorganization project funded by the National Science Foundation (NSF) and the Institute of Museum and Library Services (IMLS). Wendy reports that this project has dramatically improved the condition and accessibility of PRI's collections and has helped them gain national recognition. The IMLS recently wrote, "The museum [PRI] has revived its former status as a premier research resource for paleontologists and has, in addition, created a new role for itself in education and entertainment of the general public." The finale of this project includes the construction of a new 6,000 sq. ft. collections addition, now nearly complete, that will house half of PRI's collections and will provide additional exhibit and program space. Wendy has also mounted exciting exhibits on dinosaurs, insects, and other geologic topics. In addition, she actively participates in PRI's educational outreach program, leading field trips and giving science programs for children and has served as a student mentor for gifted elementary school children at Cornell University.

In her "spare" time, Wendy and a local Syracuse, New York, artist started a small educational fundraising company called Primordial Soup, L.L.C. last February. Her company has developed a line of domestically-made products that feature fossils such as dinosaurs, trilobites, and shells, marketed specifically for fundraising projects in elementary schools. All product designs are based on the latest scientific discoveries and feature stunning, original artwork. Primordial Soup received a Small Business Administration loan for its startup and has worked closely with the Syracuse Chamber of Com-

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Member Profile, cont.

merce. In recognition of its uniqueness, Primordial Soup has received an award from the Chamber of Commerce and has been featured on Syracuse's TV Channel Nine and in the business section of the Syracuse Post Standard. To reach a global audience and offer a convenient source of product and educational information, Primordial Soup has recently launched a 50-page World Wide Web site (www.primordialsoup.com).

Wendy served for six months as PRI's Education Director in 1996-97, when a staff member left unexpectedly. During that brief period, she was able to expand the number of education programs to more than triple that of previous years. Programs entail on-site tours of the collections and classroom outreach, where specimens are taken into schools for the presentation of hands-on programs. Wendy recalls, "I found my experiences doing programs to be extremely rewarding and noticed that when I talked about how I became interested in science as a child, many of the children (especially the girls) showed a lot of interest. In nearly every program I gave, I had female teachers and students (from K through 5th grade) make comments upon seeing a female paleontologist. And in many cases, after programs, I had huddles of girls collect around me asking questions and wondering how I did my fieldwork in a dress! This indicates to me just how interested many girls are in science, but dramatically emphasizes the lack of 'real life' role models."

While Wendy no longer gives education programs actively at PRI, she has tried to keep in contact with young women through other means. She periodically does "career days" at local high schools, where she presents ten-minute infomercials to students on paleontology and science. Sometimes these are done under less than ideal circumstances, as Wendy describes, "During the last career program I did, I was unexpectedly placed with the cosmetologists! I imagined this was due to confusion between 'cosmology' (space science) and 'cosmetology' (cosmetics and the like). Despite pleas to place my programs with others in the sciences, I ended up having to share the room with cosmetologists

and present my program to rooms full of young women, who, for the most part, had come to hear about modeling and cosmetics. To my surprise, I had more interest and questions from the girls that had come to learn about cosmetology!"

Wendy observes that her experiences with children underscore the tremendous lack of scientific role models for young girls. Over the past two years, she has worked as a volunteer leading fossil field trips for the Girl Scouts of America and mentoring high school students through a program at Cornell University. Wendy strongly believes that "it's critical to support and encourage young women who are interested in science at an early age. Talking about my experiences to young people is one of the most rewarding things I do. Through my activities in AWG, I hope to encourage others to get involved and participate in programs for children and young women in their communities. Sharing your experiences in local organizations and at schools is one of the best ways to reach young women."

Wendy reflects on her membership in AWG: "As a new and enthusiastic member of AWG, I am thrilled to be involved with an organization focused on bringing together women from diverse fields within the geosciences to share ideas and experience. As a business-owner, I know the importance of networking and see AWG not only as a clearinghouse for ideas, but as a forum for discussion and inspiration among women. I especially support initiatives that focus on attracting Earth science teachers into the AWG membership. Science teachers in elementary and high school play a critical role in the development of young women, serving to guide them and build their confidence. I encourage interested women everywhere to join AWG and get involved."

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Susan Ekdale Field Scholarship

The Salt Lake Chapter of AWG has awarded the 1997 Susan Ekdale Field Scholarships to Alisa Humphrey, Southern Utah University and Tiffany G. Skelton, University of Utah. The scholarships are awarded to help defray the costs of attending summer field camp.

Alisa Humphrey graduated magna cum laude after completing field camp. She started graduate work on a master of Science degree at Colorado State University in the fall where she is studying igneous petrology and structural geology. One of her goals is to earn her doctorate and to teach at the university or college level. Alisa's own words best describe her ultimate goal:

"As a woman in the geosciences, my main goal is to inspire other women to reach their full potential. I was initially inspired by my geology professor at Snow College, Renee Mauche... I think that women often feel that they cannot undertake a science degree. I feel strongly that if they see an accomplished woman with a science degree, they will believe it is possible for themselves."

Tiffany G. Skelton is a geology major with a strong interest in geophysics. During the 1996-1997 school year she worked as a seismological research assistant at the University of Utah Seismograph stations. She will be finishing her bachelor's degree this year and will continue in her position as a seismologist with Castle Inspection Services in Salt Lake City Utah. Tiffany also desires to become a teacher of geosciences, either at the high school or college level. As she stated in her application:

"As I look back on my education, I realize that I have never had a female teacher in college... Based upon my experiences of working with women geoscientists, I am excited for the opportunities I will have as a woman in the geosciences. I feel I could contribute much as a female professor, especially by being a role model for other female students to look up to."

Member News

Salt Lake City Chapter: **Rebecca Gonzalez** is to be congratulated on her graduation from the University of Utah. She has now joined the Utah Geological Survey as a Senior Geological Technician and GIS expert in the Environmental Science Division. **Lori Robison** has been recruited by SECOR International, Inc. of Salt Lake City and is now an Associate Hydrogeologist there. **Catharine Woodfield** was promoted to Senior Geologist and Technical Reviewer at the Utah Geological Survey.

North East Chapter: **Dr. Gail Ashley** (Rutgers University) was elected vice president of the Geological Society of America for 1998. **Pat Costanzo** is halfway through law school. She is pleased to see how helpful her geology background is in her study of environmental law. **Allison Kozak**, AWG's immediate Past President, the Northeast Chapter's current Treasurer, and one of its founding mothers, is moving herself and her company from Montgomery, New York to San Francisco, California. She can still be contacted at: axmk.hks@usa.net

Northeast Chapter wishes her well and will miss her energy and enthusiasm.

San Francisco Bay Area Chapter: **Elizabeth Zbinden** received her Ph.D. from Stanford and left the Bay area to work for Homestake Mining in Nevada. She enjoyed her summer thoroughly and has even had some "time off" to return for a visit. **Louise Pellerin**, Bay area Delegate to the AWG Board of Directors, is in Antarctica. She writes, "Greetings from the South Pole. We are still here and work is going slowly. It is cold and flat and beautiful here and I love it! Cheers, Louise (See article on next page)

Los Angeles Chapter: AWG Past Past-President **Karen Kähler** has accepted a full-time job as a research assistant at CalTech, working with Kate Hutton and her crew at their Seismology Lab.

Sometimes you read what others are up to and can't help but feel a twinge of envy...

NE Chapter Student Member **Monica Titera** is presently studying abroad in the Philippines and then as a student will continue on to New Zealand and Mexico before she returns to the United States to resume campus life at Colby College. She'll be back in August 1998.

At-Large Member News

AWGF President **Tania Brice Coffin** is happy to report the birth of her first child: Matthew Brice Coffin arrived Jan. 19, 11:48 am. He was 7lbs 4 oz at birth. Mother, father and son are home and doing well. Congratulations!

Linda Kah has completed her PhD at Harvard (her new e-mail is lckah@alum.mit.edu) and has taken a Post-Doc at the University of Missouri at Columbia.

It appears that we have another entrepreneur among us. **Sharon McKiernan White** has left the engineering firm where she was employed to start White Environmental Services, Inc.

Laurie Osher has completed her doctorate at the University of California, Berkeley. She now works for the USEPA/NERL as a research geochemist and soil scientist in Athens, GA. She has transferred to At-Large Membership.

Chapter News

The *Northeast Chapter* held a holiday party with the Hudson-Mohawk Professional Geologist's Association. The program featured informal showing of favorite geology slides. The *Salt Lake Chapter* held a very well attended fall party at Genevieve Atwood's house in November. The chapter has put its President's award on display in the lobby of the Geology and Geophysics Department at the University of Utah. Salt Lake is building on its experience running the wildly successful field trips at Perspectives by holding a pre-meeting field trip as part of the 1998 Annual Meeting of the American Association of Petroleum Geologists to be held in Salt Lake City. The 3 day trip (13 to 16 May) is "Concepts and practical applications of sequence stratigraphy in shallow marine and coastal plain successions, Book Cliffs, Utah". The leader will be Diane Kamola of the University of Kansas, a recognized expert in sequence stratigraphy. And, on top of that, the Salt Lake Chapter will also hold a Chapter field trip, probably in June, to see some volcanics or the Moab area. Justina Mickelson and Gosia Skowron are the contacts for the chapter trip. *San Francisco Bay Chapter* members displayed the Chapter's booth (a lightweight version created by Jane Gill) this fall at the American Geophysical Union

Conference. Attendance was from all over the country, and in fact all over the world. International visitors were from Mexico and Canada, western and eastern Europe including France, Germany and Russia; South and Central America, including Costa Rica, Argentina and Chile; and the West Pacific Rim including Japan and Australia. Jane Gill and Phyl Halvorson coordinated the effort; Anna Soujourner, Carrie Randolph, Sarah Roberts, and Vicky Gallardo helped sit the booth. AWG's mission was shared with least two hundred visitors, most of whom had never heard of AWG.

The *South Florida Chapter* co-hosted a talk on Caribbean Volcanology and the Soufriere Hills Volcano in Montserrat in October 1997. The speaker was Dr. Alan Smith, a volcanologist with the Dept. of Geology, University of Puerto Rico. The South Florida chapter is selling volcanic ash from the June 1997 eruption that killed 19 people. A 40-ml vial of ash is \$10 plus shipping and handling. Please direct inquiries to Eileen Rodriguez at casill@aol.com or 813-949-2400.

California Geology Soliciting Announcements

Dear Linda;

I just wanted to let you know that our magazine includes an announcement section for earth science meetings and events. If your organization and members would like to submit announcements, and you can get them to us about 6 months in advance, I would be happy to publish them. I am the new (4 months) editor and would like to establish a page of events calendar to be published in every issue. Also, if any of your members might be interested in submitting an article pertaining to the geology of California, perhaps you could pass my invitation along. Unfortunately, we do not have the budget to pay for submissions.

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A Day in the Life of a Geophysicist at the South Pole

At 6 a.m. I am awakened by the sound of heavy footsteps and the opening and closing of the double set of doors of my Jamesway (a cylindrical, insulated, oil-heated tent divided into 'bedrooms' with canvas and plywood) as many of my tent mates head off to or return from work - the 3 shifts are continuous with 24 hours of light.

There are about 180 folks (1/3 female) living at South Pole Station (SPS). The majority are construction workers starting work on the new station, which will be complete in about 10 years, and support personnel. Scientists (called 'beakers') make up the rest of the population. Most of the beakers are astro-types looking up, while we are unusual geo-types looking down at the rocks under 2 miles of the polar ice cap. Most of the beakers don't start work until after 8-9 a.m., so I go back to sleep for another hour.

I am working with Phil Wannamaker and John Stodt, Univ. of Utah, Salt Lake City, employing a method called magnetotellurics (MT), in which, we measure the earth's natural electric and magnetic field to infer the electrical conductivity structure of the subsurface.

The transect is about 50 kmlong, offset 6 km from SPS, with MT measurements taken at stations spaced every 6 km. We measure the horizontal components (x,y) of the electric field with a high impedance (the resistivity of ice is greater than a megaohm-m) system, specially design by John Stodt, and the three components (x,y,z) of the magnetic field is measured with commercially available coils (solenoids). Emplacing the sensors means digging many holes and laying out 100s of meters of wire and cable. Data are recorded at two stations, simultaneously, and radio telemetered to a recording hut centered between the two stations.

Today we are set up at stations centered about 30 km on the line, taking about 45 minutes on our snow machines to get there. With full tanks of gas, 3 day-2 person survival gear, back packs with therms of hot water, spare parts, some extra food, and after checking in with comms (SPS communications) we take off.

No skin shows when we are out working outside with temperatures ranging below -20F and wind-chill temps often as low as -60F. Today it is clear and calm and we lose sight of the station at about 10 km.

It is hard to believe how beautiful it is here with no topography and a brilliant contrast of white and blue on the horizon. Part of the beauty is in my head, knowing no one has ever been here before. And when the wind aligns the ice crystals suspended in the air, incredible halos appear around the sun. The south polar ice cap is a magical place.

As soon as we arrive at the recording hut, we review the data recorded the night before. The data are strange, but that is nothing new here. It took us 2 weeks to prove to ourselves that the instruments are working correctly and it is the conditions at the Pole which give us unusual signal.

SouMagnetic field strength is low, the rocks under the ice are conductive shales reducing the electric field strength, and the wind-blown ice crystals create electric fields that are noise, which dominate the small induced field.

So we swap batteries (a pair of car batteries provides power for 24 hours in these temps) and continue stacking. Nominally, we record from 400 Hz to 200 seconds (5×10^{-3} Hz). The signal strength is low and the noise level high so that we have spent many days at each set-up stacking in the hope of retrieving interpretable data.

As always, we get back to the Station at 7:35 PM and get a friendly chewing out by one of the cooks, because the food line at the galley is suppose to close at 7:30, but as usual there is a wonderful meal waiting. The food is always good, and plentiful, with both a meat and a veggie entree available at every meal. The cooks do an amazing job and we even get a fair amount of fresh food if no one screws up and the 'freshies' don't get frozen in the trip south.

After dinner we have many choices for the evening entertainment: watching a movie, shooting pool, reading, helping clean up in the galley, or reviewing data and the events of the day. As usual we opt for the latter activity and return to the office to scratch our heads over the unusual MT data we are collecting at the South Pole.

— Louise Pellerin, AWG San Francisco Bay Area Delegate

AWG-LA to Host GSA Lunch In Long Beach

The Los Angeles Chapter invites you to join us for lunch on Thursday, April 9, 1998, at the 94th Annual Geological Society of America Cordilleran Section Meeting. To pre-register, select the AWG luncheon on your GSA meeting preregistration form.

We are pleased to announce that Dr. Laurie Leshin will be our keynote speaker. Dr. Leshin has been chasing after those little Martians with remarkable success. She has literally gone to the end of the world—Antarctica—to collect and analyze Martian meteorites. Recently, the news media has pursued Dr. Leshin for her insights into the "Life on Mars" debate.

Dr. Leshin is an Adjunct Assistant Professor of Cosmochemistry at the University of California, Los Angeles, where she studies the formation and evolution of planetary materials. She uses stable isotopes to trace physical processes involving the interaction of mantle, crustal, surface, and atmospheric sources of volatiles in planetary samples, and to understand the role of nebular versus parent-body processes in primitive meteorites. Dr. Leshin analyzes light element (H,C,O,S) isotopes with the ion microprobe, and developed the H, C and O isotopic measurement capability for the Mars '98 lander mission using tunable diode laser spectroscopy.

Formore information contact Rachel Fischer at (310)833-3915. We look forward to seeing you in Long Beach!

— Rachel Fischer, AWG-Los Angeles

Geoscience Information Society

The Membership Committee of the *Geoscience Information Society* invites AWG members to contact their organization. GIS was created to improve the exchange of information in the geosciences. They are editors, librarians, cartographers, educators, and information professionals. The employers of GIS members are publishers, universities, industry, geological surveys, and related organizations.

Check them out at <http://www.lib.berkeley.edu/GIS>

Education Outreach Ideas for Chapters

The San Francisco Bay Area Chapter has an ambitious and many-faceted educational outreach program, which has been active and growing for many years. The South Florida Chapter, though young, has begun to shine with regard to education efforts, especially with Girl Scout Geology Badges. The Salt Lake Chapter and the Lincoln Chapters are examples of hosts of Girl Scout Wider Opportunities. The Denver Chapter gives out student awards each year and provides continuing education for teachers. The members of the Minnesota chapter are proud of their program to send members to schools to give talks. In short, AWG members are knowledgeable geoscientists and when AWG's women give their time to these projects, they demonstrate the obvious: women excel in geoscience.

Using Phyl Halvorson's recent summary of San Francisco Bay Area Chapter educational activities from a recent chapter newsletter as inspiration, I will attempt to enumerate possible chapter activities.

Educational Forum: AWG members gather to label fossils, minerals, and rocks and then put together traveling kits for show-and-tell. Use this gathering to compile resource materials into a chapter education outreach library and to share details of outreach experiences so the first-time speakers or workshop leaders know what to expect. This is a good first step toward chapter involvement in educational activities, and can be repeated every year, perhaps as the first chapter meeting in the fall as kids go back to school and the academic year is starting.

Provide Training for Workshop Leaders: Project WILD Aquatic, Project GREEN, and Project WET are examples of coordinated efforts to provide structured training and access to educational resources for those who would 'spread the word'. Explore the idea of having a Project Workshop for the chapter. Once trained, members will be equipped for the classroom or nature center experience.

Judge Science Fairs: Chapters can provide judges for geoscience projects at local science fairs. This one isn't as overwhelming as it may seem: call up the Junior or Senior high science depart-

ment (be prepared for telephone tag teachers usually teach, after all, and the phones don't ring in the classrooms) and ask about science fairs in your area. You should be able to find out who the contact is. Then just call up and offer to provide judges.

Provide Job-Shadowing Opportunities: This can be formalized (Take Our Daughters to Work and Walk a Day in my Shoes) or an individual's effort to help a young person decide on a major for college and ultimately a career that matches her skills, strengths, and interests. The chapter can advertise specific dates, companies, locations, etc. and, again, a contact in the local junior or senior high science department might put the chapter in touch with youth.

Work with Girl Scout Troops: Team up with the local council or one special troop and provide Geology Badge Programs and Geology Field Trips. Boy Scouts do Geology badges, too. Scout work can vary from visiting a troop once a year to going whole hog to put together a nationally advertised Wider Opportunity.

Structured Career Exploration Opportunities: Expanding Your Horizons, Project Choice, and others offer students information about careers. Some are designed to model science as appropriate for women and minorities, others are generic, but none-the-less good opportunities to get out there and be visible. The counselors at the local high schools should be able to get the chapter in touch with the coordinators. If there is no such career fair, the chapter could be the catalyst that starts one.

Award Excellence: We all know that young people react well to praise. How about finding out which students in your area deserve a special pat on the back for excellence in geoscience? AWG can provide the chapter with SAGE "Student Awards for Geoscience Excellence" certificates. Have a party to present the awards, take the awardees on a field trip, travel to the school and present the award at the school's awards night, or come up with some other way to acknowledge the performance and make it fun.

— *Jeanette Leete, AWG Minnesota Chapter, AWG Executive Director. Please share your ideas! We'll compile them into a page for our web site (<http://www.awg.org>). I can be reached at office@awg.org and (612)426-3316. 7/1/98 area code will change to 651.*

Occupational Outlook

The US Bureau of Labor Statistics (BLS) publishes the "Occupational Outlook Handbook", offering detailed career information on in excess of 250 professions and occupations. The most extensive BLS sections address the "nature of the career." Career projections consider technological changes, demographics, and expected employment trends (e.g. developments in computer applications, and health related services).

The BLS "Occupational Outlook Handbook" provides information that is useful in planning careers, developing basic position descriptions, or defining professional or occupational benchmark perspectives for certification. The handbook has a mission of providing objective and factual information, which it has accomplished for 50 years. The BLS indicates 7 of 8 professions and occupations in the United States are covered in the biennial handbook. The 1996-97 edition with 512 pages is available at the US Government Printing Office for under \$40. Also, upon request, the Commission can provide specific BLS descriptions.

Web users will find easy access to this information through <http://stats.bls.gov/> where there also are resources for kids and K-12 teachers (rock star and professional athlete are covered along with surveyor and engineer!).

Advice on Graduate School Needed

Hi there, my name is April Abate, a student at Northeastern University in Boston. I would like to meet other association members who can offer me some advice on Graduate School opportunities in Economic Geology. I am interested in researching ore deposits in China, or possibly the Soviet Union. I would like some direction and would enjoy speaking to other Economic Geologists on the potential expectations of a career in this area. I will be attending the Northeast GSA meeting in March as well.

April Abate — aabate@hotmail.com

1998 AWG Field Trip: Geology of Scandinavia

July 16 - August 6, 1998

Join us on a 3-week geological tour through Norway, Sweden and Denmark! We plan to:

- Visit the well-preserved K-T boundary at Stevns Klint, Denmark
- Collect from the fossiliferous Ordovician and Silurian limestone and reef deposits on Swedish islands in the Baltic Sea
- Tour the ancient copper mine at Falun, Sweden
- Visit a Devonian meteor impact crater in the heart of the Baltic Shield
- Drive through the heart of the Caledonian orogeny
- Tour the ancient mining district of Roros in the mountains of Norway
- Take a Norwegian fjord cruise
- Collect minerals from the world-famous pegmatites at Evje, Norway
- Visit lots of museums
- plus see lots of glacial geomorphology and much, much more!

This trip will have an economic geology slant to it and will focus on the historical, political, and environmental ramifications of the development of Scandinavia's abundant and varied geologic resources. We plan to arrange talks with local geologists in the mining, petroleum, and environmental industries. If there's enough interest, we may add an optional 4-5 day trip to Iceland following the main tour.

Tentative cost: \$2100 not including airfare and most meals. This price is based on a "worst-case" scenario and could go down depending on the number of participants (the more the better). We plan to keep costs down by staying as much as possible in relatively inexpensive hotels/B&Bs and in Scandinavia's comparatively nice youth hostels. Our other major cost will be van rental, so the trip size will be limited to 15. For more information and to get your name on the list:

Marcia Knadle
20201 SE 216th St.
Maple Valley, WA 98038
(206)553-1641 (work)
(206)723-8379 (home)
(206) 553-0119 (FAX)
e-mail: mknadle1@aol.com

NAGT Field Trip

The National Association of Geoscience Teachers (NAGT) presents:

SOUTH AFRICA: ITS GEOLOGIC WEALTH, RESOURCES AND BEAUTY

July 28 to August 20, 1998

The trip begins and ends in Jo' Berg, traversing spectacular scenery from the east in Kruger National Park, west to the Atlantic Ocean at Langebain and Cape Town—exploring mineral wealth in the Velds (High, Middle, Low, Bush, etc.), that take us through the entire system of rocks outcropping in South Africa, from the oldest in the Barberton Mountains, through the Witwatersrand System, the Karoo System, to the present. Mines include platinum in the Marensky Reef; gold in Johannesburg; tin, copper, banded ironstone in the Watersberg; coal in Witbank coal fields; and we go underground for diamonds in Kimberly. Other sites include Vredefort, the oldest and second largest impact crater on Earth; Pangaean glaciation in the Dwyka tillites; Table Mountain in Cape Town; cratons; Au-grabies Fall; vineyards, etc.

For more information contact:

*Dr. Dottie Stout
Cypress College
Cypress CA 90630
or gaea@deltanet.com*

Nominations Requested for 1998 AWGF Outstanding Educator

The AWG Foundation established the Outstanding Educator Award in 1988 to honor well established college or university teachers who have played a significant role in the education and support of women geoscientists both within and outside the classroom. Examples of support include encouraging women to enter and continue in a geoscience career, providing opportunities for field and laboratory experience, and serving as a positive role model. In addition, awardees are selected on the basis of their professional contributions which should include active research, a strong publication record, involvement in professional societies, and participation in science education programs in their community.

Deadline for nominations is March 15, 1998. Nominations must include the nominator's supporting letter, a summary of the nominee's academic and professional accomplishments, and at least six letters of recommendation from professional colleagues, former students, and current students. Send nominations to:

Dr. Janet Bauder Thornburg
810 West Forest Drive
Houston, TX 77079-3324.

Constructive Peer Review

"In 1751, Benjamin Franklin published a proposal to demonstrate atmospheric electricity. He proposed to stand on a table insulated from the ground, but connected to a lightning rod type antenna protruding into the atmosphere. He proposed to electrify the table and himself during an electrical storm and then complete the circuit by reaching out and touching a box connected to the ground. He failed to obtain funding for his experiment. Legend tells that the peer reviewers suggested that Franklin go fly a kite. Two years later Franklin completed his under-funded kite experiment. A Professor Richmann of Russia carried out Franklin's experiment as originally proposed and was instantaneously killed when lightning struck the antenna. These events stand out as the last time in recorded memory that the peer review system provided a constructive result." — from "*Volcanoes and the Global Electric Circuit*" by Roger Hart. *Volcano Quarterly* 6(1)

Have the facts when you ask for a raise!

Those needing the Consumer Price Index to calculate salary budgets and increases, and what *not* having a raise for the last few years has cost, can find it in a number of ways. The U.S. Department of Labor, Bureau of Labor Statistics, releases the CPI on a regular basis. Contact the BLS at (202)606-6325 to get a fax-on-demand catalog (option 2 after the greeting). The Internet site is <http://stats.bls.gov>.

Classified Ads

University of Utah

Chair — Department of Meteorology; Associate Professor/Professor of Meteorology

Applications are invited for the position of Chair of the Meteorology Department at the University of Utah to begin July 1, 1998. The successful applicant will serve initially as department chair for a term of three years. Candidates should have a proven history of research excellence in areas that bridge existing department strengths or add significantly to the diversity of research activities that are currently represented. Some preference may be given to individuals with research interests related to physical meteorology. Leadership skills are also required since, as department chair, the individual will be expected to promote the growth and stature of the department within the university and atmospheric sciences community. The successful candidate will also exhibit the ability and willingness to participate in both graduate and undergraduate teaching. Ph.D. in atmospheric science, meteorology, or closely related field is required. Research area: Atmospheric sciences with interest in physical meteorology. The individual in this position will establish an independent research program and supervise the research of graduate students in this area, will seek outside grant support for this research program and the graduate students who are doing research within it, will maintain a record of scholarly publications in reviewed journals, and will also serve as Department Chair.

The University of Utah, located in Salt Lake City, is the leading research institution in the Utah higher education system. Department faculty maintain active teaching and research programs in a broad spectrum of the atmospheric sciences. Significant opportunities for scientific collaboration exist within the department, the Center for Atmospheric and Remote Sensing Studies, the Facility for Atmospheric Remote Sensing, and the NOAA Cooperative Institute for Regional Prediction. For additional department information, see <http://www.met.utah.edu/search.html>.

General inquiries regarding the position may be directed to chair-search@atmosph.met.utah.edu. Potential candidates should send a letter of interest, vita, and the names of three references to: Search Committee Chair University of Utah Department of Meteorology 1135 South 1460 East, Room 819 Salt Lake City, Utah 84112-0110 The deadline for submission is **1 March, 1998**, or until the position is filled. Position is a 9 month tenure track, 1.00 FTE appointment at the associate professor or professor rank.

The University is an AA/EO employer and encourages applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.

Geologist (Research Assistant)—

Kansas Geological Survey – The University of Kansas, Lawrence. Provide geotechnical support for Data Resources Library. Answer public inquiries; coordinate computerized data set development. Salary negotiable. Start approx. 07-01-98. Application deadline: **05-30-98**. Contact Sharon Cox, Personnel Services (785)864-3965 or access Survey Website at <http://kgs.ukans.edu> for full description, requirements, and application procedure. Ref: 98W0193. KU is an EO/AA employer

Hydrogeologist —

Kansas Geological Survey – The University of Kansas, Lawrence. Full-time position on KU staff at faculty-equiv. rank of assistant or associate scientist depending on qualifications. Requires Ph.D. (or expected within 6 months) with hydrogeology emphasis. Research/publications on simulation of physical/biochemical processes affecting transport in porous media supplemented with practical experience. Background in stochastic applications to gw flow/transport is desirable. The Geohydrology Section has 9 full-time professionals with additional support personnel. Emphasis on state-of-the-art field studies and complementary theoretical research. Opportunity to pursue individual and cooperative research of relevance to Kansas and teach/advise students at KU. Complete announcement available from S. Cox, Personnel Service (785)864-3965 or from <http://www.kgs.edu>. Ref: 98W1089. Application deadline: **June 1, 1998**, postmark. For further information contact Jim Butler at jbutler@kgs.ukans.edu. *KU is an EO/AA employer.*





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including 20% Post-Consumer Waste



Association for Women Geoscientists
4779 126th St. North
White Bear Lake, MN 55110-5910

Address Service Requested

Thank you, Phillips Petroleum Company!

AWGF President, Tania Brice-Coffin is pleased to report receipt of a January 22 letter from Phillips Petroleum: AWGF has received \$5000 for 1998, in unrestricted funds, although Phillips hopes we will use it for the Phillips Petroleum Company - AWG Distinguished Lecturer Program.

And use it we will. Copies of the Speakers List have recently been sent to all Geoscience Departments in 4-year institutions. AWG is offering a limited number of grants, funded by AWGF, to provide partial support for speakers to travel to institutions to give talks and interact with students.

The speakers list is available on our web site:
<http://www.awg.org>