



OFFICIAL PUBLICATION OF
THE AMERICAN INSTITUTE OF
PROFESSIONAL GEOLOGISTS

THE PROFESSIONAL GEOLOGIST

VOLUME 17, No. 9

September, 1980

17th ANNUAL MEETING, September 24-27, 1980
Mobile, Alabama

THE DIARY OF AN AIPG MEMBERSHIP APPLICATION Written by Deborah L. Dare Executive Secretary - National AIPG

Once an AIPG membership application is received at AIPG Headquarters, it begins a number of steps that usually results in the approval of another geologist for certification by AIPG. To answer one of the most frequently asked questions, "Why does it take so long for an application to be approved?", the following is a step-by-step guide to the processing of a membership application.

When the application is received at Headquarters it is checked to see if the applicant has met the minimum qualifications for membership as outlined in the Bylaws and whether or not the applicant is applying under special circumstances. The application is also checked as to whether or not the correct processing fee and dues have been submitted. The five sponsors listed on the application are checked to be sure that at least three of the five sponsors are members of the Institute as required by the Bylaws. After these points have been checked and any deficiencies corrected by a letter to the applicant, letters to the sponsors are mailed out and the application is filed to await receipt of sponsor letters.

As can be seen from the above table, the greatest delays in the processing of an application result from sponsors not responding promptly and Screening Boards not acting promptly on applications sent for review.

Receipt of the five sponsor letters should take no longer than 30 days, but frequently takes 60 days or more. Awaiting receipt of a sponsor letter from just one sponsor often delays an application for weeks. During the 30-day period while the application is awaiting letters of sponsorship, the names of the applicants and sponsors are published on page 2 of "The Professional Geologist". This publication encourages the membership to review and comment on any application, either favorably or unfavorably. Membership-wide review of applicants guarantees that AIPG maintains its high standards for membership. Unfavorable comments are held in the strictest confidence by the Section Screening Board and the Executive Committee.
(continued on Page 3)

STAGE	MINIMUM (weeks)	MAXIMUM (weeks)
Sponsor Letters	4	14 (or longer)
Applicant's Name Publication	4	8
Section Screening Board Review	6	24
Reviewing Officers Review	4	6
TOTAL	18 (4½ mos.)	52 (12 mos.)

1981 OFFICERS

The Institute is pleased to announce the following Officers of the Institute for 1981:

President: John W. Rold
Vice-President: Ernest Lehmann
Secretary-Treasurer: Randall T. Chew, III
Editor: Russell R. Dutcher

Congratulations and best wishes for a successful year.

BUSINESS AFFAIRS OF THE INSTITUTE

Annual Meetings:

17th Annual Meeting - Mobile, Alabama
 September 24 - 27, 1980
 General Chairman: Jack H. Bryan
 Headquarters Hotel: Hilton Inn-Mobile

Other Annual Meetings:

18th Annual Meeting - Williamsburg, Virginia
 General Chairman: John Kent Kane II
 19th Annual Meeting - Pasadena, California
 October 13-16, 1982 (NOTE: DATES NOW SET)
 General Chairman: Howard T. Anderson
 20th Annual Meeting - Jackson, Wyoming
 (DATES NOT SET AS YET)

AIPG NATIONAL COMMITTEES

AGI Governing Board Representative

James R. Dunn

Annual Meetings Committee

A. Wayne Wood, Chairman

Awards Committee

Adolf U. Honkala, Chairman

Consultants Committee

Russell G. Slayback, Chairman

Employment Survey Committee

Wallace B. Howe, Chairman

Environmental Geology Committee

Paul DuMontelle, Chairman

Ethics Committee

Rudolph K. Hoagberg, Chairman

External Appointments Committee

Raymond C. Robeck, Chairman

Headquarters Committee

Andrew G. Alpha

Jay G. Marks

M. Dean Kleinkopf

Historian

George W. White

Legal Action Committee

Fred L. Stead, Chairman

Legislative & Regulatory Committee

Russell Wayland, Chairman

William E. Cutcliffe, Vice Chairman

Membership Committee

Susan Landon, Chairman

National Research Council Representative

Larry L. Sloss

Nominating Committee

Edward E. Rue, Chairman

Inter-Society Advisory Group

M. O. Turner, Chairman

Professional Guides Committee

Bob Paschall, Chairman

Public Affairs Committee

Randall T. Chew, III, Chairman

Registration Alert Committee

William E. Cutcliffe, Chairman

APPLICATIONS RECEIVED

ALMON, William R. IV; Houston, TX
 G.E. Murray; R.R. Berg; D.K. Davies; R.L. Alford
 F. Conselman
BOLGER, Robert C.; Littleton, CO
 H.B. Montgomery; H.C. Mosher; D.B. Tait; S.H.
 Siddiqui; J.S. Long
BRUNSON, Terry Q; Gainesville, FL
 D. Spangler; L.K. Hawkins; S.B. Upchurch; R.
 Ceryak; M.D. Mifflin
ELTZROTH, Elmore E.; Lansing, MI
 R.P. Bissell; J. VanAlstine; R. Minning; D. Malott;
 J. Sutherland
HAGAN, Wallace W.; Lexington, KY
 P.M. Miles; W.C. MacQuown; L.R. Ponsetto; J.A.
 Simon; A.E. Smith
JOHNSON, Robert L.; Casper, WY
 G.A. Jarre; R.J. Peterson; A.B. Bacho; A.R. Renfro
 M.P. Dahill
 > KOSTICK, Dennis S.; Herndon, VA
 G. Rabchevsky; E. Hoover; A.V. Bailey; T.J.
 Rowland, Jr.; F. Siegel
PALMER, James E.; Charleston, IL
 R.E. Bergstrom; W.H. Smith; R.R. Dutcher; R.H.
 Howard; T.M. Kehn
SNYDER, Stephen M.; Harrisburg, PA
 R.E. Wright; N.E. Wehler; C.G. Robertson; F.
 Zercher; J.Reil; J. Pepper
WILLIS, Gregory A.; Jackson, MS
 C. Spiers; P. Reeves; E. Boswell; M. York; J.A.
 Chisholm
VAN DEN BARK, Edwin; Bartlesville, OK
 A.W. Ball, Jr.; R.O. Dunban; O.D. Thomas; W.E.
 Kennett; D.W. Buelow

If any Member has any recommendations, positive or negative regarding the qualifications of any of the above applicants, please mail your comments to General Headquarters within 30 days. Your comments will be held confidential within the Executive Committee and Screening Board of the local Section.

NEW MEMBERS

COTTRELL, Willard M. #4763; Bellaire, TX
 GARRISON, Ronald L. #4764; Iowa Falls, IA
 HALL, Daniel W. #4765; Cross Plains, WI
 HALL, Robert A. #4766; Topeka, KS
 HATCHELL, William O. #4767; Santa Fe, MN
 HENTHORNE, Jay G., Jr. #4768; Wooster, OH
 McCLELLAN, Jack Love #4769; Roswell, NM
 MEDINA, Armando #4770; Houston, TX
 MITCHELL, Gary C. #4771; Arvada, CO
 PINEL, Mark J. #4772; Denver, CO
 SIOK, William J. #4773; Housatonic, MA
 SMART, Burton, II #4774; Lafayette, LA
 TRIMBLE, Larry M. #4775; Layton, UT
 URASH, Robert N.M. #4776; Carmi, IL
 VOYTEK, John E., Jr. #4777; Minneapolis, MN

Please take a moment and welcome these new members.

(Continued from front page)

After all five sponsor letters have been received, the application is prepared for microfilming and transmittal to the Section Screening Board. The applications are microfilmed for storage and, in the event that an application is lost in the mail, the application can be replaced. The review by the Section Screening Board should take about 30 days, but that is a rare case. Most applications are kept by Screening Boards for four to six weeks and some are kept as long as six months. An application that remains with a Screening Board longer than six weeks usually has a problem and, therefore, additional time is warranted to resolve the problem. Headquarters does request that Screening Boards holding applications longer than six weeks notify Headquarters of the problem and give an estimation of when the problem will be resolved. Historically, procrastination on the part of individual Screening Board members constitutes the greatest delay in the Screening Board process. Screening Board Chairmen are responsible for the prompt review of all applications forwarded for screening.

When the application has received a recommendation from the Section Screening Board, it is forwarded to Headquarters. Headquarters then transmits completed applications to the three Reviewing Officers of the Executive Committee, the Vice President, Secretary-Treasurer and President-Elect. The review of the Reviewing Officers should take no longer than 30 days and frequently takes less. When the last Reviewing Officer has reviewed and signed the applications, they are forwarded back to Headquarters and the successful applicants are notified that their application for certification has been approved. At this time, approximately 5-6 months normally have passed from the time the application was initially submitted but, as you can see, the application has passed through many hands and passed many reviews. This process is what makes our certification program the true mark of a professional geologist.

HEADQUARTERS CORNER
By Stuart P. Hughes ✓
Executive Director

Next time you call Headquarters, an unfamiliar, but friendly and cheerful voice will answer the phone. The voice belongs to Mrs. Jean Smith and she is our new Secretary. Jean began her responsibilities officially on August 18, but had been assisting part-time for the prior two weeks.

AIPG is fortunate to have Jean on staff since she has five years experience in all phases of Association work. Jean and her husband, Lindy have four children.

Headquarters recently completed an updated guide on AIPG Section formation. The guide was reviewed by Art Brunton, Past Executive Director. The guide details required procedures and gives an example of Section By-laws. It also outlines helpful and time-saving suggestions when forming a new Section.

Approximately 90% of AIPG's income is from membership dues. The remaining amount comes from the Dues Support Program, interest on various accounts, application processing fees and other less productive sources. In comparison, other associations rely on membership dues for 50% - 60% of their total income. It is my belief that AIPG must use new methods to raise money to fully achieve its goals.

Some ideas applicable to Non-Profit Organizations are: Short Courses, Employment Referrals, Sale of Publications and Other Educational Materials and Advertising in our periodicals. The possible implementation by AIPG of these activities will be discussed at the Executive Committee Meeting in Mobile.

Until last month we had only one telephone line into Headquarters. The line was busy much of the time and an increasing number of complaints were made concerning callers being unable to reach us. The problem has been corrected by installing a two-line system.

In an effort to cut the cost of long distance calls, we will be switching to a private system. Comparative studies suggest a savings of 30% - 40% or approximately \$100/month to AIPG.

Henry Neel, 1970 President of AIPG, wrote an article in TPG: 1970 - The Year To Be Heard. As he pointed out man had just set foot on the moon and brought back rock samples. This caught the attention of the world and put the spotlight on Geology. People had a tendency to view Geology in a favorable, even glorified light.

However, in the decade since, Geology has been associated with the shortages and high prices of gasoline and oil, the destructive failure of a dam in Idaho (despite Geologists' repeated warnings), the (killer) volcano, Mt. St. Helens and the constant threat of a major earthquake on the San Andreas fault.

What is obviously uncomprehended by the public is the fact that geological scientists provide the best hope for alleviating these problems. We have always had a deep interest in the natural environment. Unlike non-geological scientists, we realize the profound effect even the slightest geological alteration can make on an ecosystem and in many instances we can help minimize the damage. Unfortunately, it is the non-geological scientist interested in only one segment of the environment who has received most of the public's attention.

AIPG must spark public awareness of the importance of Geology in everyones daily lives. A natural concept of the significance of Geology is essential in our struggle to effectively influence Federal and State Legislation. Decisions by our law makers must actively reflect the geologic facts of life.

Each member of AIPG has an obligation to be involved through participation in a Section Speakers Bureau by working on local and regional committees or by assisting legislators or any other of a host of ways in which we can make the public "aware".

These are not new thoughts, but they are essential and need reiteration. AIPG members must continually work to expand an appreciation of the value of Geology to the public.

GEOLOGIC REFERENCE SERVICES
by
Russell G. Slayback, CPGS 2305

The advent of computer technology has brought a new dimension to literature search activities in geology and applied geologic sciences. Computer files, or data bases, can be broadly or narrowly defined but all offer rapid search and retrieval of bibliographic references by key words, topics or problem identifiers. The development of bibliographic data bases is still in its infancy, will no doubt grow widely in scope and already can be of immense help to the geologic scientist embarking on a research project or a consultant confronted by a new wrinkle to an old problem.

The Professional Geologist will periodically publish information about such reference services to assist members in keeping up to date on these valuable data sources. In this first attempt, we don't pretend to have a comprehensive list and would welcome comments to Headquarters about services of interest that we have missed.

Geo Ref is a bibliographic data base produced by the American Geological Institute, covering the geoscience literature of the world. The GeoRef computer-readable tapes now contain more than 600,000 references, including references published in North America since 1961 and published elsewhere since 1967. AGI is currently adding references for North America from 1785 to 1960 and for other areas from 1933 to 1966. This should be completed, with the assistance of funding from the U. S. Geological Survey, by October 1981.

The entire contents of GeoRef can be searched in minutes, by computer, to produce a customized list of references. Searching is done via telephone, direct from your terminal. Costs are \$75 per hour of connect time, \$8 per hour for communications, and 20¢ per-reference printed off line and mailed to you. To begin searching, contact SDC Search Service, 2500 Colorado Avenue, Santa Monica, CA 90406. Their phone number is (800) 421-7229.

GeoRef can also be searched in its printed form, The Bibliography and Index of Geology. The references in this monthly publication are arranged into 29 fields of interest, to enable the geoscientist to quickly scan the references on his specialty. In each field of interest the references are grouped by document type, e.g. books, meetings, theses, and journal articles. Complete subject and author indexes are provided in each issue. This Bibliography, which can be found in most geoscience libraries, is available from the American Geological Institute at an annual subscription rate of \$750.

For further information on GeoRef and the Bibliography write GeoRef, American Geological Institute, Skyline Place One, 5202 Leesburg Pike, Falls Church, Virginia 22041, or telephone (703) 379-2480. GeoRef has also added a toll-free number (800) 336-4764. This number is available to users in the continental United States outside of Virginia.

NTIS - The National Technical Information Service offers a variety of bibliographic services primarily in the field of environmental science. It publishes a weekly newsletter, at a cost of \$80 per year, that consists of new-listing abstracts of government publications that can be purchased through NTIS in paper or microfiche form. They also offer already-published searches covering a wide range of topics.

The product of a new search is a list of report abstracts in a bound folder. Copies of the full papers or reports are available through the service at listed prices. A recent search on "Ground-Water Pollution by Chlorohydrocarbons" consisted of one hundred abstracts at a cost of about \$100.

A customer catalog describing the system is available by calling (703) 557-4650, or writing to NTIS, Springfield, VA 22161.

NWWA LITSEARCH - The National Water Well Association provides an expensive reference system on ground-water and related topics. Specific requests will be responded to by telephone at no cost. For extensive literature searches, involving personnel or computer time, the cost is generally on the order of \$20. NWWA has recently installed a computer tie-in to GeoRef that may be accessed at cost by NWWA members.

Litsearch information can be obtained at 614-846-WELL or by writing NWWA at 500 W. Wilson Bridge Road, Worthington, OH 43085.

GROUND WATER MODELING CLEARINGHOUSE -

The Holcomb Research Institute has a computer reference file on over 320 ground-water models. Given a request for model listings for a given class or classes of problems, the system provides a listing of the characteristics of known models, reports on the degree of annotation and verification, the availability of a user manual, whether a model is in the public or private sector and how it can be obtained for use. Requests for searches cost \$10 for handling plus postage and actual computer time charges. For further information, call 317-283-9555 or write the Holcomb Research Institute, Butler University, Indianapolis, Indiana 46208.

ASSOCIATION OF ENGINEERING GEOLOGISTS POLICY STATEMENT ON DISPOSAL OF HIGH-LEVEL RADIOACTIVE WASTE

Adopted by the Board of Directors
June 27, 1980

It is the position of the Association of Engineering Geologists that radioactive nuclear wastes can be safely isolated and disposed of by deep underground burial in secure geological environments. The scientific and technical means to locate and define the boundaries of these environs and to achieve such safe disposal is well developed and increasing. Sufficient criteria have now been established to permit responsible selection of candidate sites. A sense of urgency regarding safe disposal of nuclear wastes prevails, and it can and must be satisfied.

The waste is dangerous over a long period of time and many people have been so conditioned in this concept that they tend to react emotionally rather than objectively when radioactive waste is mentioned. This has resulted in a call to cease construction of nuclear power plants and passage of laws to prohibit the disposal of nuclear waste.

Nuclear waste has been produced from civil and military activity. This accumulated waste must be disposed of soon because temporary storage facilities are not designed for permanent separation of the waste from the biosphere.

One of the methods of isolation of the waste is deep burial in specially excavated spaces in structurally adequate bedrock where ground water is absent or will not return to the biosphere carrying with it waste materials and where erosion will not expose the waste during its radioactive lifetime. To these conditions is added a requirement for a location such that future societies will most probably never expose the waste inadvertently. The location and demonstration of the feasible, acceptable character of such sites is a geological problem. It can be solved by the investigative and analytical methods now available within the geological professions.

Repository sites should be strategically located, as far as geological and subsurface conditions permit, with respect to the regional distribution of nuclear facilities. Each site should be selected only on the basis of a progressive sequence of comprehensive investigations.

Primary considerations in the selection of each repository site must be long-term geological integrity (Continued on page five)

Disposal of High-Level Radioactive Waste
(Continued from page 4)

of the host rock through natural retardation of radionuclide travel and amenability to simple, proven, and reliable methods of engineered design and construction. Safe disposal sites can be found in several types of rock. Technologies exist to ensure selection of disposal sites in these geologic media which can provide long-term integrity without harmful effects due to migration of radioactive materials to the biosphere.

Each disposal site should be selected and developed cooperatively by governmental entities, private industry and academic researchers. Full and open disclosure must be an integral part of the entire process to assure the protection of the health, welfare and safety of the public. The selection process should proceed with all deliberate speed.

AIPG's AISLE ACTIVITIES

Earlier this year President Dunn appointed me to represent AIPG on the steering committee of AISLE (An InterSociety Liaison Effort). AISLE is a consortium of scientific and engineering societies which provides access to sources of competence to assist state legislatures. The primary mechanism used to accomplish that purpose is the AISLE conference.

An increasing number of public policy and legislative issues deals with problems that have important scientific, engineering, or technical considerations. State legislatures commonly have limited inhouse staff resources with the appropriate expertise to provide sufficient background information for the legislators on may of the issues they are required to address. For that reason, they often seek outside sources of information and counsel. The appropriate state agencies are one such source; special interest groups are another; and the AISLE consortium provides what is hoped to be an impartial and objective external source of information and counsel.

An AISLE conference works something like this: A state legislature (often its science advisor), aware of the AISLE program and the resources available through it, indicates an interest in co-hosting an AISLE conference. The topics to be addressed reflect the current concerns of the state. From the wide range of expertise available in the national scientific and engineering societies comprising AISLE, those with the appropriate expertise and interest in being involved meet together with the state legislators (usually at the state capitol) in small individual workshop sessions devoted to specific topics over a two or three-day period.

AISLE has been in operation for a number of years now, and several AISLE conferences have been held. AIPG has been represented in some. The next scheduled AISLE conference will be held in Virginia on October 26-28, 1980. Some of the topics to be addressed have important geological considerations, e.g., water management, coastal zone management, nuclear waste, toxic/hazardous waste, alternative energy sources, and coal mine health and safety. AIPG candidates for participation in the conference have been nominated, and we will be involved.

I believe the AISLE program provides another worthwhile opportunity for our involvement in public policy, legislative, and regulatory issues at the state

level. I feel our involvement in AISLE is mutually beneficial and should be pursued vigorously.

If you feel your state might be interested in an AISLE conference, just let me know and I'll do what I can as our representative on the steering committee to get the ball rolling.

Larry D. Woodfork
AIPG Representative
AISLE Steering Committee

PROFESSIONAL PARAGRAPHS

Frank Ludeman CPGS 1759 and Howard Urband CPGS 4602, formerly of Wyoming Mineral Corporation are pleased to announce the formation of Exploration and Development Associates, Inc., a Denver based firm with offices in Kenedy, Texas and Miami, Arizona.

Art Tipton and Jim Jones, also former WMC employees will be Regional Managers of the Texas and Arizona offices respectively.

EDA will be available after August 1 for contract exploration and development work, conventional solution mine evaluation and planning, and project management.

The Kenedy, Texas office is located at 220 Young Street, Kenedy, Texas 78119, telephone (512) 583-2001; the Miami, Arizona office is located at Drawer Z, Miami, Arizona 85539, telephone (602) 473-2468. The Denver Headquarters of EDA is located at 3110 So. Wadsworth Blvd., Suite 301, Denver, CO 80227, telephone (303) 988-2971.

ENERGY SYMPOSIA

Energy experts from around the world will gather in Knoxville, Tennessee to identify and discuss critical energy issues during an International Energy Symposia Series that will be a part of the energy-themed 1982 World's Fair.

The Symposia are co-sponsored by the United States Department of Energy, the International Energy Agency in Paris, the Tennessee Valley Authority, and the University of Tennessee.

The first Symposium will be held October 14-17, 1980. The second will be held in June, 1981, and the third in May, 1982, during the World's Fair, also known as the Knoxville International Energy Exposition.

The three Symposia have the common theme "Energy Productivity and Production". An international committee of prominent energy authorities have identified topics for the meetings, and world-renowned speakers will participate.

Deputy Secretary of Energy John Sawhill is Chairman of the first Symposium.

Preliminary program participants include: M. Sadli, Professor of Economics, the University of Indonesia; Wolf Haefele, Deputy Director, International Institute of Applied Systems Analysis; Shem Arungu-Olende, Senior Technical Officer, Conference on New and Renewable Sources of Energy, the United Nations; John Deutch, Professor of Chemistry, Massachusetts Institute of Technology; Amory and L. Hunter Lovins, Friends of the Earth; Hiroo Tominaga, Professor of Synthetic Chemistry, the University of Tokyo; Hans H. Lansberg, Senior Fellow, Resources for the Future; (Continued on page 7)

AIPG WASHINGTON REPORT
Legislative and Regulatory Activity Watch List

Compiled monthly by your Legislative and Regulatory Committee: Russ Wayland, Chairman, Washington, DC and AIPG Legislative Counsel, James U. Hamersley and Gail Leslie Fairman, Suite 1040, 1800 M Street NW, Washington, DC 20036 (202) 223-8200.

<u>Bill No./Sponsor</u>	<u>Description</u>	<u>Previous Action</u>	<u>Current Status</u>	<u>Comments</u>	<u>AIPG Position</u>
NEW LEGISLATION					
Amend. 1684 to S 1637 Bumpers (D-AR)	Mandatory competitive leasing system for all onshore oil and gas lands. 5 yr. lease terms. Quarterly public nominations and sales.	Administration requested submission of S 1637	5-8 Senate Energy Comm. approved Amend. as substitute for S1637 by vote of 9-8	Close vote means bill will have rough time on floor. Bumpers still eager for floor test has requested scheduling of debate.	AIPG opposes competitive leasing
HR 2743 Fuqua (D-FL)	Materials Policy Research Act -to provide a national policy for materials research & devel.	Passed House 12-3-79	Science Subcommittee (Senate Commerce) to hold hearings	Administration opposes bill on grounds that such legislation is unnecessary.	
HR 2759 Studs (D-MA)	Deep Seabed Mining Bill Estab. licensing and permit system for U.S. or U.S.-controlled mining interests. Permits would include environ. protection provisions	House passed 6/9. Senate passed w/amendments to resemble S 493. House accepted amended bill thus avoiding conference.	Signed into law 6/28 as PL 96-283.		
S 493 Melcher (D-CA)	Deep Seabed Mining Act	Passed Senate 12-12-79	See above HR 2759		
H J Res. 573 Forsythe (R-NJ) ***** S J Res. 184 McClure (R-ID)	Joint resolution would direct the President to remove administrative restrictions which impede or constrain the leasing of energy resources on public offshore and onshore lands		Senate version referred to Energy & Nat. Res. Comm. On the House side, the resolution is in Agriculture, Merchant Marine, & Inter. Comm.		
S 2009 Church (D-ID)	RARE II/Central Idaho 2.2 million acres of wilderness	Passed Senate 11-20-79 Passed House 4-16-80 Conf. report cleared Senate 6/26, House 7/1	Action by Congress completed and bill sent to President	Conference likely to be troubled with controversial West Panther Creek area. Senate version designates the area as wilderness. House version would permit mining.	
S 2583 Domenici (R-NM)	New Mexico-designates 560,000 acres as wilderness. Contains release provision for areas not designated as wilderness.		Parks Subcomm. (Senate Energy) hearings 5/29. Nothing further scheduled	Environmentalists oppose release provision and pressing for more wilderness acreage.	
S 2741 Armstrong (R-CO)	Colorado-designates 1.2 million acres of wilderness. Contains release provision	HR 5487 passed House 12/79. Designates 1.3 million acres as wilderness	Senate Energy top priority upon return from July adjournment	Compromise bill announced 6/30 would designate 1.4 million acres as wilderness, retain 700,000 acres for further study, and release 4.4 million acres for multi-use.	
S 2123 Hart (D-CO)	Colorado-Classifies as wilderness 1.5 million acres.				
HR 5341 Chappel (D-FL)	Eastern wilderness bill. Would add 21 areas containing 130,000 acres to wilderness. Areas located in Florida, N. and S. Carolina, Missouri, Mississippi, Louisiana	Passed House 7/1	Referred to Senate Agriculture & Energy	Relatively noncontroversial bill supported by environmentalists. Administration also supports with exception of prov. dealing with phosphate leases located in Florida's Osceola National Forest	

(Continued from page 5)

Jose Goldembeg, Professor of Physics, the University of Sao Paulo; David Rose, Professor of Nuclear Engineering, Massachusetts Institute of Technology; Marcello Alonso, Executive Secretary, Inter-American Nuclear Energy Agency; David Sternlight, Chief Economist, ARCO; Vaclav Smil, Associate Professor of Geography, the University of Manitoba; and Ben Nwosu, Chief Education Officer, Federal Ministry of Education, Nigeria.

Additional information about the Symposia may be obtained by contacting The 1982 World's Fair, P.O. Box 1982, Knoxville, Tennessee 37901, (615) 971-1544.

Art Socolow, state geologist of Pennsylvania has written the following words which several members of the Executive Committee felt were very refreshing.
Editor

ACHIEVEMENTS YES, APOLOGIES NO
Reprinted from
Vol. II, No. 3 of "Pennsylvania Geology"

There are some who have been saying in recent years that the United States, with approximately 6% of the world's population, has no right to be consuming some 30% of the world's annual production of mineral resources. Such remarks have been particularly stimulated by the unsettled world energy situation.

I, for one, am not yet ready to apologize for the extent of our consumption. To begin with, the early settlers of our nation had no forehand knowledge that this was a continent blessed with an abundance of mineral resources, including coal, oil, and natural gas. We owe no apologies for our early pioneers, who had the initiative to move westward and who braved unbelievable hardships as they settled in the wilderness. Nor do we owe apologies for the prospectors and miners who endured and conquered physical dangers and economic risks to locate and develop our mineral deposits, and are still doing so today at greater and greater costs as the easily discovered mineral resources are long gone.

And we should not be apologetic for the initiatives of industry and labor whose combined efforts created our industrial society and standard of living which is the envy of both developed and undeveloped nations of the world-even as our industrial society is the very basis for our massive mineral resource consumption.

America's technological and scientific genius which has created the marvels of transportation, communication, housing, disease controls, and scientific agricultural should also not be asked to apologize for their achievements, even as they too have added to our consumption of resources.

The challenge to our society is not simply to consume less out of some sense of guilt. We should rather eliminate wasteful procedures so that our known mineral resources will go farther, and improve our technology to find deeply hidden resources and to utilize low grade resources.

The underdeveloped nations have every right to aspire to greater use of mineral resources, greater industries, and high standards of living. But the challenge to those nations is to take the initiative to find and develop the resources in their own back yard. Our national achievements or our levels of consumption are not the cause of their underdevelopment and under-consumption.

While some countries have been blessed with a greater abundance of mineral raw materials than others, and some nations have moved far along to depleting their rich, easily discovered mineral deposits, the fact is that the world is not really running out of mineral raw materials. There remain in the earth's crust both deeply hidden, highgrade deposits, as well as known low-grade deposits of vast dimensions waiting to be "harvested" by improved technology. These challenges are compounded by political barriers which so often prevent freedom of movement of mineral resources between have and havenot nations.

Yes, our country is a major consumer. Yes, we have challenges to face in order to sustain our standards of consumption. Those challenges call for achievements, not apologies.

Arthur A. Socolow

CONTINUING EDUCATION
Design and construction of tailings dams
Co-Sponsored by Colorado School of Mines
and Klohn Leonoff, Inc.
November 6-7, 1980

PURPOSE AND SCOPE:

The seminar will address the general problems of mill tailings disposal, as well as waste from oil sands and oil shale processing. Addressing both theory and current practices, the program provides the participants a working knowledge of the parameters affecting tailings dam design and construction.

For further information contact:

Director Continuing Education
Colorado School of Mines
Golden, CO 80401

WORKSHOP IN
GEOLOGICAL REMOTE SENSING TECHNIQUES
November 17-21, 1980
EROS DATA CENTER
Sioux Falls, South Dakota

PURPOSE: To introduce practicing geoscientists to the concept and utility of geological data bases that incorporate topographic, geographic, geophysical, geochemical, geological and remotely sensed data types.

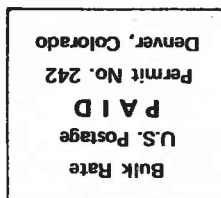
INTENDED AUDIENCE: The course has been designed for geoscientists who are actively involved in mineral resource investigations. A working knowledge of geologic concepts and principles is assumed. Previous experience in the analysis and interpretation of geophysical data or geochemical data or remotely sensed data is required. A knowledge of computer processing techniques applied to geologic investigations is desirable.

GENERAL DESCRIPTION: The workshop will be an intensive four and one-half day session of lectures, discussions, and exercises concentrating on mineral resource applications of geological data bases including data base planning, implementation, and management. Library and data reference facilities will be available for use by participants.

LOCATION: Classes will be held at the EROS Data Center, Sioux Falls, South Dakota.

(Continued on page 8)

Russell G. Wayland
4660 North 35th Street
Arlington, VA 22207



(Continued from page 7)

COST: Tuition for the workshop is US\$400.00. The tuition cost covers all instruction and course materials. Tuition does not cover food and lodging while in attendance. Payment of the tuition will be required on the first day of the workshop. Federal employees should use "Optional Form 170" (Request, Authorization Agreement and Certification of Training). State agency personnel may issue a purchase order or appropriate obligating document. Private parties should submit a check or money order. All reimbursement forms, purchase orders, checks, etc., should be payable to: U.S. Geological Survey, EROS Data Center. Payments in cash cannot be accepted. For further information contact:

Charles M. Trautwein
Application Branch
EROS Data Center
Sioux Falls, South Dakota 57198

Career opportunities in the 1980's will be very good for geophysicists - with demand exceeding supply, and good for geologists - with demand and supply about balanced, according to the Scientific Manpower Commission. They anticipate 600 openings a year for geophysicists, and 1700 openings a year for geologists.

THE PROFESSIONAL GEOLOGIST
An Official Publication of the
American Institute of Professional Geologists

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GEOLOGIC MAP OF WYOMING

A Reprint of the 1955 GEOLOGIC MAP OR WYOMING is now available from the Geological Survey of Wyoming. The full color 1955 map by J. D. Love, J. L. Weitz, and R. K. Hose, produced by the U. S. Geological Survey at a scale of 1:500,000, has been rearranged and reproduced in black and white on two sheets: the map sheet measures 58 X 40 inches, the legend sheet 50 X 40 inches. The two sheets, together designated Map Series No. 7 (MS-7), can be purchased for \$3.00 postpaid by writing The Geological Survey of Wyoming, Box 3008, University Station, Laramie, Wyoming 82071 or by calling (307) 742-2054, or over the counter of the Wyoming Oil and Gas Conservation Commission, 123 South Durbin, Casper.