American Institute of Professional Geologists How We Help Students Launch a Career in the Geosciences

STUDENT MEMBERSHIP TO YOUNG PROFESSIONAL MEMBERSHIP



A Bright Future for Young Geoscientists

- Dept of Labor: between 2019 and 2026, Geoscience jobs to grow by 14% (more than any other profession).
- Many geoscience graduates will be needed for <u>Off-World activities</u> on the Moon, Asteroids, Mars, etc. for NASA and the new <u>U.S. Space Industry</u>, based on Earth.
- Increase in job hiring due largely to retirement of pre-war and post-war "boomer" professionals.
- Recent graduates are entering at a good time, BUT – need to be patient! Getting a good job takes timing and a bit of luck, requires networking with friends and new associates at local and national professional meetings.



A Bright Future for Young Geoscientists

Number of Professionals in U.S. by category:

Profession	No.	Year
Software Developers	4,400,000	2015
Lawyers	1,340,000	2017
Doctors	950,000	2016
CPAs	665,000	2016
Geoscientists	32,000	2016
Geoscientists (projected)	36,500	2026

- <u>Disadvantage</u>: Not as many jobs available for geoscientists relative to other professions, including Engineers of all types.
- <u>Advantage</u>: An acute shortage can occur with relatively few leaving the field (retirees)

A Bright Future for Young Geoscientists

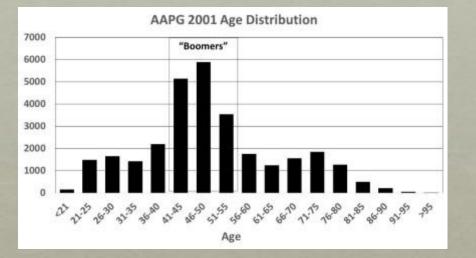
If 30% of geoscientists retire before 2026, then:

32,000 – 9600 = 22,400 (remaining geoscientists in 2026)

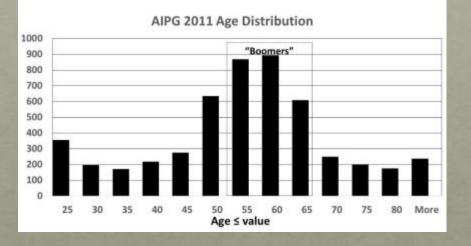
36,480 – 22,400 = 14,080 <u>geoscience jobs</u> needed to be filled by 2026 (39% of all geoscience jobs!)

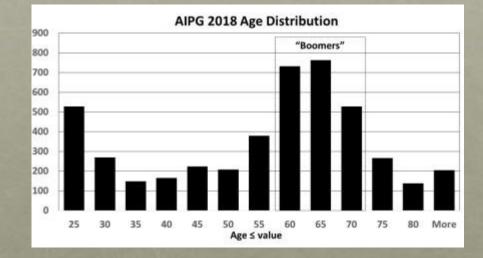
No. of graduates (BS, MS, PhD) 2016 = 5,787

Average salary of geologists (2018) = \$70,823, mostly related to oil and gas jobs.



Bye-Bye Baby Boomers! Hello Millennials! (or whatever they call you ...)





How Do I Get a Job in the Geosciences?

- Be Patient but Persistent
- Increase your odds by being VISIBLE!
- Networking
 - Join national organizations like AIPG
 - Join local organizations like a state geological society
 - Go to conferences; attend field trips and special lectures / short courses

What is AIPG?



- Founded in 1963
- Largest association dedicated to supporting geology as a profession
- Presently, AIPG has more than 7,800 members in the U.S. and abroad, organized into 36 regional Sections, including the Texas Section: see: <u>AIPG-TX.ORG</u>
- Encourages principles of professional responsibility, public health and safety, and public service
- The only international organization that certifies the competence and ethical conduct of geological scientists

What AIPG Does

- Professional Certification
- Categories of Membership Certified Professional Geologist, Professional, Young Professional, Associate, and Student.
- Ombudsman (investigate complaints)
- Lobbying on matters related to the geosciences
- Liability Insurance
- Continuing Education

The difference between AIPG and other organizations

- Many organizations represent a particular field of geology (engineering geology, petroleum geology, etc)
- AIPG represents all fields of geological practice
- A member society of American Geological Institute (AGI)

Student Membership Benefits

- Free
- Undergraduate and Graduate Scholarships
- Make Professional contacts
- Access to meetings and field trips
- Mentorship
- Can post resume and do job searches
- Publish articles in The Professional Geologist
- <u>Texas Section Scholarships</u>



Scholarships

- In 2017 AIPG awarded...
 - 6 undergraduate scholarships in the amount of \$1,000

- 2 graduate scholarships in the amount of **\$1,000**
- Some state sections offer additional undergraduate/ graduate scholarships and scholarships for field camps
- <u>See Texas Scholarships</u>





The Shoemaker Scholarships (\$2,500)

2016, 2017 & 2018 University of Texas - El Paso (UTEP)

Presented by Mike Jacobs, P.G. AIPG-TX District I Representative

Mentorships

- What's the industry like in your field of interest?
- Is the industry going through major changes?
- Do you need a post-graduate degree?
- How is the job market (in the state you live or want to live in)?
- What can I do to prepare?
- Difference between working in government and private sectors?



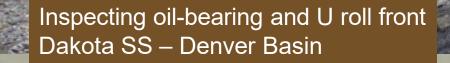
Section and Annual Meetings

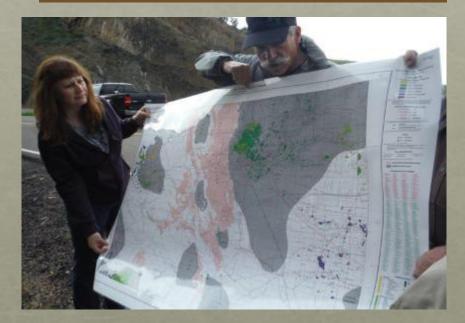


Executive Committee Meeting & Field Trip Denver, Colorado









Section and Annual Meetings



Fieldtrip Guidebook (here)

AIPG TEXAS SECTION Field Trips and Training Programs

For details see TPG, PDF pp. 44 to 45 (more)



AIPG - TX presents

2018 GEODAYZ Feb. 24 & 25, 2018 1120 NW Stallings Dr. Nacogdoches, TX

Learn About the Application of Geological and Hydrogeological Techniques ...

For Students and New Professionals in the Industry

Featuring Demonstrations & Presentations



AIPG ARIZONA SECTION FIELD TRIP



ASU's Dr. Ron Dorn led field trip to South Mtns: evolution of drainages



AIPG ANNUAL MEETING

ANCHORAGE, ALASKA

Denali – visible 30% of the time!





Usibelli Coal Mine Control Room













Alaska National Meeting



AIPG ANNUAL MEETING SANTA FE, NEW MEXICO







Near Los Alamos and the Valles Caldera

AIPG ANNUAL MEETING

NASHVILLE, TENNESSEE

Gordonsville UG Zinc Mine









Tennessee



Mammoth Cave / Corvette Museum





What Does it mean to be an AIPG Student Chapter?

- An AIPG Student Chapter is a resource for students to learn about professionalism in the geosciences. To gain insight on careers of interest prior to college graduation.
- AIPG Student Chapters can host/ participate in events, workshops, meetings, and fieldtrips to learn valuable tools in preparation for post- graduation and make professional contacts.



To help bridge the long distances in Texas: The Virtual Statewide AIPG Chapter (here)

Transitioning to a young professional



Lots of Good Company

- Graduate school or starting a career?
- Do I want (or have) to move?
- What industries interest me most?
- Is a cover letter necessary?
- What can I expect from an entry-level position?
- Should I take the first ASBOG Test ASAP?
- How do I get involved in the geological community?

The Future of Young Professional Memberships

- Young Professional member has been added to the national executive committee
- Bridges the gap between students and professionals! The YP representative acts as a resource for student chapters.
- Insight on events, social media, newsletters, marketing, etc.
- YP's gain the opportunity to have responsibility and leadership roles in AIPG



How Being a member can benefit your career



- Networking is valuable to every business
- AIPG leadership can accelerate your career
- Planning events, AIPG email correspondence, articles in section newsletters or TPG, etc.
 = GREAT avenue to practice writing skills and collaborating
- The ins and outs of an organization run in a similar way to a business

Continuing Education Credits

- Online courses
 - Field trips
- Annual Meetings

The geoscience community is moving in the direction of requiring continuing education requirements for licensure.

- 17+ Webinars online at AIPG website
- <u>Global Energy Resources: Current and</u> <u>Short Term Predictions (earn 0.1 CEU's)</u>
- Basics of Seismic Petroleum Exploration
 for New Hires
- Publish your thesis/dissertation (more)
- Contribute/use focused web portals (more)



AIPG Code of Ethics

(Adouted December 11, 1989, with modifications adopted October 5, 2003)

PREAMBLE

Members of The American Institute of Professional Geologists are dedicated to the highest standards of personal integrity and professional conduct. The Institute's Code of Ethics comprises three parts: the Canons, which are broad principles of conduct; the Ethical Standards, which are goals to which Members aspire; and the Rules of Concluct. Compliance with the Rules of Concluct is mandatory and violation of any Rule will be grounds for disciplinary action by the Institute. Under the Bylaws, the Institute may also impose discipline for legal violations and because of the suspension or revocation of redistration or licensure, among other crounds, Disciplinary action may take the form of private admonition, public reprimand, suspension of membership, or termination. The Code of Ethics applies to all professional activities of Members and Adjuncts, wherever and whenever they occur. The title "Member" where used in this Code of Ethics shall include Adjuncts. A Member shall not be relieved of an ethical responsibility by virtue of his or her employment, because the Member has delegated an assignment to a subordinate, or because the Member was not involved in performing services for concensation.

CANON 1. General Obligations

Members should be guided by the highest standards of personal integrity and professional conduct.

STANDARD 1.1

Members should pursue honesty, integrity, loyalty, fairness, impartiality, candor, fidelity to trust, invidiability of confidence, and honorable concluct as a way of life.

Rule 1.1.1 By applying for or by continuing Membership in the STANDARD 3.2 this Code of Ethics.

CANON 2. Obligations To The Public

Members should uphold the public health, safety, and welfare in the performance of professional services, and avoid even the appearance of impropriety.

STANDARD 2.1

Members should observe and comply with the requirements and intent of all applicable laws, codes, and regulations

- Rule 2.1.1 A Member shall not knowingly participate in any illegal reports, maps, or other documents for illegal purpose.
- Rule 2.1.2 A Member shall nether offer nor make any illegal payment, gift, or other valuable consideration to a public official for the purpose of influencing a decision by such official: nor shall a Member accept any payment, pift, or other valuable consideration that would appear to influence a decision made on behalf of the public by the Member acting in a position of public trust.
- Rule 2.1.3 If a Merrber becomes aware of a decision or action by regulation, the Member shall advise against such action, and when such violation appears to materially affect the in ublic health, safety, or welfare, shall arryise the appropriate public officials responsible for the enforcement of such

STANDARD 2.2

Members should be accurate, truthful, and candid in all communications with the public

- Rule 2.2.1 A Member shall not knowingly engage in false or decepgeology or which concern his or her own professional
- Rule 2.2.2 A Member shall not issue a false statement or false information which the Member knows to be false or
- Rule 2.2.3 A Member shall avoid making sensational, exaggerated, and or unwarranted statements that may mislead or deceive members of the public or any public body.

STANDARD 2.3

public affairs.

Rule 2.3.1 A Member acting in a position of public trust shall exerose his or her authority impartially, and shall not seek to use his or her authority for personal profit or to secure any competitive advantage.

STANDARD 24

Members should promote public awareness of the effects of geology and geological processes on the quality of life.

CANON 3. Obligations To Employers And Clients

Members should serve their employers and dients faithfully and competently within their overall professional and ethical obligations.

STANDARD 3.1

Members should disclose any actual or potential conflicts of interest that may affect their ability to serve an employer or dient faithfully.

- Rule 3.1.1 A Member shall disclose to a prospective employer or dient the existence of any owned or controlled mineral or other interest that may, either directly or indirectly, have a pertinent bearing on such employment.
- Rule 3.1.2 A Member having or expecting to have beneficial interest in a property on which the Member reports shall state. in the report the fact of the existence of such interest or excerted interest.
- Rule 3.1.3 A Member employed or retained by one employer or client shall not accept, without that employer's or client's written consent, an encacement by another if the interests of the two are in any manner conflicting.

Institute, a Member agrees to comply with and uphold Members should protect, to the fullest possible extent, the interest of an employer or client so far as is consistent with the public health. safety, and welfare and the Member's legal, professional, and ethicaloblications.

- Rule 3.2.1 A Member shall not use, cirectly or indirectly, any confidential information obtained from or in the course of performing services for an employer or dient in any way. which is adverse or detrimental to the interests of the employer or dient, except with the prior consent of the employer or client or when disclosure is required by law.
- Rule 3.2.2 A Member who has made an investigation for an employer or client shall not seek to profit economically. from the information gained without written permission of the employer or client junless it is clear that there can no longer be a conflict of interest with the original employer
- Rule 3.2.3 A Member shall not use his or her employer's or dient's attention of the Institute. resources for private gain without the prior knowledge and consent of his or her employer or dient.

STANDARD 3.3

Members should serve their employers and dients competently.

- Rule 3.3.1 A Member shall perform professional services or issue professional advice that is only within the scope of the education and experience of the Member and the Member's professional associates, consultants, or employees, and shall advise the employer or dilent if any professional advice is outside of the Member's personal expertise.
- Rule 3.3.2 A Member shall not give a professional comon or submit a report without being as thoroughly informed as might bereasonably expected, considering the purpose for which. the opinion or report is requested
- Rule 3.3.3 A Member shall engage, or advise an employer or client to encade, and opporate with other experts and specialbest served by such service.

STANDARD 3.4

Members should serve their employers and dients diligently and perform their services in a timely manner.

STANDARD 3.5

Members who find that obligations to an employer or client conflict able conditions corrected or resign.

CANON 4. Obligations to Professional Colleagues

Members should participate as otizens and as professionals in Members should respect the rights, interests, and contributions of their professional colleagues.

STANDARD 4.1

Members should respect and adknowledge the professional status. and contributions of their colleagues.

Rule 4.1.1 A Member shall give due credit for work done by others. in the course of a professional assignment, and shall not knowingly accept credit due another.

Rule 4.1.2 A Member shall not plagiarize another in oral and written communications, or use materials prepared by others without appropriate attribution.

STANDARD 4.2

Members should be accurate, truthful, and candid in all communications with others regarding professional colleagues.

Bule 421 A Member shall not issue (a) false statement(s) (a) msleading statement(s), or (a) sensational, exaggerated, defamatory, and or unwarranted statement(s) regarding a professional colleague. Differences of opinion occur and statements regarding opinions should be restricted to and based on logical and scientific principles and should be made in a respectful and professional manner

CANON 5 Obligations to the Institute and the Profession

Members should continually strive to improve the profession of geology so that it may be of even increasing benefit to society.

STANDARD 5.1

Members should shrve to improve their professional knowledge and skills.

STANDARD 5.2

Members should cooperate with others in the profession and encourage the dissemination of geological knowledge.

STANDARD 5.3

Members should work toward the improvement of standards of geological education, research, training, and practice.

STANDARD 5.4

Members should not only uphold these standards of ethics by precept and example but also encourage by counsel and advice to other Members, their adherence to such standards.

STANDARD 5.5

Members having knowledge of a violation of these Bules by another Member should bring substantiated evidence of such violation to the

For Link (here)

AIPG CODE **OF ETHICS**





Questions??

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