



# Professional Licensure and Certification of Geologists: *AIPG's Professional Certification*

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2023 President, American Institute of Professional Geologists



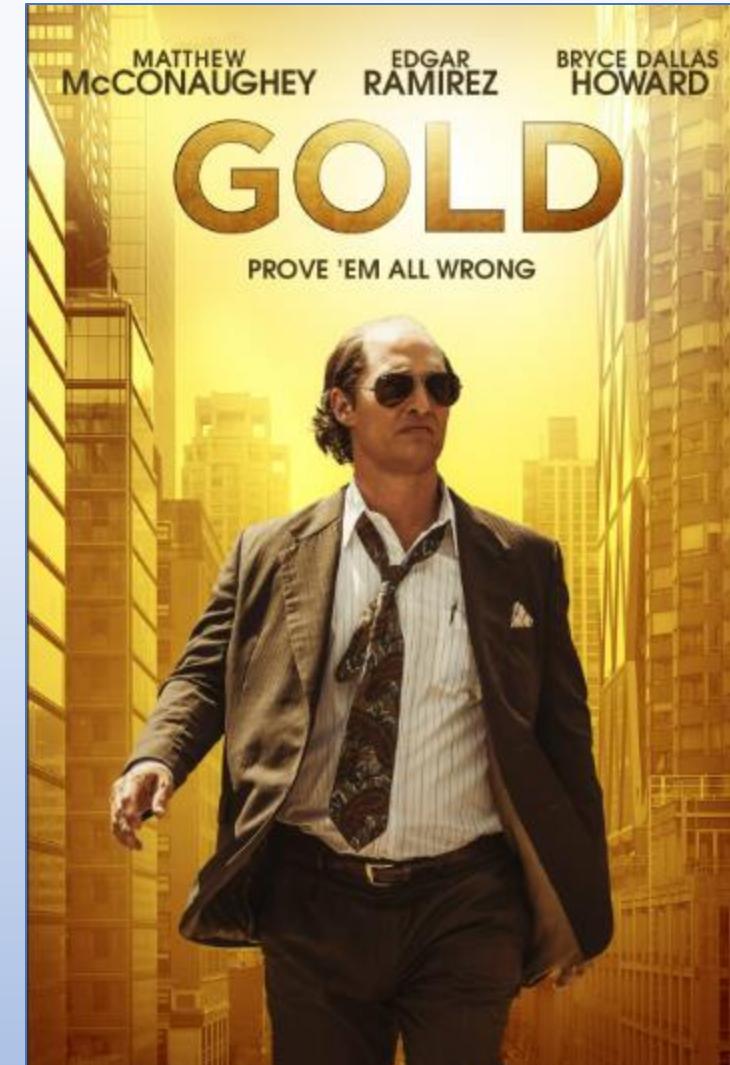
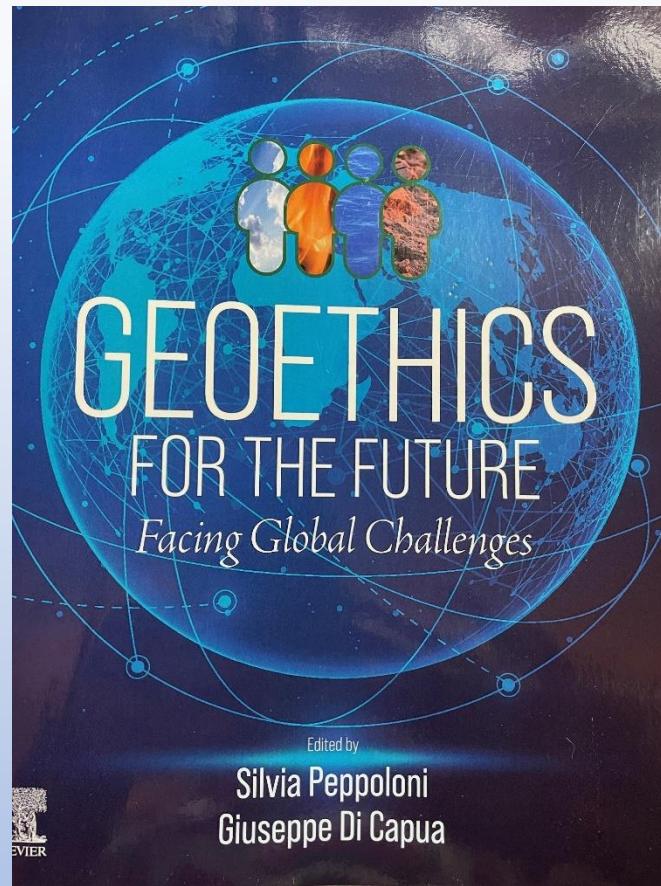
# Topics to be Covered

- The importance of licensure and certification of geologists
- Who are today's geologists
- Introduction to American Institute of Professional Geologists (AIPG)
- The difference between licensure and certification
- Definition of a professional geologist
- How AIPG helps you in your professional career as a geologist
- How you can become a Certified Professional Geologist



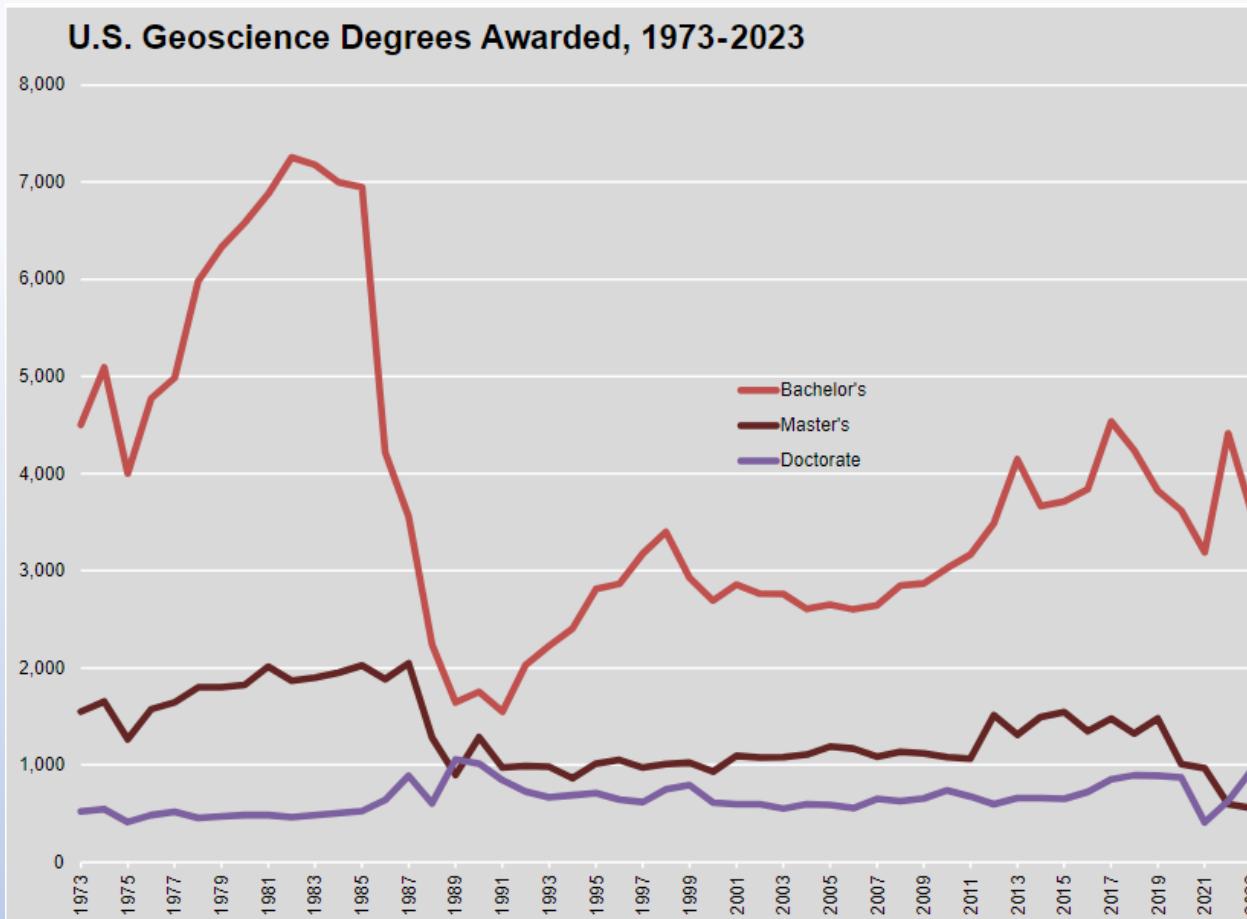
# The Importance of Licensure and Certification

- World-Wide Demand for Qualified Geologists
- Type of Work Performed by Geologists
- Global Challenges and International Reach of Geologic Studies

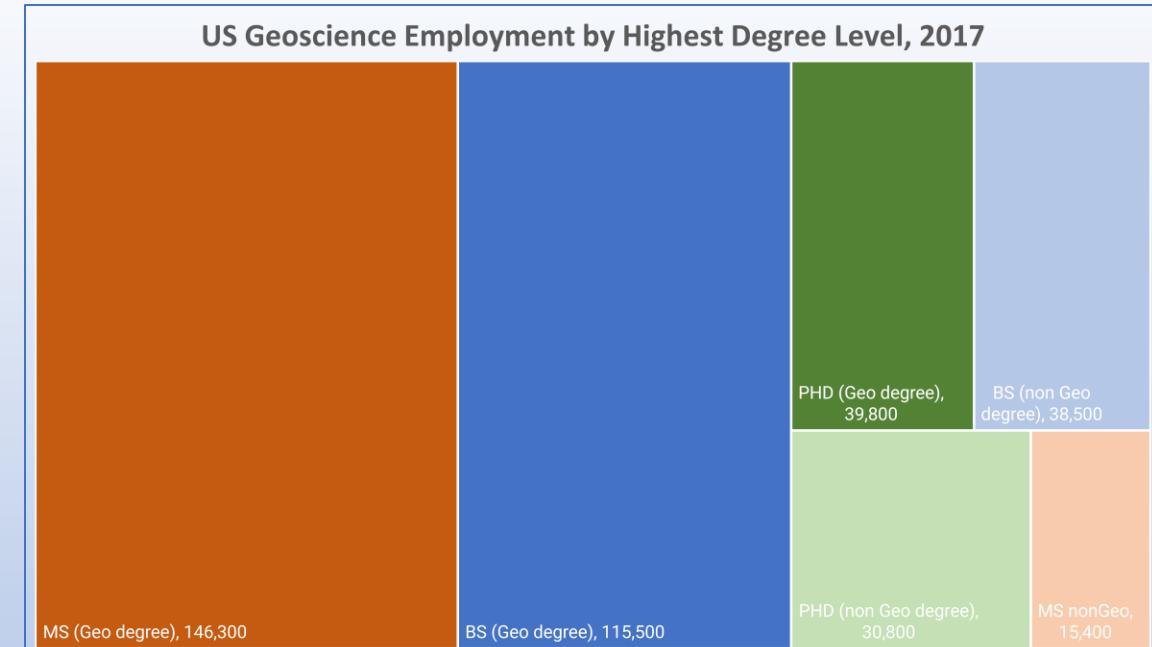




# Who are the Geologists of Today?



Source: [U.S. Geoscience Degrees Awarded since 1973 \(americangeosciences.org\)](https://www.americangeosciences.org)



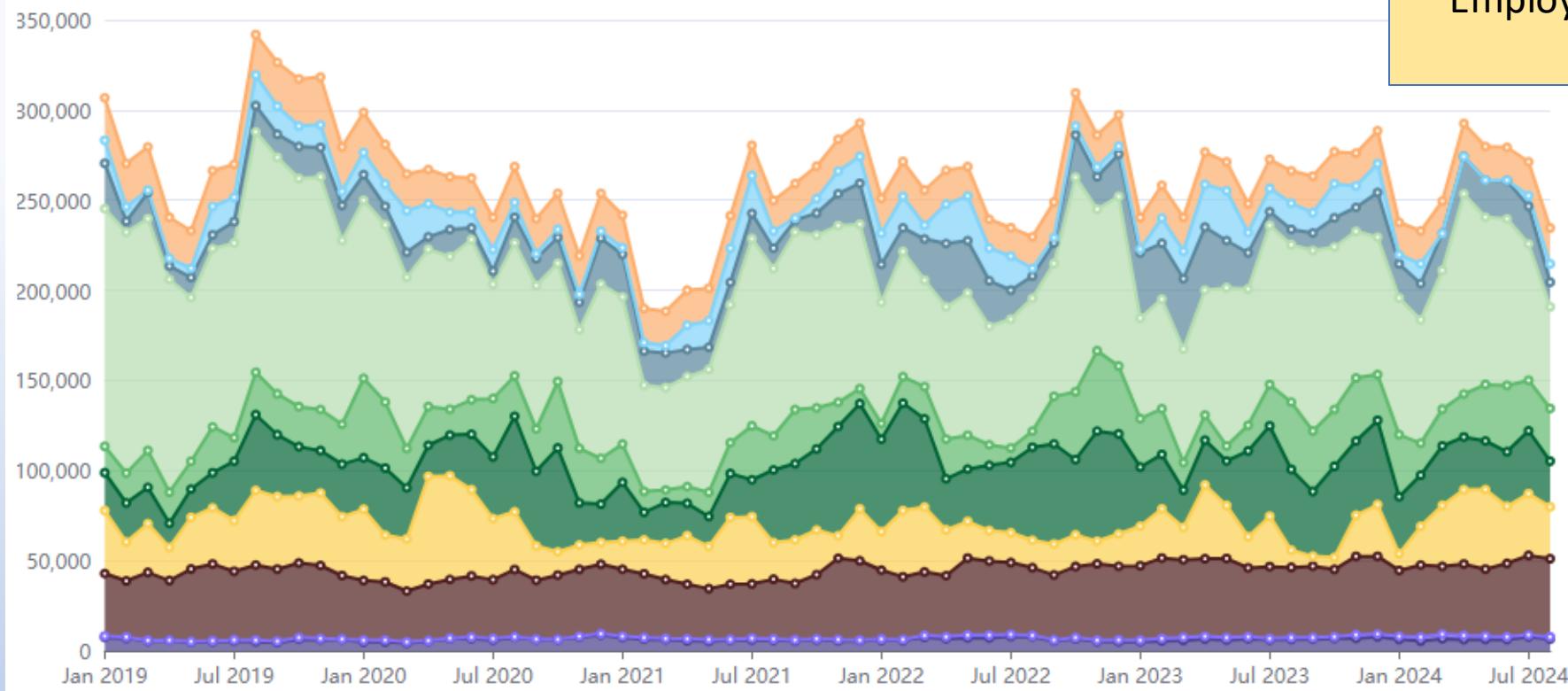
Almost 400,000 Geologists Employed in the US in 2017



# Employee Statistics 2019-2024

Monthly geoscience employment by occupational category

Fewer than 235,000 Geoscientists  
Employed in United States in July  
2024



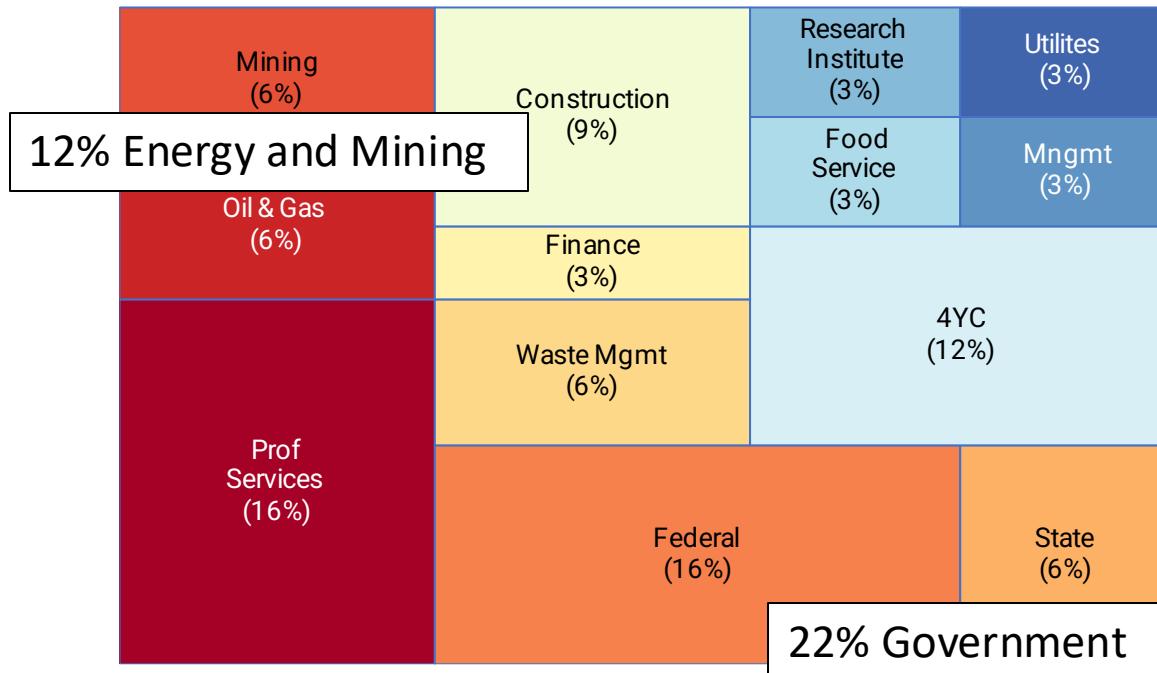
- Geoscience postsecondary teachers
- Atmospheric and space scientists
- Conservation scientists
- Environmental scientists and geoscientists
- Environmental science and geoscience technicians
- Environmental engineers
- Petroleum, mining and geological engineers
- Geoscience civil engineers
- Geoscience natural sciences managers
- Geoscience engineering managers

Source: [U.S. Geoscience Monthly Employment \(americangeosciences.org\)](http://U.S. Geoscience Monthly Employment (americangeosciences.org))

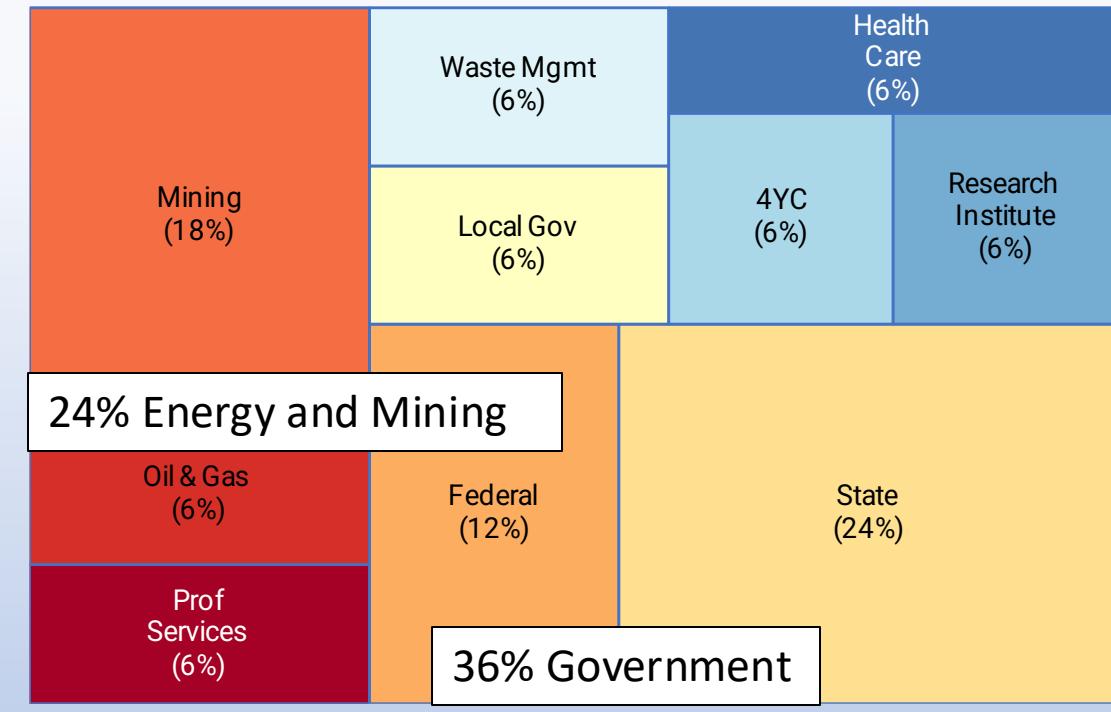
American Institute of Professional Geologists

# Employee Sectors

## Employment Sectors of Bachelor's Graduates, 2020-21



## Employment Sectors of Master's Graduates, 2020-21

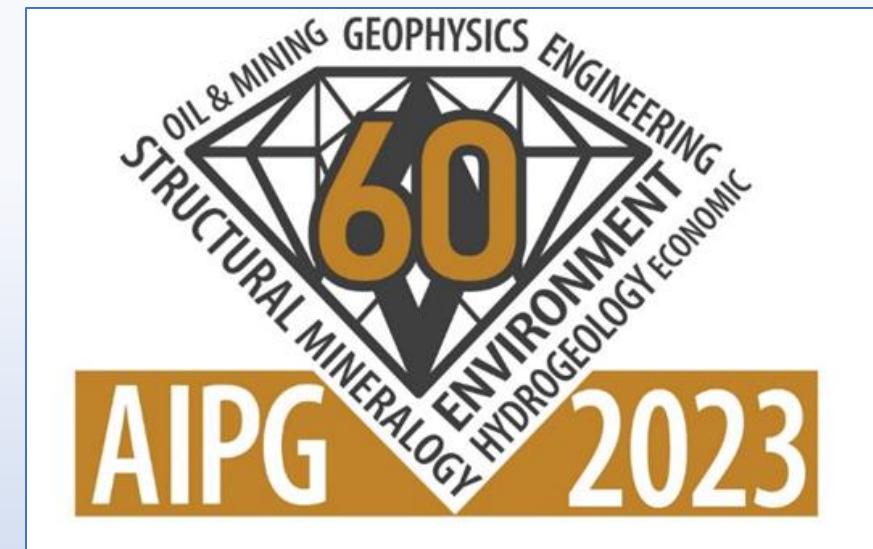


Source: Chris Keane, American Geosciences Institute



# Introduction to American Institute of Professional Geologists

- Founded in 1963
- Advocate for the Profession of Geology
- About 5,000 Members
- Promotes High Standards of Ethical Conduct
- Provides Certification of Professional Geoscientists
- Certification Recognized within the United States and Internationally
- Members are Geoscientists Practicing in all Areas of Geosciences



*Celebrating AIPG's 60<sup>th</sup> anniversary  
in 2023*



# Government Licensure of Professionals

- Licensing Started after High-Profile Building Failures
- Engineering and Architecture First Regulated
- The “Big 5” Professions, including Architects, Engineers, Geologists, Landscape Architects, and Surveyors
- Geologists First Licensed in Arizona in 1956





# Why was AIPG Formed?

- Response to Long-Term Problems of Poor Quality and Fraud
- Very Few States had Licensure of Geologists when AIPG was Formed
- Founded in 1963
- Promote the Geology Profession
- Provide Certification for Geologists as a Standard of Excellence for the Profession
- No Prior Organization Focused on Professionalism for Geologists





# What is the Difference between Licensure and Certification?

## Licensure

- Permission from Government to Practice
- Administered under the State's Statutes and Rules
- No Federal Program in US or Canada
- Purpose is Primarily to Protect the Health, Safety, and Welfare of the Public
- Establishes Standards for Minimum Competency
- Works in Conjunction with Association of State Boards of Geology (Organization that Prepares Examination)

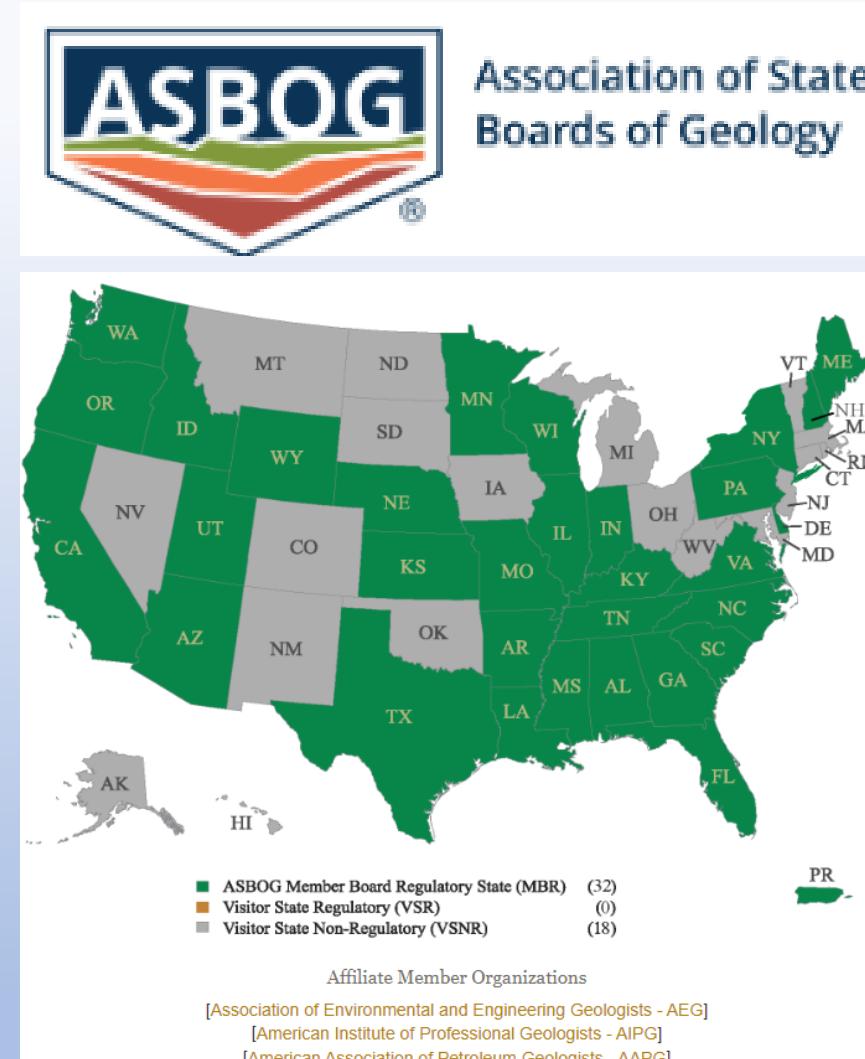
## Certification

- Granted by a Professional Organization
- Voluntary
- Professional Organization Establishes Standards
- Recognition Internationally
- Organization may have Additional Goals

*Both licensure and certification were created to demonstrate that the geologist is a professional.*

# Association of State Boards of Geology (ASBOG)

- Established to create a unified approach to geology licensure and regulation across the United States
- Initial meeting took place in 1988 with first official meeting 1990
- Central body for coordinating geology licensure and ensuring public protection through standardized examinations and procedures
- Examinations are validated by a psychometrician

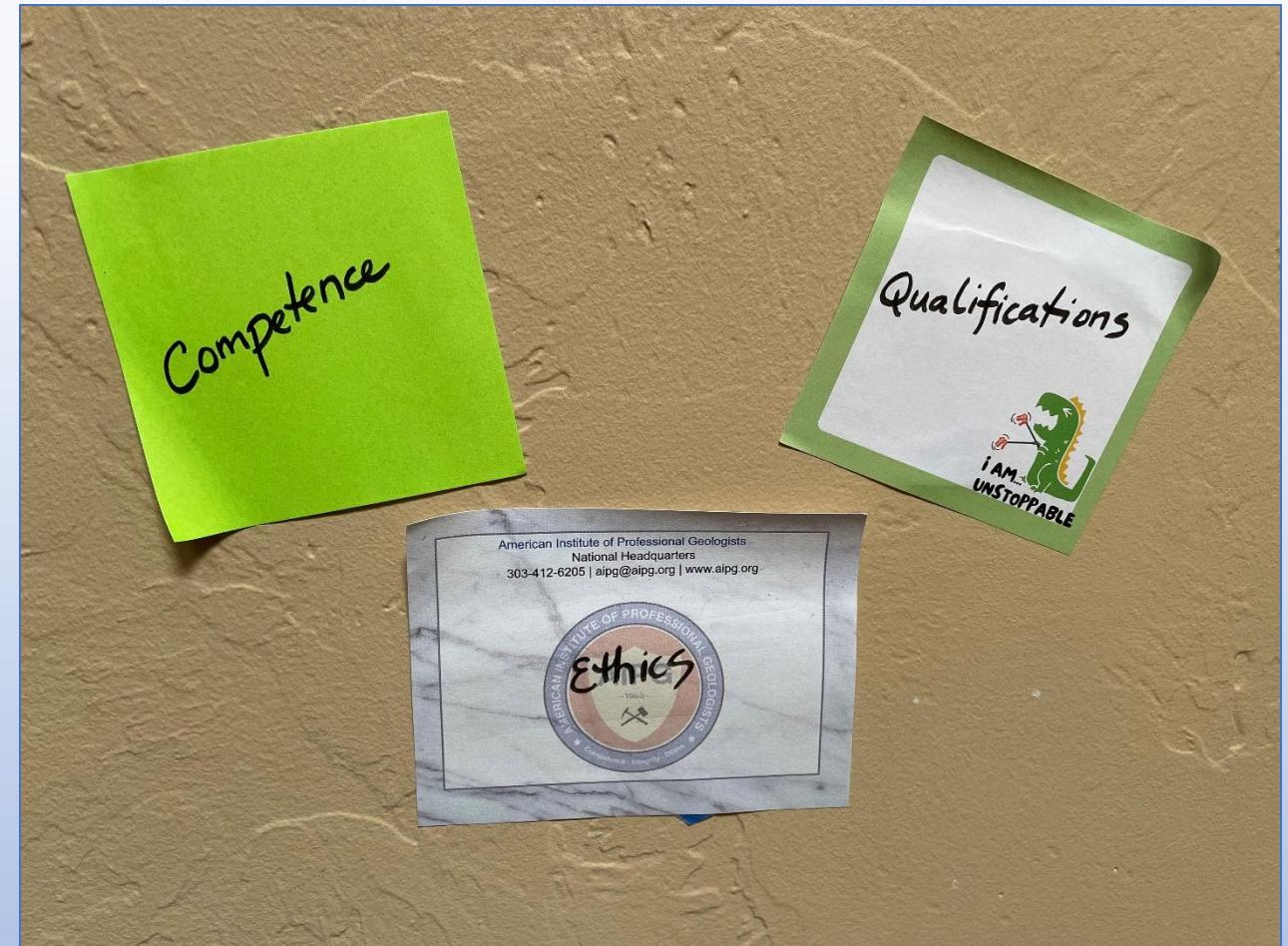




# What Defines a Professional Geologist?

- Qualifications, Competence, and Ethics
- Qualified ≠ Competent
- Ethics ≠ Morals
- Obligations and Practices

*The Criteria that Define a Professional Geologist Change Based on the Jurisdiction and Organization*





# The Values of Being an AIPG CPG

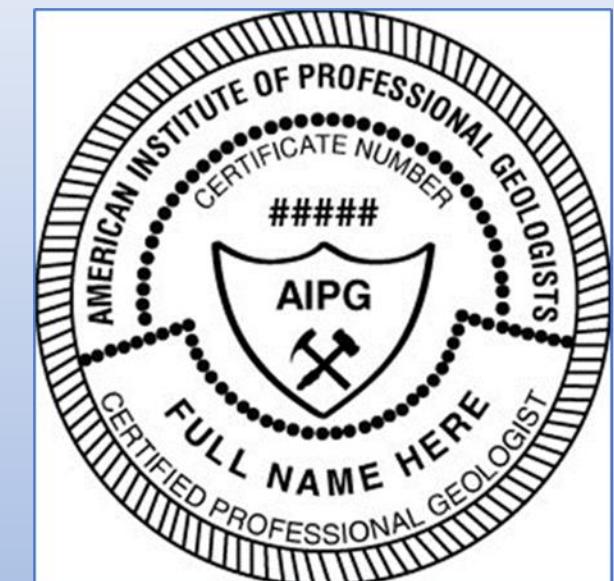
- AIPG is Recognized Internationally
- AIPG CPG Status is Recognized as “Qualified Person” for Public Disclosure for Mining companies
  - Australian Joint Ore Reserves Committee (JORC)
  - Canadian National Instrument 43-101
  - US Securities and Exchange Commission SK-1300
- Agreements of Mutual Recognition of Professional Qualifications
  - American Association of Petroleum Geologists
  - European Federation of Geologists
  - Geological Society of London
  - Institute of Geologists of Ireland
- AIPG Provides Continuing Education and Professional Development
- AIPG is an Advocate for the Profession on a Global Basis





# Global Practice Supported by AIPG

- Members in 54 Countries
- International Collaboration:
  - American Geosciences Institute (AGI is a network of nearly 50 member societies, including AIPG)
  - Australian Institute of Geoscientists
  - Committee for Mineral Reserves International Reporting Standards (CRIRSCO)
  - European Federation of Geologists (EFG)
  - GeoAnsata (Brazil)
  - Geological Society of London (GSL)
  - Geological Society of South Africa
  - Geoscience Council of Namibia
  - Geoscientists Canada
  - Global Geoscience Professionalism Group (founding member)
  - International Raw Materials Observatory
  - West African Institute of Mining, Metallurgy and Petroleum





# Criteria for Professional Certification through AIPG

## Education

- Baccalaureate or higher degree in a geological science (minimum of 36 semester hours / 54 quarter hours of geoscience and related courses). Reviewers are looking for completion of key core geosciences courses.
- Transcripts from all colleges and universities attended.

## Tips!

- Additional continuing education courses may be considered to demonstrate sufficient coursework.

- Transcripts are to be sent directly to AIPG from the issuing academic institution.
- Applicant should provide description when course title is not geologic-content specific, including for a related science.

Be sure to read the AIPG website instructions and *Frequently Asked Questions*!





# Criteria for Professional Certification through AIPG

## Geological Experience

- Verification from employers or supervisors (form requires applicant to complete sections)
- Minimum 8 years (96 months) of professional experience
- Credit for additional advanced degree (1 year for Masters and 2 more for PhD)
- Need to show that experience is of “professional” level

## Tips!

- Read application instructions regarding the how to describe experience
- Work experience needs to detail progressive responsibilities and level of professional growth
- Explain gaps in experience
- Contact AIPG National if any questions





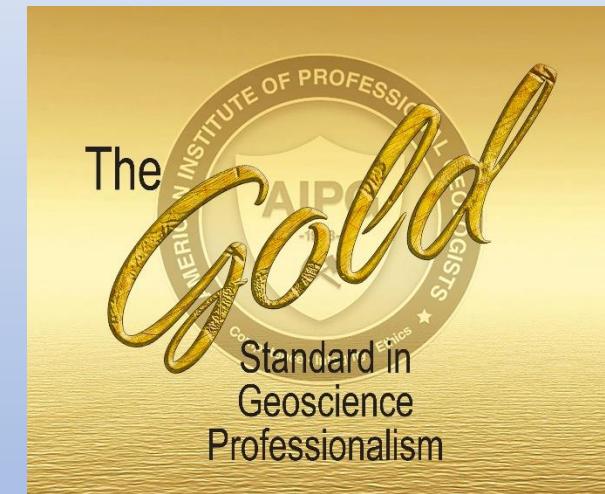
# Criteria for Professional Certification through AIPG

## Sponsorship

- Verification of reputation and ethics
- Need 3 professional geologists as sponsors (2 of the sponsors need to be CPGs)
- If not able to get CPG sponsors, may have 6 professional geologists who have a knowledge of the applicant's qualifications, integrity and conduct as sponsors

## Tips!

- Be sure to include the email/phone number of sponsors on the application in case the sponsor needs to be contacted by the screening committee
- Contact the local AIPG section or AIPG National for assistance if needed



# CPG Application Process

- Online application
- Request Education Transcripts
- Request submittal of Geological Experience Verification forms
- Request submittal of Sponsor's Statement forms
- AIPG will compile documents received for the application and determine whether the application is complete
- AIPG submits application package to Section Screening Committee for review
- AIPG submits application package to National Screening Committee for review and determination
- AIPG sends notification and, if approved, membership fee invoice will be sent to applicant
- Members pay an annual fee for section and national dues, and sign an ethics declaration

## Tips!

- Ask Sponsors and Geological Experience Verifiers to alert you when they submit forms (AIPG does not notify you when each document is received)
- Track the status of form submittals and transcript requests
- Verify with AIPG that all documents have been received
- Applicants may be contacted during the application review process to provide additional information



*The largest geosciences association devoted to ethical and professional practices in the U.S.*

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## AIPG CPG MEMBERSHIP APPLICATION



[Membership](#) » [Membership Applications](#) » [CPG Electronic Application](#)

### AIPG Certified Professional Geologist (CPG) Membership Application

#### Steps for Applying for CPG

1. Read the following items:

- Letter to Applicants
- Helpful Information from the National Screening Committee Chairman
- Application Flow Chart
- AIPG Bylaws
- AIPG Ethics

2. Submit your application (form below); includes requirement of uploading an official photo ID (such as passport or driver's license).

3. Pay the application fee online (\$70 non-member and \$50 for members upgrading).

4. Fill out Geological Experience Verification forms, email to individuals to complete, sign, and upload.

5. Fill out Sponsor's Statement forms, email to individuals to complete, sign, and [upload](#).

6. Certified Transcripts must be sent by the university, in electronic format to Dorothy Combs - [aipg@aipg.org](mailto:aipg@aipg.org) or by mail (AIPG, 1333 W. 120th Ave., Suite 211, Westminster, CO 80234).

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## GEOLOGICAL EXPERIENCE VERIFICATION

(applicant's name) has filed an application with the American Institute of Professional Geologists for Certification as a Certified Professional Geologist. This Certification depends, among other considerations, on the verification of the extent, diversity, and quality of his/her practical training and geological experience as described on page 2 of this form. Please assist us by supplying the information requested below, based on your own personal, first-hand knowledge of the applicant. Attach additional sheets if needed. Thank you.

Verification of experience from (month and year) \_\_\_\_\_ To \_\_\_\_\_

Applicant's employer during this period: \_\_\_\_\_

— SEE APPLICANT'S COMPLETE STATEMENT ON REVERSE SIDE OF FORM —

To be completed by person verifying geologic experience:

Name	
Current employer	
Current job and/or professional title	
Complete Business address	
Email/Office phone number	
Nature of current business	

1. Profession and specialty (if any) \_\_\_\_\_ Years Experience \_\_\_\_\_

2. What was your business or professional relationship with the applicant during the time described?

3. The portion of employment or experience we wish you to verify is described by the applicant on the reverse side of this form. Please state your opinion regarding the accuracy of the description, including duration, extent, and complexity of work, **particularly the geological work and whether the work was in a position of responsibility**, and indicate your evaluation of the applicant's performance.

4. If there is any portion of the described experience with which you are insufficiently familiar, please identify the portion and explain.

5. Additional Comments?

6. List your Professional Certification(s), License(s), or Registration(s), if any.

Signature \_\_\_\_\_

Date \_\_\_\_\_

## TO BE COMPLETED BY APPLICANT EXPERIENCE RECORD: SUMMARY AND DESCRIPTION

Name of person verifying your work experience	
Name and address of your employer at time of experience	
Date of employment: From _____ To _____	
Percent full-time	Percent of full-time work which was geological*
Percent part-time	Percent of part-time work that was geological*
Total experience in months	Percent of work in a position of responsibility

\*Geological work may include time spent managing/supervising other geologists, reviewing geologic reports, and conducting the appropriate administration necessary to your work as a geologist.

Description of Geological Experience: Make explicit statements, listing and defining geological work performed. The description should be specific and contain details as to how the job included the application of geological principles, theories, and knowledge in the collection, analysis, and interpretation of geological data. Include a statement describing the extent and complexity of work performed. In particular, identify work "in a position of responsibility" as defined in the requirements for Certification (Bylaw 2.3.1.4). A listing of projects, without details regarding the geological aspects is not sufficient for a fair evaluation of your experience. Terms such as "managed," "was involved in," "participated in," "served on a team," and so forth do not provide sufficient detail. It is better to use terms that identify duties, such as "project director," "principal investigator," "well-site geologist," "geologic team foreman." If more space is needed, upload additional information.

Summary of work experience:

Reason for leaving:

Name of Supervisor:

The person completing this form must return the completed form directly to AIPG by uploading on the AIPG Website or emailing it to aipg@aipg.org. Save the form. The [Upload Form](#) button below links to the website page to upload this form and any additional information you or the applicant has provided to <https://aipg.org/page/geoexpformupload>

[Upload Form Link](#)

# Tips on the Supporting information:

A complete record of experience, including non-geological, should be provided on the application form, leaving no unexplained gaps.

Demonstrate progression in professional experience that includes responsible charge of work.

Verification of at least the minimum number of years to qualify, preferably the most recent.

Credit for additional advanced degree (1 year for Masters and 2 more for PhD)

For applicants with long work histories, exceptions can be made in the case of companies no longer in business or supervisors not able to provide verification.

Verification may be provided by a supervisor, coworker of the applicant, or a client or regulator who is familiar with the applicant's professional work.

## SPONSOR'S STATEMENT

Any non-AIPG Sponsor must be a professional geologist. For the purposes of this application, a professional geologist sponsor is defined as one who has a baccalaureate degree or higher with 30 semester hours (or equivalent) in geological sciences and 5 years of post-degree experience in the practice of geology as a vocation. Applicant information received by AIPG will be considered confidential. Application materials will be divulged only to those directly involved in review of that particular application.

To the Sponsor: Note: Save the form, then fill it out, either use a digital signature or sign by typing your name, save completed form, and upload form using the Upload link below or go to <https://aipg.org/page/sponsorformupload>.

(applicant's name) has filed an application with the American Institute of Professional Geologists for Membership in AIPG or Certification as a Certified Professional Geologist and has named you as a Sponsor. Membership and Certification depend, among other considerations, upon an evaluation of the applicant's professional and ethical reputation. Please assist us by supplying the information requested below, based upon your own personal, first-hand knowledge of the applicant. Thank you.

Sponsor's name	
Sponsor's current employer	
Sponsor's current job and/or professional title	
Sponsor's complete business address	
Sponsor's Email /office phone number	
Nature of current business	

1. How long have you known the applicant? \_\_\_\_\_
2. Past Relationships: \_\_\_\_\_
3. Present Relationship: \_\_\_\_\_
4. Do you have knowledge of the professional and ethical reputation of the applicant in his/her professional and business community?  Yes  No
5. What is his/her reputation? \_\_\_\_\_
6. Do you personally agree with that reputation?  Yes  No (please explain) \_\_\_\_\_
7. Have you had business or other professional dealings with the applicant?  Yes  No  
Remarks: \_\_\_\_\_
8. If your answer to 7 is No, would you willingly have future dealings?  Yes  No  
Remarks: \_\_\_\_\_

9. Are you aware of any business or professional activities by the applicant that you would consider to be questionable or unethical?  Yes  No

Remarks:

10. State to the best of your knowledge whether the applicant is honest and trustworthy.

11. Do you have any reservations about the applicant's professional and ethical standards?  Yes  No

Remarks:

12. Are you willing to provide further information to AIPG if requested?  Yes  No

Remarks:

13. Any additional comments you wish to make:

I certify that I am a Member of the American Institute of Professional Geologists.  
AIPG Member number \_\_\_\_\_

I am licensed or certified to practice geology as follows:  
Licensing Certifying organization(s) \_\_\_\_\_  
License/certification number(s) \_\_\_\_\_

I am a professional geologist, as defined on the front of this form.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Place electronic signature above or by typing your name here \_\_\_\_\_ you attest to being the sponsor providing this sponsorship statement for this applicant.

The person completing this form must return the completed form directly to AIPG by uploading it on the AIPG Website. Save the form. The **Upload Form** button below links to the website page to upload or go to <https://aipg.org/page/sponsorformupload>.

**Upload Form Link**

# Additional Notes for Foreign Applicants

- There is a lot of information required – the high level of scrutiny is part of the reason that the AIPG CPG is highly regarded for its verification of applicants
- Transcripts from schools are requested. In the cases that a transcript directly from the school is not possible, contact the AIPG office to let them know
- 2 CPGs are needed as sponsors. If you have not had the opportunity to know or work with a CPG, then contact the AIPG office. There is an alternative to have 6 professional geologists (that is, geologists who meet all the education and experience requirements, and have a record of high ethical standards)
- Your supervisors need to verify your experience. Contact the AIPG office if your supervisors are not available
- Applications are to be completed in English; a working proficiency in English is assumed for applicants
- Applicants should submit translations for documents not in English (such as transcripts or any sponsor statements not in English)

*For ANY questions, contact the AIPG office (email [aipg@aipg.org](mailto:aipg@aipg.org))*



# What do our Members say about the benefits of AIPG?

National meetings are a great opportunity to meet people that you have only communicated with or heard about. The span of ages and knowledge is incredible, and everyone is approachable. No egos here.

**CPG has helped take my career to the next level.**

I think the opportunity to have access to professionals in the field has made a large impact.

*AIPG has increased my credibility and value to my employers.*

It has been one of the best organizations I have belonged to in my career.

...presenting at the national meeting was a great learning opportunity that helped me polish up my presentation skills and to highlight some of the key projects I have been working on...

**I found my career path by talking to AIPG members who took the time to answer my questions.**

I found mentorship, passionate people and support!

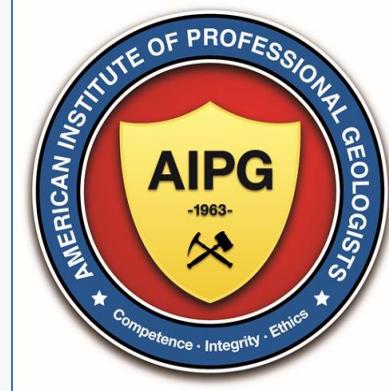
...the professional network I have developed is invaluable...

I wanted to thank you for awarding me a \$1,500 AIPG National Undergraduate Scholarship... I am deeply appreciative of your support, and I look forward to staying connected with the AIPG throughout my student and professional career.

AIPG is well respected in the environmental and geological professions. My clients know that my credentials are not phony and that I am a competent professional.



# Thank you! AIPG wants to hear from you



Dawn H. Garcia, PG, CPG  
American Institute of Professional Geologists  
2023 President

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AIPG Contact Information

[www.aipg.org](http://www.aipg.org)  
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