2013 GSA Division Annual Report of the Mineralogy, Geochemistry, Petrology, and Volcanology (MGPV) Division

04 September 2013

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[1] Division Mission:

- to provide a mechanism whereby Geological Society of America members whose common interests are mineralogy, geochemistry, petrology, and volcanology can organize to partner with adhering Associated Societies with the same interests;
- to act as an organized group within the framework of the Geological Society of America to better promote awareness, teaching, study, and research of the relevant areas;
- to stimulate and facilitate within the framework of the Geological Society of America the presentation and discussion of problems, ideas, knowledge, and results of work and research in the relevant areas;
- to cooperate with other Divisions and Sections of the Geological Society of America and with other Associated Societies and scientific organizations in fostering, aiding, furthering, and promoting the relevant areas;
- to advise and assist the officers, council, and committees of the Geological Society of America in matters pertaining to the relevant areas.

[2] Officers:

These are the elected officers between the 2012 and 2013 GSA Annual Meetings:

Past Chair: Russell S. Harmon
Chair: Calvin G. Barnes
1st Vice-Chair: Eric H. Christiansen
2nd Vice-Chair: Diane R. Smith
Secretary-Treasurer: J. Alexander Speer

[3] Management Board: Elected Officers plus representatives from the:

Mineralogical Society of America (Wendy A. Bohrson)
Geochemical Society (William K. Hart)
Mineralogical Association of Canada (David A. Fowle)
Clay Minerals Society (Warren D. Huff)
Mineralogical Society of Great Britain and Ireland (Kevin Murphy)

[4] Committees:

(a) MGPV Distinguished Geologic Career Award (2014 award)

Matthew J. Kohn, Boise State University, chair
Stephen Daly, University College Dublin
Jay J. Ague, Yale University
Cynthia Gardner, Cascades Volcano Observatory
Tanya Furman, Penn State University
(b) Nomination for Officers committee (for 2013 ballot)

Cathy J. Busby, University of California Santa Barbara, Chair
Jon Davidson, Durham University
Sorena S. Sorensen, Smithsonian Institution
David W. Peate, University of Iowa
Jade Star Lackey, Pomona College

(c) review of proposals and selection of MGPV Division Student Research Grants (for 2012)

Russell S. Harmon
Calvin G. Barnes
Eric H. Christiansen
Diane R. Smith

[5] JTPC Representatives:

Eric H. Christiansen, Diane R. Smith

[6] Council Liaison:

Barbara L. Dutrow

[7] Membership Information:

955 Division members as of 12/31/2010
1437 Division members as of 12/31/2011
1432 Division members as of 12/31/2012
1365 Division members as of 08/27/2013

[8] Newsletter and Publications:

Newsletter, twice a year <http://www.geosociety.org/divisions/mgpv/newsletter/>, 2013 issues:
February 2013, Vol. 4, No. 1
August 2013, Vol. 4, No. 2

[9] Website:

The Division website is <http://www.geosociety.org/divisions/mgpv/>

[10] Fundraising and Awareness: none

[11] Financial Summary:

GSA reports that the MGPV Division has a balance of $21,565.86 as of 06/30/2013. The Division will have its major expenses the last half of the year: the GSA 2013 Annual Meeting, (now 4 up from 2) student research grants, field forum support, and the MGPV Distinguished Geologic Career Award.

[12] Awards and Travel Grants:

Gerhard Wörner, Geochemische Institut, Georg August Universität Göttingen, Göttingen, Germany, is the 2013 Distinguished Geologic Career Awardee.
2013 MGPV Division Student Research Grant awardees are:

- Emily Hernandez Goldstein of the University of Texas at Austin for her project: Magnetite (U-Th)/He and (U-Th)/Ne geochronology: constraining serpentinization along magma-poor continental margins.
- Ben Luetkemeyer, of Saint Louis University for his project: Clumped isotope thermometry of carbonate veins and breccias from the SAFOD drill hole.
- Kirsten Sauer of the University of Nevada-Reno for her project: Sediment Incorporation in Arc Systems: Insights from the North Cascades
- Chris Yakymchuk from the University of Maryland for his project: Separating superimposed high-temperature metamorphic events using Lu–Hf garnet geochronology

The awards will be presented at the Joint MGPV-MSA-GS Reception, Tuesday, 29 October 2013: 5:45 PM-7:30 PM, CCC, Upper Level Lobby D.

[13] Associated Societies and Partnerships:

The Clay Minerals Society; The Geochemical Society; The Mineralogical Association of Canada; The Mineralogical Society of America; The Mineralogical Society of Great Britain and Ireland

[14] 2013 GSA Annual Meeting Activities:

MGPV and its Adhering Societies are sponsoring or co-sponsoring 4 Pardee Keynote Symposia, 1 Special Session, 45 oral technical sessions, and 11 poster technical sessions

**MGPV’s Distinguished Geologic Career Award Lecture**

- Dr. Wörner will give his *Distinguished Geologic Career Award Lecture - Late Cretaceous Structure and Tectonics of the California Great Valley (GV) Forearc, and its Relationships with the Southern Sierra Nevada-Salina Supra-Subduction Zone Core Complex (SSCC)* at the MGPV-sponsored session on T169. Volcanology, Mineralogy, Geochemistry & Petrogenesis of Circum-Pacific Magmatism: A Tribute Session to Gerhard Wörner, Monday, 28 October 2013: 8:00 AM-12:00 PM Colorado Convention Center Room 605

**Pardee Keynote Symposia**

- P.1 125th Anniversary Pardee Symposium: 125 Years of Exploration and Geoscience with GSA and the National Geographic Society: Celebrating the Rich History of Geoscientist Explorers Who Have Broadened Our Horizons and Knowledge of Our World
- P5. Evolution of the North American Cordilleran Lithosphere
- P11. Rare Earth Elements: Minerals, Mines, Magnets (and More)

**Special Sessions**


**Technical Sessions - oral**

- T005. Impact Cratering in the Solar System: Fire to Ice—Vacuum to Atmospheres
- T022. Quantifying Mountain Evolution from the Lithosphere to the Landscape I
• T046. Experimental Study and Numerical Simulation of Reactive Chemical Transport in Complex Subsurface Media
• T060. Caves as Deep Time Repositories of Geological, Biological, and Anthropological Information I
• T060. Caves as Deep Time Repositories of Geological, Biological, and Anthropological Information II
• T078. Environmental Impacts of Coal Utilization
• T079. Geochemical Mapping at Regional to Continental Scales
• T098. Recent Advances and Applications of Isotope Geochemistry and Geochronology to Ore Deposit Studies
• T099. Sediment-Hosted Base Metal Deposits
• T106. Geophysical/Remote Sensing Characterization of Rare Earth Element and Other Critical Mineral Deposits
• T111. The Structure and Evolution of the North American Lithosphere: An Integrated Perspective
• T152. Celebrating the Scientific Contributions of Kirk Nordstrom—Part 1: Acid to Neutral Mine Drainage, Geochemistry of Iron and Sulfur, Sulfate Minerals, Natural Background, and Geochemical Modeling
• T154. Coupling Colloid-Water Interfacial Geochemical Processes with Contaminant Transport: Micro Vehicles for Big Problems
• T155. Dating the Prograde Path in Metamorphic Rocks: Methods, Advances, Limitations, and Applications
• T157. Frontiers in Petrochronology
• T160. Hot Topics: Understanding Metamorphic Processes in the Middle to Lower Crust
• T161. Hydrochemistry and Biogeochemistry of Tropical Mountainous Rivers & Estuaries
• T162. Interdisciplinary Studies across the Critical Zone
• T164. Recent Advances in Geochronology—Celebrating the 100th Anniversary of the Publication of the "The Age of the Earth" by Arthur Holmes
• T168. Urban Geochemistry
• T169. Volcanology, Mineralogy, Geochemistry & Petrogenesis of Circum-Pacific Magmatism: A Tribute Session to Gerhard Wörner
• T171. Disposal of Radioactive Waste: Promise, Progress, Pitfalls, and Path Forward
• T179. Geological and Geophysical Constraints on the Tectonic Evolution and Resource Potential of Alaska and the Northern North American Cordillera
• T181. Modern Techniques, Models, and Interpretations of Ancient Orogens: 125 Years of Progress in Understanding the Grenville and Appalachian Orogens of Eastern North America
• T184. Recent Advances in Thermochronology
• T186. STAMP: Structure, Tectonics, and Metamorphic Petrology
• T188. Tethyan Evolution and Seismotectonics of Southwest Asia: In Honor of the 40 Years of Manuel Berberian’s Research Contributions I
• T188. Tethyan Evolution and Seismotectonics of Southwest Asia: In Honor of the 40 Years of Manuel Berberian’s Research Contributions II
• T191. The Rio Grande Rift: New Insights on the Evolution of Faulting, Magmatism, Sedimentation, and Landscape
• T192. Volcanic/Tectonic Processes and Their Interactions on Rocky Planets and Moons
• T195. Advances in Quantitative Sediment Provenance Research: Novel Approaches from Multi-Proxy Provenance Data to Provenance Modeling
• T206. Magma Transport, Emplacement, and Accommodation: Morphology, Mechanisms, and Models
• T213. Through the Looking Glass: Microstructural Insights into Tectonic Processes
• T214. Advances in Mineralogy, Crystallography, and Petrology: In Honor of Frank C. Hawthorne, 2013 Roebling Medalist
• T215. Frontiers in High-Pressure Research: In Honor of Wendy Li-Wen Mao, 2013 MSA Awardee
• T216. Gemological Research in the 21st Century: Characterizing Diamonds and other Gem Minerals
• T218. Illuminating Felsic Origins: Using Novel Multiple-Method Approaches to Investigate the Birth of Silicic Magmas
• T219. Microanalysis of Trace Elements and Isotopes in Igneous Petrology: Applications to Genesis, Storage, Evolution, Transport, and Eruption of Magma
• T222. What Can We Learn About Plutons From Volcanic Rocks and What Can We Learn About Volcanoes From Plutonic Rocks?
• T224. A Life in Earth History from Tectonics to Climate: The Scientific Legacy of Paul F. Hoffman
• T255. Produced Waters: Characterization and Impacts of Subsurface Brine and Formation Water Associated with Hydrocarbon Production
• T257. Regional to Global Perspectives on the Formation, Assembly, and Tectonic Evolution of Western North America from the Neoarchean through the Mesoproterozoic
• T258. The Pulse of the Earth: Episodic and Periodic Events on Timescales of ≥10 million Years

Technical Sessions - Posters

• T088. Pyrogenic Black Carbon, or Biochar, in Soils and Sediments, Its Characterization and Fate, Its Effects on the Carbon Cycle and Carbon Sequestration, and Its Effects on Soil Properties (Posters)
• T119. Digital Geology Express (Digital Posters)
• T169. Volcanology, Mineralogy, Geochemistry & Petrogenesis of Circum-Pacific Magmatism: A Tribute Session to Gerhard Wörner (posters)
• T176. Applied Volcanology: The Role of Physical Volcanology and Volcanic Facies Mapping in Mineral Deposit Studies (posters)
• T194. Current Understanding of Dolomite, Dolomitization, and Dolomite Problems (posters)
• T220. Processes and Timescales of Magma Evolution in the Crust: Insights from the Past Fifty Years and Approaches for the Next Fifty Years (posters)
• T224. A Life in Earth History from Tectonics to Climate (Posters): The Scientific Legacy of Paul F. Hoffman
• T255. Produced Waters: Characterization and Impacts of Subsurface Brine and Formation Water Associated with Hydrocarbon Production
• T256. Proterozoic Meets Archean: Amalgamation of Laurentia (posters)
• T257. Regional to Global Perspectives on the Formation, Assembly, and Tectonic Evolution of Western North America from the Neoarchean through the Mesoproterozoic
• T258. The Pulse of the Earth: Episodic and Periodic Events on Timescales of ≥10 million Years

Associated Society Special Sessions

• T214. Advances in Mineralogy, Crystallography, and Petrology: In Honor of Frank C. Hawthorne, 2013 Roebling Medalist
• T214. Advances in Mineralogy, Crystallography, and Petrology: In Honor of Frank C. Hawthorne, 2013 Roebling Medalist (Posters)

[15] Business Meeting Summary:

The Division’s 2013 Business Meeting is scheduled Sunday, 27 October 2013: 12:30 PM-1:00 PM, CCC, Room 205; just before the MGPV-sponsored session T220. Processes and Timescales of Magma Evolution in the Crust: Insights from the Past Fifty Years and Approaches for the Next Fifty Years

[16] In-Coming Officers:

Past Chair: Calvin G. Barnes
Chair: Eric H. Christiansen
1st Vice-Chair: Diane R. Smith
2nd Vice-Chair: Yildirim Dilek
[17] **GSA Section Meeting Activities:** none

[18] **Other Meetings:** none

[19] **Future Activities / Action Items:**

The Division’s goals for the upcoming year are (1) increasing membership, (2) encouraging session proposals for the GSA 2014 Annual meeting, (3) selection of the 2014 MGPV Distinguished Geologic Career Award, (4) establish the criteria for the MGPV Early Career Award and select the 2014 Awardee, (5) selection of MGPV Division Annual Student Research Awards, and (6) encouraging MGPV technical sessions at Sectional Meetings.

[20] **Requests For GSA Council Ratification:** (Changes/additions in Bylaws, Awards, Travel Grants, etc. for GSA Council final approval)

There are two items for GSA Council Ratification:

(1) Bylaws amendments approved by the membership during August 2013. These are attached as Appendix A.

(2) Approval of Frederick A. Frey, Massachusetts Institute of Technology, as the 2014 MGPV Division Distinguished Geologic Career Awardee

[21] **Emerging Needs:**

(1) GSA members should have the ability to join a Division or renew just their Division membership (in case they forgot) online rather than the current procedure to mail, fax, or call in their application and payment <http://www.geosociety.org/members/joindiv.htm>.

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Annual Report Submitted By: J. Alex Speer, MGPV Secretary-Treasurer
Reporting Period: 1 October 2012 – 30 September 2013
Date Report Submitted: 04 September 2013
Section 4. Nomination of Officer Candidates.

Omit:

[This is moved to ARTICLE V, Section 3b and expanded.]

ARTICLE V
Powers and Duties of the Management Board and Officers

1. Management Board. The property and affairs of the division shall be managed by the management board as defined in Article IV.

At the annual business meeting, the management board shall submit a report of the preceding year’s activities of the division, which shall include the reports of the chair and secretary-treasurer and reports of the various committees. This report shall be submitted before February 15 of the following year by the secretary-treasurer of the division to the executive director of the Society. The report shall be made available to the members of the division. All actions of the management board are subject to the bylaws of the Geological Society of America.

2. Chair. The chair shall preside at the annual meetings of the division and meetings of the management board. The chair shall submit a report to the management board of the activities of the division during his/her term of office and on future plans.

3. First Vice-Chair. The first vice-chair shall assume the powers and duties of the chair in the event of the absence or disability of the chair. Such absence or disability is to be determined by a majority vote of the Management Board. The first vice-chair chairs the Program Committee for the annual meeting and, as such, serves as the senior division representative on the Joint Technical Program Committee (JTPC) for the annual meeting. The first vice-chair shall supervise planning for the division technical sessions or symposia to be held at the Annual Meeting of the succeeding year. The first vice-chair will coordinate the work of any section representatives and will appoint representatives to organize technical sessions for section meetings.

4. Second Vice-Chair. The second vice-chair shall assume the chair whenever both the chair and the first vice-chair are not available. Such absence or disability is to be determined by a majority vote of the management board. The second vice-chair serves as a member of the Program Committee for the annual meeting and, as such, serves as the junior division representative on the JTPC for the annual meeting. The second vice-chair will assist the editor in preparing a newsletter.

5. Secretary-Treasurer. The secretary-treasurer shall act as secretary of the management board and shall keep and archive the records of the division. The secretary-treasurer shall notify the officers and the members of the committees of their election or appointment and shall arrange for issuance of notices of all division and management board meetings and of election results. He/she shall maintain liaison with Geological Society of America headquarters and shall serve, ex officio, as a member of all
committees. The secretary-treasurer shall collect and disburse all funds of the Division and shall keep records of all receipts and disbursements and other financial transactions of the Division. The secretary-treasurer shall account to the Geological Society of America Council for all funds advanced by the Geological Society of America.

6. Past Chair. The past chair shall serve as an advisor to the chair, forms some of the corporate memory of the division, and chairs the Nominations Committee.

7. Representatives of Each Adhering Associated Society. Each Adhering Associated Society to the Division appoints one representative to the management board who both represents those societies and acts as a liaison back to their respective society.

8. Council Liaison to Division. The Council Liaison to the Division is an ex-officio member of the management board. He/She shall have no voting privileges on proceedings of the management board.

ARTICLE VI

Committees and Other Appointed Posts

1. Committees of the Division. The standing committees of the division are the Program Committee and the Nominations Committee. Special committees may be appointed from time to time on the advice of the management board.

2. Formation of Committees. The chair of the division, with the concurrence of the management board, shall establish whatever committees are required to help the division function effectively. All committee members, including the committee chair, shall be appointed by the chair of the division with advice of the management board, unless required otherwise in these Bylaws. Only the chair of the committee need be a member of the Division, but all committee members must be members of either the Geological Society of America or an Adhering Associated Society. The division secretary-treasurer shall be a non-voting ex-officio member of every committee. Members of the management board are not normally appointed as committee members.

3. Standing Committees. The standing committees of the division are:

   3a. Program Committee. This committee plans and arranges for the technical sessions and symposia of the division at the Annual and Sectional Meetings of the Geological Society of America, and other external meetings as may be directed by the management board. The committee will proactively plan and develop contributions for oral and poster sessions, short courses, field trips, and other outlets at conferences. The Program Committee may appoint Division representatives to organize and chair scientific sessions, short courses, field trips, and other outlets at conferences.

   The Program Committee consisting of two or more voting members of the division shall be appointed annually by the chair of the division following the annual meeting. The committee is chaired by the division first vice-chair and includes the second vice-chair.

   3b. Nominations Committee. This committee nominates candidates annually for second vice-chair of the management board, and every two years for secretary-treasurer, and facilitates the nomination of members of the division for Geological Society of America appointments and honors (e.g., Fellow of the Society).

   Each member of the Management Board (including representatives from the Adhering Societies) is entitled, but not required, to identify one Division member who agrees to serve on the Nominations Committee. Following the annual meeting, the chair of the division will solicit those names from Management Board members. In the event that less than three names are put forward, the chair of the division will appoint additional members of the Division, who are
not members of the Management Board, to serve so that there are at least three committee members (excluding the chair). The chair of the Nominations Committee shall be the past division chair.

4. **Committee Duties and Responsibilities.** The purpose, duties, procedures, and timelines of each standing committee shall be determined by the Management Board and codified in the Division Rules and Procedures Handbook. If a new committee is established, the division chair shall provide the newly established committee and the management board with a clear statement of the purpose, duties, procedures, and timelines for that committee.

The chair of each standing committee shall report the activity of the committee during the preceding year in writing to the management board 30 days before its annual meeting, or at such times as the management board may direct. These reports shall be summarized in the annual report of the management board.

All committees are advisory in character and shall report to and act under the direction of the management board. Reports, recommendations, or other actions by the committees, other than the Nominations Committee, shall be subject to the approval of the management board. Committees are not authorized to communicate their recommendations to others, or to take action unless directed by the management board. All actions of the committees are subject to the bylaws of the Geological Society of America.

5. **Committee Tenure.** Committees of the division shall be established for a one-year duration, unless otherwise specified in the Division Rules and Procedures Handbook. All committees, except for the standing committees, shall be abolished as soon as their principal objectives have been met or at the discretion of the management board. All committee appointments shall expire at the close of the next annual business meeting of the division, unless otherwise specified in the Division Rules and Procedures Handbook. Committee members may serve for up to three consecutive years.

6. **Committee Vacancies.** Vacancies on committees may be filled by interim appointments at any time by the committee chair, with the approval of the division chair. Vacancies of committee chairs may be filled by appointment of division chair.

7. **Division Representatives.** In order to facilitate effective communication and interaction between the division and other components of the Geological Society of America and (or) other related scientific societies, the chair may appoint, at his/her discretion, with advice of the management board, members in good standing of the division, to serve as representatives to these other entities. The responsibilities and the terms of these division appointees shall be defined when created and recorded in guidelines in the Division Rules and Procedures Handbook. Individuals serving in these posts shall serve at the pleasure of the division chair.

8. **Other Appointed Posts.** The chair may appoint at his/her discretion, with advice of the management board, members in good standing of the division, to serve as a newsletter editor, webmaster, or other such division function as deemed necessary by the chair and management board. The responsibilities of these division appointees shall be as defined in guidelines in the Division Rules and Procedures Handbook and as provided by the chair and management board. Individuals serving in these posts shall all be appointed by, and serve at the pleasure of, the division chair.


**ARTICLE IX**
2. The Division shall sponsor an award to a distinguished early career scientist (35 years of age or younger throughout the year in which the award is to be presented or within 5 years of receiving their highest degree or diploma) for distinguished contributions in one or more of the following fields of research: mineralogy, geochemistry, petrology, volcanology, with an emphasis on multidisciplinary, geologic field-based contributions. The name of the award shall be the MGPV Early Career Award made possible by J. B. Thompson, Jr. The awardee(s) need not be citizen(s) or resident(s) of the United States of America, and membership in the Geological Society of America is not required. The award will not be given posthumously. The award description and selection guidelines shall be as defined in the Division Rules and Procedures Handbook and as provided by the chair and management board.

3. The Division may sponsor other awards, recognitions, and grants as approved by the Management Board.