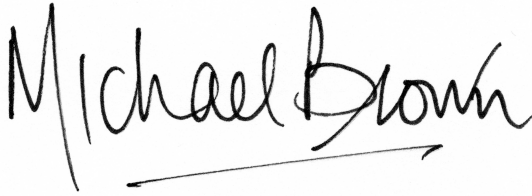


# Curriculum Vitae

**Michael Brown**

Notarization. I have read the following and certify that this *curriculum vita* is a current and accurate statement of my professional record.

A handwritten signature in black ink that reads "Michael Brown". The signature is written in a cursive style with a long horizontal line extending from the end of the name.

Signature:

Date: January 1, 2025

# Curriculum Vitae

## Michael Brown

### 1. PERSONAL INFORMATION

Name: Michael Brown  
Address: Laboratory for Crustal Petrology, Department of Geology, University of Maryland, College Park, MD 20742-4211, USA; (+1) 3014054080; mbrown <at> umd.edu; www.geol.umd.edu  
Born: March 19, 1947 (Hayes UB4 8BH, UK)  
Family: Wife (Jennifer Frances); children (Matthew James, Thomas Michael and Sarah Jane)  
Nationality: U.S. Citizen/British Citizen

### University Education

BA Hons Geography and Geology (with subsidiary Chemistry and Political Institutions), University of Keele, UK, 1969  
PhD University of Keele, UK, for a thesis entitled “The Petrogenesis of the St. Malo Migmatite Belt, North-Eastern Brittany, France”, successfully defended Fall 1974/graduation Spring 1975

### Professional Positions

**1990 to present UNIVERSITY OF MARYLAND, USA**  
*Department of Geology*  
3/1/90 to present Professor of Geology  
3/1/90 to 6/30/11 Chair of Department (appointed 1990, reappointed 1995, 2000, 2005 and 2010)  
*Earth System Science Interdisciplinary Center*  
7/1/02 to present Affiliate Professor  
9/1/98 to 9/25/00 Interim Director – concurrent appointment with Chair of Department

**1984 to 1990 KINGSTON UNIVERSITY, UK**  
*School of Geological Sciences*  
12/9/88 to 2/28/90 Professor of Geology  
4/30/84 to 2/28/90 Head of School  
*Faculty of Science*  
9/1/86 to 2/28/90 Associate Dean (Academic Affairs) – concurrent appointment with Head of School

**1972 to 1984 OXFORD BROOKES UNIVERSITY, UK**  
*Department of Geology & Physical Sciences*  
9/1/82 to 4/29/84 Acting Head of Department  
9/1/79 to 8/31/82 Principal Lecturer in Geology  
1/1/75 to 8/31/79 Senior Lecturer in Geology  
9/1/72 to 12/31/74 Lecturer in Structural Geology

**1969 to 1972 UNIVERSITY OF KEELE, UK**  
*Department of Geology*  
1970 to 1971 Part-time demonstrator (teaching assistant) in Geology laboratory classes

### Visiting Appointments

**2022 to 2024** Visiting Adjunct Professor, Curtin University, Western Australia  
**2019** Visiting Adjunct Professor, Curtin University, Western Australia  
**2018** Visiting Professor, ETH-Zurich, Switzerland  
**2014** Visiting Research Fellow, Curtin University, Western Australia  
**2013** Visiting Researcher, Johannes Gutenberg-Universität Mainz, Germany  
**1999** Visiting Professor, Universidade do Estado do Rio de Janeiro, Brazil  
**1993** Visiting Lecturer, Kyoto University, Japan

**1990 to 1992** Visiting Professor, Kingston University, UK

## Other Appointments

**2014 to present** Associate Director, Center for Global Tectonics, China University of Geosciences, Wuhan, P.R. China  
**2014 to present** Honorary Professor, China University of Geosciences, Wuhan, P.R. China  
**2010 to present** Member, International Precambrian Research Centre of China, Beijing, P.R. China  
**2015 to 2020** Director of the Consulting Committee, School of Earth and Space Sciences, Peking University  
**2011 to 2020** Partner Investigator, ARC Centre of Excellence for Core to Crust Fluid Systems (CCFS), Macquarie University, Australia

## Recognition

**2024** Highly Cited Researcher (Clarivate)  
**2024** Winston Family Honors Faculty Award for outstanding advising, mentorship, and supervision of University of Maryland Honors students  
**2021** Distinguished Geologic Career Award for 2021– Mineralogy, Geochemistry, Petrology & Volcanology Division, Geological Society of America  
**2021** Full day session on “Metamorphism into the 21st Century—A Celebration of the Career of Mike Brown” part of the Geological Society of America Annual Meeting, September 2021, Portland, OR  
**2020** Fellow – American Geophysical Union  
**2018** 51<sup>st</sup> Hallimond Lecturer – Mineralogical Society of the United Kingdom and Ireland  
Lecture presented during the Granulites and Granulites 2018 Conference, July 2018, Ullapool, Scotland  
**2018** President – Mineralogical Society of America  
**2014** Collins Medal – Mineralogical Society of the United Kingdom and Ireland  
**2012** Two-day session on “Evolution and differentiation of the continental crust: A celebration of the contributions by Michael Brown” part of the Goldschmidt Conference, July 2012, Montreal, Canada  
**2012** Antarctic Service Medal – US National Science Foundation  
**2005** John Sacheverell A'Deane Coke Medal – The Geological Society (London, UK)

## Professional and Learned Societies

The Geological Society, Fellow (1972, FGS); Chartered Geologist (1990–2018)  
Mineralogical Society of the United Kingdom and Ireland, Member (1980)  
American Geophysical Union, elected Fellow (2020; Member since 1986)  
Geological Society of America, elected Fellow (1993; Member since 1987)  
Mineralogical Society of America, elected Fellow (1999; Member since 1990)  
European Geophysical Union, Member (2003; EGS Member since 1998)  
Geochemical Society, Member (2000)

## Career Summary

### Accomplishments in research and related activities

I am an internationally recognized researcher in the field of metamorphic geology, with expertise in crustal melting, the petrogenesis of granulites (including ultrahigh temperature (UHT) metamorphism) and eclogites (including ultrahigh pressure (UHP) metamorphism), the relationship between metamorphism and tectonics, and secular change. My research uses observations and laboratory data in petrology and structural geology, integrated with data from geochemistry and geochronology, and results from numerical modeling, to investigate orogenic processes at all scales, providing original contributions to and insight about heat and mass transfer and secular change. In Google Scholar, my citation count is >19,900, my h-index is 78 and my i10-index is 165.

My research has:

- determined the petrogenesis of upper amphibolite and granulite facies migmatites by anatexis, produced the first quantitative  $P$ - $T$ - $t$  paths from migmatite terranes, determined petrogenetic relationships between migmatites and leucogranites, and elucidated the polyphase nature of leucogranite complexes (Brown, 1979, 1983; Brown et al., 1981;

Jones & Brown, 1990; Brown & D'Lemos, 1991; Pressley & Brown, 1999; Milord et al., 2001; Solar & Brown, 2001; Johnson et al., 2003, 2004; Korhonen et al., 2010a, 2015; Yakymchuk et al., 2015a; Brown, C. et al., 2016);

- contributed to a comprehensive understanding of late Neoproterozoic (Cadomian) magmatism in the northern Armorican Massif (Brown et al., 1980; Topley et al., 1982; Strachan et al., 1989; Brown et al., 1990; Power et al., 1990; Topley et al., 1990; D'Lemos & Brown, 1993);
- established the inter-relationship between tectonics and magmatism in the Mesozoic Andes of northern Chile (Brown et al., 1993; Grocott et al., 1994; Dallmeyer et al., 1996);
- demonstrated the role of deformation in the segregation of anatectic melt and furthered our understanding of heat and mass transfer through the crust, with particular emphasis on the role of shear zones and the emplacement of orogenic leucogranites, and recognized the southern Brittany metamorphic belt as a core complex (D'Lemos et al., 1992; Brown, 1994; Brown et al., 1995b; Brown & Dallmeyer, 1996; Brown & Rushmer, 1997; Brown & Solar, 1998a, 1998b, 1999; Brown, 2001, 2005, 2007, 2010a, 2010b, 2013; Marchildon & Brown, 2002);
- imaged for the first time, using HR X-ray CT, the 3-d form of mesoscopic leucosome, representing former melt flow channels, in hand samples of migmatite with S>L and L>S tectonite fabrics, and shown how these relate to the evolving strain field during melt flow (Brown, M.A. et al., 1999); and, quantified the 3-d form of leucosome networks at outcrop scale in migmatites to understand melt flow through anatectic crust (Marchildon & Brown, 2003; Yakymchuk et al., 2013);
- characterized UHT metamorphism in the Southern Granulite Terrain of India, the Southern Brasília Belt in Brazil and the Eastern Ghats Province in India (e.g. Brown & Raith, 1996; Raith et al., 1997; Moraes et al., 2002; Baldwin et al., 2005, 2007; Baldwin & Brown, 2008; Korhonen et al., 2011, 2013a, b, 2014; Mitchell et al., 2019; Clark et al., 2024); and, investigated mechanisms of formation of UHT terrains (Jiao et al., 2023, 2025);
- demonstrated that the Ryoke–Sambagawa metamorphic belts were juxtaposed by tectonic processes and determined that paired metamorphic belts generally were not formed *in situ* (Brown, 1998a, b, 2010);
- characterized the secular evolution of subduction and plate tectonics using the crustal record of metamorphism, proposed distinct geodynamic regimes in Earth's history based on secular change in metamorphism, and linked these to secular cooling of Earth's mantle, major surface erosion events and the supercontinent cycle (Brown, 2006, 2007a, 2008, 2009, 2014; Brown & Johnson, 2018, 2019a, b; Brown et al., 2020b, 2022, 2024; Holder et al., 2019; Liu et al., 2022; O'Neill et al., 2022; Sizova et al., 2010, 2012, 2014; Sobolev & Brown, 2019; Spencer et al., 2021; Zou et al., 2023);
- investigated closed vs open system processes in crustal anatexis and quantified the behavior of accessory minerals during melting and crystallization (Brown & Korhonen, 2009; Korhonen et al., 2010b; Yakymchuk & Brown, 2014a, b, 2019);
- been instrumental in unravelling the tectonic mode of the Archean Eon prior to the emergence of plate tectonics, and in determining the petrogenesis of the tonalite–trondhjemite–granodiorite suite of rocks (Johnson et al., 2012, 2014, 2016, 2017, 2019, 2022; Brown, 2015; Sizova et al., 2015, 2018; Brown et al., 2020a, 2022, 2024; Alfing et al., 2024; Kaempfer et al., 2024); and,
- contributed to a better understanding of tectono-metamorphic processes during subduction, including fluid evolution and melting during UHP metamorphism of continental crust, with particular emphasis on the role of strain localization, dehydroxylation of nominally anhydrous minerals and production of granite during exhumation (Wang, L. et al., 2018; Wang, S.-J. et al., 2016, 2017, 2020, 2023; Xia et al., 2018, 2020; Feng et al., 2021; Brown, 2023; Chen et al., 2025).

### ***Major leadership roles in the research community***

I proposed and established the Metamorphic Studies Group in the UK (1981; a Specialist Group of the Geological Society and the Mineralogical Society of the United Kingdom and Ireland), the *Journal of Metamorphic Geology* (1982; Blackwell Publishing; now Wiley, Chichester, UK) and the IAVCEI Commission on Granites (1992–1993; International Association of Volcanology and Chemistry of the Earth's Interior). I was Co-leader of the International Geological Correlation Program Project 235 on “Metamorphism and Geodynamics” (1985–1990), General Chair of the Organizing Committee for the Hutton III Symposium on the “Origin of Granites and Related Rocks” at the University of Maryland, USA, in 1995, and Chair of the Organizing Committee for the Granulites & Granulites 2006 Conference held at the University of Brasília, Brazil (the first in a triennial series). I was also a member of the co-ordinating group for the Integrated Solid Earth Sciences forums concerning setting priorities for research and education in the solid Earth sciences (2002–2006; sponsored by the US NSF).

### **Teaching profile**

My approach to education is innovative even though it is based on traditional lecture/laboratory/seminar/tutorial teaching methods. I stress the importance of personal observation and interpretation in the classroom and in the field, and I foster a questioning attitude during discussion, particularly with respect to published work.

At **Oxford Brookes University**, my main teaching responsibilities included courses in metamorphic petrology, structural geology and tectonics, the year 2 mapping training and structural geology field course and the year 3 hard-rock option field course. At various times I also taught physical geology, petrogenesis, map work, first year fieldwork and introductory geology for Civil Engineers. I supervised undergraduate independent mapping projects (cf. senior thesis) and supervised four graduate students to successful completion of PhDs. At **Kingston University**, my teaching responsibilities included courses in metamorphic geology to all 3 years of the BSc Honors Geology program; in addition, I took a tutorial group in each year of the Course and taught the first-year field course. I supervised four graduate students to successful completion of PhDs. At the **University of Maryland**, my main teaching responsibilities included courses in undergraduate and graduate level petrology, and in Earth evolution and tectonics. Since 1997 I have taught the undergraduate capstone Honors seminar and more recently, I have taught undergraduate metamorphic petrology and a graduate class on the Precambrian. I advised both undergraduate (four senior thesis completions) and graduate students in research (three PhD and five MS completions), and I have mentored six post-doctoral Research Associates and several visiting scientists.

## **Achievements in management/administration**

Over a 29-year period, I demonstrated administrative effectiveness as Head or Chair of Department at Oxford Brookes University, Kingston University and the University of Maryland, and through service to the Institution of Geologists, the Geological Society, the Mineralogical Society of the United Kingdom and Ireland, the American Geophysical Union, the Geological Society of Washington and the Mineralogical Society of America.

At both **Oxford Brookes University**, as Acting Head of the Department, and **Kingston University**, as Head of School, I was responsible for the provision of academic leadership, and the management of the teaching, research, technical and secretarial staff, the laboratories and the financial resources. At the **University of Maryland**, as Chair, I was responsible for the development of strong undergraduate and graduate programs in Geology and raising the national and international reputation of the Department, which was not ranked among the best 170 graduate programs in Geology in 1990. Under my leadership the Department increased the number of faculty by 50%, raised the level of research grant and contract support per year approximately eightfold, enlarged the Graduate Program in parallel with more rigorous standards for entry, and stabilized the number of undergraduate majors. When I stepped down as Chair in 2011, the Department's graduate programs ranked 14<sup>th</sup> nationally in Geology (NRC) and 7<sup>th</sup> nationally in Geochemistry (US News and World Report).

## **External Service**

**While based in the UK** I served on the Council of the Geological Society (1980–1983) and the Mineralogical Society of the United Kingdom and Ireland (1985–1988), and on many of their committees, and committees of the Institution of Geologists. I was Secretary (1980–1984) and Chairman (1985–1988) of the Metamorphic Studies Group, Subject Editor (Metamorphic Petrology, 1981–1986) and Advisory Editor (1998–2004) for the *Journal of the Geological Society*, and founder and Editor of the *Journal of Metamorphic Geology* (1982–2019). I served on the Council for National Academic Awards (CNAA) Combined Studies (Science) Board and Committee for Physical Sciences. I represented the National Advisory Body (NAB) on the University Grants Committee (UGC) Earth Sciences Review National Committee and represented the Committee of Heads on the National Advisory Body (NAB) Earth Sciences Review Committee. (In the UK, the NAB disbursed Government funding in the Polytechnic sector until 31 March 1989, and the UGC disbursed Government funding in the University sector until 31 March 1989.) In April 1989, the Polytechnics and Colleges Funding Council (PCFC) replaced the NAB, and in August 1989, I became a member of the Science Programme Advisory Group.

**While based in the USA** I have served on the Council of the Geological Society of Washington (1991–1992 and 2011), as a member of the American Geophysical Union (AGU) 75th Anniversary Planning Committee (1990–1994), as Spring Program Chair for the Volcanology, Geochemistry and Petrology Section of the AGU (2002–2004), as a member of the AGU Meetings Committee (2004–2007) and Chair of the Program Committee for the AGU Joint Assemblies in Spring 2006 and 2007, and as a member of the AGU Hess Medal Committee (2013–2017). I have been a member of the Committee on Management of the Mineralogical Society of America (1995–1998), the Nominating Committee for Officers (1998–2001), the Nominating Committee for Fellows (2004–2007, Chair 2005–2007), and the Financial Advisory and Audit Committee (2013–2016). I was a member of the Executive Committee of the AGU Board of Heads and Chairs of Earth and Space Science Departments (2000–2003). In addition to founding the *Journal of Metamorphic Geology*, I was an editor of the journal for 37 years (1982–2019). I am a former member of the *Geology* Editorial Board, a former Advisory Editor of the *Journal of the Geological Society, London* (1998–2004), a former member of the Geological Society, London, Books Editorial Committee (2005–2011), and a former member of the *Journal of the Virtual Explorer* Editorial Board. I am a member of the Advisory Board of the International Association for Gondwana Research (2009–present). I was Vice

President of the Mineralogical Society of America for 2017; in this role I was a member of Council, a member of the Executive, Management, Long-term Planning, and Financial Advisory and Audit Committees, Chair of the Committee on Committees, and Publications Director. I was President of the Mineralogical Society of America for 2018; in this role I chaired the Council, and the Executive, Management, and Long-term Planning committees, and I was a member of the Financial Advisory and Audit Committee. In 2019 I was Past President of the Mineralogical Society of America; in this role I chaired the Meetings Committee, and I was a member of the Council, the Executive, Management, and Long-term Planning Committees.

## 2. RESEARCH, SCHOLARLY, AND CREATIVE ACTIVITIES

### 2.1. Books

\*Denotes a graduate student author; † denotes a Post-doctoral Research Associate author.

#### Books Authored

1. Roach, R.A., Topley, C.G., Brown, M., \*Bland, A.M. and \*D'Lemos, R.S., 1991. *Outline and Guide to the Geology of Guernsey*. Guernsey Museum Monograph No. 3, Guernsey Museum & Art Gallery, 102 pp.

#### Books/Volumes Edited

1. Ashworth, J.R. and Brown, M., 1990. *High-temperature Metamorphism and Crustal Anatexis*. Unwin Hyman, 407 pp.
2. Brown, M., Candela, P.A., Peck, D., Stephens, W.E., Walker, R.J. and Zen, E., 1996. *Origin of Granites and Related Rocks*. Geological Society of America Special Paper, **315**, 361 pp.
3. Brown, M. and Rushmer, T., 2006. *Evolution and Differentiation of the Continental Crust*. Cambridge University Press, 553 pp.
4. Sawyer, E.W. and Brown, M., 2008. *Working with Migmatites*. Mineralogical Association of Canada, Short Course Series, Vol. 38, 158 pp.

#### Chapters in Books

1. Brown, M. and Phadke, A.V., 1983. High temperature reactions in pelitic gneiss from Precambrian Sausar metasediments of the Ramakona area, Chindwara District, Madhya Pradesh (India): Definition of the exhumation P-T path and the tectonic implications. In: Phadke, A.V. and Pansalkar, V.G. (eds), *Prof. Kelkar Memorial Volume*, Indian Society of Earth Scientists, Poona, 61-96.
2. Brown, M., 1983. The petrogenesis of some migmatites from the Presqu'île de Rhuys, southern Brittany, France. In: Atherton, M.P. and Gribble, C.D. (eds), *Migmatites, Melting and Metamorphism*, Shiva Publishing Limited, Nantwich, 174-200.
3. \*Jones, K.A. and Brown, M., 1989. The metamorphic evolution of the Southern Brittany migmatite belt, France. In: Daly, J.S., Cliff, R.A. and Yardley, B.W.D. (eds), *Evolution of Metamorphic Belts*, Geological Society, London, Special Publications, **43**, 501-505.
4. Brown, M., Power, G.M., Topley, C.G. and \*D'Lemos, R.S., 1990. Cadomian magmatism in the North Armorican Massif. In: D'Lemos, R.S., Strachan, R.A. and Topley, C.G. (eds), *The Cadomian Orogeny*. Geological Society, London, Special Publications, **51**, 181-213.
5. Power, G.M., Brewer, T.S., Brown, M. and Gibbons, W., 1990. Late Precambrian foliated plutonic complexes of the Channel Islands and La Hague - Early Cadomian plutonism. In: D'Lemos, R.S., Strachan, R.A. and Topley, C.G. (eds), *The Cadomian Orogeny*. Geological Society, London, Special Publications, **51**, 215-229.
6. Topley, C.G., Brown, M., \*D'Lemos, R.S., Power, G.M. and Roach, R.A., 1990. The northern igneous complex of Guernsey. In: D'Lemos, R.S., Strachan, R.A. and Topley, C.G. (eds), *The Cadomian Orogeny*. Geological Society, London, Special Publications, **51**, 245-259.
7. Ashworth, J.R. and Brown, M., 1990. An overview of diverse responses to diverse processes at high crustal temperatures. In: Ashworth, J.R. and Brown, M. (eds), *High-temperature Metamorphism and Crustal Anatexis*. The Mineralogical Society Series: 2. Unwin Hyman, 1-18.
8. Brown, M., 1991. Comparative geochemical interpretation of Permian-Triassic plutonic complexes of the Coastal Range and Altiplano (25°30'-26°30'S), northern Chile. In: Harmon, R.S. and Rapela, C.W. (eds), *Andean Magmatism and its Tectonic Setting*. Geological Society of America Special Paper, **265**, 157-177.
9. Brown, M., 1995. *P-T-t* evolution of orogenic belts and the causes of regional metamorphism. In: Le Bas, M.J. (ed), *Milestones in Geology*, Geological Society, London, Memoir No. 16, 67-81.
10. Brown, M. and Rushmer, T., 1997. The role of deformation in the movement of granite melt: views from the laboratory and the field. In: Holness, M.B. (ed), *Deformation-enhanced Fluid Transport in the Earth's Crust and Mantle*. The Mineralogical Society Series: 8. Chapman and Hall, London, 111-144.

11. Brown, M., 1997. Migmatites and Melt Migration. In: Xianglin, Q., Zhendong, Y. and Hall, H.C. (eds) *Precambrian Geology and Metamorphic Petrology*, Proceedings of the 30th International Geological Congress, VSP, Zeist, The Netherlands, **V. 17**, 187-202. [Also translated into Chinese]
12. Brown, M. and O'Brien, P.J., 1997. Evolution of Metamorphic Belts: A Changing View. In: Xianglin, Q., Zhendong, Y. and Hall, H.C. (eds), *Precambrian Geology and Metamorphic Petrology*, Proceedings of the 30th International Geological Congress, VSP, Zeist, The Netherlands, **V. 17**, 217-231. [Also translated into Chinese]
13. Brown, M., 1998. Ridge-trench interactions and high-*T*-low-*P* metamorphism, with particular reference to the Cretaceous evolution of the Japanese Islands. In: Treloar, P.J. and O'Brien, P.J. (eds) *What drives metamorphism and metamorphic reactions*. Geological Society, London, Special Publications, **138**, 131-163.
14. Brown, M., 2001. Metamorphism (geology). In: *McGraw-Hill Yearbook of Science and Technology 2002*. McGraw-Hill, New York, 215-219.
15. Brown, M., 2003. Metamorphic petrology at the Millennium: Retrospection and prospects for the future. In: Mohan, A. (ed) *Milestones in Petrology at the end of the Millennium and Future Perspectives*. Memoir, Geological Society of India, Bangalore, **52**, 21-48.
16. †Johnson, T.E. and Brown, M., 2005. The granulite facies, crustal melting, and prograde and retrograde phase equilibria in metapelites at the amphibolite to granulite facies transition. In: Thomas, H. (ed) *Metamorphism and Crustal Evolution*. Atlantic Publishers and Distributors, New Delhi, 3-27.
17. Brown, M., 2005 Synergistic effects of melting and deformation: an example from the Variscan Belt, western France. In: Gapais, D., Brun, J.P. and Cobbold, P.R. (eds) *Deformation Mechanism, Rheology and Tectonics: from Minerals to the Lithosphere*. Geological Society, London, Special Publications, **243**, 205-226.
18. Brown, M., 2005. The mechanism of melt extraction from lower continental crust of orogens. In: Ishihara, S., Stephens, W.E., Harley, S.L., Arima, M. and Nakajima, T. (eds). Fifth Hutton Symposium: The Origin of Granites and Related Rocks, Geological Society of America, Special Paper 389, 35-48.
19. Tomascak, P.B., Brown, M., \*Solar, G.S., Becker, H.J., \*Centorbi, T.L. and \*Tian, Jinmei, 2005. Source contributions to Devonian granite magmatism near the Laurentian Border, New Hampshire and Western Maine, USA. In: *Granitic Systems*. Ramo, O. Tapani (ed). Elsevier Science, 75-99.
20. Brown, M., 2006. Melt extraction from lower continental crust of orogens: the field evidence In: *Evolution and Differentiation of the Continental Crust*. Brown, M. and Rushmer, T. (eds). Cambridge University Press, 331-383.
21. Brown, M. and Rushmer, T., 2006. Introduction. In: *Evolution and Differentiation of the Continental Crust*. Brown, M. and Rushmer, T. (eds). Cambridge University Press, 1-20.
22. Brown, M., 2008. Metamorphic conditions in orogenic belts: a record of secular change. In: *Metamorphic Conditions Along Convergent Plate Junctions: Mineralogy, Petrology, Geochemistry and Tectonics—The J.G. Liou Volume*. Ernst, W.G. and Rumble, III, D. (eds). Bellweather Publishing, Ltd. for the Geological Society of America, International Book Series, Volume 10, 24-65.
23. Brown, M., 2008. Eight figures with extended captions. In: *Atlas of Migmatites*. Sawyer, E.W. The Canadian Mineralogist, Special Publication 9, NRC Research Press, Figures B10, B45, D25, D30, D46, D52, D54 and D60.
24. Brown, M., 2008. Granites, migmatites and residual granulites: Relationships and processes. In: *Working with Migmatites*, Sawyer, E.W. and Brown, M., (eds). Mineralogical Association of Canada, Short Course Series, Vol. 38, 97-144.
25. Brown, M., 2008. Characteristic thermal regimes of plate tectonics and their metamorphic imprint throughout Earth history: When did Earth first adopt a plate tectonics mode of behavior? In: *When Did Plate Tectonics Begin?* Condie, K. and Pease, V. (eds). Geological Society of America Special Paper 440, 97-128.
26. Brown, M. and †Korhonen, F.J., 2009. Some remarks on melting and extreme metamorphism of crustal rocks. In: *Physics and Chemistry of the Earth's Interior*. Gupta, A.K. and Dasgupta, S. (eds). Published for the Indian National Science Academy by Springer, 67-88.
27. Brown, M., 2009. Metamorphic patterns in orogenic systems and the geological record. In: *Accretionary Orogens in Space and Time*. Cawood, P.A. and Kröner, A. (eds). Geological Society, London, Special Publications, 318, 37-74.
28. \*Yakymchuk, C., Siddoway, C.S., Fanning, C.M., McFadden, R., Korhonen, F.J. and Brown, M., 2013. Crustal differentiation along the active margin of Gondwana: A zircon Hf-O perspective from granites in the Fosdick migmatite-granite complex, West Antarctica. In: *Antarctica and Supercontinent Evolution*. Harley, S.L., Fitzsimons, I. C. W. and Zhao, Y. (eds). Geological Society, London, Special Publications, 383, 169-210.
29. Johnson, T. and Brown, M., 2021. Metamorphism through time. In: Alderton, David; Elias, Scott A. (eds.) *Encyclopedia of Geology*, 2nd edition, 2, 623-633. United Kingdom: Academic Press.
30. Jiao, S.J., Brown, M., Huang, G., Qi, Y. and Guo, J.H., 2025. Ultrahigh temperature (UHT) metamorphism. Treatise on Geochemistry, Third Edition, 533-569, Elsevier B.V., <https://doi.org/10.1016/B978-0-323-99762-1.00011-5>.

## 2.2. Articles in Refereed Journals

\*Denotes a graduate student author; † denotes a Post-doctoral Research Associate author.

1. Brown, M., Barber, A.J. and Roach, R.A., 1971. The age of the St. Malo Migmatite Belt, Northern Brittany. *Nature Physical Science*, **234**, 77-79.
2. Brown, M. and Roach, R.A., 1972. Precambrian Rocks South of Erquy and Around St. Cast, Côtes-du-Nord. *Nature Physical Science*, **236**, 77-79; and, Brown, M. and Roach, R.A., 1972. Reply. *Nature Physical Science*, **239**, 74-75.

3. Brown, M., 1973. The Definition of Metatexis, Diatexis and Migmatite. *Proceedings of the Geologists' Association*, **84**, 371-382; and, Brown, M., 1974. Reply by the author. *Proceedings of the Geologists' Association*, **85**, 114.
4. Brown, M., 1978. The tectonic evolution of the Precambrian rocks of the St. Malo region, Armorican Massif, France. *Precambrian Research*, **6**, 1-21; and, Brown, M., 1979. The St. Malo migmatite belt: a reply. *Precambrian Research*, **8**, 142-143.
5. Brown, M., 1979. The petrogenesis of the St. Malo migmatite belt, Armorican Massif, France, with particular reference to the diatexites. *Neues Jahrbuch für Mineralogie Abhandlungen*, **135**, 48-74.
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## 2.3. Reports, Conference Proceedings and Field Excursion Guides

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## 2.4. Book Reviews, Other Articles, and Notes

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40. Brown, M., 2018b. President's letter – Feedback. *Elements*, **14**, 134.
41. Brown, M., 2018c. President's letter – Indispensibility. *Elements*, **14**, 198.
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43. Brown, M., 2018e. President's letter – My, oh, my; how time flies! *Elements*, **14**, 340.
44. Brown, M., 2019. BOOK REVIEW The tectonic plates are moving. *International Geology Review*, **61**, 1553-1555.

## 2.5. Talks, Abstracts and Other Professional Papers Presented

### Invited Lectures/Seminars at Institutions and other Organizations

- 1972-1990** While employed in the U.K., in an average year I was invited to give several lectures to regional and local geological societies and several research seminars at other Departments of Geology, Research Institutes and Geological Surveys, both in the U.K. and abroad.
- 1990** High-temperature 'clockwise'  $P$ - $T$  paths and melting. 'Precambrian High'. Geological Survey of Canada, Ottawa, March 23, 1990.  
The late Archean Qôrqut granite complex of southern West Greenland: A colorful story of black and white rocks. Geological Society of Washington, October 10, 1990.
- 1991** Microscopes to mountain belts:  $P$ - $T$ - $t$  paths of metamorphism and their tectonic interpretation. Inaugural lecture as Visiting Professor, Kingston University, UK, June 6, 1991.
- 1992** Transpression and the generation, segregation, ascent and emplacement of granite magma. Department of Geological Sciences, McGill University, Canada, March 12, 1992.  
The Atacama Fault System of North Chile: Displacement history and tectonic significance. Department of Geological Sciences, McGill University, Canada, March 12, 1992.  
Transpression and the generation, segregation, ascent and emplacement of granite magma. Centre Géoscientifique de Québec, Sainte-Foy, Québec, Canada, March 13, 1992.  
Microscopes to mountain belts:  $P$ - $T$ - $t$  paths of metamorphism and their tectonic interpretation. Centre Géoscientifique de Québec, Sainte-Foy, Québec, Canada, March 13, 1992  
Transpression and the generation, segregation, ascent and emplacement of granite magma. Department of Geological Sciences, Virginia Polytechnic Institute and State University, April 9, 1992.  
The Atacama Fault System of North Chile: Displacement history and tectonic significance. Department of Geological Sciences, Virginia Polytechnic Institute and State University, April 10, 1992.
- 1993** Granites: Current and Future Research Directions. Contribution to the IAVCEI Scientific Horizons Forum as Leader of the IAVCEI Task Group on Granites. Australian National University, Canberra, Australia, September 26, 1993.  
The generation, segregation, ascent and emplacement of granitic magma: The migmatite to crustally-derived granite connection in thickened orogens. Geological Survey of Japan, Tsukuba, Japan, November 2, 1993.  
Continental arc evolution: Mesozoic magmatism and tectonics of the Andean Plate Boundary Zone, Northern Chile. Geological Survey of Japan, Tsukuba, Japan, November 8, 1993.  
Crustal processes - two examples: Earth's hottest rocks and fastest exhumation. Crustal Processes Shuzan Symposium, Kyoto Seminar House at Shuzan, Japan, November 12, 1993.  
 $P$ - $T$ - $t$  evolution of orogenic belts and the causes of regional metamorphism. Department of Geology and Mineralogy, Kyoto University, Japan, November 15, 1993.  
The generation, segregation, ascent and emplacement of granite magma: The migmatite to crustally-derived granite connection in thickened orogens. Department of Geology and Mineralogy, Kyoto University, Japan, November 16, 1993.  
Continental arc evolution: Mesozoic magmatism and tectonics of the Andean Plate Boundary Zone, North Chile. Department of Geology and Mineralogy, Kyoto University, Japan, November 17, 1993.
- 1994** Microscopes to mountain belts: Variscan  $P$ - $T$ - $t$  path from Brittany, West France - Rapid uplift, decompression melting, and the role of granite in exhumation of high-grade metamorphic rocks. Department of Geology, Temple University (Philadelphia), April 1, 1994.  
High- $T$ -low- $P$  metamorphism in the Ryoke Belt: Present knowledge and future perspectives. Ryoke Belt Symposium, Conference Center, Kyushu University, Japan, November 22, 1994.
- 1996** Metamorphism: Paradigms and perspectives of a dynamical system. 50th Anniversary, School of Geological Sciences, Kingston University, January 19, 1996.
- 1997** Positive-feedback loops, self-organization and migration of granitic melt through the crust. Department of Geology, Université du Québec à Chicoutimi, January 23, 1997.  
High- $T$ -Low- $P$  metamorphism, ridge subduction and the unpairing of metamorphic belts. Department of Geological Sciences, Brown University (Providence, RI), March 6, 1997.  
Positive-feedback loops, self-organization and migration of granitic melt through the crust. Department of Geological Sciences, Brown University (Providence, RI), March 6, 1997.
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13. Brown, M., Marchildon, N. and Solar, G., 2002. Localization in melt-bearing rocks. *Gordon Conference on Rock Deformation. Deformation mechanism and failure mode transitions in rocks*. Il Ciocco, Barga, Italy. Session #9 Localized vs. distributed flow in partially-molten rocks.
14. Brown, M., 2002. *P-T* conditions and tectonics – An introduction. *Geological Society of America Penrose Conference – Precambrian high-pressure – high-temperature metamorphism: A key to understanding the lower crust and reconstruction of Precambrian plate tectonics*, Beijing, China.
15. Moraes, R., Brown, M. and Fuck, R.A. 2002. Characterization and *P-T* evolution of melt-bearing ultrahigh-temperature granulites: an example from the Anápolis-Itaúçu Complex of the Brasília Fold Belt, Brazil. *Geological Society of America Penrose Conference – Precambrian high-pressure–high-temperature metamorphism: A key to understanding the lower crust and reconstruction of Precambrian plate tectonics*, Beijing, China.
16. Brown, M., 2003. Melting and the mechanism of melt extraction from continental crust: Notes from the anatectic front. *CSIRO Magmatic Processes Workshop*, Perth, Australia.
17. Brown, M., 2004. Secular variation in metamorphic regimes and punctuated tectonic evolution of Earth. *Geological Society of America Penrose Conference – Secular Variation in Tectonics and Allied Fields*, St. George, Utah.

18. Brown, M., 2006. What is the metamorphic hallmark of plate tectonics and when does this imprint first appear in the rock record? *Geological Society of America Penrose Conference – When did Plate Tectonics Begin on Earth? Theoretical and Empirical Constraints*, Lander, Wyoming.
19. Korhonen, F., Brown, M., Saito, S. and Siddoway, C., 2007. *P-T-t* paths and crustal melting associated with extensional deformation, Fosdick Mountains, West Antarctica. *Geological Society of America Penrose Conference – Extending a Continent: Architecture, Rheological Coupling, and Heat Budget*, Island of Naxos, Aegean Sea, Greece.
20. Penniston-Dorland, S., Wing, B., Nex, P.A.M., Kinnaird, J.A., Farquhar, J., Brown, M. and Sharman, E.R., 2008. Multiple sulfur isotopes reveal a primary magmatic orogen for the Platreef PGE deposit, Bushveld Complex, South Africa. *3rd Platreef Workshop, 11th July–13th July 2008, SEG–GSSA 2008 Conference*, Misty Hills, South Africa.
21. Brown, M., 2011. Metamorphism in accretionary orogens. *Geological Society of America Penrose Conference – Comparative evolution of past and present accretionary orogens: Central Asia and the Circum-Pacific*, Urumqi, China.
22. Brown, M. and Johnson, T., 2012. Insights about the development of Archean crust. *Seminar and Excursion to Early Precambrian Terrains of Shandong Peninsula, Qingdao, China, 17–21 October 2012*, International Precambrian Research Centre of China.
23. Yakymchuk, C. & Brown, M., 2013. To be or not to be: What happens to monazite and zircon during open system melting? *Workshop: applying phase equilibria modelling to rocks, 24–25 August 2013*, Goldschmidt2013, Florence, Italy.
24. Yakymchuk, C., Brown, M. & Vervoort, J., 2013. Using Lu–Hf garnet geochronology and inverse phase equilibria modeling to decode the prograde P–T–t path of deep crustal migmatites. *Geological Society of America Annual Meeting and Exposition, Denver, Colorado*, Geological Society of America Student Awards Ceremony, Public Poster Session.
25. Brown, M., 2015. Archean metamorphism and geodynamics. *International Symposium on New Theories and Approaches to Global Tectonics and Field Workshop on International Collaborative Research on the Northern Margin of the Yangtze Craton*. Center for Global Tectonics, China University of Geoscience, Wuhan, June 1–4 2015.
26. Brown, M., 2015. Crust–mantle interactions in hot orogens characterized by counterclockwise *P–T–t* paths and slow cooling. *2nd Lithosphere Dynamics Workshop*, University of Western Australia, Perth, November 19–20 2015.
27. Brown, M., 2016. Precambrian geodynamics. IPRCC 2016 – Global geodynamic processes, *International Precambrian Research Center of China*, Beijing SHRIMP Centre, Institute of Geology, Chinese Academy of Geological Sciences, 21–23 October 2016.
28. Brown, M., 2018. Secular and cyclic variation of the heat budget of metamorphism: geodynamic implications. Workshop at Klein Bolayi Lodge, Limpopo belt, South Africa, 26 July, 2018.
29. Brown, M., 2019. Plate Tectonics and the Archean Earth. Processes and Outcomes of Material Recycling Between Earth's Surface and Interior. Interior of the Earth Gordon Research Conference, June 2–7, 2019, Mount Holyoke College, South Hadley, MA, US.
30. Brown, M., 2024. Is plate tectonics a post-Archean phenomenon? A petrological perspective. Potsdam MEETING 2024.

## 2.6. Short Courses and Workshops

1. *Migmatites and Granulites*. June, 1999, one-week short course for graduate students and post-doctoral scientists, Departamento de Geologia, Universidade do Estado do Rio de Janeiro, Brazil. Lecturer: Michael Brown.
2. *Migmatites and Melt Extraction/Granulites: Origin and Evolution/Secular Variation in Metamorphic Regimes and Punctuated Tectonic Evolution of Earth*. June, 2005, one-week short course for graduate students and post-doctoral scientists, Departamento de Mineralogia e Geotectônica, Instituto de Geociências, Universidade de São Paulo, Brazil. Lecturers: Michael Brown and Renato Moraes.
3. *Working with Migmatites*. Mineralogical Association of Canada Short Course, May 24–25, 2008, Quebec City, Canada. Lecturers: Brown, M., Cesare, B., Holness, M., Sawyer, E.W., Solar, G.S. and White, R.W.
4. *Workshop: Melt formation and segregation*. April 6, 2010, 13th TSK Symposium, Goethe University, Frankfurt a.M., Germany. Lecturers: M. Brown, R. White, G. Richard, N. Bagdassarov and W. Dörr.
5. *Seminar: High-T metamorphism and Crustal Melting*. EURISPET V, June 1–10, 2010, Monteortone near Abano (Padua), Italy. Brown 1 of 22 Lecturers.
6. *Migmatites, melting and intracrustal differentiation*. Short course organized by: The International Precambrian Research Centre of China and The Beijing SHRIMP Center, Beijing, China, October 12–16, 2012. Lecturers: Michael Brown, Edward Sawyer, Yusheng Wan, Richard White and Simon Wilde.
7. *High-grade metamorphism and the generation and differentiation of Earth's crust*. Short Course for the Geocycles EARTH SYSTEM RESEARCH CENTRE, University of Mainz, Germany, July 4–5, 2013, Lecturers: Michael Brown, Tim Johnson and Richard White.
8. *Workshop: Applying phase equilibria modelling to rocks*, Goldschmidt2013, Florence, Italy, 24–25 August 2013, Conveners: Michael Brown and Bernardo Cesare.
9. *Phase Equilibria, Migmatites, Melting and Intracrustal Differentiation*. Short course organized by: State Key Lab of Geological Processes and Mineral Resources, China University of Geosciences (Wuhan), China, September 25–October 3, 2013. Lecturers: Michael Brown, Edward Sawyer, Richard White, Chunjing Wei and Simon Wilde.
10. *Fundamentals of Metamorphic Petrology*. Short course organized by: State Key Lab of Geological Processes and Mineral Resources, China University of Geosciences (Wuhan), China, September 15–September 19, 2018. Lecturers: Michael Brown and Tim Johnson.
11. *Crustal melting*. Short course organized by: The International Precambrian Research Centre of China and The Beijing SHRIMP Center, Beijing, China, October 11–13, 2019. Lecturers: Michael Brown, Tim Johnson, Simon Wilde and Chris Yakymchuk.

## 2.7 Contracts and Grants

### External Funding

#### Research Awards

Prior to 1990.	List of awards available on request.
1990-1992	NATO Collaborative Research Grants Programme: "Tectonothermal Evolution of the Cadomian Orogen and Circum-Atlantic Correlations". Belgian Francs 222,000 (c. \$7,000).
1991	Committee for Research and Exploration, National Geographic Society: "Displacement History of Atacama Fault System, North Chile" (\$14,895).
1991-1993	Geological Survey of Canada: "Metamorphic Studies in the Port aux Basques Area". Canadian \$13,067 (c. \$12,000).
1993	Geological Survey of Japan (International Office): "International cooperation on the Ryoke Belt". ¥165,000 + international travel (c. \$3,000).
1997-1999	National Science Foundation: "Migration of granitic melt in the crust" (\$140,000).
1997-2002	National Aeronautics and Space Administration (NASA): "The Earth System Science Interdisciplinary Center" (became PI as Interim Director of ESSIC in 1998, and continued as PI to end of award period) (\$600,000).
1998-2000	National Science Foundation: "Acquisition of a new electron probe microanalyzer" (with P.M. Piccoli, P.A. Candela and R.J. Walker) (\$195,000).
	National Science Foundation: "Developing models of melt transfer in migmatites" (\$57,618).
1999-2000	National Science Foundation - Major Research Instrumentation Program: "Acquisition of a multicollector ICP-MS instrument" (with R.J. Walker, P.A. Candela, C.D. Gallup and A.J. Kaufman) (\$350,000).
1999-2002	National Aeronautics and Space Administration (NASA): "Earth System Science Interdisciplinary Center" (PI, as Interim Director of ESSIC, with Co-I. R.D. Hudson; overall administration of an aggregate award based on individual peer-reviewed proposals, therefore \$ value not reported here).
2001-2002	National Science Foundation: "Characterizing Melt Flow in the Anatectic Zone" (with Nathalie Marchildon) (\$129,647).
2001	National Science Foundation: "Characterizing Melt Flow in the Anatectic Zone" (REU Supplement, \$9,975).
2002-2003	National Science Foundation: "Support for a Workshop: Priorities in Solid Earth Sciences" (\$36,748).
2003-2004	National Science Foundation: "Planning Visit to South Africa" (\$10,400).
	National Science Foundation: "Support for ISES Forum I: CyberInfrastructure and Geochronology" (\$55,285).
2003-2007	National Science Foundation: "Cooperative Research: Petrogenesis of HP and UHT granulites from the Brasília Fold Belt in Minas Gerais and Goiás, Brazil" (\$360,460).
2004-2005	National Science Foundation: "Support for ISES Forum II: Rheology of the Continental Lithosphere" (\$31,732).
2005-2007	Department of the Interior – USGS: "Petrogenesis of the Platreef, Bushveld Complex, South Africa" (\$44,500).
2005-2006	National Science Foundation: "Support for ISES Forum III: Growth of a Continent in Space and Time" (\$35,444).
2006-2007	National Science Foundation: "Support for an International Conference: Granulites and Granulites 2006, Brasília, Brazil" (\$10,000).
2007-2008	National Science Foundation: "Characterizing Carboniferous and Cretaceous Granites and their Sources in the Fosdick Mountains Gneiss Dome – A Pilot Study" (\$22,928).
2010-2014	National Science Foundation: "Collaborative Research: Polyphase Orogenesis and Crustal Differentiation in West Antarctica" (\$337,608 + \$22,362 (supplement 2013) = \$359,970).
2011-2018	Macquarie University: "ARC Centre of Excellence for Crust to Core to Fluid Systems" (25% time commitment expressed as cost-share)
2013-2015	National Science Foundation - Instrumentation & Facilities Program: "Acquisition of a State-of-the-Art Thermal Ionization Mass Spectrometer" (with R.J. Walker (PI), I.S. Puchtel, S. Penniston-Dorland and R.L. Rudnick) (\$325,000).

## 2.8 Fellowships, Awards and Honors

Visiting Professor, School of Geological Sciences, Kingston University, UK, 1990–1992.

Geological Society of America, elected Fellow 1993.  
 Visiting Lecturer, Department of Geology and Mineralogy, Kyoto University, Japan, 1993.  
 Mineralogical Society of America, elected Fellow 1999.  
 Visiting Professor at the State University, Rio de Janeiro, Brazil, 1999.  
 Medal from the City of Clermont-Ferrand, France, for “Contributions to the Understanding of Granites and Related Rocks”, presented September 1999 during the IV Hutton Symposium on “The Origin of Granites and Related Rocks” by the Mayor of the City.  
 Listed in: *A–Z of Earth Scientists* (150 Notable Earth Scientists, 18th Century to Present), 2002, Facts On File, Inc.  
 John Sacheverell A'Deane Coke Medal for 2005, Geological Society of London, “for his contribution to our understanding of how heat and mass are transferred within continents, his research within high-pressure and paired metamorphic belts, and his work on international bodies and editorial boards.”  
 Antarctic Service Medal of the United States of America 2012, “in recognition of valuable contributions to exploration and scientific achievement under the U.S. Antarctic program.”  
 Goldschmidt, Montreal, June 2012, “Session 5b. Evolution and differentiation of the continental crust: A celebration of the contributions by Michael Brown.”  
 Granulites & Granulites 2013 – Hyderabad, 16–20 January 2013, “Special session to recognise the 40-year contribution of Professor Mike Brown to the field of high-grade metamorphism and partial melting. The Brown Session will comprise 14 invited speakers, who will provide an exceptional overview of recent developments and progress in the study and interpretation of high-grade metamorphic rocks.”  
 Visiting Researcher, Johannes Gutenberg-Universität Mainz, Germany, 2013.  
 Collins Medal for 2014, Mineralogical Society of the United Kingdom and Ireland.  
 Visiting Research Fellow, Curtin University, Western Australia, 2014.  
 Honorary Professor, China University of Geosciences (Wuhan), P.R. China, 2014–present.  
 Vice President of the Mineralogical Society of America for 2017.  
 President of the Mineralogical Society of America for 2018.  
 Visiting Professor, ETH-Zurich, Switzerland, 2018.  
 51<sup>st</sup> Hallimond Lecturer for 2018, Mineralogical Society of the United Kingdom and Ireland.  
 Past President of the Mineralogical Society of America for 2019.  
 Visiting Adjunct Professor, Curtin University, Western Australia, 2019.  
 Plenary Lecturer, 36th International Geological Congress, Delhi, India, 2020 (cancelled due to Covid-19 pandemic)  
 Fellow, American Geophysical Union, 2020.  
 Distinguished Geologic Career Award for 2021, Mineralogy, Geochemistry, Petrology & Volcanology Division, Geological Society of America.  
 Visiting Adjunct Professor, Curtin University, Western Australia, 2022 to 2024.  
 Winston Family Honors Faculty Award for 2024. This award recognizes outstanding faculty advising, mentorship and supervision of University of Maryland Honors students.

## 2.9 Editorships, Editorial Boards and Reviewing Activities for Journals and Other Learned Publications

### Journal Editorships

#### *Journal of the Geological Society, London (1982–1986)*

Brown, G.C., **Brown, M.**, Frostick, L.E., Horder, M.F., Robertson, A.H.F., Tanner, P.W.G., Thomas, G. and Westbrook, G.K., Volume 139.  
 Le Bas, M.J., Brown, G.C., **Brown, M.**, Colley, H., Frostick, L.E., Horder, M.F., Moorbath, S., Robertson, A.H.F., Tanner, P.W.G. and Westbrook, G.K., Volume 140.  
 Le Bas, M.J., Brown, G.C., **Brown, M.**, Colley, H., Frostick, L.E. Moorbath, S., Robertson, A.H.F., Tanner, P.W.G., Westbrook, G.K. and Williams, P.J., Volume 141.  
 Le Bas, M.J., Brown, G.C., **Brown, M.**, Colley, H., Cubitt, J.M., Frostick, L.E., Lane, P.D., Moorbath, S., Robertson, A.H.F., Robinson, D., Searle, R.C., Tanner, P.W.G., Westbrook, G.K., Williams, G.D. and Williams, P.J., Volume 142.  
 Le Bas, M.J., Besley, B.M., Brown, G.C., **Brown, M.**, Chadwick, B., Cubitt, J.M., Frostick, L.E., Harris, N.B.W., Lane, P.D., Pankhurst, R.J., Robinson, D., Searle, R.C., Tanner, P.W.G., Williams, G.D. and Williams, P.J., Volume 143.

#### *Journal of Metamorphic Geology (founding editor; 1982–2019)*

Brown, M., Loomis, T.P. and Vernon, R.H., Volume 1-3.  
 Brown, M., Day, H.W. and Vernon, R.H., Volume 4-6.  
 Brown, M., Day, H.W., Robinson, D. and Vernon, R.H., Volume 7-10.



Brown, M., Robinson, D., Selverstone, J.E. and Vernon, R.H., Volume 11-14.  
 Brown, M., Robinson, D., Morrison, J. and Vernon, R.H., Volume 15-18.  
 Brown, M., Morrison, J., Powell, R. and Robinson, D., Volume 19-23.  
 Brown, M., Powell, R., Robinson, D. and Whitney, D., Volume 24-26.  
 Brown, M., Powell, R., Robinson, D., White, R.W. and Whitney, D., Volume 27-30.  
 Brown, M., Clarke, G.L., Robinson, D., White, R.W. and Whitney, D., Volume 31-33.  
 Brown, M., Evans, K., Robinson, D., White, R.W. and Whitney, D., Volume 34-37.

## Journal Special Issues Edited

Brown, M., 1983. Fluids in metamorphism. *Journal of the Geological Society, London*, Vol. 140, Part 4, July 1983, pp. 529-663.  
 Brown, M., 1984. Shear zone metamorphism. *Journal of Metamorphic Geology*, Vol. 2, No. 2, June 1984, pp. 75-141.  
 Brown, M., 1994. Special set of papers. Crustal anatexis and ascent of felsic magmas. *Lithos*, Vol. 32, 1/2, pp. 109-168.  
 Brown, M., Rushmer, T. and Sawyer, E.W., 1995. Special Section: Mechanisms and consequences of melt segregation from crustal protoliths. *Journal of Geophysical Research, Solid Earth*, Vol. 100, B8, pp. 15,549-15,805.  
 Brown, M. and Piccoli, P.M., 1995. *The Origin of Granites and Related Rocks*. U.S. Geological Survey Circular 1129. U.S. Geological Survey, 170 pp.  
 Brown, M., Candela, P.A., Peck, D., Walker, R.J. and Zen, E., 1996. The Origin of Granites and Related Rocks. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, Vol. 87, 1&2, pp. 1-361. (Also published as Geological Society of America Special Paper, 315).  
 Brown, M. and Kotkova, J., 1999. Crustal melting in nature and experiment. *Physics and Chemistry of the Earth*, Vol. 24, Issue 3, pp. 269-319.  
 Brown, M., Petford, N. and Schilling, F., 2001. Crustal melting and granite magmatism: Causes and behaviours from pores to plutonic belts in orogens. *Physics and Chemistry of the Earth, A*, Vol. 26, Issue 4-5, pp. 201-367.  
 Brown, M. and Clarke, G., 2002. Metamorphic Processes. *Journal of Metamorphic Geology*, Vol. 20, Issue 1, January 2002, pp. 1-213.  
 Brown, M. and White, R.W., 2008. Processes in Granulite Metamorphism. *Journal of Metamorphic Geology*, Vol. 26, Issue 2, pp. 121-299.  
 Brown, M., Eklund, O., Korhonen, F. and Sorjonen-Ward, P., 2010. On high-grade metamorphism, crustal melting, migmatites and granites - A special issue in honour of Jakob Johannes Sederholm, The Sederholm symposium on high-grade metamorphism, crustal melting, migmatites and granite. *Lithos*, 116, 203-340.  
 Brown, M., Sandiford, M. and White, R.W., 2010. Special Issue: On the importance of minding one's Ps and Ts. *Journal of Metamorphic Geology*, 28, 561-718.  
 Brown, M., Schulmann, K. and White, R.W., 2011. Special Issue: Granulites, partial melting and rheology of orogenic lower crust. *Journal of Metamorphic Geology*, 29, pp. 1-166.  
 Sawyer, E.W., Cesare, B. and Brown, M., 2011. When the continental crust melts. *Elements*, 7, 229-266.  
 Abu-Alam, T., Brown, M., Stüwe, K. and Santosh, M., 2013. Gondwana Collision. *Mineralogy and Petrology*, 107, 631-880.  
 Hawkesworth, C. and Brown, M., 2018. Earth dynamics and the development of plate tectonics. *Philosophical Transactions of the Royal Society A*, 376, 2132.

## Editorial Boards

*Geology* Editorial Board 1998-2000.  
*Journal of the Geological Society* Advisory Editor 1998-2004.  
*Journal of the Virtual Explorer* Editorial Board 2001-2012.  
*Geological Society of London*, Books Editorial Committee 2005-2011.

## Reviewing Activities for Journals and Other Learned Publications

American Mineralogist	Journal of the Geological Society, London
Canadian Journal of Earth Sciences	Journal of Geophysical Research
Canadian Mineralogist	Journal of Metamorphic Geology
Contributions to Mineralogy and Petrology	Journal of Petrology
Earth and Planetary Science Letters	Journal of South American Earth Sciences
Geological Magazine	Journal of South East Asian Earth Sciences
Geological Society of America Bulletin	Journal of Structural Geology
Geological Society of America, Special Paper Series	Lithos
Geological Society, London, Special Publication Series	Mineralogical Magazine
Geology	Nature
Gondwana Research	Nature Geoscience

## **2.10. Other Scientific Meetings, Conferences, Symposia, Workshops and Field Excursions Organized**

1–17. 1981–2000. List available on request.

18. *12–14 March 2001, Burlington, Vermont, USA*

Theme Session 4: Deformation, Metamorphism, and Melting: Interactions in the Crust

Co-conveners: G. Gleason and T. Rushmer

(Sponsor: The Geological Society of America Northeastern Section, 36<sup>th</sup> Annual Meeting)

19. *17–19 May 2001, Blacksburg, Virginia, USA*

THERMOCALC Workshop

Co-conveners: R. Tracy

Workshop presenters: R. Powell and C. Carson

20. *20–24 May 2001, The Holmstead, Virginia, USA*

Crustal Melting: From Grain Boundaries to Batholiths

Co-conveners: R. Tracy

(Sponsor: Eleventh V.M. Goldschmidt Conference)

21. *4–8 November 2001, Boston, Massachusetts, USA*

Pardee Keynote Symposium. Melt in the Crust and Upper Mantle: How Much, Where, for How Long, and What Significance of Geodynamics.

Co-Conveners: T. Rushmer, G. Bergantz and G. Hirth

(Sponsor: Geological Society of America; Co-sponsors Geological Society of America Structural Geology and Tectonics Division, Geochemical Society, Mineralogical Society of America)

22. *4–8 November 2001, Boston, Massachusetts, USA*

Topical Session. Melt in the Crust and Upper Mantle: How Much, Where, for How Long, and What Significance of Geodynamics.

Co-conveners: T. Rushmer, G. Bergantz and G. Hirth

(Sponsor: Geological Society of America; Co-sponsors Geological Society of America Structural Geology and Tectonics Division, Geochemical Society, Mineralogical Society of America)

23. *8–11 November 2001, Boston Massachusetts, USA*

Fieldtrip: Deformation, Metamorphism, and Granite Ascent in Western Maine

Co-conveners: G.S. Solar and P.B. Tomascak

(Sponsor: Geological Society of America; Co-sponsor: GSA Structural Geology and Tectonics Division)

24. *1–5 July 2002, Adelaide, Australia*

Fluids, Metals and Melts: Their Extraction, Transport and Emplacement in Convergent Plate Settings

Co-conveners: I. Buick

(Sponsor: 16<sup>th</sup> Australian Geological Convention)

25. *23–29 September 2002, Hengshan-Wutaishan and Beijing, China*

Precambrian high-pressure – high-temperature metamorphism: a key to understanding the lower crust and reconstruction of Precambrian plate tectonics.

Co-conveners: A. Kröner, P.J. O'Brien, C.W. Passchier, Li Jianghai and Zhai Ming-Guo

(Sponsor: Geological Society of America, Penrose Conference Series. Co-sponsors: National Science Foundation of China, Beijing, China; Chinese Academy of Sciences, Beijing, China; and, Peking University, Beijing, China)

26. *26 October 2002, Denver, Colorado, USA*

Workshop: Setting Priorities in Solid Earth Sciences.

Co-conveners: C. Manduca, T. Rushmer, B. Tikoff and B. van der Pluijm

(Sponsor: National Science Foundation)

27. *9 December 2002, San Francisco, California, USA*

Town Hall Meeting: Setting Priorities in Solid Earth Sciences.

Co-convenor: T. Rushmer

(Sponsor: National Science Foundation)

28. *6-11 April 2003, Nice, France*

High-pressure/high-temperature metamorphism and crustal melting in orogenesis: From microstructures to tectonics.

Co-conveners: P.J. O'Brien and T. Rushmer

(Sponsors: European Geophysical Society; European Union of Geoscience; and, American Geophysical Union)

29. *2-6 September 2003, Toyohashi, Japan*

Session A-2. Anatexis and segregation in continental lower crust.

Co-conveners: Y. Hiroi and H. Kagami

(part of the Fifth Hutton Symposium on the Origin and Granites and Related Rocks)

30. *1 November 2003, Seattle, Washington, USA*

ISES Forum I: CyberInfrastructure and Geochronology

Co-conveners: A. Goldstein, C. Manduca, T. Rushmer, B. Tikoff and B. van der Pluijm

(Sponsor: National Science Foundation)

31. *2-5 November 2003, Seattle, Washington, USA*

Pardee Keynote Symposium. Modeling Metamorphism: Petrology, Geochemistry and Tectonics.

Co-convenor: B. Dutrow, Louisiana State University

(Sponsor: Mineralogical Society of America, Geochemical Society, and Geological Society of America, Structural Geology and Tectonics Division)

32. *2-5 November 2003, Seattle, Washington, USA*

Topical Session. Modeling Metamorphism: Petrology, Geochemistry and Tectonics.

Co-convenor: B. Dutrow, Louisiana State University

(Sponsor: Mineralogical Society of America, Geochemical Society, and Geological Society of America, Structural Geology and Tectonics Division)

33. *8-12 December 2003, San Francisco, California, USA*

Modeling Metamorphism.

Co-convenor: B. Dutrow

(Sponsor: Volcanology, Geochemistry & Petrology and Tectonophysics Sections, American Geophysical Union)

34. *12-16 July 2004, Johannesburg, South Africa*

The birth and growth of continents - geodynamics through time.

Co-conveners: R. Gibson and H. Mouri

(Sponsor: Tectonics Division of the Geological Society of South Africa)

35. *20-28 August 2004, Florence, Italy*

Melting and the rheology of the crust and upper mantle: What significance for geodynamics?

Co-convenor: B. Cesare

(Sponsor: 32<sup>nd</sup> International Geological Congress)

36. *12 December 2004, San Francisco, California, USA*

ISES Forum II: Rheology of the continental lithosphere.

Co-conveners: A. Goldstein, D. Mogk, T. Rushmer, B. Tikoff and B. van der Pluijm

(Sponsor: National Science Foundation)

37. *16 October, 2005, Salt Lake City, Utah, USA*

Geology and EarthScope.

Co-convenor: David W. Mogk

(Sponsor: Structural Geology and Tectonics Division, Geological Society of America)

38. *4 December, 2005, San Francisco, California, USA*

ISES Forum III: Growth of a Continent in Space and Time

Co-conveners: D. Mogk, T. Rushmer, B. Tikoff

(Sponsor: National Science Foundation)

39. 23-26 May 2006, *Baltimore, Maryland, USA*  
 2006 Joint Assembly  
 Chair, Program Committee: M. Brown  
 (Sponsor: American Geophysical Union)
40. 10-12 July 2006, *Brasília, Brazil*  
 Granulites and Granulites 2006  
 Chair, Organizing Committee: M. Brown  
 (Sponsors: National Science Foundation; Universidade de Brasília; Fundação de Empreendimentos Científicos e Tecnológicos - Finatec; Companhia Vale do Rio Doce; Anglo American do Brasil)
41. 11-15 December 2006, *San Francisco, California, USA*  
 Melt Migration: From Source to Pluton, From Experiment to Field  
 Co-convenor: R. Weinberg  
 (Sponsor: Volcanology, Geochemistry and Petrology and Tectonophysics Sections, American Geophysical Union)
42. 22-25 May 2007, *Acapulco, Mexico*  
 2007 Joint Assembly  
 Co-Chair, Program Committee: M. Brown  
 (Sponsor: American Geophysical Union)
43. 24-25 May 2008, *Québec City, Canada*  
 Québec 2008  
 Short Course: C14 "Working with Migmatites"  
 E.W. Sawyer (Université du Québec à Chicoutimi), M. Brown (University of Maryland)  
 (Sponsor: Mineralogical Association of Canada)
44. 26-28 May 2008, *Québec, Canada*  
 Québec 2008  
 Special Session SS8 "New advances in migmatites"  
 Organizer(s): Edward W. Sawyer (Université du Québec à Chicoutimi), Michael Brown (University of Maryland)  
 (Sponsor: Mineralogical Association of Canada, Joint Annual Meeting GAC-MAC-SEG-SGA)
45. 6-14 August 2008, *Oslo, Norway*  
 MPN-12 Sederholm Symposium on High-grade Metamorphism, Crustal Melting, Migmatites and Granites  
 Conveners: Michael Brown (University of Maryland, USA), Olev Eklund (Turku University, Finland) and Peter Sorjonen-Ward (Geological Survey of Finland, Finland)  
 (Sponsor: 33rd International Geological Congress)
46. 15-18 September 2008, *Yunnan Province, China*  
 Gondwana 13 Conference, Dali  
 Technical Session on "Comparative orogenesis: Brasiliano–Pan-African belts vs. Altaid–Tethyan belts"  
 Conveners: Michael Brown (University of Maryland), Christopher Clark (Curtin University), Brian Windley (Leicester University), Wenjiao Xiao (Chinese Academy of Sciences)  
 (Sponsor: International Association for Gondwana Research)
47. 11-12 June 2009, *School of Earth Sciences, University of Melbourne, Australia*  
 rpdag – On the Importance of Minding Ones Ps and Qs Reflections on the past, present and future of metamorphic studies on the occasion of Roger Powell's 60th birthday.  
 Conveners: Michael Brown (University of Maryland), Michael Sandiford (University of Melbourne), Janet Hergt (University of Melbourne) and Neil Phillips (University of Melbourne)  
 (Sponsor: University of Melbourne, Australia; Wylie–Blackwell)
48. 21-26 June 2009, *Davos, Switzerland*  
 Theme 5, Session 05B "Crust Coming of Age: From Accretion to Craton"  
 Conveners: Qiang Wang (Guangzhou Institute of Geochemistry, Chinese Academy of Sciences), Bill Griffin (Macquarie University) and Michael Brown (University of Maryland)  
 (Sponsor: Goldschmidt 2009 – "Challenges to Our Volatile Planet")
49. 13-15 July 2009, *Hrubá Ská Chateau, Czech Republic*  
 Granulites & Granulites 2009: Granulites, Partial Melting and Rheology of Orogenic Lower Crust

- Organizing Committee: Schulmann, K. (University of Strasburg), White, R. (University of Mainz), Brown, M. (University of Maryland), O'Brien, P. (University of Potsdam) and Lexa, O. (Charles University, Prague)
50. 26-28 October 2009, Calcutta, India  
International Conference on "Paleoproterozoic Supercontinents and Global Evolution"  
Member, Advisory Committee  
(Sponsor: International Geological Correlation Program Project 509)
51. 5-9 July 2010, Hyderabad, India  
Session SE01 Metamorphism and orogenesis from the Archean to the present, with particular reference to the evolution of Asia and its Gondwanan heritage.  
Conveners: Michael Brown (University of Maryland), Samarendra Bhattacharya (Indian Statistical Institute), Chris Clark (Curtin University of Technology), Saibal Gupta (IIT Kharagpur), Wenjiao Xiao (Chinese Academy of Sciences) and Guochun Zhao (The University of Hong Kong)  
(Sponsor: AOGS 2010)
52. 8-12 August 2010, Foz do Iguassu, Brazil  
Session: U14 Thermal regimes and orogenesis from Archean to present  
Conveners: Michael Brown (University of Maryland), Marcus Egydio Silva (University of Sao Paulo), Monica Heilbron (State University of Rio de Janeiro) and Alain Vauchez (University of Montpellier)  
(Sponsor: The Meeting of the Americas, American Geophysical Union)
53. 31 October-3 November 2010, Denver, Colorado, USA  
Topical Session 59 High-pressure and high-temperature metamorphism:  $P$ - $T$ - $t$  paths and tectonics.  
Conveners: Michael Brown (University of Maryland), Fraukje Brouwer (VU University, Amsterdam) and Nigel Kelly (Colorado School of Mines)  
(Sponsor: Geological Society of America, Mineralogical Society of America, Structural Geology and Tectonics Division)
54. 8-14 January 2011, Johannesburg, South Africa  
Session S3.6 Metamorphism and metamorphic processes, crustal melting and the mobile belts of Africa and contiguous parts of Gondwana  
Conveners: Michael Brown (University of Maryland), Christoph Hauzenberger (University of Graz) and Jürgen Reinhardt (University of KwaZulu-Natal)  
(Sponsor: CAG 23 – South Africa 2011, 23rd Colloquium of African Geology)
55. 2-10 February 2011, Delhi, India  
International Symposium on Precambrian accretionary orogens and field workshop in the Dharwar craton, Southern India  
Member, International Advisory Committee  
(Sponsors: University of Delhi, multiple departments of the Government of India, multiple industries)
56. 25-30 September 2011, Buzios, Rio de Janeiro State, Brazil  
Gondwana 14 'East meets West'  
Member, Scientific Committee  
(Sponsors: Petrobras SA, Academia Brasileira de Ciências, DRM-RJ, CPRM, Sociedade Brasileira de Geologia, multiple universities)
57. 5-10 August 2012, Brisbane, Australia  
34th International Geological Congress  
Session 22-5 Anatexis  
Conveners: Geoffrey Clarke (University of Sydney, Australia), Michael Brown (University of Maryland, USA), Bernardo Cesare (University of Padova, Italy) and Gary Stevens (Stellenbosch University, South Africa)
58. 16-19 January, 2013, Hyderabad, India  
Granulites & Granulites 2013  
Organizing Committee  
Conveners: Ian Fitzsimons (Curtin University, Australia) and Chris Clark (Curtin University, Australia)  
Members: E.V.S.K.Babu (NGRI, Hyderabad, India), Y.J. BhaskarRao (NGRI, Hyderabad, India), Michael Brown (University of Maryland, USA), Saibal Gupta (IIT-Kharagpur, India), Martin Hand (University of Adelaide, Australia), and David Kelsey (University of Adelaide, Australia)  
Eastern Ghats Field Trip Committee  
Leader: Chris Clark (Curtin University, Australia)

Members: Michael Brown (University of Maryland, USA), Saibal Gupta (IIT-Kharagpur, India), Martin Hand (University of Adelaide, Australia), Fawna Korhonen (Geological Survey of Western Australia) and Jagatbikus Nanda (IIT-Kharagpur, India)

59. 07–12 April, 2013, Vienna, Austria

General Assembly 2013

Disciplinary Session: GMPV1 Origin, evolution of Earth's crust and the formation of a habitable planet

Convener: Stephen J. Mojzsis (University of Colorado, USA)

Co-Conveners: Pierre Bouilhol (Durham University, UK), Michael Brown (University of Maryland, USA), Bruno Dhuime (St Andrews and Bristol Universities, UK), Elizabeth Swanner (Karls Eberhad University Tuebingen, Germany)

(Sponsor: European Geosciences Union)

60. 25–30 August, 2013, Florence, Italy

Goldschmidt2013

Session 06g: Quantification of Metamorphic Processes and the Thermo-Tectonic Evolution of Orogens

Conveners: Michael Brown (University of Maryland, USA), Bernardo Cesare (University of Padova, Italy), Sumit Chakraborty (Ruhr Universität Bochum, Germany), Taras Gerya (ETH Zurich, Switzerland)

(Sponsor: European Association of Geochemistry/Geochemical Society)

61. 7–9 October, 2013, Beijing, China

International interdisciplinary meeting on Precambrian evolution of the Earth

Organizing Committee: Alfred Kröner (University of Mainz, Germany), Chair

Members of the International Precambrian Research Centre of China (includes Michael Brown, University of Maryland)

(Sponsor: the Beijing SHRIMP Centre, together with the International Precambrian Research Centre of China and SINOPROBE)

62. 27 April –2 May, 2014, Vienna, Austria

General Assembly 2014

Disciplinary Session: GMPV20 Granites – Archaean to present

Convener: Jean-François Moyen (Université Jean-Monnet, Saint-Etienne, France)

Co-Conveners: Tracy Rushmer (Macquarie University, Australia), Michael Brown (University of Maryland, USA)

(Sponsor: European Geosciences Union)

63. 17–19 June 2014, Petrozavodsk, Karelia, Russia

International Conference – Precambrian high-grade mobile belts

Member of the Organizing Committee

(Sponsors: Russian Academy of Sciences, Earth Sciences Section RAS, Science Board on Precambrian Problems; Institute of Geology, Karelian RC, RAS; Geological Institute, RAS; Geological Institute, Kola Science Centre, RAS; Institute of Precambrian Geology and Geochronology, RAS; Geological Survey of Finland)

64. 17 July–22 July, 2016, Congressi Stefano Franscini, Monte Verità, Locarno, Switzerland

Workshop on the origin and evolution of plate tectonics

Programme Committee: Tackley, P.J. (ETH Zurich); Stern, Bob (University of Texas at Dallas, Richardson); Gerya, T. (ETH Zurich); Sobolev, S. (GFZ); van Hunen, Jeroen (Durham U., UK); and, Brown, Michael (U. Maryland, USA)

(Sponsor: Swiss National Science Foundation and ETH Zürich)

65. 27 August–4 September, 2016, Cape Town, South Africa

35th International Geological Congress

Session: Challenges in high-grade metamorphism and crustal melting

Conveners: Michael Brown (University of Maryland, USA), Mark Caddick (Virginia Tech, USA) and Chris Clark (Curtin University, Australia)

66. 27 August–4 September, 2016, Cape Town, South Africa

35th International Geological Congress

Session: Crust formation and recycling from the Hadean to the late Archaean: The transition to plate tectonics

Conveners: Alfred Kröner (University of Mainz, Germany), Duni Liu (Beijing SHRIMP Center, CAGS), Michael Brown (University of Maryland) and Walter Mooney (USGS)

67. 27 August–4 September, 2016, Cape Town, South Africa

35th International Geological Congress

Session: Secular change in Earth evolution

Conveners: Christopher Spencer (Curtin University, Australia), Michael Brown (University of Maryland, USA), Blair Schoene (Princeton University, USA) and Elis Hoffmann (Freie Universität Berlin, Germany)

68. *11 September–15 September, 2016, Rimini, Italy*

emc2016 – 2nd European Mineralogical Conference

Session: S6. Metamorphism, crustal melting and granite magmas from start to stop and from inclusions to intrusions

Conveners: Antonio Acosta Vigil (Universidad de Granada, Spain), Michael Brown (University of Maryland, USA), Sergio Rocchi (Università di Pisa, Italy) and Richard White (University of Mainz, Germany)

(Sponsor: Società Italiana di Mineralogia e Petrologia)

69. *12 August–17 August, 2018, Boston, USA*

Goldschmidt 2018 – Theme 03 Earth's Lithosphere Formation, Evolution, Recycling, and Subduction

Co-ordinators: Michael Brown (University of Maryland), Timm John (Freie Universität Berlin), Fuyuan Wu (Chinese Academy of Science) and Christy Till (Arizona State University)

(Sponsor: European Association of Geochemistry and Geochemical Society)

70. *18 August–23 August, 2019, Barcelona, Spain*

Goldschmidt2019

Session 03c: Crust Formation and Evolution on the Hadean and Archaean Earth

Conveners: Nicholas Gardiner (Monash University, Australia), Tim Johnson (Curtin University, Australia), Eugene Grosch (Rhodes University, South Africa), Michael Brown (University of Maryland, USA)

(Sponsor: European Association of Geochemistry and Geochemical Society)

71. *31 September–25 September 2019, Phoenix, Arizona, USA*

Topical Session T25. A Life in Mineralogy and Petrology: A Session in Honor of Robert J. Tracy.

Conveners: Kristin M. Dorfler (Virginia Tech), Michael Brown (University of Maryland), Victor Guevara (Skidmore College), and Nancy L. Ross (Virginia Tech)

(Sponsor: Geological Society of America (Mineralogy, Geochemistry, Petrology, and Volcanology Division), Mineralogical Society of America)

## 2.11. Media

*April 3rd, 2014*

Interviewed by Jessica Morrison of Nature about the article by Bercovici & Ricard on “Plate tectonics, damage and inheritance” (Nature) and quoted in her article entitled “New origin seen for Earth's tectonic plates” published in *NATURE* | NEWS on April 6th, 2014 (<http://www.nature.com/news/new-origin-seen-for-earth-s-tectonic-plates-1.14993>).

*April 15th, 2014*

Interviewed by Andrea Jaramillo Jaramillo, the Producer of Ciencia, Salud y Tecnología Nuestra (CST), the Science, Health and Technology daily show, which airs on Tele Noticias 24 (NTN24), the Latino for Latino News Channel broadcasting across the Americas from Bogota, Colombia, about the Nature article by Bercovici & Ricard on “Plate tectonics, damage and inheritance” (Nature) and its importance in relation to understanding how and why plate tectonics developed on Earth but not on other planets in the Solar System.

*November 18<sup>th</sup>, 2014*

Interviewed by Melissa Hogenboom of BBC Earth (<http://www.bbc.com/earth/world>) about the article by Korhonen et al. on “Taking the temperature of Earth's hottest crust” (Earth and Planetary Science Letters) and its significance in relation to the origin of mountain belts for her article entitled “Rocks get super-heated to 1000C under new mountains” published on BBC Earth on November 20<sup>th</sup>, 2014 (<http://www.bbc.com/earth/story/20141120-the-hottest-part-of-earths-crust>).

*February 26th, 2017*

Interviewed by Richard A. Lovett of Cosmos magazine (Australia) about the article by Johnson et al. on “Earth's first stable continents did not form by subduction” (Nature) and quoted in his article entitled “Australian rocks suggest early Earth may not have had plate tectonics” published in Cosmos on February 27<sup>th</sup>, 2017 (<https://cosmosmagazine.com/geoscience/tremors-shake-tectonic-plate-theory>).

*February 27th, 2017*

Interviewed by Kendra Pierre-Louis of Popular Science about the article by Johnson et al. on “Earth's first stable continents did not form by subduction” (Nature) and quoted in her article entitled “Earth's first continent? Probably a giant continental crust”

published in Popular Science on February 27<sup>th</sup>, 2017 (<http://www.popsci.com/earths-first-continent-probably-giant-continental-crust>).

*February 27<sup>th</sup>, 2017*

Interviewed by Madeline Rosenthal of earth.com about the article by Johnson et al. on “Earth’s first stable continents did not form by subduction” (Nature).

*February 28<sup>th</sup>, 2017*

Interviewed by Lindsay Dodgson, Science reporter, Business Insider UK, about the article by Johnson et al. on “Earth’s first stable continents did not form by subduction” (Nature) and quoted in her article entitled “Earth may have once had a single shell like an egg” published in Business Insider on March 1<sup>st</sup>, 2017, <http://www.businessinsider.com/earth-single-shell-egg-tectonic-plates-2017-2?r=UK&IR=T>.

*March 3<sup>rd</sup>, 2017*

Interviewed by Ira Flatow for “Science Friday” on National Public Radio about “Back When the Planet Had Just One Plate” <http://www.sciencefriday.com/segments/back-when-the-planet-had-just-one-plate/> (with reference to the article by Johnson et al. on “Earth’s first stable continents did not form by subduction”, Nature).

*March 27<sup>th</sup>, 2017*

Interviewed by Seth Shostak, Host and Producer, Big Picture Science and Senior Astronomer, SETI Institute, about the article by Johnson et al. on “Earth’s first stable continents did not form by subduction” (Nature), <http://bigpicturescience.org/episodes>, -- the third segment, starting at 31 mins 20 secs. Link: [https://secure-hwcdn.libsyn.com/p/4/a/3/4a367760e1944cc4/BiPiSci17-03-27.mp3?c\\_id=14652356&expiration=1496236624&hwt=3394dc9ab47249cce4e3276ecc3cc0f7](https://secure-hwcdn.libsyn.com/p/4/a/3/4a367760e1944cc4/BiPiSci17-03-27.mp3?c_id=14652356&expiration=1496236624&hwt=3394dc9ab47249cce4e3276ecc3cc0f7)

*October 8<sup>th</sup>, 2018*

Interviewed by Natalie Angier, The New York Times, and quoted in “The Earth’s Shell Has Cracked, and We’re Drifting on the Pieces” <https://www.nytimes.com/2018/12/18/science/plate-tectonics-continents-earth.html> (concerning the Royal Society discussion meeting and issue of the Phil. Trans. R. Soc. A on “Earth dynamics and the development of plate tectonics”)

*June 5<sup>th</sup>, 2019*

Interviewed by Maya Wei-Haas, National Geographic, about the article by Sobolev and Brown on “Surface erosion events controlled the evolution of plate tectonics on Earth” (Nature) and quoted in “What jumpstarted Earth’s plate tectonics? New clues point to ancient glaciers” <https://www.nationalgeographic.com/science/2019/06/what-jumpstarted-earth-plate-tectonics-ancient-glaciers/>

*January 29<sup>th</sup>, 2020*

Interviewed by Ramin Skibba, Freelance Science Journalist, for Inside Science, about the article by Gardiner et al. on “North Atlantic Craton architecture revealed by kimberlite-hosted crustal zircons” (Earth and Planetary Science Letters) and quoted in “Geologists dig into the origin of Plate Tectonics”

*April 20<sup>th</sup>, 2020*

Provided comments to Carolyn Gramling, Science News, about the article by Brenner et al. on “Paleomagnetic evidence for modern-like plate motion velocities at 3.2 Ga” (Science) and quoted in “Plate tectonics may have started 400 million years earlier than we thought”

*July 23<sup>rd</sup>, 2020*

Provided comments to Melanie Chan, Temblor, about the article by Tulley, C.J. et al. on “Hydrous ocean crust hosts megathrust creep at low shear stresses” (Science Advances) and quoted in “Hydrated oceanic crust supports benign plate movement at subduction zones”

*May 19<sup>th</sup>, 2021*

Interviewed by Alison Snyder, author of Science, Axios, about articles by Ackerson et al. on “Emergence of peraluminous crustal magmas and implications for the early Earth” (Geochemical Perspectives Letters) and Bauer et al. on “Hafnium isotopes in zircons document the gradual onset of mobile-lid tectonics” (Geochemical Perspectives Letters) and quoted in “The hunt for the start of Earth’s plate tectonics”

*November 5<sup>th</sup>, 2021*



Interviewed by Charles Choi, a science reporter in New York writing for science news service Inside Science, about the article by Chowdhury et al. "Magmatic thickening of crust in non-plate tectonic settings initiated the subaerial rise of Earth's first continents 3.3 to 3.2 billion years ago" (Proceedings of the National Academy of Sciences) and quoted in "Earth's First Continents May Have Appeared Earlier Than Previously Thought"

*May 3rd, 2024*

Interview by Carolyn Y. Johnson, Science Reporter, Washington Post, about the article by Yuan et al. on "A giant impact origin for the first subduction on Earth" (Geophysical Research Letters) and quoted in the article "Mysterious blobs inside Earth triggered plate tectonics, study suggests" published in the Washington Post on May 7th, 2024.

*May 7th, 2024*

Interviewed by Michael Marshall, freelance science journalist based in the UK, about the emergence of plate tectonics on Earth for a Feature article in Nature; quoted 6 times in "Geology's biggest mystery: When did plate tectonics start?" (Nature, 632, 490-492, 15 August 2024).

### **3. TEACHING, MENTORING AND ADVISING**

#### **3.1. Classes etc.**

##### **Oxford Brookes University**

Introductory Geology for Civil Engineers  
Physical Geology (first-year course, 3-year honors degree)  
Structural Geology (second-year course, 3-year honors degree)  
Metamorphic Petrology (second-year course, 3-year honors degree)  
Petrogenesis (third-year course, 3-year honors degree)  
Tectonics (third-year course, 3-year honors degree)  
Map Work (all years)  
Field Work (all years)  
Research direction at PhD Level

##### **Kingston University**

Metamorphic Petrology (first-year course, three-year honors degree)  
Metamorphic Petrology (second-year course, three-year honors degree)  
Crustal Petrology (third-year honors option, three-year honors degree)  
Field Work (first year)  
Research direction at PhD Level

##### **University of Maryland**

###### ***Undergraduate***

Petrology (team taught with R.J. Walker) 1991-1998, 2016-2017  
Tectonics 1996  
Recent Advances in Geology/Recent Advances: Geology (Hons capstone) 1997, 2002, 2004-2005, 2008-2017, 2020-2024

###### ***Graduate***

Crustal Petrology 1991, 1994, 1996, 2007  
Igneous and Metamorphic Petrology 1993, 1995, 1997, 2003, 2006  
The Precambrian: a geological record of secular change 2014-2015  
Seminar in Geology 1998, 2004  
Research adviser for Master's and Doctoral Research

***Fall 2017 to Spring 2019 Sabbatical Leave***

***50% FTE since Summer 2019***

### 3.2. Undergraduate Senior Thesis Advisor

- 2006 Andrew Shansby  
Title: Comparison of the Petrology of Samples from Two Amphibolite Facies Localities from the Andrelândia Group, Brazil (Joint with Dr. P.M. Piccoli).
- 2001 Colin Steely  
Title: The implications of porphyroblast fabric obliquity on the timing of deformation and metamorphism at Coos Canyon, Maine (Recipient of UM Honors Research Grant, \$500)
- 1994 Damian Hodgkinson  
Title: Nd isotope evidence for origin of the Caldera-Pajonales Plutonic Complex, North Chile. (Joint with Dr. E.J. Krogstad)
- 1991 Bradley Blase  
Title: The Strafford Dome: A geophysical analysis using gravity modeling.
- 1972-1990 Several each year at Oxford Brooks University and Kingston University

### 3.3. Undergraduate Interns

2005 Andrew Shansby; 2004 Andrew Masterson; 2001 Tracey Centorbi, Brendan Puls, Colin Steely (NSF REU funding)

### 3.4. Graduate Students Supervised

#### In the United Kingdom

##### *As Principal Supervisor (Advisor)*

Gardeweg P., M.C.  
Title: Geology of the Tumisa Volcanic Complex, N. Chile. Awarded PhD in 1991 (Kingston University).  
[Geologist, Servicio Nacional de Geología y Minería de Chile, Chile]

Jones, K.A.  
Title: The metamorphic petrology of the Southern Brittany Migmatite Belt, France.  
Awarded PhD in 1988 (Kingston University).  
[Lecturer, Oxford Brookes University, UK]

Bland, A.M.  
Title: The geology of the granites of western Jersey, with particular reference to the south-west granite complex.  
Awarded PhD in 1985 (Oxford Brookes University).  
[unknown]

Perkins, W.T.  
Title: The geochemistry and petrogenesis of the Qôrqt granite complex, with particular reference to the area north of Qôrqt, southern West Greenland. Awarded PhD in 1984 (Oxford Brookes University).  
[Reader, University of Wales, Aberystwyth, UK]

##### *As Second Supervisor (Advisor)*

Pembroke, J.  
Title: Recognition and significance of magma-mixing in granites. Awarded PhD in 1997 (Oxford Brookes University).  
[unknown]

Pearce, T.J.  
Title: Geology, sedimentology, geochemistry and provenance of Late Quaternary turbidites: Madeira Abyssal Plain.  
Awarded PhD in 1991 (Kingston University).  
[Sedimentologist, Kingston Geological Services, UK]

Gibson, S.A.

Title: Geochemistry and petrology of alkaline basaltic sills from the Tertiary Brito-Arctic Province in NW Scotland.  
Awarded PhD in 1989 (Kingston University).  
[Professor, University of Cambridge, UK]

D'Lemos, R.S.  
Title: Relationships between the Cobo Granite and the Bordeaux Diorite Complex, Guernsey.  
Awarded PhD in 1988 (Oxford Brookes University).  
[Lecturer, Oxford Brookes University, UK]

## **In the USA**

### ***As Principal Advisor***

Yakymchuk, C.  
Title: Anatexis and crustal differentiation: Insights from the Fosdick migmatite–granite complex, West Antarctica.  
Awarded Ph.D. 2014  
[Assistant Professor, University of Waterloo, Canada]

Brown, C.  
Title: Petrogenesis of peraluminous granites from the Fosdick Mountains, Marie Byrd Land, West Antarctica.  
Awarded M.S. 2013.  
[PhD, Stony Brook University, New York]

Chen, Y.  
Title: The  $P$ – $T$ – $t$  history of a Barrovian sequence in Dutchess County, New York, and the adjacent part of Connecticut.  
Awarded M.S. 2009.  
[PhD, Peking University, China]

Reno, B.  
Title: Timing of orogenesis in the Southern Brasília Belt. Awarded Ph.D. 2009.  
[Senior Geologist, Northern Territory Geological Survey, Darwin, Australia]

Tian, J.  
Title: A geological and geochemical study of the Mooselookmeguntic composite pluton, west-central Maine and east-central New Hampshire. Awarded M.S. 2000.  
[Hughes Network Systems]

Solar, G.S.  
Title: Structural and petrologic investigations in the Central Maine Belt, west-central Maine, with special reference to the migmatites. Awarded PhD 1999.  
[Professor, SUNY College, Buffalo]

Pressley, R.A.  
Title: Petrogenesis of the Phillips pluton, west-central Maine. Awarded M.S. 1997.  
[Geologist, Environmental Consultancy, North Carolina]

Burgess, J.L.  
Title: Metamorphic studies in the Port aux Basques Area, SW Newfoundland, Canada. Awarded M.S. 1994.  
[Program Director, Sr. Lecturer, Johns Hopkins University]

### ***As Member M.S./PhD Committee***

Cunningham, E.E.  
Title: Constraining Lithospheric Structure across the Continental United States through Receiver Function and Apparent Incidence Angle Analysis  
Current (expected Spring 2019)

Johnston, S.  
Title: Tectonics of icy satellites driven by melting and crystallization of water bodies inside their ice shell.  
Awarded Ph.D. 2015.  
[University of Maryland, Baltimore County/Goddard Space Flight Center]

Mengason, M.

Title: Cu-Fe sulfide saturation and its effect on metal budgets of intermediate magmas. Awarded Ph.D. 2011.

[Unknown]

Baker, M.A.

Title: Sulfur isotope studies of the Duitschland Formation, South Africa. Awarded M.S. 2006.

[American Geological Institute]

Dai, Tianhuan

Kinematics and deformation history of the Cross Lake Greenstone Belts, Manitoba, Canada. Awarded M.S. 2005

[Unknown]

Tsuru, Asuka

The Os isotopic composition of an ancient upper mantle; a study of the Jormua Ophiolite Complex, northeastern Finland. Awarded M.S. 1997.

[Ph.D. program, University of Alberta, Canada]

Smolier, M.

Re-Os isotope study of magmatic iron meteorites. Awarded Ph.D. 1997.

[Principal Scientist, DynCorp]

Ratajeski, K.

Title: Estimation of initial and saturation water concentrations of four granitoids in the Central Great Basin, Nevada and relevance to associated ore mineralization. Awarded M.S. 1995.

[Senior Lecturer, University of Kentucky]

Tomascak, P.B.

Title: Isotopic and geochemical constraints on the origin of Topsham Series granitic pegmatites, southwestern Maine. Awarded PhD. 1995.

[Professor, SUNY Oswego]

Williams, T.J.

Title: An experimental investigation of HCl and ore metals in magma-volatile systems. Awarded PhD 1995.

[Clinical Associate Professor, University of Idaho]

Petrina, C.J.

Title: Influence of preexisting structure on the development of accommodation zones: San Luis and upper Arkansas Valleys, Colorado. Awarded M.S. 1992.

[Unknown]

### **3.5. Post-Doctoral Research Associates**

Saito, Satoshi – 2007-2008. Project: “Isotope Geochemistry of Migmatites and Granites in the Fosdick Mountains, Antarctica” (Funding Source: University of Maryland)

[Post-doctoral Researcher, Institute for Research on Earth Evolution (IFREE), Japan Agency for Marine-Earth Science and Technology (JAMSTEC); Assistant Professor, Department of Earth Sciences, Ehime University, Japan]

Korhonen, Fawna – 2006-2009. Project: "Petrogenesis of Migmatites in the Fosdick Mountains, Antarctica" (Funding Sources: NSF Graduate Fellow (Polar Programs), University of Maryland)

[Postdoctoral Researcher, Curtin University of Technology, Australia; Geologist, Geological Survey of Western Australia]

Baldwin, Julia – 2003-2005. Project: “UHT Granulites in Brazil” (Funding Sources: NSF, University of Maryland)

[Assistant/Associate Professor, University of Montana]

Johnson, Timothy – 2002-2003. Project: “Petrogenetic Studies of Migmatites and Granulites” (Funding Source: NSF, University of Maryland)

[Research Scientist, University of Mainz, Germany; Senior Lecturer, Curtin University, Australia]

Moraes, Renato – 2000-2002. Project: “To Establish *P-T* Paths for the Goiás UHT Granulites and Determine the Age of Metamorphism” (Funding Source: CNPq, Brazil, University of Maryland)

[Professor, USP, Brazil]

Marchildon, Nathalie – 1998-2002. Project: “Developing Models of Melt Transfer in Migmatites - A Pilot Study.” and “Characterizing Melt Flow in the Anatectic Zone” (Funding Source: NSF, University of Maryland)  
[Promoted from Research Associate to Assistant Research Scientist wef July 1, 2001; since 2002, professional translator (French/English), Quebec]

### 3.6. Visiting Researchers

Tian, Zuolin – December 2017–December 2019. Project: “Metamorphic PTt studies in the east-central Himalaya, South Tibet: phase equilibria and tectonic implications” [Funding source: China Scholarship Council]

Huang, Guangyu – January 2017–January 2018. Project: “High-pressure granulites of the northern Trans North China Orogen, North China Craton.” [Funding source: University of the Chinese Academy of Sciences]

Wang, Songjie – January 2016–January 2017. Project: “Detailed field-based petrological, geochemical and geochronological studies to decipher the generation, migration and crystallization of melts/fluids in deeply subducted continental crust of the Sulu belt, China.” [Funding source: China Scholarship Council]

Xia, Bin – January 2016–April 2017. Project: “Phase equilibria modeling of HP/UHP–LT and MP–HT metamorphic rocks; the  $P$ – $T$ – $t$  evolution of orogenic belts; and, the formation of paired metamorphic belts. [Funding source: China Scholarship Council]

Guo, LongLong – December 2013–December 2014. Project: “Petrological and geochemical studies in the Ordos Block and the Khondalite Belt, North China craton, and the Tianshan, northwest China” [Funding source: Northwest University, Xi'An, China]

Korhonen, Fawna – 2009–2015. Project: "Petrogenesis of UHT granulites from the Eastern Ghats Belt, India [Funding source: Curtin University of Technology, Australia/ARC, Australia; Geological Survey of Western Australia]

Podlesskii, Konstantin – 2008. Project: "Research: Sapphirine-Bearing Assemblages as Indicators of Metamorphic Conditions" [Fulbright Scholar]

Baldwin, Julia A. – 2005–2015. Project: “Petrogenesis of HP and UHT granulites from the Brasilia Fold Belt in Minas Gerais and Goiás, Brazil” [Funding Source: University of Maryland; NSF; CNPq, Brazil]

Johnson, Timothy – 2002–present. Project: “Petrogenetic studies of migmatites and granulites” [Funding Source: University of Maryland; NSF; Deutsche Forschungsgemeinschaft (DFG); Curtin University]

Moraes, Renato – 2002–2008. Project: “Petrogenesis of HP and UHT granulites from the Brasilia Fold Belt in Minas Gerais and Goiás, Brazil” [Funding Source: University of Maryland; NSF; CNPq, Brazil]

### 3.7. Faculty Mentor

Penniston-Dorland, Sarah (University of Maryland): 2015–2020.

Caddick, Mark (Virginia Tech): 2012–2017.

Montesi, Laurent (University of Maryland): 2011–2018.

## 4. SERVICE

### Professional

#### Offices and Committee Memberships Held in Professional Organizations

2018 - 2019	Past-President of the Mineralogical Society of America for 2019
2018 - 2019	Chair, Meetings Committee, Mineralogical Society of America
2018	Theme Chair, Earth's Lithosphere Formation, Evolution, Recycling, and Subduction, Goldschmidt2018
2017 - 2018	President of the Mineralogical Society of America for 2018
2016 - 2019	Member of the Council, Mineralogical Society of America
2016 - 2019	Member of the Executive Committee, Mineralogical Society of America
2016 - 2019	Member of the Management Committee, Mineralogical Society of America
2016 - 2019	Member of the Long-term Planning Committee, Mineralogical Society of America
2016 - 2017	Vice President of the Mineralogical Society of America for 2017

2016 - 2017	Chair of the Committee on Committees, Mineralogical Society of America
2016 - 2017	Publications Director, Mineralogical Society of America
2015 - 2016	Theme Champion "Metamorphic Processes", 35 <sup>th</sup> International Geological Congress
2013 - 2019	Member, Financial Advisory and Audit Committee, Mineralogical Society of America
2013 - 2017	Member, Hess Medal Committee, American Geophysical Union.
2011	2 <sup>nd</sup> Vice-President, The Geological Society of Washington
2009 - 2016	Member, Advisory Committee of the International Association for Gondwana Research.
2005 - 2011	Member, Books Editorial Committee, Geological Society of London, UK.
2006 - 2007	Co-Chair, Program Committee, 2007 Joint Assembly, Acapulco, Mexico, American Geophysical Union.
2005 - 2006	Chair, Program Committee, 2006 Joint Assembly, Baltimore, Maryland, American Geophysical Union
2004 - 2005	Ex officio, Program Committee, 2005 Joint Assembly, New Orleans, LA, American Geophysical Union.
2004 - 2007	Member, Meetings Committee, American Geophysical Union.
2004 - 2006	Member/Chair (2005-2006), Nominating Committee for Fellows, Mineralogical Society of America.
2002 - 2006	Member, Integrated Solid Earth Sciences (ISES) Coordinating Group.
2002 - 2004	Spring Meeting Chair, Volcanology, Geochemistry and Petrology Section, American Geophysical Union.
2001 - 2006	<i>Journal of the Virtual Explorer</i> Editorial Board
2000 - 2002	Executive Committee, Board of Heads and Chairs of Earth and Space Science Departments (AGU)
1998 - 2001	Member/Chair (2000-2002), Nominating Committee for Officers, Mineralogical Society of America
1998 - 2004	Advisory Editor, <i>Journal of the Geological Society</i> , London
1998 - 2000	Member, <i>Geology</i> Editorial Board, Geological Society of America, USA
1995 - 1998	The Geological Society, Representative, Member Society Council of the American Geological Institute
1995 - 1998	Member, Committee on Management, Mineralogical Society of America, USA
1993 - 1996	Member, Steering Committee, Earth Science Journal Editors Round Table
1992 - 1993	Leader, IAVCEI Task Group on Granites
1990 - 1994	Member, AGU 75th Anniversary Planning Committee, USA
1991 - 1992	Council Member, Geological Society of Washington, USA
1989 - 1990	Member, PCFC Science Programme Advisory Group, UK
1988 - 1989	Member, NAB Earth Sciences Review Committee, UK
1988 - 1989	Member, UGC Earth Sciences Review National Committee, UK
1987 - 1989	External Examiner for Course S336 Crustal and Mantle Processes, The Open University, UK
1985 - 1988	External Examiner for Geology, BSc in Science (CNAAs), Luton College of Higher Education, UK
1985 - 1990	Co-leader, IGCP Project 235 Metamorphism and Geodynamics
1988 - 1990	Chairman, CNAAs Subject Review Committee for Geology, UK
1987 - 1990	Member, CNAAs Committee for Physical Sciences, UK
1984 - 1987	Member, CNAAs Combined Studies (Science) Board, UK
1985 - 1988	Council Member, Mineralogical Society of the United Kingdom and Ireland
1982 - 2019	Founding Editor/Editor, <i>Journal of Metamorphic Geology</i>
1981 - 1986	Subject Editor (Metamorphic Geology), <i>Journal of the Geological Society</i> , London, UK
1985 - 1988	Chairman, Metamorphic Studies Group, UK
1980 - 1984	Founding Secretary, Metamorphic Studies Group, UK
1980 - 1983	Council Member, Geological Society, London, UK
1979 - 1989	Member, committees of the Geological Society, London, UK (in particular, Publications Committee 1980-1988), Institution of Geologists (in particular, Joint Education Committee 1979-1988) and Mineralogical Society (in particular, Meetings Committee 1985-1988)

CNAAs = Council for National Academic Awards  
 IGCP = International Geological Correlation Programme  
 UGC = University Grants Committee  
 NAB = The National Advisory Body  
 PCFC = The Polytechnics and Colleges Funding Council  
 AGU = American Geophysical Union

## Unpaid Reviewing Activities for Agencies

Agence nationale de la recherche (France), Australian Research Council, Chilean Research Council (CONICYT), Czech Science Foundation, ETH-Zurich, Switzerland, Irish Research Council for Science, Engineering and Technology, K.U. Leuven, Belgium, National Science and Engineering Research Council (Canada), Natural Environment Research Council (U.K.), South African Research Council, The Research Grants Council of Hong Kong, U.S. Department of Energy, U.S. National Science Foundation: Continental Dynamics, Geophysics, Instrumentation and Facilities, Ocean Sciences, Petrology and Geochemistry, Polar Programs, Tectonics

## **External Examiner for Ph.D. Degree/Habilitation**

Multiple universities worldwide throughout my career.

## **Oxford Brookes University**

**1972–1984**

Senate, various committees of Senate; Faculty Board, various committees of Faculty Board; Departmental Board, various committees of Department Board; course committees.

Head of Department (Acting) 1982–1984

## **Kingston University**

**1984–1990**

Senate, various Senate committees; Faculty Board, various Faculty Board committees; Departmental Committees.

Associate Dean for Academic Affairs 1986–1990 (concurrent appointment with Head of Department)

Head of Department 1984–1990

## **University of Maryland**

### **Departmental**

Chair, Search Committee, Assistant Professor in Geophysics, 2013-2014

Member, Search Committee, Professor in Geophysics, 2010-2011

Chair, Search Committee, Professor in Geophysics, 2006-2007

Chair, Search Committee, Professor in Geophysics, 2005-2006

Chair, Search Committee, Professor in Mineralogy, 2004-2005

Chair, Search Committee, Professor in Structural Geology and Tectonics, 2004-2005

Chair, Search Committee, Professor in Biogeosciences, 2000-2001

Chair, Search Committee, Professor in Geochemistry, 1999-2000

Chair, Search Committee, Professor in Structural Geology and Tectonics, 1998-1999

Chair, Search Committee, Professor in Geochemistry, 1995-1997

Chair of Department, 1990–2011 (reappointed 1995, 2000, 2005 and 2010)

### **College**

Member, College of CMNS APT Committee 2016-2017

Interim Director, Earth System Science Interdisciplinary Center 1998-2000

Member, College of CMPS Committee on Teaching TAs to Teach 1997-1998

### **University**

Member, Academic Planning Advisory Committee, 2015-2017

Member, Provost's Working Group to Evaluate the Proposed Merger of the Colleges of Chemical and Life Sciences and of Computer, Mathematical and Physical Sciences, 2010

Member, Committee to Advise the Provost on the Desirability and Feasibility of Forming an Environment-Centered College-level Academic Unit at the University of Maryland, College Park, 2009

Member, Senate Executive Committee, 2003-2004, 2004-2005, 2005-2006 (re-elected annually)

Ex officio Member (as Chair, Faculty Affairs Committee), Graduate Council, 2004-2005

Chair, Faculty Affairs Committee, 2004-2005

Member, College Park Senate, 2003-2006

Member, University Medal Selection Committee, 2002-2003

Member, Middle States Periodic Review - Committee on Interdisciplinary Programs, 2001-2002

Member, Academic Planning Advisory Committee, 2002-2005

Chair, Campus Research Council, 2000-2003

Chair, Senate Research Committee, 1999-2000

Member, Senate Executive Committee, 1999-2000

Member, Campus Assessment Working Group, 1998-1999

Chair, Senate Academic Procedures and Standards Committee, 1998-1999

Member, College Park Senate, 1997-2000

Chair, Committee to Examine the Realignment, Coordination or Consolidation of Programs Concerning Environmental Science and Policy, 1991-1992 (Blue Ribbon Committee established by the Provost)

Member, Senate General Committee on Educational Affairs, 1990-1991