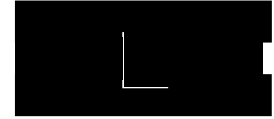


Curriculum Vitae

Kyle R. Mayborn, Ph.D.

Interim Associate Dean, College of Arts and Sciences
Professor of Geology
Western Illinois University
1 University Circle
Macomb, IL 61455



Education

- 2000 Ph.D. University of California - Davis
Dissertation Topic: Petrogenesis of the Paleoproterozoic Kangâmiut dike swarm, West Greenland.
- 1993 M.S. Colorado State University
Thesis Topic: Geometry and deformation of three fault-propagation folds in the Front Range of the Canadian Thrust Belt.
- 1991 B.S. California State University, Bakersfield

Professional Experience

- 2015-Present Interim Associate Dean, College of Arts and Sciences, Western Illinois University
- 2010-Present Professor, Western Illinois University
- 2005-2010 Associate Professor, Western Illinois University
- 2000-2005 Assistant Professor, Western Illinois University
- 1993-1999 Research Assistant, University of California - Davis
- 1993-1999 Teaching Assistant, University of California - Davis
- 1993 Summer Geologist, Meridian Oil, Denver, CO
- 1992-1993 Research Assistant, Colorado State University.
- 1991-1992 Teaching Assistant, Colorado State University
- 1991 Summer Geologist, United States Geological Survey, Woods Hole, MA
- 1990-1991 Project Employee, ARCO Oil and Gas, Bakersfield, CA
- 1990 Digitizer, Occidental Oil, Bakersfield, CA

Administrative Experience

Interim Associate Dean for Curriculum and Student Affairs, College of Arts and Sciences

- Assist department chairs and faculty with curriculum development and approval process.
Ex-officio member on College Curriculum Committee, Faculty Council, and Council on General Education.
- Assist department chairs and Assessment Committee chairs with the development, implementation and reporting on assessment of programs and general education courses.

- College liaison with the Office of Admissions. Give recruitment presentations for admissions counselors, community college advisors, and high school guidance counselors.
- Oversee college advising, including being supervisor for the Science Advisor.
- Represent Dean's Office at Summer Orientation and Registration (SOAR) and Discover Western events. Includes giving introductory presentation at SOAR and coordinating departmental visits with the Office of Admissions for Discover Western.
- Assist department graduate chairs, including reviewing applications for temporary and full membership in the graduate faculty, graduate curriculum approvals, leading the College Graduate Committee meetings and attending Graduate Council meetings.
- Coordinate the College Undergraduate Research Grants program.
- Assist teacher education faculty with program assessment and curriculum. Represent the college at University Committee for Educator Preparation (UCEP) meetings.
- Liaison for students, including addressing student concerns regarding courses, faculty and advisors. Supervising the College Student Council.

Service Activities (as Faculty)

CAS College Personnel Committee for five years, three years as chair. Includes four times on Negative Recommendation sub-committees.

Fall 2012 – Spring 2015, Fall 2007 – Spring 2009

CAS Faculty Council for six and a half years, two years as chair, one year as secretary, one year as vice chair.

Spring 2015, Fall 2009 – Spring 2012, Fall 2003 – Spring 2006

CAS Curriculum Committee for five and a half years, one year as chair.

Spring 2015, Fall 2009 – Spring 2011, Fall 2002 – Spring 2005

CAS Grade Appeal Committee, member on four sub-committees and chair for one.

Fall 2005 – Spring 2014

CAS Undergraduate Research Committee for ten years.

Fall 2005 – Spring 2015

WIU Undergraduate Research Day Committee for three years.

Spring 2003 – Spring 2006

WIU Council on Student Welfare for three years.

Fall 2002 – Spring 2005

WIU New Faculty Mentor Program for two years.

Fall 2006 – Spring 2006, Fall 2003 – Spring 2004

WIU Summer Science Institute: taught one day of geology.

Summer 2011

Geology Department Personnel Committee for ten years, five years as chair.

Fall 2005 to Spring 2015

Geology Academic Advisor for two years (when faculty advised students)
Fall 2002 - Spring 2004

Geology Department Chair Review Committee for three semesters, one as chair.
Fall 2006, Fall 2010, Fall 2014

Geology Faculty Search Committee for two years, one as chair.
Fall 2010 – Spring 2011, Fall 2006 – Spring 2007

Geology Club Advisor for nine years.
Fall 2011 – Fall 2012, Spring 2001 – Spring 2008

Departmental Library Representative for thirteen years.
Fall 2002 – Spring 2015

Community Service. Science Olympiad event captain (yearly) and twenty-two community presentations over the past sixteen years.

Courses Taught

| | |
|--|-------------------------------|
| Introduction to the Earth (GEOL 110) | Structural Geology (GEOL 320) |
| Igneous and Metamorphic Petrology (GEOL 301) | Mineralogy (GEOL 200) |
| Summer Field Geology (GEOL 362) | Geologic Hazards (GEOL 355) |
| Geology of Illinois State Parks (GEOL 475) | |

Professional Papers (peer-reviewed)

- Mayborn, K.R.** and Leshner, C.E., 2011, MagPath: An Excel-based Visual Basic program for forward modeling of mafic magma crystallization: *Computers & Geosciences*, v. 37, p. 1900-1903.
- Mayborn, K.R.**, Leshner, C.E. and Connelly, J.N., 2008, Geochemical constraints on the late-stage evolution of basaltic magma as revealed by composite dikes within the Kangâmiut dike swarm, West Greenland: *Lithos*, v. 104, p. 428-438.
- Mayborn, K.R.** and Leshner, C.E., 2006, Origin and evolution of the Kangâmiut dike swarm, West Greenland: *Geological Survey of Denmark and Greenland Bulletin*, v. 11, p. 61-86.
- Mayborn, K.R.** and Leshner, C.E., 2004, Paleoproterozoic mafic dike swarms of northeast Laurentia: products of plumes or ambient mantle?: *Earth and Planetary Science Letters*, v. 225, p. 305-317.
- Mayborn, K.R.** and Leshner, C.E., 2000, Teaching the scientific method using contemporary research topics as the basis for student defined projects: *Journal of Geoscience Education*, v. 48, p. 145-149.
- Erslev, E.A. and **Mayborn, K.R.**, 1997, Multiple geometries and modes of fault-propagation folding in the Canadian thrust belt: *Journal of Structural Geology*, v. 19, p. 321-335.

Abstracts

- Smith, L.R. and **Mayborn, K.R.**, 2016, Investigation of a Marginal Reversal at the Base of the Mineral Lake Intrusion, Northern Wisconsin: *Geological Society of America Abstracts with Programs*, <https://gsa.confex.com/gsa/2016NC/webprogram/Paper275256.html>
- Smith, L.R. and **Mayborn, K.R.**, 2015, Mineral Chemistry Constraints on the Origin of the Mineral Lake Intrusion, Northern Wisconsin: *Geological Society of America Abstracts with Programs*, v. 47, n. 6, p. 36.
- Mayborn, K.R.**, Candioto, J.A., Garvis, T.M., Gustafson, R.W., Hicks, J.J, 2013, Mineralogical Constraints on the Magmatic Evolution of the Mineral Lake Intrusion, Northern Wisconsin: *Geological Society of America Abstracts with Programs*, v. 45, n. 7, p. 761.
- Hubb, R. and **Mayborn, K.R.**, 2009, Fractional Crystallization Modeling of the Syenitic and Basaltic Dike Suites of the Gardar Province, South Greenland: *Geological Society of America Abstracts with Programs*, v. 41 no. 4.
- Mayborn, K.R.**, 2007, Geochemical evidence of magma recharge and mixing in late-stage dikes associated with the Nain anorthosites, Labrador, Canada: *Geological Society of America Abstracts with Programs*, v. 39, no. 6.
- Kubler, D.L., Angster, S.J. and **Mayborn, K.R.**, 2005, Petrologic and geochemical investigation of the Flat Tops Volcanic Field near Yampa, Colorado: *Geological Society of America Abstracts with Programs*, v. 37, no. 7.
- Mayborn, K.R.**, Brehm, A.M., and Myers, J.S., 2004, Emplacement and fractionation of late-stage dikes associated with the Nain anorthosites, Labrador, Canada: *Geological Society of America Abstracts with Programs*, v. 36, no. 7.
- Mayborn, K.R.**, and Leshner, C.E., 2004, The origin and evolution of the Kangâmiut Dike Swarm, West Greenland, *Geological Survey of Denmark and Greenland Report #2004/17*, p. 44.
- Mayborn, K.R.**, Leshner C.E., and Connelly, J.N., 2001, Trace element and isotopic constraints on crustal contamination and the origin of composite dikes within the Kangâmiut dike swarm, West Greenland, *Geological Society of America Abstracts with Programs*, v. 33, no. 7., p. 375.
- Mayborn, K.R.**, and Leshner, C.E., 2000, Trace element constraints on the tectonic setting during emplacement of the 2.04 Ga Kangâmiut dike swarm, West Greenland: Implications for the Paleoproterozoic tectonic history of Northeast Laurentia: *Geological Society of America Abstracts with Programs*, v. 32, no. 7., p. 376.
- Mayborn, K.R.**, and Leshner, C.E., 1999, Quantitative forward modeling of silicate liquid-mineral evolution and implications for the fractionation history of the Kangâmiut dikes, West Greenland: *Geological Society of America Abstracts with Programs*, v. 31, no. 7., p. 414.
- Mayborn, K.R.**, Willigers, B.J., Mengel, F.C., and Leshner, C.E., 1998, Petrogenesis of the Kangâmiut dikes and implications for the Paleoproterozoic Nagssugtoqidian orogen, West Greenland: *Geological Society of America Abstracts with Programs*, v. 30, no. 7., p. 109-110.
- Mayborn, K.R.**, Leshner, C.E., and Mengel F.C., 1998, Experimental melting studies of the Kangâmiut dikes: *Program and Abstracts, 3rd DLC Workshop on Nagssugtoqidian Geology*, Danish Lithosphere Center, Copenhagen.
- Mayborn, K.R.**, 1996, The magmatic evolution of the Kangâmiut dikes; preliminary results and proposed new work: in *Proceedings of the 2nd DLC Workshop on Nagssugtoqidian Geology*, p. 98-99.

Rosing, M.T., Thomsen, H.S., Rose, N.M., Hoch, E., **Mayborn, K.R.**, 1995, The southern Nagssugtoqidian foreland: in Proceedings of the *1st DLC Workshop on Nagssugtoqidian Geology*, p. 10-12.

Mayborn, K.R., Erslev, E.A. and Schulz, S.E., 1993, Diversity of fault-propagation fold geometries in the Front Range of the Canadian Thrust Belt: *Geological Society of America Abstracts with Programs*, v. 25, No. 5, p. 91.

Professional Presentations

November 2013, “Mineralogical Constraints on the Magmatic Evolution of the Mineral Lake Intrusion, Northern Wisconsin” Geological Society of America Annual Meeting, Denver, Colorado.

July 2013, “Origin and Evolution of the Kangâmiut dike swarm, west Greenland.” Department of Geoscience, Aarhus University, Denmark.

March 2010, “Geochemical constraints on the late-stage evolution of basaltic magma as revealed by composite dikes within the Kangâmiut dike swarm, West Greenland.” Department of Geology and Environmental Geosciences, Northern Illinois University.

November 2007, “Geochemical evidence of magma recharge and mixing in late-stage dikes associated with the Nain anorthosites, Labrador, Canada.” Geological Society of America Annual Meeting, Denver, Colorado.

November 2004, “Emplacement and Fractionation of Late-Stage Dikes Associated with the Nain Anorthosites, Labrador, Canada” Geological Society of America Annual Meeting, Denver, Colorado.

January 2004, “The origin and evolution of the Kangâmiut Dike Swarm, West Greenland” The Geologic Survey of Greenland and Denmark meeting on the geology of West Greenland. Copenhagen, Denmark.

April 2002, “Tectonic and Petrologic Significance of the Paleoproterozoic Kangâmiut Dike Swarm, West Greenland.” Department of Geoscience, The University of Iowa.

October 2001, “Trace element and isotopic constraints on crustal contamination and the origin of composite dikes within the Kangâmiut dike swarm, west Greenland”, Geological Society of America Annual Meeting, Boston, Massachusetts.

October 2000, “Trace element constraints on the tectonic setting during emplacement of the 2.04 Ga Kangâmiut dike swarm, west Greenland: Implications for the Paleoproterozoic tectonic history of Northeast Laurentia” Geological Society of America Annual Meeting, Reno, Nevada.

October 1999, “Quantitative forward modeling of silicate liquid-mineral evolution and implications for the fractionation history of the Kangâmiut dikes, west Greenland” Geological Society of America Annual Meeting, Denver, Colorado.

October 1998, “Petrogenesis of the Kangâmiut dikes and implications for the Paleoproterozoic Nagssugtoqidian orogen, west Greenland” Geological Society of America Annual Meeting, Toronto, Canada.

March 1998, “The magmatic evolution of the Kangâmiut dikes; preliminary results and proposed new work” 2nd DLC Workshop on Nagssugtoqidian Geology, Copenhagen, Denmark.

May 1993, Diversity of fault-propagation fold geometries in the Front Range of the Canadian Thrust Belt.” The Cordillera Sectional Meeting of the Geological Society of America, Reno Nevada.

Peer Reviews Conducted

- April 2014, "Petrology, geochemistry and emplacement model of the giant 1.37 Ga Arcuate Lake Victoria Dyke Swarm on the margin of a large igneous province in eastern Africa." Reviewed for *African Journal of Earth Science*.
- January 2013, "Empirical relationships for on-site earthquake early warning with multiple regression analysis: including two user-friendly Excel toolkits." Reviewed for *Computers & Geosciences*.
- March 2012, "GPVplot: Simple and Efficient Graph Generation for Geochemical Data". Reviewed for *Computers & Geosciences*.
- December 2011, "RosenPoint: A Microsoft Excel-Based Program for the Rosenblueth Point Estimate Method and an Application in Slope Stability Analysis. Reviewed for *Computers & Geosciences*
- December 2010, "Mineral chemical variations within the Late Permian Baima layered gabbroic intrusion (SW, China): evidence for mineral redistribution during fractional crystallization". Reviewed for *American Mineralogist*.
- August 2008, "Neoproterozoic mafic dyke swam at the Tarim Block, NW China: age, geochemistry, petrogenesis and tectonic implications". Reviewed for *Journal of Asian Earth Sciences*.
- March 2008, "Anomalous internal zonation of small mafic dykes of the Åland-Åboland dyke swarm, SW Finland: indication of an unknown process of magma differentiation? Reviewed for *Geological Magazine*.
- November 2005, "Geochemical constraints on the tectonic environment of ~1.8 Ga mafic dyke swarms in the Eastern Block, the North China Craton". Reviewed for *Precambrian Geology*.
- September 2005, "The Geochemistry of Mafic Dikes in Coastal Areas of Guangdong Province, China". Reviewed for *Earth and Planetary Science Letters*.
- March, 2002, "Mantle Plumes and Their Record in Earth History". Reviewed for *Journal of Sedimentary Research*.

Awards, Fellowships, Grants

| | |
|---|-----------|
| Western Illinois University, University Research Grant | 2004 |
| Western Illinois University, Faculty Development Grant | 2002 |
| Western Illinois University, Faculty Development Grant | 2001 |
| Western Illinois University, University Research Grant | 2000 |
| U.C. Davis Humanities and Graduate Research Award | 1998 |
| U.C. Davis Humanities and Graduate Research Award | 1997 |
| Sigma-Xi, The Research Society Grant-in-Aid | 1994 |
| Durrell Fellowship, Department of Geology U.C. Davis | 1993-1998 |
| Chevron Research Grant | 1992 |
| Colorado Fellowship, Colorado State University | 1992 |
| Geological Society of America Grant-in Aid | 1992 |
| NAGT - USGS Summer Internship Award | 1991 |
| Martin Van Couvering Award, Pacific Section, AAPG | 1991 |
| C.E. Strange Scholarship, California State University Bakersfield | 1991 |

Professional Affiliations

Geological Society of America
American Geophysical Union

References

[Redacted reference text]

[Redacted reference text]

[Redacted reference text]