

## CURRICULUM VITAE

### SAMUEL B. MUKASA

Office of the Executive Vice President and Provost  
University of Minnesota

#### Professional Experience:

- 2018-pres. *Senior Executive – Global Initiatives*, Office of the Provost, Univ. Minnesota  
2016-2018 *Dean*, College of Science and Engineering, Univ. Minnesota  
2011-2016 *Dean*, College of Engineering and Physical Sciences, Univ. New Hampshire  
2007-2010 *Department Chair*, Department of Geological Sciences, Univ. Michigan  
1999-2010 *Professor* (tenured), Department of Geological Sciences, Univ. Michigan  
1992-1998 *Associate Professor* (tenured), Department of Geological Sciences, Univ. Michigan  
1989-1992 *Associate Professor* (untenured), Department of Geological Sciences, Univ. Michigan  
1985-1989 *Assistant Professor* (untenured), Department of Geology, University of Florida  
1984-1985 *Postdoctoral Research Fellow* Isotope Geochemistry Laboratory, Lamont-Doherty Earth Observatory, Columbia University, New York.

#### Description of Responsibilities:

##### University of Minnesota – brief description

###### (a) Senior Executive for Global Initiatives, Office of the Executive Vice President and Provost

- *Responsibilities and reporting structure:* Expansion of the University's global presence through partnerships with international universities, and the private sector – both domestically and internationally; creation of incubator space for innovations in medical devices, energy, and food security. I report to the Provost and Vice President for Research.
- *Accomplishments:* Joint medical devices incubator in Beijing with Tsinghua University and Boston Scientific China; student and faculty exchange programs with the Chinese University of Hong Kong (Shenzhen campus); partnership with the African Institute for Mathematical Sciences (AIMS) to recruit PhD students for units across the entire University; partnership with Boston Scientific to revitalize the Minnesota STEM Compass Advisory Board.

###### (b) Dean, College of Science and Engineering

- *Responsibilities and reporting structure:* Overall management of the college with 5,600 undergraduate students, 2,700 graduate students, 435 tenure-track faculty, 12 departments, 20 interdisciplinary research centers, 3 associate deans, 1 assistant dean, 15 center and program directors, and total budget of ~\$400 million. Reported to the Executive Vice President and Provost.
- *Accomplishments:* \$37 million raised in 2016-17; partnerships and student exchange programs with 4 Asian universities; expanded student experiential learning opportunities through internships and construction of a robotics lab; stabilized funding for our Institute of Mathematics and its Applications (IMA) by pivoting it toward a data science focus and partnering it with Cargill and Target; built partnerships with 13 Fortune 500 companies in the Twin Cities area focused on joint research and workforce development.

## University of New Hampshire – brief description

### (a) Dean, College of Engineering and Physical Sciences

- **Responsibilities and reporting structure:** Overall management of the college with 2,000 undergraduate students, 500 graduate students, 135 tenure-track faculty, 25 contract lecturers and adjuncts, 9 departments, 5 interdisciplinary research centers, 2 associate deans, and total budget of ~\$150 million. Reported to the Provost.
- **Accomplishments:** Created the 2014-2018 Strategic Plan; hired faculty clusters in advanced manufacturing, artificial intelligence, bioengineering, flexible electronics, sustainable infrastructure, and math education – with each cluster distributed across several departments; started new undergraduate degree programs in bioengineering, engineering physics, ocean engineering and cybersecurity; raised \$23 million; raised the funding to develop an advanced manufacturing center; raised the funding to build a new wing at the Jere A Chase Lab for faculty offices and ocean engineering teaching labs; grew summer Tech Camp from 22 students in 2010 to 155 students per year in 2016; created the Cohort Career Advising Program (CCAP) for the 24 untenured faculty in the College.

### Educational Background:

**Ph.D.**, Geochemistry, 1984, University of California, Santa Barbara, CA

**M.Sc.**, Geology, 1980, The Ohio State University, Columbus, OH

**B.Sc.**, Geology, 1977, University of New Hampshire, Durham, NH

### Other Educational Experience:

**Certificate**, Leadership in Higher Education, 2015, Institute for Management and Leadership in Education (MLE), Harvard Graduate School of Education, Cambridge, MA.

### Honors and Awards:

Distinguished Alumnus Award, University of California, Santa Barbara, May 2006

D.Sc. Honorary Degree (Commencement Speaker), Nkumba Univ, Entebbe, Uganda – April 2008

### Professional Organizations:

American Geophysical Union (**Council Member** 2015-2017)

American Association for the Advancement of Science (**Fellow**)

American Society for Engineering Education

Geochemical Society (**Vice-President** 2008 & 2009; **President** 2010 & 2011; **Past President** 2012 & 2013)

Geological Society of America (**Fellow**)

Global Engineering Deans Council

### Research Interests:

- Integrated use of trace elements and Pb, Nd, Sr, Hf and Os isotopes to model the evolution and dynamics of Earth's mantle as recorded by materials derived from alpine peridotite massifs, ultramafic xenoliths, arc lavas, and continental flood basalts.
- Uranium-series disequilibrium (U, Th, Pa & Ra) in arc and continental rift lavas, and in climate science studies.
- Chemical and physical dynamics of the magma chambers that form layered mafic intrusions.
- Applications of U-Pb (SIMS and TIMS) and  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology to providing constraints on the evolution of the continents, and continental and oceanic magmatic arcs.
- Kinematic evolution of orogenic belts and their bearing on palinspastic plate reconstructions and the tectonic histories of supercontinent amalgamations and breakups.

- Volatiles (H<sub>2</sub>O, CO<sub>2</sub>, F, Cl and S) in olivine-hosted mantle melt inclusions and their insight on mantle-melting processes.
- Climate change adaptation and mitigation strategies.

**Professional Service Activities:**

ADVANCE External Advisory Board Member for the University of Virginia (2013 – 2016)  
ADVANCE External Advisory Board Member for the Univ. of Massachusetts-Lowell (2016 – pres.)  
American Geophysical Union Council Member (2015 – 2017)  
American Geophysical Union Honors and Recognition Committee Member (2013 – 2014)  
American Geophysical Union Honors and Recognition Committee Chair (2015 – 2016)  
Nat. Academy of Sciences Committee on Emerging Research Questions in the Arctic (2013 – 2014)  
Research4Life Advisory Council member – a global organization aiming to achieve the UN's Millennium Development Goals (<http://www.research4life.org/>) (2013 – 2016)  
President's Advisory Board, Bridgewater State University, Bridgewater, MA (2011 – 2016)  
National Academy of Sciences Committee on the future of Scientific Ocean Drilling (2010 – 2011)  
Major Research Instrumentation (MRI) Panel, National Science Foundation (2009 – 2010)  
Polar Research Board Member, National Research Council (2007 – 2010)  
National Academy of Sciences Committee on Subglacial Lakes – Member (2005 – 2007)  
Development Officer for the 10<sup>th</sup> International Symposium of Antarctic Earth Sciences (2005 – 2007)  
ADVANCE Panel, National Science Foundation (2005-06; 2009-10; 2014-15; 2016-17)  
Goldschmidt Medal Committee Chair, Geochemical Society (2005 – 2007)  
Committee of Visitors (COV) for the EAR Instrumentation and Facilities Program, NSF (2004)  
IGERT Panel, National Science Foundation (1998)  
Associate Editor, Geological Society of America Bulletin (1995 – 1998)  
Chair, Advisory Board for the Office of Polar Programs, National Science Foundation (1994 – 1997)  
Earth Sciences Postdoctoral Fellowship Panel, National Science Foundation (1995 – 1996)  
Polar Geology and Geophysics Panel, National Science Foundation (1992 – 1994)

**Professional Consulting:**

NOVA Science Program, WGBH, Boston, and Nebraska ETV Network, Lincoln, NE (no fees)

**University Service (University of Michigan):**

- LS&A telethon to recruit accepted minority students in the post Proposition 2 world (2007 – 2010)
- Member of the Executive Board, Rackham School of Graduate Studies (2006 – 2007)
- Co-chair of the Diversity in Graduate Admissions in the Natural Sciences Committee, College of Literature, Science and the Arts or LS&A (2003 – 2006)
- Crosby Award Review Panel (2006 – 2009)
- Member of the Dean's Committee on Gender and the Natural Sciences, College of Literature, Science and the Arts or LS&A (2003 – 2010)
- Member of the College of LS&A Grievance Panel (2003 – 2007)

- Member of STRIDE (Strategies and Tactics for Recruiting to Improve Diversity and Excellence). This is the Committee of faculty advisors on recruitment and hiring, U of M/NSF ADVANCE Project (2002– 2008)
- ADVANCE Implementation Advisory Committee – Institutional transformation for gender equity in science and engineering (2001– 2008)
- Member of the Center for Research on Learning and Teaching (CRLT) Advisory Board (1997 – 1999)
- Proposal Evaluation Panel, Office of the Vice Provost (1995 – 1996)
- College of LS&A Representative to the Senate Assembly (1992 – 1994)
- College of LS&A Convocation Representative (1991 – 1994)

**Departmental service (University of Michigan):**

- Department Chair (2007 – 2010)
- Alt promotion committee member (2010)
- Ritsema promotion committee member (2010)
- Executive Committee member, Department of Geological Sciences (1992-94; 2006-10)
- Becker promotion committee chair (2006 – 2007)
- NRC Departmental Ranking Coordinator (2006 – 2007)
- Official mentor for a junior faculty member – name withheld (2005 – 2007)
- Geological Sciences Curriculum Committee (2004 – 2006)
- Geological Sciences Upper-Level Writing Requirement director (2003 – 2007)
- Lithgow-Bertelloni promotion committee member (2003 – 2004)
- Zhang promotion committee chair (2003-2004)
- Hall promotion committee chair (2002 – 2003)
- Stixrude promotion committee chair (2002 – 2003)
- General Promotions Committee chair (2002 – 2003)
- Scott Turner Awards Committee (2002)
- Technical Personnel and Facilities Committee chair (2000 – 2002)
- Graduate Chair (1996 – 2001)
- Department Outreach Program Coordinator (1990 - 2000)
- Mineral Separation Lab Committee member (1991 - 2000)
- Hydrogeology Search Committee member (1998-1999)
- Ph.D. Examination Committee chair (1994 - 1995)
- Building Renovation Committee member (1993 - 1994)
- Executive Committee member (1992 - 1994)
- Curriculum Committee member (1991 - 1992)
- Ph.D. Examination Committee member (1990 - 1991)
- Igneous Petrology Search Committee member (1990 - 1991)

### Community Outreach:

- As Senior Executive for Global STEM Initiatives in the Provost's Office, I have worked extensively with the North Minneapolis Community to, among other things, bring the University to the people in what we termed "Neighborhood U," and to develop the concept of a North Minneapolis Gateway and Oasis (NM-GO). I also became a member of the MN STEM Compass Advisory Board; guided students from the College of Biological Sciences to stage a STEM outreach event; and built a partnership with BestPrep.
- As Dean of the College of Science and Engineering at the University of Minnesota, I partnered with student organizations – including the Society of Women Engineers (SWE) the National Society of Black Engineers (NSBE) – to start a hands-on STEM outreach program in K-12 public schools in the Minneapolis-St Paul area. I have also recruited some Fortune 500 companies (Boston Scientific, 3M and Medtronic) to underwrite these outreach efforts and provide logistics for getting college students to the K-12 schools.
- As Dean of the College of Engineering and Physical Sciences at the University of New Hampshire, I challenged and then facilitated the Society of Women Engineers (SWE) to start a hands-on STEM outreach program in 13 K-12 public schools in southern New Hampshire (Fall 2012); this program is now part of the College's DNA. In Spring 2014, I expanded the outreach activities to another group of schools in partnership with the UNH chapter of the National Society of Black Engineers (NSBE), particularly the urban area of Manchester. We created an annual event called *STEMfest* to bring the University to K-12 students in remote regions of the state in partnership with student volunteers we named "STEMmbassadors."
- Speaker for "*Café Scientifique*" on the Universe and Solar System at Bishop Cipriano High School, Kampala, Uganda (September 2010)
- Speaker at the Climate Change Student Summit – Videoconference with middle school students in Ann Arbor, Anchorage and Chicago (April 2010)
- Talk about records of climate change in Antarctic ice at the Science at the Poles Museum Theme Semester; Exhibit Museum, University of Michigan (April 2008)
- ADVANCE Program speaker about gender balance on the faculty in science and engineering departments: Oct 2004 – Case Western University; Apr 2005 – Columbia University; Mar 2006 – University of Texas, Austin; May 2007 – National Conference on Race and Ethnicity in American Higher Education (NCORE), San Francisco, CA; Aug 2008 – Wesleyan University
- Talk about global climate change at the Amos Fortune Forum, Jaffrey, New Hampshire (July 2006)
- Member of the Senior Vice Provost's Committee for MSP in the Southfield public schools (2004 - 2010)
- Member of the U of M Provost's delegation for minority student recruitment, Romulus, MI, Dec., 2003
- Yearly talks in the Ann Arbor Public Schools about Antarctica and climate change (2001-2010)
- Talk on Antarctic geology and global warming at St. Raphael School, Medford, MA, March 2000
- Minority student recruitment in Ann Arbor and Detroit Public Schools for U of M field camp (1990 – 1996)
- Science fair judge, Wines Elementary, Ann Arbor Public Schools (2002 – 2006)

### Invited Lectures:

1983 Geological Society of London  
1983 University of Liverpool  
1984 RPI  
1984 Lamont-Doherty Earth Observatory  
1985 University of Minnesota

1986 University of South Florida, Tampa  
1987 Florida International University  
1988 Florida State University  
1989 Institute of Geology, Academia Sinica,  
Beijing

1989 Guilin Institute of Geochemistry  
1989 University of South Carolina  
1990 Ohio State University  
1990 Bowling Green State University  
1991 Hope College  
1991 Woods Hole Oceanographic Institution  
1992 University of Illinois, Chicago  
1993 USGS Flagstaff  
1993 Ohio State University  
1994 Transantarctic Mtns workshop, Estes Park  
1995 Plenary lecture ISAES-1995, Siena, Italy  
1997 University of New Mexico  
1997 New Mexico Tech  
1998 Inst. of Geology, Academ. Sinica, Beijing  
1998 Ohio State University  
2002 Michigan State University  
2003 Okayama University  
2003 Hiroshima University  
2003 Korea University  
2003 Bowling Green State University  
2004 Case Western Reserve University  
2005 McMurdo Research Station, Antarctica  
2005 Lamont Doherty (Columbia University)  
2006 University of Texas at Austin  
2007 University of Arizona  
2007 University of Texas at Austin  
2007 University of New Hampshire  
2007 Nkumba University, Entebbe, Uganda  
2007 University of Cape Town, South Africa  
2008 Nkumba University, Entebbe, Uganda

*(Commencement Speaker)*

2008 Makerere University, Kampala, Uganda  
2009 North Dakota State University  
2009 University of North Dakota  
2010 University of Geoscience, Wuhan, China  
2010 Kyambogo University, Kampala, Uganda  
2012 Al-Farabi Kazakh National University,  
Kazakhstan  
2012 Makerere University, Kampala, Uganda  
2012 Global Engineering Deans Council,  
Buenos Aires, Argentina  
2013 University of Lagos, Nigeria  
2014 Al-Farabi Kazakh National University,  
Kazakhstan  
2014 Makerere University, Kampala, Uganda  
2015 University of Lagos, Nigeria  
2015 Makerere University, Kampala, Uganda  
2015 Global Engineering Deans Council, Addis  
Ababa, Ethiopia  
2015 University of Nairobi, Kenya  
2016 Saint Jerome Univ., Douala, Cameroon  
2017 Xi'an Jiaotong University, Xi'an, China  
2017 Chinese University of Hong Kong (SZ)  
2019 African Institute for Mathematical  
Sciences (AIMS), Cape Town, S. Africa  
2019 AIMS, Kigali, Rwanda  
2019 Makerere University, Kampala, Uganda  
2019 Addis Ababa Institute of Technology,  
Addis Ababa, Ethiopia

**Research grants awarded:**

31. NSF HRD-1712619: The North Star STEM Alliance: Building on the Legacy of Minnesota's LSAMP (09/01/2017 – 08/31/2022; \$3,748,263; 0 MTDC). I was one of four PIs, but rotated off the project in February 2018.
30. NSF MRI-1337897: MRI: Acquisition of Analytical Scanning Electron Microscope for Engineering and Earth Science Research (09/01/2013 – 08/31/2016; \$683,558; 0 MTDC).
29. NSF MRI-1255888: MRI: Acquisition and development of a plasma mass spectrometer facility for Earth Sciences research and research training in Northern New England (08/01/2013 – 07/31/2015; \$722,107; 0 MTDC).
28. NSF HRD-1209189: UNH UNBIASED: Leadership Development and Policy Change to Promote Institutional Transformation (10/01/2012 – 09/30/2017; \$3,475,893; 47% MTDC). Provost is the PI, and I am 1 of 4 co-PIs.
27. NSF OPP-1025513: Geochemistry and Geochronology of the First Submarine Intraplate Lavas Recovered from the Arctic Ocean – Bearing on the Plate Tectonic Evolution of the Amerasian Basin (07/01/2010 – 12/31/2014; \$286,927; 47% MTDC).
26. NSF EAR-0911353: The Columbia River Plateau-Snake River Plain Large Igneous Province: Plume, Flux Melting or Both? (10/01/2009 – 09/30/2014; \$288,757; 47% MTDC).

25. NSF ANT- 0739617: Submarine and On-Land Volcanism in the West Antarctic Rift System: A Petrologic and Geochemical Study to Assess Melting Processes and Eruption History (07/01/2008 – 06/30/2013; \$270,626; 52% MTDC).
24. UNL Subcontract # 25-0550-0001-129: Sr Isotopic Measurements on Carbonate Fossil Materials Aimed at Providing Tight Age Constraints for Paleoclimate Records in the McMurdo Ice Shelf (MIS) and Southern McMurdo Sound (SMS) Cores (06/01/2007 - 05/31/2011; \$83,910; 52% MTDC).
23. NSF OPP-0603729: Basement Sill, Antarctica: Constraints from its PGE Abundance Patterns and Isotopic Compositions on Magma Source Characteristics and Crystallization Processes (02/01/2006 - 01/31/2007; \$28,978; 53% MTDC).
22. NSF EAR-0440238: Collaborative Research: Geochemical Processes in Forearc Peridotites: Depletion, Enrichment, and Melt Reactions in the Mantle Wedge (10/1/2005 – 9/30/2006; \$88,663, 53% MTDC).
21. NSF EAR-0440185: Bering Sea Volcanic Province: Eruption History, Source Characteristics, Melting Processes and Plate Tectonic Context (03/01/2005 - 02/28/2008; \$284,295; 53% MTDC).
20. NSF EAR-0345135: (With Joel Blum) Refurbishment of a VG Sector Mass Spectrometer to Gain Negative Ion Capability (7/1/04-6/30/06; \$87,886; No indirect cost rate).
19. NSF INT-0227687: Pre-Alpine Terranes of the Balkan Peninsula, Bulgaria: A Field, Geochronologic and Geothermobarometric Assessment of their Tectonic Significance (1/1/03-12/31/04; \$15,000; No indirect cost rate).
18. NSF EAR-0226031: Lu-Hf and Re-Os Systematics of the Earliest Crust in Antarctica: The Napier Complex of Enderby Land (6/1/02-5/31/04; \$97,229; 51% MTDC).
17. NSF EAR-0207830: Collaborative Research: U-series, Be, Sr, Nd and Pb Isotopic and Trace Element Constraints on Melting and Mass Transfer Processes in Arcs, Philippine Arc System (6/15/02-5/31/04; \$97,598; 51% MTDC).
16. NSF EAR-0009454: (With Eric Essene) Lutetium-Hafnium Ages and the P-T History of High-Pressure Rocks in the Appalachians (1/1/01-12/31/04; \$188,275; 52% MTDC).
15. NSF EAR-99099598 and EAR-0207400: Upgrading and Refurbishing of the “Multi-1” Mass Spectrometer at the University of Michigan (5/1/00-4/30/03; \$220,250; No indirect cost rate)
14. NSF OPP-9825250: Lithospheric Mantle Evolution Beneath the Bering Sea Volcanic Province: An Isotopic Elemental and Oxygen Fugacity Study of Peridotite Xenoliths (11/1/98-9/31/01; \$327,957; 52% MTDC).
13. NSF OPP-9725298: Second-Phase Isotopic and Trace Element Studies of the Dufek Layered Mafic Intrusion and Comparisons with Dikes and Sills of the Ferrar Magmatic Province (5/1/98-4/30/00; \$170,000; 52% MTDC)
12. NSF OPP-9615274: Evolution of the Lithospheric Mantle Beneath East Antarctica: Connections to the Plate Tectonic Development of Eastern Gondwanaland (6/1/97-5/31/99; \$135,000; 52% MTDC)
11. NSF EAR-9405503: (With Alex Halliday) Continued Technical Support for Mass Spectrometers in the Radiogenic Isotope Geochemistry Laboratory, University of Michigan (7/1/94-6/30/96; \$80,000; No indirect cost rate).
10. NSF OPP-923128: A Nd, Os, Pb and Sr isotopic Study of the Dufek Intrusion, Pensacola Mountains, Antarctica: Re-assessment of Differentiation Mechanisms in Layered Mafic Complexes (6/1/93-5/31/97; \$312,808; 52% MTDC).

9. OSU Subcontract: Magma evolution along the Antarctic Peninsula (1/1/91-8/31/91; \$12,000; 52% MTDC).
8. NSF EAR-9018967: Isotopic age constraints on the Kinematic evolution of terranes in the northern Philippines (4/1/91-5/31/94; \$110,933; 50% MTDC).
7. NSF DPP-9014854: Tectonic evolution of the Antarctic sector of the Pacific margin: Mesozoic and Paleozoic development of Marie Byrd Land II (10/1/90-9/30/93; \$239,000; 50% MTDC).
6. NSF DPP-8716020: Tectonic evolution of the Antarctic sector of the Pacific margin: Mesozoic and Paleozoic development of Marie Byrd Land (6/1/88-5/31/90; \$63,581; 50% MTDC).
5. NSF EAR-8721417: Geochemical study of arc magmas from Luzon and Marinduque Islands, Philippines (4/15/88-3/31/90; \$50,000; 50% MTDC).
4. NSF EAR-8704724: Metasomatism and magma evolution in the upper mantle: evidence from alpine peridotites (4/1/87-3/31/89; \$65,600; 50% MTDC).
3. NSF DPP-8643441: Geochronology and the kinematic evolution of the Scotia arc (6/1/86-11/30/88; \$58,881; 50% MTDC).
2. UF RDA-13 85-86: Geotectonic evolution of the Scotia Arc: A geochronologic study to assess the rates of mountain building processes (5/1/86-4/30/87; \$23,991).
1. UF DSR-D-16 85-86: Integrated petrochemical and Nd-Sr-Pb isotope systematics of mantle-derived rocks: bearing on mantle structure and magma origins (9/20/85-9/19/86; \$11,500).

#### **Non-research grants awarded**

6. 2009: Department of Geological Sciences, University of Michigan – A Geological and Cultural Field Excursion to New Zealand (1/1/09-12/31/09; \$20,000; 0% MTDC); PI: S.B. Mukasa, co-PI: I. Hendy.
5. 2007: Department of Geological Sciences, University of Michigan – A Geological and Cultural Field Excursion to Iceland with 30 students (1/1/07-12/31/07; \$20,000; 0% MTDC); PI: S.B. Mukasa, co-PI: R.A. Lange.
4. 2007: Global Intercultural Experience for Undergraduates (GIEU), University of Michigan – A Geological and Cultural Field Excursion to Iceland (2/1/07-12/31/07; \$30,000; 0% MTDC); PI: S.B. Mukasa, co-PI: R.A. Lange.
3. 2006: International Institute, University of Michigan – A Geological and Cultural Field Excursion to Iceland (1/1/06-12/31/07; \$15,000; 0% MTDC); PI: S.B. Mukasa, co-PI: R.A. Lange.
2. 2001: Proposal for Graduate Assistance in Areas of National Need (GANN), Department of Geological Sciences, University of Michigan” (1/1/01-12/31/05; \$779,139: \$519,426 from the Department of Education, \$129,857 from the Rackham Graduate School, and \$129,857 from the Department of Geological Sciences; 0% MTDC); PI: E.J. Essene; co-PIs: M.C. Castro, K.C. Lohmann and S.B. Mukasa.
1. 1990: Exxon Foundation – Initiative to Engage High School and First-Year College Minority Students in Geological Field Studies (1/1/90-12/31/92; \$25,000; 0% MTDC); PI: S.B. Mukasa, co-PI: H.N. Pollack.



**Courses Taught at the University of Michigan**

Year	Term	Course #	Format	Title	Credit	% Resp.	Enroll	Course (Q1)	Lecturer (Q2)
2010	W	119	Lec	Intro. Geology	5	100	95	4.10	4.25
2009	F	497	Sem	Topics Earth Sci.	1	50	3	5.00	5.00
2008	F	580	Lec	Isotope Geology	3	100	8	4.25	4.85
2007	W	535	Sem	Petrology	1	100	9	4.20	4.25
2007	W	310	Lec	Petrology	4	100	13	4.42	4.57
2006	F	145	Lec/Sem	Evol. of the Earth	3	100	16	4.08	4.75
2006	F	580	Lec	Isotope Geology	3	50	10	4.17	4.79
2006	W	115	Lec/Mini	Earth & Life	1	100	120	3.35	3.96
2006	W	608	Lec	Adv. Isotopes	3	100	5	5.00	4.88
2005	F	115	Lec/Mini	Earth & Life	1	100	110	3.70	3.94
2005	F	145	Lec/Sem	Evol. of the Earth	3	100	16	3.94	4.22
2005	W	115	Lec/Mini	Deep Time	1	100	101	3.78	4.06
2005	W	310	Lec	Petrology	4	100	6	4.00	4.33
2004	F	145	Lec/Sem	Evol. of the Earth	3	100	16	4.70	4.83
2004	F	580	Lec	Isotope Geology	3	50	19	4.38	4.38
2004	W	608	Lec	Adv. Isotopes	3	100	7	4.92	4.92
2003	F	115	Lec/Mini	Geologic Time	1	100	70	3.79	4.03
2003	F	145	Lec/Sem	Evol. of the Earth	3	100	16	3.94	4.70
2003	W			<b>Sabbatical Leave</b>					
2002	F	145	Lec/Sem	Evol. of the Earth	3	100	20	4.44	4.79
2002	F	580	Lec	Isotope Geology	3	50	12	4.92	5.00
2002	W	145	Lec/Sem	Evol. of the Earth	3	100	20	3.72	4.38
2001	F	580	Lec	Isotope Geology	3	50	10	4.33	4.67
2001	F	145	Lec/Sem	Evol. of the Earth	3	100	20	3.95	4.17
2001	W	145	Lec/Sem	Evol. of the Earth	3	100	20	4.50	4.83
2000	F	205	Lec	Dynamic Planet	2	100	21	3.72	4.07
2000	F	580	Lec	Isotope Geology	3	50	10	4.33	4.50
2000	W	145	Lec/Sem	Evol. of the Earth	3	100	25	3.42	3.80
2000	W	310	Lec	Petrology	4	100	8	4.63	4.80
1999	F	580	Lec	Isotope Geology	3	50	8	4.25	4.00
1999	W	117	Lec	Intro. Geology	5	50	35	3.57	3.65
1999	W	118	Lab	Intro. Geology	2	50	3	--	--
1999	W	119	Lec	Intro. Geology	4	50	36	2.78	3.11
1999	W	135	Lec	Earth History	3	50	57	3.50	3.87

1998	F	145	Lec/Sem	Evol. of the Earth	3	100	25	3.90	4.36
1998	F	580	Lec	Isotope Geology	3	50	18	4.50	4.79
1998	W	117	Lec	Intro. Geology	5	50	33	3.96	4.07
1998	W	118	Lab	Intro. Geology	2	50	2	--	--
1998	W	119	Lec	Intro. Geology	4	50	33	3.68	3.36
1998	W	310	Lec	Petrology	4	100	8	4.38	4.63
1997	F	115	Lec/Mini	Geologic Time	1	100	93	3.25	3.88
1997	W	117	Lec	Intro. Geology	5	50	14	3.25	3.67
1997	W	118	Lab	Intro. Geology	2	50	1	--	--
1997	W	119	Lec	Intro. Geology	4	50	16	4.00	4.25
1997	W	310	Lec	Petrology	4	100	10	4.13	4.50
1996	F	115	Lec	Geologic Time	1	100	46	4.00	4.07
1996	F	580	Lec	Isotope Geology	3	50	8	4.71	4.42
1996	W	117	Lec	Intro. Geology	5	50	11	3.92	4.25
1996	W	118	Lab	Intro. Geology	2	50	2	--	--
1996	W	119	Lec	Intro. Geology	4	50	17	3.92	4.25
1995	F			<b>Sabbatical Leave</b>					
1995	W	117	Lec	Intro. Geology	5	50	17	4.00	4.00
1995	W	118	Lab	Intro. Geology	2	50	8	--	--
1995	W	119	Lec	Intro. Geology	4	50	20	4.00	4.00
1995	W	310	Lec	Petrology	4	70	9	3.83	4.10
1994	F	115	Lec/Mini	Geologic Time	1	100	61	3.53	4.00
1994	F	580	Lec	Isotope Geology	3	50	8	4.80	4.38
1994	W	117	Lec	Intro. Geology	5	50	20	3.93	4.13
1994	W	118	Lab	Intro. Geology	2	50	9	--	--
1994	W	119	Lec	Intro. Geology	4	50	31	3.81	3.78
1994	W	608	Lec	Adv. Isotopes	3	50	6	4.67	4.67
1993	F	115	Lec/Mini	Geologic Time	1	100	75	3.52	3.98
1993	F	580	Lec	Isotope Geology	3	50	9	4.25	4.17
1993	W	117	Lec	Intro. Geology	5	50	15	4.00	4.00
1993	W	119	Lec	Intro. Geology	4	50	15	3.00	4.07
1993	W	310	Lec	Petrology	4	50	10	3.33	3.88
1992	F	115	Lec/Mini	Geologic Time	1	100	73	3.02	3.57
1992	F	580	Lec	Isotope Geology	3	50	17	4.33	4.43
1992	W	310	Lec	Petrology	4	50	14	4.25	3.90
1991	F	580	Lec	Isotope Geology	3	50	8	--	--
1991	W	310	Lec	Petrology	4	50	8	3.70	4.30
1990	F	580	Lec	Isotope Geology	3	50	7	4.50	4.83
1990	W	310	Lec	Petrology	4	100	7	4.00	4.75

**Undergraduate students supervised:**(a) University of Michigan

Lora Armstrong  
 Lauren Brown  
 Laurie Cotsonika

Tanya Chantal Shavalia (Eaton)  
 Angela Smith  
 Eric Tishkoff

Amy Koh  
Linda Kohn  
Madeline O'Campo  
Mary Peterson

Dino VanDenheede  
Jill Vantongerren  
Sandy Zeff

(b) University of Florida

Mervin Dale  
Beth Harding  
George Houston

Paul McDowell  
Jeff Wahl

**Graduate students supervised:**

(a) University of New Hampshire

Kimberly Aviado (Ph.D., 2017)

Lorne Loudin (M.Sc., 2015)

(b) University of Michigan

Charles Carrigan (Ph.D., 2004)  
John Encarnación (Ph.D., 1994)  
Katherine Griffin (M.Sc., 2002)  
Tom Hudgins (Ph.D., 2015 – co-advised  
with Simon)  
Maria Marcano (Ph.D., 2010)  
David Minor (M.Sc., withdrew)  
Steven Ownby (Ph.D., 2007 – co-advised  
with Lange)

Fredrick (Zeb) Page (M.Sc., 2001; Ph.D., 2005)  
Sarah Rilling (Ph.D., 2009)  
Christopher Stefano (Ph.D., 2010)  
Jean Tangeman (M.Sc., 1993)  
Xiangyang Xian (M.Sc., 1999)  
Pinbo Zhou (M.Sc., 1994; Ph.D., 2001)

(c) University of Florida

George Houston (M.Sc., 1991)

Matt Fischer (M.Sc., 1991)

**Membership on thesis committees:**

(a) University of Michigan

Mary C. O'Leary (Ph.D. 2014)  
Laura Waters (Ph.D. 2013)  
Xuan Guo (Ph.D., 2013)  
Matt Domeier (Ph.D., 2011)  
Stephen Crabtree (Ph.D., 2010)  
Yang Chen (Ph.D., 2008)  
Huawei Ni (Ph.D., 2008)  
Lixin Jin (Ph.D., 2007)  
Holli Frey (Ph.D., 2005)  
Teri Boundy (Ph.D., 1995)  
Qiong Liu (Ph.D., 2005)  
Chris Smith (Ph.D., 2005)

Kate Kenedi (M.Sc., 2003)  
Yang Liu (Ph.D., 2003)  
Eric Tohver (Ph.D., 2003)  
Xiaozhong Luo (Ph.D., 1999)  
Jean Tangeman (Ph.D., 1998)  
Jay Busch (Ph.D., 1996)  
Der-Chuan Lee (Ph.D., 1994)  
Charlie DeWolf (Ph.D., 1993)  
Joe Meert (Ph.D., 1993)  
Der-Chuan Lee (M.Sc., 1990)  
Annie Kersting (Ph.D., 1990)  
Fred Ochs III (Ph.D., withdrew)

(b) University of Florida

Maria Lebron (M.Sc., 1988)  
Dave Goldman (M.Sc., 1988)  
Emily Weyand (M.Sc., 1989)  
Dan Stanley (M.Sc., 1989)

Fran Goodman (Chem) (Ph.D., 1989)  
Wellington Masamba (Chem) (Ph.D., 1989)  
Kim D'Arcy (Ph.D., 1991)  
Jerry Murphy (M.Sc., 1990)

**Postdoctoral Fellows sponsored:**

Dr. Mary Peterson (10/15 – 9/16), University of New Hampshire  
Dr. Joan Cabato (10/12 – 9/15), University of New Hampshire  
Dr. Martin Guitreau (8/12 – 7/14), University of New Hampshire  
Dr. Maria Marcano (5/10 – 12/11), University of Michigan  
Dr. Christopher Stefano (4/10 – 12/11), University of Michigan  
Dr. Sharon Hoffmann (9/08 – 7/10), University of Michigan  
Dr. Sung Hi Choi (1/04 – 1/07), University of Michigan  
Dr. Alexandre Andronikov (12/97 – 12/99), University of Michigan  
Dr. David Palais (6/91 - 6/93), University of Michigan

**Postdoctoral Fellows co-sponsored:**

Dr. Robert Shuster (1986-1988), University of Florida  
Dr. Ann Heatherington (1988-1989), University of Florida

**Visiting Scholars sponsored**

Prof. Aizhan Assylbekova (2019), Visiting scholar, Al-Farabi Kazakh National University, Almaty, Kazakhstan  
Mr. Muratbek Kudaibergenov (2019), Visiting scholar, Al-Farabi Kazakh National University, Almaty, Kazakhstan  
Ms. Ying Wei (2015-2017), PhD student, China University of Geosciences, Wuhan, China  
Dr. Alexei Ivanov (2012-2013), Fulbright scholar from the Russian Academy of Sciences, Irkutsk, Russia  
Mr. Zhihai (Adian) Zhang (2008), PhD student, China University of Geosciences, Wuhan, China  
Prof. Jianping Zheng (2008), Associate Professor, China University of Geosciences, Wuhan, China  
Dr. Yueheng Yang (2008), Research Scientist, Institute of Geology and Geophysics, Beijing, China  
Dr. Sung Hi Choi (2008), then Senior Research Scientist, Korea Polar Research Institute; now professor at Chungnam National University, Daejeon, South Korea  
Dr. Ricarda Hanemann (2007), then Postdoctoral Fellow at Universität Jena, Germany  
Dr. Vyacheslav V. Akinin (2003), Russian scholar from the Russian Academy of Sciences, Magadan, Russia  
Prof. Ivan Haydoutov (1997-1998), Fulbright scholar from the Bulgarian Academy of Sciences, Sofia, Bulgaria  
Dr. Emmanuel Opare-Addo (1990), PhD student, Cambridge University, UK

**Publications:**

Elliot, D.H., Fanning, C.M., **Mukasa, S.B.**, and Millar, I.L., 2019, Hf- and O-isotope data from detrital and granitoid zircons reveal characteristics of the Permian–Triassic magmatic belt along the Antarctic sector of Gondwana: *Geosphere*, 15, no. 2, 576–604,

<https://doi.org/10.1130/GES02011.1>

- Stefano, C. J., **Mukasa, S. B.**, and Cabato, J. A., 2019, Elemental abundance patterns and Sr-, Nd- and Hf-isotope systematics for the Yellowstone hotspot and Columbia River flood basalts: Bearing on petrogenesis. *Chemical Geology*, 513, 44-53.
- Choi, S. H., **Mukasa, S. B.**, Ravizza, G., Fleming, T. H., Marsh, B. D., and Bédard, J. H. J., 2019, Fossil subduction zone origin for magmas in the Ferrar large igneous province, Antarctica: Evidence from PGE and Os isotope systematics in the Basement Sill of the McMurdo Dry Valleys. *Earth Planet. Sci. Lett.*, 506, 507-519.
- Wei, Y., **Mukasa, S. B.**, Zheng, J., Fahnestock, M. F., and Bryce, J.G., 2019, Phanerozoic lower crustal growth from heterogeneous mantle beneath the North China Craton: Insights from the diverse Hannuoba pyroxenite xenoliths. *Lithos*, 324-325, 55-67.
- Ivanov, A. V., **Mukasa, S. B.**, Kamenetsky, V. S., Ackerson, M., Demonterova, E. I., Pokrovsky, B. G., Vladykin, N. V., Kolesnichenko, M. V., Litasov, K. D., and Zedgenizov, D. A., 2018, Volatile concentrations in olivine-hosted melt inclusions from meimechite and melanephelinite lavas of the Siberian Traps Large Igneous Province: Evidence for flux-related high-Ti, high-Mg magmatism. *Chemical Geology* 483, 442-462.
- LeMasurier, W. E., Choi, S. H., Kawachi Y., **Mukasa, S. B.**, and Rogers, N. W., 2018, Dual origins for pantellerites, and other puzzles, at Mount Takahe volcano, Marie Byrd Land, West Antarctica. *Lithos*, 296-299, 1424-162.
- Guitreau, M., **Mukasa, S. B.**, Loudin, L., and Krishnan, S., 2017, New constraints on the early formation of the Western Dharwar Craton (India) from igneous zircon U-Pb and Lu-Hf isotopes. *Precambrian Research*, 302, 33-49.
- Guitreau, M., **Mukasa, S. B.**, Blichert-Toft, J., and Fahnestock, M. F., 2016, Pikes Peak Batholith (Colorado, USA) revisited: A SIMS and LA-ICP-MS study of zircon U-Pb ages combined with solution Hf isotopic compositions. *Precambrian Research*, 280, 179-194.
- LeMasurier, W. E., Choi, S. H., Hart, S. R., **Mukasa, S. B.**, and Rogers, N. W., 2016, Reconciling the shadow of a subduction signature with rift geochemistry and tectonic environment in Eastern Marie Byrd Land, Antarctica. *Lithos*, 260, 134-153.
- Levy, R., and SMS Science Team (incl. **Mukasa, S. B.**), 2016, Antarctic ice sheet sensitivity to atmospheric CO<sub>2</sub> variations in the early to mid-Miocene. *Proceedings of the National Academy of Sciences (PNAS)*, 113, no. 13, 3453-3458.
- Lindow, J., Kamp, P. J. J., **Mukasa, S. B.**, Kleber, M., Lisker, F., Gohl, K., Kuhn, G., and Spiegel, C., 2016, Exhumation history along the eastern Amundsen Sea coast, West Antarctica, revealed by low-temperature thermochronology. *Tectonics*, 35, 2239-2257.
- Spiegel, C., Lindow, J., Kamp, P. J. J., Meisel, O., **Mukasa, S. B.**, Lisker, F., Kuhn, G., and Gohl, K., 2016, Tectonomorphic Evolution of Marie Byrd Land – Implications for Cenozoic Rifting Activity and Onset of West Antarctic Glaciation. *Global and Planetary Change*, 145, 98-115.
- Aviado, K. B., Rilling-Hall, S., Bryce, J. G., and **Mukasa, S. B.**, 2015, Submarine and subaerial lavas in the West Antarctic Rift System: Temporal record of shifting magma source components from the lithosphere and asthenosphere. *Geochemistry, Geophysics, Geosystems (G-Cubed)*, doi: 10.1002/2015GC006076.
- Cabato, J. A., Stefano, C. J., and **Mukasa, S. B.**, 2015, Volatile concentrations in olivine-hosted melt inclusions from the Columbia River flood basalts and associated lavas of the Oregon Plateau: Implications for magma genesis. *Chemical Geology*, 392, 59-73.

- Hudgins, T. R., **Mukasa, S.B.**, Simon, A. C., Moore, G., and Barifajjo, E., 2015, Melt-inclusion evidence for CO<sub>2</sub>-rich melts beneath the western branch of the East African Rift: Implications for long-term storage of volatiles in the deep lithospheric mantle. *Contrib. Mineral. Petrol.*, 169, 5, doi: 10.1007/s00410-015-1140-9
- Marcano, M. C., Frank, T. D., **Mukasa S. B.**, Lohmann, K. C., and Taviani, M., 2015, Diagenetic incorporation of Sr into aragonitic bivalve shells: implications for chronostratigraphic and palaeoenvironmental interpretations. *The Depositional Record*, 1, 38-52.
- Page, F. Z., Essene, E. J., **Mukasa, S. B.**, and Valley, J. W., 2014, A garnet-zircon oxygen isotope record of subduction and exhumation fluids from the Franciscan Complex, California. *Jour. Petrology* 55, 103-131. doi:10.1093/ptrology/egt062
- Akinin, V. V., Andronikov, A. V., **Mukasa, S. B.**, and Miller, E. I., 2013, Cretaceous lower crust of the continental margins of the northern Pacific: petrological and geochronological data on lower to middle crustal xenoliths. *Petrology*, 21, 28-65.
- Mukasa, S. B.**, Wilson, A. H., and Young, K. R., 2013, Geochronological constraints on the magmatic and tectonic development of the Pongola Supergroup (Central Region), South Africa. *Precambrian Research*, 224, 268-286.
- Yong, W., Zhang, L., Hall, C. M., **Mukasa, S. B.**, and Essene, E. J., 2013, The <sup>40</sup>Ar/<sup>39</sup>Ar and Rb-Sr chronology of the Precambrian Aksu blueschist. *Journal of Asian Earth Sciences* 63, 197-205.
- Choi, S. H. and **Mukasa, S. B.**, 2012, Lu-Hf and Sm-Nd isotope systematics of Korean spinel peridotites: A case for metasomatically induced Nd-Hf decoupling. *Lithos* 154, 263-276.
- Jin, L., **Mukasa, S. B.**, Hamilton, S. K., and Walter, L. M., 2012, Impacts of glacial/interglacial cycles on continental rock weathering inferred using Sr/Ca and <sup>87</sup>Sr/<sup>86</sup>Sr ratios in Michigan watersheds. *Chemical Geology* 300, 97-108.
- Hanemann, R., Viereck-Gotte, L., Melcher, F. and **Mukasa, S. B.**, 2011, Enrichment of platinum-group elements related to late Ti-magnetite fractionation in the Dufek-Forrestal layered mafic intrusion, Antarctica. *Ore Deposits*, I - II, 682-684.
- LeMasurier, W. E., Choi, S. H., Kawachi, Y., **Mukasa, S. B.**, and Rogers, N. W., 2011, Evolution of pantellerite-trachyte-phonolite volcanoes by fractional crystallization of basanite magma in a continental rift setting, Marie Byrd Land, Antarctica. *Contrib. Mineral. Petrol.*, 162, 6, 1175-1199.
- Shervais, J. W., Choi, S. H. Sharp, W. D., Ross, J., Zoglman-Schuman, M. and **Mukasa, S. B.**, 2011, Serpentine matrix mélange: Implications of mixed provenance for mélange formation. *Special Paper Geol. Soc. Amer.*, 480, 1-30.
- Stefano, C. J., **Mukasa S. B.**, Andronikov, A. and Leeman, W. P., 2011, Water and other volatile systematics of olivine-hosted melt inclusions from the Yellowstone Hot Spot track. *Contrib. Mineral. Petrol.*, 161, 4, 615-633.
- Andronikov, A. V. and **Mukasa, S. B.**, 2010, <sup>40</sup>Ar/<sup>39</sup>Ar eruption ages and geochemical characteristics of Late Tertiary to Quaternary intraplate and arc-related lavas in interior Alaska. *Lithos* 115, 1-14.
- Choi, S. H., Suzuki, K., **Mukasa, S. B.**, Lee, J. I., and Jung, H., 2010, Lu-Hf and Re-Os systematics of peridotite xenoliths from Spitsbergen, western Svalbard: Implications for mantle-crust coupling. *Earth Planet. Sci. Lett.* 297, 121-132.
- Jean, M. M., Shervais, J. W., Choi, S. H., and **Mukasa, S. B.**, 2009, Melt extraction and melt refertilization in mantle peridotite of the Coast Range ophiolite: an LA-ICP-MS study. *Contrib. Mineral. Petrol.* 159, 113-136.

- Rilling, S., **Mukasa, S. B.**, Wilson, T., Lawver, L., and Hall, C., 2009, New determinations of  $^{40}\text{Ar}/^{39}\text{Ar}$  isotopic ages and flow volumes for Cenozoic volcanism in the Terror Rift, Ross Sea, Antarctica. *Jour. Geophys. Res.*, 114, B12, B12207.
- Marcano, M. C., **Mukasa S. B.** Lohmann, K. C., Stefano, C., Taviani, M., and Andronikov, A., 2009, Chronostratigraphic and paleo environmental constraints derived from  $^{87}\text{Sr}/^{86}\text{Sr}$  and  $\delta^{18}\text{O}$  signal of Miocene bivalves. *Global and Planetary Change*, 69, 3, 124-132.
- Mukasa, S. B.**, 2009, Underrepresentation of women and minority awardees in geoscience societies. *Elements*, 5, 2, 77-78.
- Choi, S. H., **Mukasa, S. B.**, and Shervais, J.W., 2008, Initiation of Franciscan subduction along a large-offset fracture zone: Evidence from mantle peridotites, Stonyford, California. *Geology* 36, 595-598.
- Choi, S. H., Shervais, J.W. and **Mukasa, S. B.**, 2008, Supra-subduction and abyssal mantle peridotites of the Coast Range Ophiolite, California. *Contrib. Mineral. Petrol.*, DOI 10.1007/s00410-008-0300-6
- Choi, S.H., **Mukasa, S.B.**, Zhou, X., Xian, X.H., and Andronikov, A.V., 2008, Mantle dynamics beneath East Asia constrained by Sr, Nd, Pb and Hf isotopic systematics of ultramafic xenoliths and their host basalts from Hannuoba, North China. *Chemical Geology* 248, 40-61.
- Bédard, J. H. J., Marsh, B. D., Hersum, T. G., Naslund, H. R., and **Mukasa, S. B.**, 2007, Large-scale mechanical redistribution of orthopyroxene and plagioclase in the Basement Sill, Ferrar Dolerites, McMurdo Dry Valleys, Antarctica: Petrological, mineral-chemical and field evidence for channelized movement of crystals and melt. *Jour. Petrology* 48, 2289-2326.
- Choi, S.H., **Mukasa, S.B.**, Andronikov, A.V. and Marcano, M.C., 2007, Extreme Sr–Nd–Pb–Hf isotopic compositions exhibited by the Tinaquillo peridotite massif, Northern Venezuela: implications for geodynamic setting. *Contrib. Mineral. Petrol.* 153, 443-463.
- Mukasa, S. B.**, Andronikov, A. V. and Hall, C. M. 2007, The  $^{40}\text{Ar}/^{39}\text{Ar}$  chronology and eruption rates of Cenozoic volcanism in the eastern Bering Sea Volcanic Province, Alaska, *Jour. Geophys. Res.*, 112, B06207, doi:10.1029/2006JB004452.
- Mukasa, S.B.**, Blatter, D. and Andronikov, A.V., 2007, Mantle peridotite xenoliths in andesite lava at El Peñon, central Mexican Volcanic Belt: Isotopic and trace element evidence for melting and metasomatism in the mantle wedge beneath an active arc. *Earth Planet. Sci. Lett.* 260, 37-55.
- Page, F.Z., Armstrong, L.S., Essene, E.J. and **Mukasa, S.B.**, 2007, Prograde and retrograde history of the Junction School eclogite, California, and an evaluation of garnet–phengite–clinopyroxene thermobarometry. *Contrib. Mineral. Petrol.* 153, 533-555.
- Rilling, S.E., **Mukasa, S.B.**, Wilson, T.J. and Lawver, L.A., 2007,  $^{40}\text{Ar}$ - $^{39}\text{Ar}$  Age Constraints on Volcanism and Tectonism in the Terror Rift of the Ross Sea, Antarctica, in Antarctica: A Keystone in a Changing World – Online Proceedings of the 10th ISAES, edited by A. K. Cooper and C. R. Raymond, USGS OF-2007-1047, Short Research Paper 092; doi:10.3133/of2007-1047.srp092.
- Carrigan C. W., **Mukasa S. B.**, Haydoutov I., and Kolcheva K., 2006, Neoproterozoic magmatism and Carboniferous high-grade metamorphism in the Sredna Gora Zone, Bulgaria; an extension of the Gondwana-derived Avalonian-Cadomian belt? *Precambrian Research* 147(3-4), 404-416.
- Choi, S.H., **Mukasa, S.B.**, Kwon, S.T., and Andronikov, A.V., 2006, Sr, Nd, Pb and Hf isotopic compositions of late Cenozoic alkali basalts in South Korea: Evidence for mixing between the two dominant asthenospheric mantle domains beneath East Asia. *Chemical Geology* 232, 134–151
- Choi, S.H., **Mukasa, S.B.**, Andronikov, A.V., Osanai, Y., Harley, S.L. and Kelly, N.M., 2006, Lu–Hf systematics of the ultra-high temperature Napier Metamorphic Complex in Antarctica: Evidence for the early Archean differentiation of Earth's mantle. *Earth Planet. Sci. Lett.*, 246, 05-316.

- DuFrane, S.A., Asmerom, Y., **Mukasa, S.B.**, Morris, J.D. and Dreyer, B.M., 2006, Subduction and melting processes inferred from U-Series, Sr–Nd–Pb isotope, and trace element data, Bicol and Bataan arcs, Philippines. *Geochim. Cosmochim. Acta*, 70, 3401-3420.
- Asmerom, Y., DuFrane, S.A., **Mukasa, S.B.**, Cheng, H. and Edwards, R.L., 2005, Time scale of magma differentiation in arcs from protactinium-radium isotopic data. *Geology* 33, no.8, 633-636.
- Carrigan, C.W., **Mukasa, S.B.**, Haydoutov, I. and Kolcheva, K., 2005, Age of Variscan magmatism from the Balkan sector of the orogen, central Bulgaria. *Lithos* 82, 125-147.
- Choi, S.H., Kwon, S.T., **Mukasa, S.B.**, and Sagong, H., 2005, Sr—Nd—Pb isotope and trace element systematics of mantle xenoliths from late Cenozoic alkaline lavas, South Korea. *Chem. Geol.* 221, 40-64.
- Page, F.Z., Essene, E.J. and **Mukasa, S.B.**, 2005, Quartz exsolution in clinopyroxene is not proof of ultrahigh pressures: evidence in eclogites from the Eastern Blue Ridge, Southern Appalachians, USA. *Am. Mineral.* 90, 1092-1099.
- Carrigan, C.W., **Mukasa, S.B.**, Haydoutov, I., and Kolcheva, K., 2003, Ion microprobe U-Pb zircon ages of pre-Alpine rocks in the Balkan, Sredna Gora, and Rhodope terranes of Bulgaria: Constraints on Neoproterozoic and Variscan tectonic evolution. *Jour. Czech Geol. Society*, 48, 32-33.
- Page, F.Z., Essene, E.J. and **Mukasa, S.B.**, 2003, Prograde and retrograde history of eclogites from the Eastern Blue Ridge, North Carolina, USA. *Jour. Metamorphic Geol.*, 21, 685-698.
- Ionov D.A., Bodinier J.-L., **Mukasa S.B.**, and Zannetti A., 2002, Mechanisms and sources of mantle metasomatism: major and trace element composition of peridotite xenoliths from Spitsbergen in the context of theoretical modeling. *Jour. Petrology*, 43, 2219-2259.
- Ionov D.A., **Mukasa S.B.**, and Bodinier J.-L., 2002, Sr-Nd-Pb isotopic compositions of peridotite xenoliths from Spitsbergen: numerical modeling indicates Sr-Nd decoupling in the mantle by melt percolation metasomatism. *Jour. Petrology*, 43, 2261-2278.
- Mukasa S.B.** and Dalziel I.W.D., 2000, Marie Byrd Land, West Antarctica: Evolution of Gondwana's Pacific margin constrained by zircon U-Pb geochronology and feldspar common-Pb isotopic compositions. *Geol. Soc. Amer. Bull.*, 112(4), 611-627.
- Mukasa, S.B.**, and Shervais, J.W., 1999, Growth of subcontinental lithosphere: evidence from repeated dike injections in the Balmuccia lherzolite massif, Italian Alps. **In:** van der Hilst, R. D. and McDonough, W. F. (eds.), *Composition, Deep Structure and Evolution of Continents. Developments in Geotectonics* 24. Elsevier, Amsterdam, pp. 287-316.
- Mukasa, S.B.**, and Shervais, J.W., 1999, Growth of subcontinental lithosphere: evidence from repeated dike injections in the Balmuccia lherzolite massif, Italian Alps. *Lithos*, 48, 287-316.
- Encarnación, J.P., **Mukasa, S.B.** and Evans, C., 1999, The role of subduction components in the generation of a back-arc ophiolite: Pb, Sr and Nd isotope geochemistry of the Zambales ophiolite, Philippines. *Chemical Geology*, 156, 343-357.
- Mukasa, S.B.**, Wilson, A.H., and Carlson, R.W., 1998, A multielement geochronologic study of the Great Dyke, Zimbabwe: Significance of the reset and robust ages. *Earth Planet. Sci. Lett.*, 164, 353-369.
- Fodor, R.V., **Mukasa, S.B.**, Sial, A.N., 1998, Isotopic and trace-element indications of lithospheric and asthenospheric components in Tertiary alkalic basalts, northeastern Brazil. *Chemical Geology*, 43, 197-217.
- Mukasa, S.B.**, and Wilshire, H.G., 1997, Isotopic and trace element compositions of upper mantle and lower crustal xenoliths, Cima volcanic field, California: Implications for evolution of the subcontinental lithospheric mantle. *Jour. Geophys. Res.*, 102, 20,133-20,148.



- Wilshire, H.G., and **Mukasa, S.B.**, 1997, Mineral and whole rock major and trace element compositions of upper mantle and lower crustal xenoliths from the Cima volcanic field, California. *U.S. Geol. Surv. Open File Rep. 97-173*, 15 p.
- McGuire, A.V., and **Mukasa, S.B.**, 1997, Magmatic modification of the uppermost mantle beneath the Basin and Range to Colorado Plateau Transition Zone; Evidence from xenoliths, Wikieup, Arizona. *Contrib. Mineral. Petrol.*, 128, 52-65.
- Encarnación, J.P., and **Mukasa, S.B.**, 1997, Mantle-driven crustal melting in the South China Sea area: zircon and monazite U-Pb systematics and geochemistry of the Capoas granite, Palawan, Philippines. *Lithos*, 42, 1-13.
- Minor, D.R., and **Mukasa, S.B.**, 1997, Zircon U-Pb and hornblende  $^{40}\text{Ar}$ - $^{39}\text{Ar}$  ages for the Dufek layered mafic intrusion, Antarctica: Implications for the age of the Ferrar large igneous province. *Geochim. Cosmochim. Acta*, 61, 2497-2504.
- Zhou, P., and **Mukasa, S.B.**, 1997, Nd-, Sr-, Pb-isotopic, and major- and trace-element geochemistry of Cenozoic basalts from the Khorat Plateau, Thailand: sources and petrogenesis. *Chemical Geology*, 137, 175-193.
- Mukasa, S.B.**, and Dalziel, I.W.D. 1996, Southernmost Andes and South Georgia Island, North Scotia Ridge: Zircon U-Pb and muscovite  $^{40}\text{Ar}/^{39}\text{Ar}$  age constraints on tectonic evolution of southwestern Gondwanaland. *Jour. S. Am. Earth Sci.*, 9, 349-365
- Mukasa, S.B.**, Fischer, G.M., and Barr, S.M., 1996, The character of the subcontinental mantle in southeast Asia: isotopic and elemental compositions of extension-related Cenozoic basalts in Thailand. In: Basu, S., and Hart, S., (eds.), *Earth Processes: Reading the Isotopic Code. Geophys. Monograph 95*, 233-252.
- Tangeman, J.A., **Mukasa, S.B.**, and Grunow, A.M., 1996, Zircon U-Pb geochronology of plutonic rocks from the Antarctic Peninsula: Confirmation of the presence of unexposed Paleozoic crust. *Tectonics*, 15, 1309-1324.
- Encarnación, J.P., Essene, E.J., **Mukasa, S.B.**, Hall, C., 1995, High pressure and temperature kyanite garnet amphibolites generated during initiation of mid-Tertiary subduction, Palawan, Philippines. *Jour. Petrology*, 36, 1481-1503.
- Mukasa, S.B.**, Flower, M.F.J., and Miklius, A., 1994, The Nd-, Sr- and Pb-isotopic character of lavas from Taal, Laguna de Bay and Arayat volcanoes, southwestern Luzon, Philippines: implications for arc magma petrogenesis. *Tectonophysics*, 235, 205-221.
- Weaver, S.D., Storey, B.C., Pankhurst, R.J., **Mukasa, S.B.**, DiVenere, V., and Bradshaw, J.D., 1994, Antarctica-New Zealand rifting and Marie Byrd Land Lithospheric magmatism linked to ridge subduction and mantle plume activity. *Geology*, 22, 811-814.
- Encarnación, J.P., **Mukasa, S.B.**, and Obille, Jr., E.C., 1993, Zircon U-Pb geochronology of the Zambales and Angat ophiolites, Luzon, Philippines: Evidence for an Eocene arc-backarc pair. *Jour. Geophys. Res.*, 98, no. B11, 19,991-20,004.
- Stern, C.R., **Mukasa, S.B.**, and Fuenzalida, R., 1992, Age and petrogenesis of the Sarmiento ophiolite complex of southern Chile. *Jour. S. Amer. Earth Sci.*, 6, 97-104.
- Shervais, J.W., and **Mukasa, S.B.**, 1991, The Balmuccia orogenic lherzolite massif, Italy. *Jour. Petrol.*, Special Lherzolites Issue, 155-174.
- Mukasa, S.B.**, Shervais, J.W., Wilshire, H.G., and Nielson, J., 1991, Intrinsic isotopic heterogeneities exhibited by the Lherz alpine peridotite massif, French Pyrenees. *Jour. Petrol.*, Special Lherzolites Issue, 117-134.

- Miklius, A., Flower, M.F.J., Huijsmans, J.P.P., **Mukasa, S.B.**, and Castillo, P., 1991, Geochemistry of Lavas from Taal Volcano, Southwestern Luzon, Philippines: evidence for multiple magma supply systems and mantle source heterogeneity. *Jour. Petrol.*, 32, 593-627.
- Mukasa, S.B.**, and Henry, D.J., 1990, The San Nicolás batholith of Coastal Peru: early Paleozoic continental arc or continental rift magmatism? *Jour. Geol. Soc. London*, 147, 27-39.
- Mukasa, S.B.**, Vidal, C.E., and Injoque-Espinoza, J., 1990, Pb isotope bearing on the metallogenesis of sulfide ore deposits in central and southern Peru. *Econ. Geol.*, 85, 1438-1446.
- John, B.E., and **Mukasa, S.B.**, 1990, Footwall rocks to the Mid-Tertiary Chemehuevi detachment fault: A window into the Late Cretaceous middle crust in the southern Cordillera. *Jour. Geophys. Res.*, 95, No. B1, 463-485.
- Fodor, R.V., Sial, A.N., **Mukasa, S.B.**, and McKee, E.H., 1990, Petrology, isotope characteristics, and K-Ar ages of the Maranhão, northern Brazil, Mesozoic basalt province. *Contr. Min. Petrol.*, 104, 555-567.
- Vidal, C.E., Injoque-Espinoza, J., Sidder, G.B., and **Mukasa, S.B.**, 1990, Amphibolitic Cu-Fe skarn deposits in the central coast of Peru. *Econ. Geol.*, 85, 1447-1461.
- Fodor, R.V., **Mukasa, S.B.**, Gomes, C.B. and Cordani, U.G., 1989, Ti-rich Eocene basaltic rocks of the Abrolhos platform, offshore Brazil at 18°S: their petrology and role in South Atlantic magmatism. *Jour. Petrol.*, 30, 763-786.
- Mukasa, S.B.**, and Ludden, J.N., 1987, Uranium-lead isotopic ages of plagiogranites from the Troodos ophiolite, Cyprus and their tectonic significance. *Geology*, 15, 825-828.
- Mukasa, S.B.**, McCabe, R. and Gill, J.B., 1987, Pb-isotopic compositions of volcanic rocks in the West and East Philippine island arcs: presence of the Dupal isotopic anomaly. *Earth Planet. Sci. Lett.*, 84, 153-164.
- Mukasa, S.B.**, 1986, Zircon U-Pb ages of super-units in the Coastal batholith, Peru: implications for magmatic and tectonic processes. *Geol. Soc. Amer. Bull.*, 97, 241-254.
- Mukasa, S.B.**, 1986, Lead isotopic compositions of the Lima, Arequipa and Toquepala segments in the Coastal batholith, Peru: implications for magmagenesis. *Geochim. Cosmochim. Acta*, 50, 771-782.
- Sutter, J.F., Ratcliffe, N.M., and **Mukasa, S.B.**, 1985,  $^{40}\text{Ar}/^{39}\text{Ar}$  and K/Ar data bearing on the metamorphic and tectonic history of New England. *Geol. Soc. Amer. Bull.*, 96, 123-136.
- Mukasa, S.B.**, and Tilton, G.R., 1985, Lead isotope systematics as a guide to crustal involvement in the generation of the Coastal batholith, Peru. In: *Magmatism at a Plate Edge*. W.S. Pitcher, E.J. Cobbing, R.D. Beckinsale and W.P. Taylor, eds., 235-238; Blackie and Son Ltd., Glasgow.
- Mukasa, S.B.**, and Tilton, G.R., 1985, Zircon U-Pb ages of super-units in the Coastal batholith, Peru: a preliminary report. In: *Magmatism at a Plate Edge*. W.S. Pitcher, E.J. Cobbing, R.D. Beckinsale and W.P. Taylor, eds., 230-234; Blackie and Son Ltd., Glasgow.
- Mukasa, S.B.**, and Tilton, G.R., 1984, Lead isotope systematics in batholithic rocks of the Western and Coastal Cordilleras, Peru. In: *Andean Magmatism: Chemical and Isotopic Constraints*. R.S. Harmon and B.A. Barreiro, eds., 180-189; Shiva Publishing, Nantwich, Cheshire, U.K.

**Manuscripts completed recently:**

- Mukasa, S. B.**, Andronikov, A. V., Brumley, K., Mayer, L. A., and Armstrong, A., Basalts from the Chukchi Borderland:  $^{40}\text{Ar}/^{39}\text{Ar}$  Ages and Geochemistry of submarine intraplate lavas dredged from the western Arctic Ocean. *Journal of Geophysical Research* (in review).

**Mukasa, S. B.**, and Zhou, P., Dynamic emplacement and crystallization of the lower section of the Dufek Layered Mafic Intrusion, Antarctica: Insights from elemental and Nd-, Sr-, and Pb-isotopic compositions. *Journal of Petrology* (in review)

**Abstracts of papers presented:**

Choi, S. H., **Mukasa, S. B.**, Ravizza, G., Fleming, T. H., Marsh, B. D., and Bédard, J. H. J., 2019, Fossil subduction zone origin for magmas in the Ferrar large igneous province, Antarctica: Evidence from PGE and Os isotope systematics in the Basement Sill of the McMurdo Dry Valleys. *European Geosciences Union General Assembly, Vienna: Geophysical Research Abstracts, v. 20, Abstract EGU2019-2044.*

Fahnestock, M. F., Bryce, J. G., Driscoll, C. T., Montesdeoca, M., **Mukasa, S. B.**, and Frey, S. D., 2018, Mercury cycling across a nitrogen gradient in manipulated forests (in Goldschmidt 2018) V.M. Goldschmidt Conference - Program and Abstracts, 670.

Ivanov, A. V., **Mukasa, S. B.**, Kamenestsky, V. S., Ackerson, M., Demonterova, E. I., Pokrovsky, B. G., and Vladykin, N. V., 2017, High water in meimechites of the Siberian traps LIP (in Goldschmidt 2017) V.M. Goldschmidt Conference - Program and Abstracts, ISSN: 1042-7287.

Guitreau, M., **Mukasa, S. B.**, Loudin, L., and Krishnan, S., 2016, Probing the igneous zircon record of the Western Dharwar Craton using U-Pb and Lu-Hf isotope systematics to understand its early growth (in Goldschmidt 2016) V.M. Goldschmidt Conference - Program and Abstracts, 1006.

Peterson, M. E., **Mukasa, S. B.**, and Hervig, R. L., 2016, Volatile and elemental co-variations in multiply sourced Icelandic magmas: new evidence from olivine-hosted melt inclusions. *American Geophysical Union Fall Meeting, 2016, AGU 2016 fall meeting.*

**Mukasa, S. B.**, Mayer, L. A., Aviado, K., Bryce, J., Andronikov, A., Brumley, K., Blichert-Toft, J., Petrov, O., and Shokalsky, S., 2015, Alpha / Mendeleev Ridge and Chukchi Borderland <sup>40</sup>Ar/<sup>39</sup>Ar Geochronology and Geochemistry: Character of the First Submarine Intraplate Lavas Recovered from the Arctic Ocean. *European Geosciences Union General Assembly, Vienna: Geophysical Research Abstracts, v. 17, Abstract EGU2015-8291.*

Spiegel, C., Lindow, J., Kamp, P., Meisel, O., **Mukasa, S. B.**, Lisker, F., Kuhn, G., and Gohl, K., 2015, Tectonomorphic evolution of Marie Byrd Land – Implications for Cenozoic rifting activity and onset of West Antarctic glaciation. *European Geosciences Union General Assembly, Vienna: Geophysical Research Abstracts, v. 17, Abstract EGU2015-10177.*

Guitreau, M., Gonzalez, J., **Mukasa, S. B.**, and Colucci, M., 2014, Determination of water concentration in volcanic glasses using Laser Induced Breakdown Spectroscopy (LIBS) (in Goldschmidt 2014) V.M. Goldschmidt Conference - Program and Abstracts, 24:881.

Guitreau, M., **Mukasa, S. B.**, and Blichert-Toft, J., 2014, Insights into Pikes Peak Batholith construction using U-Pb ages and Hf isotopes in zircons from lake George Ring Complex (Colorado, USA) (in Goldschmidt 2014) V.M. Goldschmidt Conference - Program and Abstracts, 24:882.

Guitreau, M., Gonzalez, J., **Mukasa, S. B.**, and Colucci, M., 2014, Geochemical applications of the tandem LA-ICP-MS/LIBS analytical technique *Fall Meeting, AGU, San Francisco, Calif., Dec.*

Hoffmann, S. S., McDermott, K. J., McManus, J. F., **Mukasa, S. B.**, 2014, <sup>231</sup>Pa/<sup>230</sup>Th records of Arctic/Atlantic interchange in Fram Strait. *American Geophysical Union Fall Meeting, 2014, AGU 2014 fall meeting.*

Aviado, K., Rilling-Hall, S.; **Mukasa, S. B.**, Bryce, J. G., and Cabato, J., 2013, Melt generation in the West Antarctic Rift System; the volatile legacy of Gondwana subduction? *American Geophysical Union Fall Meeting, 2013, AGU 2013 fall meeting.*

- Aviado, K. B., Rilling, S., **Mukasa, S. B.**, Bryce, J. G., and Cabato, J., 2013, Melt generation in the West Antarctic Rift System; the volatile legacy of Gondwana subduction? Goldschmidt abstracts, *Min. Mag.*, 77, 632, doi:10.1180/minmag.2013.077.5.1
- Brumley, K. J., **Mukasa, S. B.**, O'Brien, T. M., Mayer, L. A., and Chayes, D. N., 2013, Dredged bedrock samples from the Amerasia Basin, Arctic Ocean. *American Geophysical Union Fall Meeting, 2013, AGU 2013 fall meeting.*
- Mukasa, S. B.**, Loudin, L. C., Peterson, M., and Dixon, E. T., 2013, Relationship between volatiles and noble gases in Icelandic lavas: Evidence for crustal recycling. Goldschmidt abstracts, *Min. Mag.*, 77, 1801, doi:10.1180/minmag.2013.077.5.13
- Giacomoni, P. P., Coltorti, M., **Mukasa, S. B.**, Bonadiman, C., Ferlito, C., and Pelorosso, B., 2013 Petrological study of Cenozoic basic lavas and melt inclusions from northern Victoria Land (Antarctica) Goldschmidt abstracts, *Mineralogical Magazine*, 77, 1165, doi: 10.1180/minmag.2013.077.5.7.
- Hudgins, T. R., **Mukasa, S. B.**, and Simon, A. C., 2013, Melt-inclusion evidence for a CO<sub>2</sub>-rich mantle beneath the western branch of the East African Rift Goldschmidt abstracts, *Min. Mag.*, 77, 1344, doi:10.1180/minmag.2013.077.5.8.
- Mukasa, S. B.**, Aviado, K. B., Rilling-Hall, S., Bryce, J. G., and Cabato, J., 2013, Rifting, volcanism, and the geochemical character of the mantle beneath the West Antarctic Rift System. *American Geophysical Union Fall Meeting, 2013, AGU 2013 fall meeting.*
- Elliot, D., Fanning, C. M., and **Mukasa, S. B.**, 2012, Isotopic studies of near contemporaneous zircons from Permian and Triassic strata in central Antarctica and the contemporaneous magmatic arc in West Antarctica; preliminary results. *Geol. Soc. Am. Abstr. Prog.* 44(7), 72.
- Jin, L., **Mukasa, S. B.**, Ogrinc, N., Hamilton, S., Walter, L. M., 2012, Impacts of glacial/interglacial cycles on continental rock weathering and CO<sub>2</sub> consumption using Sr/C isotopes in Michigan watersheds. *Min. Mag.*, 76(6).
- Mukasa, S. B.**, Rilling-Hall, S., Marcano, M. C., Wilson, T. J., Lawver, L. L., and LeMasurier, W. E., 2012, Nature of the mantle sources and bearing on tectonic evolution in the West Antarctic Rift System. *American Geophysical Union Fall Meeting, 2012, AGU 2012 fall meeting.*
- Choi, S. H., and **Mukasa; S. B.**, 2011, Lu-Hf and Sm-Nd isotope systematics of Korean spinel peridotites: A case for Nd-Hf decoupling. *Min. Mag.*, 75(3), 670.
- Hanemann, R., Viereck-Goette, L., and **Mukasa, S. B.**, 2011, Petrogenetic implications from PGE in the layered mafic Dufek intrusion and related sills of the Ferrar large igneous province, Antarctica. *Min. Mag.*, 75(3), 975.
- Mukasa, S. B.**, 2011, Dufek layered mafic intrusion, Antarctica: Perspective on differentiation from Nd-Sr-Pb isotopic compositions, PGE abundance patterns and trace element modeling. *Abstract V43A-2567 Poster presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.*
- Mukasa, S. B.**, Stefano, C., Marcano, M. C., Hudgins, T., Peterson, M., Shimizu, N., and Kent, A. J., 2011, Volatiles in the mantle: Impact on intraplate magmatism. *Min. Mag.*, 75(3), 1512.
- Mukasa, S. B.**, Rilling, S., Wilson, T. J., and Lawver, L., 2010, Submarine volcanism in the Ross Sea, Antarctica; bearing on the nature of mantle sources. *Geochimica et Cosmochimica Acta* 74, A734.
- Shervais, J.W., Choi, S. H., Jean, M., and **Mukasa, S. B.**, 2010, Initiation of proto-Franciscan subduction along a transform fault zone: evidence from serpentinite melange of the Coast Range Ophiolite Complex. *Geol. Soc. Am. Abstr. Prog.* 42, no. 5, 576.

- Choi, S. H., **Mukasa; S. B.**, Andronikov, A. V., Osanai; Y., Harley, S. L., and Kelly, N. M., 2009, Lu-Hf systematics of the ultra-high temperature Napier Complex, East Antarctica: evidence for the early Archean formation of continental crust. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V13A-2004.
- Hanemann, R., Melcher, F., **Mukasa, S. B.**, Viereck-Goette, L., and Abratis, M., 2009, PGE-enrichment with late-stage Fe-Ti oxide crystallization observed in the Dufek-Forrestal layered mafic intrusion, Antarctica. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V21A-1973.
- LeMasurier, W. E., Choi S. H., **Mukasa, S. B.**, and Rogers, N. W., 2009, The Peralkaline Rhyolite Spectrum in Marie Byrd Land Volcanoes, West Antarctic Rift, and the Case for Polybaric Fractionation. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V51A-1664.
- Marcano, M. C., Frank, T. D., **Mukasa; S. B.**, Lohmann K. C., Stefano C., Taviani, M., and Andronikov, A. V., 2009, Sr Isotope Systematics of Aragonite Shell Fragments and Pore Waters from an ANDRILL Core, Southern McMurdo Sound, Antarctica. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract PP43A-1554.
- Mukasa, S. B.**, Andronikov, A., Mayer, L. A., and Brumley, K., 2009, Geochemistry and geochronology of the first intraplate lavas recovered from the Arctic Ocean. *Geol. Soc. Am. Abstr. Prog.* 41, no. 7, 370.
- Mukasa, S. B.**, Andronikov, A., Mayer, L. A., and Brumley, K., 2009, Submarine basalts from the Alpha Mendeleev Ridge and Chukchi Borderland: Geochemistry of the first intraplate lavas recovered from the Arctic Ocean. *Geochimica Et Cosmochimica Acta* 73, A912.
- Mukasa, S. B.**, Stefano, C., Leeman, W. P., and Shimizu, N., 2009, Exceptionally high Water, Other Volatile and LILE Concentrations in Olivine-Hosted Melt Inclusions from the Yellowstone Hotspot and Columbia River Flood Basalts. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V51E-1773.
- Peterson, M. E., **Mukasa, S. B.**, Stefano, C., Shimizu, N., and Kent, A. J., 2009, Elevated water concentrations and evidence of small scale heterogeneity in olivine-hosted melt inclusions: Insight into the source of high melt volumes in the Iceland hotspot. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V42B-05.
- Stefano, C., **Mukasa, S. B.**, Andronikov., A. V., and Leeman, W. P., 2009, Exceptionally high Water, Other Volatile and LILE Concentrations in Olivine-Hosted Melt Inclusions from the Yellowstone Hotspot and Columbia River Flood Basalts. *Geol. Soc. Am. Abstr. Prog.* 41, no. 7, 339.
- Andronikov, A., **Mukasa, S. B.**, Mayer, L., and Brumley, K., 2008, First recovery of submarine basalts from the Chukchi Borderland and Alpha/Mendeleev Ridge, Arctic Ocean. . *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract V41D-2124.
- Choi, S. H., Shervais, J. W., and **Mukasa, S. B.**, 2008, Supra-subduction and abyssal mantle peridotites of the Coast Range ophiolite, California: Initiation of Franciscan subduction along a large-offset fracture zone. *Geochimica Et Cosmochimica Acta* 72, A160.
- Hanemann, R., Viereck-Goette, L., and **Mukasa, S. B.**, 2008, Distribution of PGE in the layered Mafic Dufek Intrusion, Antarctica. *Geochimica et Cosmochimica Acta* 72, A350.
- LeMasurier, W. E., Choi S. H., **Mukasa, S. B.**, and Rogers, N. W., 2008, Evidence for the involvement of medium- to high-pressure fractionation processes in the origin of Marie Byrd Land pantellerites, West Antarctic Rift System. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract V51A-1664.

- Mukasa, S. B.** and Andronikov, A. V., 2008, Record of upper mantle evolution beneath Western Alaska as preserved by peridotite xenoliths in the Bering Sea Volcanic Province. *Geochimica et Cosmochimica Acta* **72**, A661.
- Mukasa, S. B.**, Choi, S. H., Andronikov, A. V., and Marcano, M. C., 2008, Extreme Sr-Nd-Pb-Hf isotopic compositions exhibited by the Tinaquillo peridotite massif, northern Venezuela; implications for geodynamic setting. *Geol. Soc. Am. Abstr. Prog.* **40**, no. 6, 104.
- Shervais, J.W., Jean, M., Choi, S. H., and **Mukasa, S. B.**, 2008, Geochemical flux in the mantle wedge: Insights from suprasubduction zone ophiolites. *Geochimica et Cosmochimica Acta* **72**, A856.
- Choi, S. H., **Mukasa, S. B.**, Zhou, X., Xian, X.H., and Andronikov, A. V., 2007, Mantle Dynamics beneath East Asia Constrained by Sr, Nd, Pb and Hf Isotopic Systematics of Ultramafic Xenoliths and their Host Basalts from Hannuoba, North China. *Eos Trans. AGU*, **88(52)**, Fall Meet. Suppl., Abstract V43B-1364.
- Choi, S. H., Shervais, J.W. and **Mukasa, S. B.**, 2007, Supra-subduction and abyssal mantle peridotites in serpentinite melange, Coast Range Ophiolite, California: Implications for melange formation. *Geol. Soc. Am. Abstr. Prog.* **39**, no. 6, 454.
- Mukasa, S.B.**, 2007, Lessons Learned About Recruiting and Retention of a Diverse Faculty During 5 Years of the University of Michigan ADVANCE Program. *Eos Trans. AGU*, **88(52)**, Fall Meet. Suppl., Abstract ED11B-0472.
- Mukasa, S.B.**, Choi, S.H., Andronikov, A.V., Osanai, Y., Harley, S.L. and Kelly, N.M., 2007, Lu-Hf Systematics of the Ultra-High Temperature Napier Complex, East Antarctica: Evidence for the Early Archean Differentiation of Earth's Mantle. *U.S. Geological Survey and The National Academies; USGS OF-2007-1047*, Extended Abstract 207
- Mukasa, S.B.**, Ravizza, G., Bédard, J., Choi, S.H., Andronikov, A.V., Fleming, T., Marsh, B.D. and 2007, Dufek Layered Mafic Intrusion and Basement Sill, Antarctica: Constraints on their Magma Sources Based on PGE Abundance Patterns, Nd-Sr-Pb Isotopic Ratios and Trace Element Modeling. *Eos Trans. AGU*, **88(52)**, Fall Meet. Suppl., Abstract V53D-03 (Invited).
- Rilling, S.E., **Mukasa, S. B.** and Andronikov, A. V., 2007, Geochemical Evidence of a Metasomatized Mantle Source Beneath the West Antarctic Rift System. *Eos Trans. AGU*, **88(52)**, Fall Meet. Suppl., Abstract V43B-1372.
- Race, M.S., Hobbie, J.E., Baker, A., Clarke, G., Doran, P.T., Karl, D., Methe, B., Miller, H., **Mukasa, S.B.**, Vincent, W., White, J.W., Walton, D. and Uhle, M., 2007, TI: Guidelines to Avoid Biocontamination of Antarctic Subglacial Aquatic Environments: Forward Contamination Concerns, Environmental Management and Scientific Stewardship of Icy analogue environments. *Eos Trans. AGU*, **88(52)**, Fall Meet. Suppl., Abstract P52A-07.
- White, J.W., Hobbie, J.E., Baker, A., Clarke, G., Doran, P.T., Karl, D., Methe, B., Miller, H., **Mukasa, S.B.**, Race, M., Vincent, W., Walton, D. and Uhle, M., 2007, Exploration of Antarctic Subglacial Aquatic Environments: Environmental and Scientific Stewardship. *Eos Trans. AGU*, **88(52)**, Fall Meet. Suppl., Abstract U23B-06.
- Carrigan, C.W., **Mukasa, S.B.**, Essene, E.J., Haydoutov, I. and Kolcheva, K., 2006, Multiple P-T paths for eclogites from the Bulgarian Rhodope Massif. *Geol. Soc. Am. Abstr. Prog.* **38**, no. 7, 276.
- Mukasa, S. B.** and Andronikov, A. V., 2006, Multiplicity of Magma Source Characteristics and Melting Processes for Late Cenozoic Basalts of the Bering Sea Volcanic Province (BSVP), Alaska. *Eos Trans. AGU*, **87(52)**, Fall Meet. Suppl., Abstract V13B-0682.
- Choi, S. H., **Mukasa, S. B.**, Kwon, S.T. and Andronikov, A. V., 2006, Sr, Nd, Pb and Hf Isotopic Compositions of Late Cenozoic Alkali Basalts in South Korea: Evidence for Mixing Between the

- Two Dominant Asthenospheric Mantle Domains Beneath East Asia. *Eos Trans. AGU*, 87(52), West. Pac. Geophys. Meet. Suppl., Abstract V35A-03.
- Mukasa, S. B.**, Choi, S. H., Xian, X.H., Zhou, X. and Andronikov, A. V., 2006, Asthenospheric Mantle Source for the Hannuoba (North China) Alkali Basalts: Evidence from Sr, Nd, Pb and Hf Isotopic Systematics of Ultramafic Xenoliths and the Host Basalts. *Eos Trans. AGU*, 87(52), West. Pac. Geophys. Meet. Suppl., Abstract V35A-02.
- Mukasa, S.B.**, Ravizza, G., Bédard, J., Fleming, T., Boudreau, A., Marsh, B.D. and Choi, S.H., 2006, PGE abundance patterns for the basement sill and Dufek intrusion, Ferrar large igneous province, Antarctica. *Goldschmidt Conference Abstracts*, Melbourne, Australia, A434.
- Page, F., Kita, N.T., **Mukasa, S.B.**, Essene, E.J. and Valley, J.W., 2006, Hydrothermal Blueschist Facies Zircons from the Franciscan Complex, California. *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V41E-08.
- Bédard, J. H., Fleming, T., Hersum, T., Marsh, B., Mathez, E., **Mukasa, S. B.**, Naslund, H. R. and Simon, A., 2005, Evidence for channelized transfer of residual melts and fluids in the Basement Sill, Ferrar Province, Antarctica. *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract V14C-05.
- Choi, S. H., **Mukasa, S. B.**, Andronikov, A. V. and Marcano, M. C., 2005, Geochemistry of the Tinaquillo Peridotite Massif, Venezuela. *Goldschmidt Conference*, Moscow, Idaho, *Supp. Geochim. Cosmochim. Acta*, Abstract A438.
- Mukasa, S. B.**, Choi, S. H., Andronikov, A. V., Osanai, Y. and Harley, S. L., 2005, Lu-Hf systematics of the earliest crust in Antarctica: The Napier Complex of Enderby Land. *Goldschmidt Conference*, Moscow, Idaho, *Supp. Geochim. Cosmochim. Acta*, Abstract A396.
- Mukasa, S. B.**, Ravizza, G., Bédard, J., Fleming, T., Boudreau, A. and Marsh, B. D., 2005, Basement Sill of the Jurassic Ferrar Large Igneous Province, Antarctica: Constraints from its PGE abundance patterns on magma source characteristics and crystallization processes. *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract V14C-08.
- Naslund, H. R., Bédard, J. H., Simon, A. and **Mukasa, S. B.**, 2005, Small-scale modal layering in the Dais section of the Basement Sill, Ferrar Province, Antarctica. *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract V13H-04.
- Akinin, V. V., Miller E. L., **Mukasa, S. B.**, and Andronikov, A. V., 2004, Mesozoic-Cenozoic reworking of the deep crust beneath the Bering Sea plate: Data from lower to middle crust xenoliths. *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract GP44A-07.
- Armstrong, L., Page, F.Z., Essene, E.J. and **Mukasa, S.B.**, 2004, Two generations of sphene in one garnet from a Franciscan eclogite, Healdsburg, California. *Geol. Soc. Am. Abstr. Prog.* 36, #50-9.
- Carrigan, C.W., **Mukasa, S.B.**, Haydoutov, I., and Kolcheva, K., 2004, An eastern extension of Gondwana-derived terranes and the Variscan Orogeny in Bulgaria. *Geol. Soc. Am. Abstr. Prog.* 36, #231-7.
- Choi, S. H., **Mukasa, S. B.**, Kwon, S. T., and Andronikov, A. V., 2004, Sr, Nd, Pb and Hf Isotopic Compositions of Late Cenozoic Alkali Basalts in South Korea: Evidence for Mixing Between the Two Dominant Asthenospheric Mantle Domains beneath East Asia. *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract T11C-1272
- Mukasa, S. B.**, and Andronikov, A. V. 2004, Dufek Layered Mafic Intrusion, Antarctica: Constraints on Magma Chamber Processes from U-Pb Geochronology and Trace Element Modeling. *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract V53A-0617

- Mukasa, S. B.**, and Andronikov, A. V. 2004, Nd, Sr and Pb isotopic and trace element data support a subduction origin for the Dufek layered mafic intrusion, Antarctica. Goldschmidt Conference, Copenhagen, Denmark, *Supp. Geochim. Cosmochim. Acta*, Abstract 5.2.23, A576.
- Mukasa, S. B.** and STRIDE Committee, 2004, The NSF-Supported ADVANCE Initiative at the University of Michigan Aimed at Successful Recruitment and Retention of Women Faculty in Science and Engineering. *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract ED23B-0098
- Page, F.Z., Essene, E.J. and **Mukasa, S.B.**, 2004, Quartz exsolution in clinopyroxene is not proof of ultra-high pressures: evidence from phase equilibria and eclogite from the Eastern Blue Ridge, Southern Appalachians, USA. *Geol. Soc. Am. Abstr. Prog.* 36, #195-3.
- Smith, A. E., Wilson, T. J., Davis, M., Lawver, L. A., and **Mukasa, S. B.**, 2004, Franklin Volcanic Field: Characteristics of a Submarine Volcanic Province in the Western Ross Sea, Antarctica. *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract T11A-1231
- DuFrane S.A., Asmerom, Y., **Mukasa, S.B.**, Dreyer, B., and Morris, J.D., 2003, Sediment/Fluid Contributions and Element Transport Deduced from Elemental and Isotopic Data From the Luzon-Bicol arc Systems, Philippines. *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract V32F-03
- Essene, E.J., Page, F.Z., and **Mukasa, S.B.**, 2003, Quantitative Prograde P-T Paths From Inclusion Assemblages in Eclogitic Garnets. *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract V12F-05
- Mukasa, S.B.**, 2003, Continental Arc Magmatism and its Abrupt Termination by Ridge Subduction or Ridge Jump Along the Proto-Pacific Margin of Gondwana, Marie Byrd Land, Antarctica: A Zircon U-Pb Study. *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract V32F-05
- Page, F.Z., **Mukasa, S.B.**, Essene, E.J., Carrigan, C.W., 2003, Lu-Hf and U-Pb Chronology of a Possible Triassic Franciscan High-Grade Block, Healdsburg, California. *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract V32C-1035
- Carrigan, C.W., **Mukasa, S.B.**, Haydoutov, I., and Kolcheva, K., 2003, Contrasting styles of Variscan granitic plutonism, central Bulgaria: A zircon U-Pb geochronological study. *Geol. Soc. Am. Abstr. Prog.*, 35 (6), 554.
- Carrigan, C.W., **Mukasa, S.B.**, Haydoutov, I., and Kolcheva, K., 2003, Ion microprobe U-Pb zircon ages of pre-Alpine rocks in the Balkan, Sredna Gora, and Rhodope Terranes of Bulgaria: Constraints on Mesoproterozoic and Variscan tectonic evolution. *Magmatic and Metamorphic Evolution of Central European Variscides, J. Czech Geol. Soc.*, 48 (1-2), 32.
- Mukasa, S.B.**, Haydoutov, I., Carrigan, C.W., and Kolcheva, K., 2003, Thermobarometry and  $^{40}\text{Ar}/^{39}\text{Ar}$  ages of eclogitic and gneissic rocks in the Sredna Gora and Rhodope Terranes of Bulgaria. *Magmatic and Metamorphic Evolution of Central European Variscides, J. Czech Geol. Soc.*, 48 (1-2), 94.
- Carrigan, C.W., Essene, E.J., **Mukasa, S.B.**, Haydoutov, I., and Kolcheva, K., and Carpenter, C.M., 2002, Thermobarometric constraints on the formation of sapphirine-spinel-plagioclase symplectites in kyanite eclogites, and the prograde and retrograde P-T path, Central Rhodope Massif, Bulgaria. *Geol. Soc. Am. Abstr. Prog.*, 34 (6), 503.
- Mukasa, S.B.**, and Andronikov, A.V., 2002, Lithospheric Mantle Evolution Beneath the Bering Sea Volcanic Province: An Isotopic and Trace Element Study of Peridotite Xenoliths and Their Host Lavas. *EOS* 83, F1435.
- Asmerom, Y., **Mukasa, S.B.**, Cheng, H., Polyak, V. and Edwards, R.L., 2002, Timescale of Melt Differentiation from  $^{231}\text{Pa}$ - $^{226}\text{Ra}$  Data. Goldschmidt Conference, Davos, Switzerland, *Goldschmidt Conference Abstracts*, A035.
- Page, F. Z., Essene, E.J., and **Mukasa, S.B.**, 2001, Thermobarometry of eclogites from the Eastern Blue Ridge, North Carolina. *Geol. Soc. Amer. Abst. Prog.*, 33, 251.



- Asmerom, Y., **Mukasa, S.B.**, Cheng, H. and Edwards, R.L., 2000, Pa-Th-U Constraints on Melting and Material Recycling in Subduction Zones: A Case Study of the Philippine Arcs. Goldschmidt Conference, Oxford, U.K., *Jour. Conf. Abstracts* 5(2), 166.
- Ionov, D.A., **Mukasa, S.B.** and Bodinier, J.-L., 2000 Sr and Nd Isotope Decoupling in the Mantle by Melt Percolation Metasomatism: Evidence from Peridotite Xenoliths from Spitsbergen. Goldschmidt Conference, Oxford, U.K., *Jour. Conf. Abstracts* 5(2), 541.
- Mukasa, S.B.**, Blatter, D. and Andronikov, A.V., 2000, Arc Mantle Xenoliths and Their Quaternary Andesite Host Rocks Near El Peñon, Central Trans Mexican Volcanic Belt: a Trace Element and Radiogenic Isotope Study. Goldschmidt Conference, Oxford, U.K., *Jour. Conf. Abstracts* 5(2), 729.
- Mukasa, S.B.** and Ionov, D.A., 2000, Mechanisms and Sources of Mantle Metasomatism: Evidence from Trace Element and Sr-Nd-Pb Isotope Compositions of Peridotite Xenoliths from Spitsbergen. *EOS* 81, S419.
- Mukasa, S.B.**, and Andronikov, A.V., 1999, Trace element and Sm-Nd and Rb-Sr isotopic evidence for incipient melting of clinopyroxene in lherzolite xenoliths of the Jetty Peninsula area, East Antarctica. *EOS* 80, S379.
- Mukasa, S.B.**, and Andronikov, A.V., 1999, Petrologic and geochemical relationships between the Dufek layered mafic intrusion and coeval dikes and sills in its immediate vicinity, Pensacola Mountains, Antarctica. *EOS* 80, S376.
- Mukasa, S.B.**, and Andronikov, A.V., 1999, Trace element and Sm-Nd and Rb-Sr isotopic evidence for incipient melting of clinopyroxene in lherzolite xenoliths of the Jetty Peninsula area, East Antarctica. 8<sup>th</sup> International Symposium on Antarctic Earth Sciences, Wellington, New Zealand, Programme and Abstracts, pp. 220.
- Mukasa, S.B.**, and Andronikov, A.V., 1999, Petrologic and geochemical relationships between the Dufek layered mafic intrusion and coeval dikes and sills in its immediate vicinity, Pensacola Mountains, Antarctica. 8<sup>th</sup> International Symposium on Antarctic Earth Sciences, Wellington, New Zealand, Programme and Abstracts, pp. 219.
- Mukasa, S. B.**, 1998, A case for subduction involvement in the generation of high-MgO and high-SiO<sub>2</sub> magmas in layered mafic intrusions. *Chinese Science Bulletin*, 43, 92.
- Mukasa, S. B.**, Zhou, P., Minor, D.R., and Wilson, A.H., 1997, Bushveld, Dufek, and Great Dyke Intrusions: Similarities, Differences, and the Petrogenesis of Layered Mafic Intrusions. *Eos*, 78
- Mukasa, S.B.**, and Shervais, J.W., 1997, The Balmuccia orogenic peridotite massif, Italy: Character of the uppermost mantle. *Workshop on Continental Roots*, Conf. Vol., Harvard University, 69-70.
- Mukasa, S.B.**, Wilson, A.H., and Carlson, R.W, 1996, Source characterization and crystallization age of the Great Dyke layered mafic intrusion, Zimbabwe. *Eos*, 77, F823.
- Mukasa, S.B.**, 1995, U-Pb, Rb-Sr, and <sup>40</sup>Ar/<sup>39</sup>Ar age constraints on the development and tectonic evolution of microplates in West Antarctica, *Seventh International Symposium on Antarctic Earth Sciences, Siena, Italy, Abst. Prog.*, 278.
- Encarnación, J.P., and **Mukasa, S.B.**, 1995, Post-spreading crustal melting in the South China Sea area: Zircon and monazite U-Pb systematics and geochemistry of the Capoas granite, Palawan, Philippines, *Eos*, 76, S286.
- Grunow, A.M., Wilson, T.J., and **Mukasa, S.B.**, 1995, Constraints on the timing of East Gondwana assembly: A reappraisal, *Eos*, 76, p.S280.
- Minor, D.R., and **Mukasa, S.B.**, 1995, A new U-Pb crystallization age and isotope geochemistry of the Dufek layered mafic intrusion: Implications for formation of the Ferrar Volcanic Province, *Seventh International Symposium on Antarctic Earth Sciences, Siena, Italy, Abst. Prog.*, 272.

- Minor, D.R., and **Mukasa, S.B.**, 1995, A new U-Pb crystallization age and isotope geochemistry of the Dufek layered mafic intrusion: Implications for formation of the Ferrar Volcanic Province, *Eos*, 76, S285-S286.
- Zhou, P., and **Mukasa, S.B.**, 1995, An isotopic and trace element study of the Dufek layered intrusion: Insights into magma differentiation mechanisms, *Seventh International Symposium on Antarctic Earth Sciences, Siena, Italy, Abst. Prog.*, 422.
- Mukasa, S.B.**, Dalziel, I.W.D., and Pankhurst, R.J., 1994, U-Pb and  $^{40}\text{Ar}/^{39}\text{Ar}$  age constraints on the development and subsequent fragmentation of Gondwanaland's Pacific margin, Marie Byrd Land, Antarctica, *Eos*, 75, p.692.
- Mukasa, S.B.**, Zhou, P., and Barr, S.M., 1994, Geochemical character of mantle sources beneath continental southeast Asia: a Nd-Sr-Pb isotopic and major- and trace-element study of Cenozoic basalts in Thailand, *Eos*, 75, p.736.
- Encarnación, J.P., Essene, E.J., **Mukasa, S.B.**, Hall, C., 1994, Kyanite-garnet amphibolites generated during initiation of subduction, Palawan, Philippines: Implications for ophiolite obduction. *Eos*, 75, 736.
- Hallett, R.B., Kyle, P.R., and **Mukasa, S.B.**, 1994, Modification of the lithosphere during continental rifting: Geochemical and isotopic evidence from the southeastern Colorado Plateau transition zone, New Mexico. *Abst. Eighth Internat. Conf. on Geochron. Cosmochron. and Isotope Geol., U.S.G.S. Circular 1107*, Berkeley, California, 122.
- Kyle, P.R., Pankhurst, R.J., **Mukasa, S.B.**, Panter, K., Smellie, J., and McIntosh, W., 1994, Sr, Nd and Pb isotopic variations in the Marie Byrd Plume, West Antarctica. *Abst. Eighth Internat. Conf. on Geochron. Cosmochron. and Isotope Geol., U.S.G.S. Circular 1107*, Berkeley, California, 184.
- Panter, Pankhurst, R.J., K., Kyle, P.R., Smellie, J., **Mukasa, S.B.**, and McIntosh, W., 1994, Petrogenetic interpretations of Sr, Nd, O and Pb isotopes from the Mount Sidley Volcano, Marie Byrd Land, Antarctica. *Abst. Eighth Internat. Conf. on Geochron. Cosmochron. and Isotope Geol., U.S.G.S. Circular 1107*, Berkeley, California, p.241.
- Mukasa, S.B.**, and Wilshire, H.G., 1993, Lithospheric evolution beneath Cima volcanic field, S. California. *Eos*, 74, 324.
- Encarnación, J.P., **Mukasa, S.B.**, and Obille, E.C., 1993, Origin of the Zambales and Angat Ophiolites, Philippines: New constraints from zircon U-Pb geochronology. *Eos*, 74, 286.
- Opare-Addo, E., John, B.E., **Mukasa, S.B.**, and Browning, P., 1993, Field and geochronologic (U-Pb) constraints on the age and generation of granitoids and migmatites in southern Ghana. *Eos*, 74, 301.
- Palais, D.G., **Mukasa, S.B.**, and Weaver, S.D., 1993, U-Pb and  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology for plutons along the Ruppert and Hobbs Coasts, West Antarctica: Evidence for rapid transition from arc to rift-related magmatism. *Eos*, 74, 123.
- Encarnación, J.P., **Mukasa, S.B.**, and Evans, C., 1993, A Pb and Sr isotopic view into supra-subduction zone lithosphere: Zambales Ophiolite, Luzon, Philippines. *Eos*, 74, 680.
- Palais, D.G., and **Mukasa, S.B.**, 1992, Improving U-Pb concordance of zircon through sequential dissolution in a microwave oven. *Geol. Soc. Amer. Abst. Prog.*, 24, A217.
- Tangeman, J.A., **Mukasa, S.B.**, and Grunow, A., 1992, Geochronologic and geochemical constraints on the magmatic and kinematic evolution of the northern Antarctic Peninsula. *Geol. Soc. Amer. Abst. Prog.*, 24, A191-A192.
- Mukasa, S.B.**, Flower, M.F.J., Wright, E., Defant, M.J., and Miklius, A., 1991, Contrasts in the isotopic and trace element characteristics between volcanic chains of the two oppositely-dipping Philippine subduction zones: Bearing on arc magma petrogenesis. *Eos*, 72, 244.

- Stern, C.R., **Mukasa, S.B.**, and Fuenzalida, R., 1991, Age of the Sarmiento ophiolite complex and the Rocas Verdes marginal basin, Magallanes, Chile. *Congreso Geologico Chileno*, 241-243.
- Tangeman, J.A., **Mukasa, S.B.**, and Grunow, A., 1991, Geochronologic and geochemical constraints on the magmatic and kinematic evolution of the western Antarctic Peninsula. *Sixth International Symposium on Antarctic Earth Sciences, Ranzan, Japan, Abst. Prog.*, 576.
- Mukasa, S.B.**, Shervais, J.W., Wilshire, H.G., and Nielson, J.E., 1990, Upper mantle Nd-, Pb- and Sr-isotopic heterogeneities exhibited by alpine peridotite massifs at Lherz and Balmuccia. *International Workshop on Orogenic Lherzolites and Mantle Processes, Montpellier, France, Abst. Prog.*, 13.
- Nielson, J.E., Wilshire, H.G., Meyer, C., Shervais, J.W., and **Mukasa, S.B.**, 1990, Fractionated dikes, Lherz massif, southern France. *International Workshop on Orogenic Lherzolites and Mantle Processes, Montpellier, France, Abst. Prog.*, 13.
- Shervais, J.W., and **Mukasa, S.B.**, 1990, Metasomatic effects of magma intrusion in spinel lherzolite: Dike rocks and amphibole veins in the Balmuccia peridotite massif. *International Workshop on Orogenic Lherzolites and Mantle Processes, Montpellier, France, Abst. Prog.*, 17.
- Mukasa, S.B.**, Dalziel, I.W.D., and Kunk, M., 1989,  $^{40}\text{Ar}/^{39}\text{Ar}$  and U-Pb age constraints on the kinematic evolution of the Northern Scotia arc. *28th Internat. Geol. Cong., Washington, D.C., Abst. Prog.*, 2 of 3, 2-476.
- Mukasa, S.B.**, Dalziel, I.W.D., and Brueckner, H.K., 1988, Zircon U-Pb constraints on the kinematic evolution of the northern Scotia arc. *Geol. Soc. Amer. Abst. Prog.*, 20, A12.
- Fodor, R.V., **Mukasa, S.B.**, and Sial, A.N., 1988, Sr-Nd-Pb isotope distinctions between continental and oceanic basalts along the Brazil margin. *Geol. Soc. Amer. Abst. Prog.*, 20, A158.
- John, B.E., and **Mukasa, S.B.**, 1988, Structural and geochronologic (U/Pb) evidence for the nature of Cretaceous plutonism and mylonitization in the Chimeheuvi mountains core complex, southeastern California. *Geol. Soc. Amer. Abst. Prog.*, 20, A271-A272.
- Perfit, M.R., **Mukasa, S.B.**, Shuster, R.D., and Fornari, D.J., 1988, Trace element and isotopic compositions of basalts from the Lamont Seamounts: Implications for MORB sources and petrogenesis. *Eos*, 69, 1475.
- Shuster, R.D., Anderson, R.R., and **Mukasa, S.B.**, 1988, Rb/Sr and Sm/Nd isotopic analysis of a Keweenawan gabbro from the subsurface of northeast Iowa. *Geol. Soc. Amer. Abst. Prog.*, 20, 128.
- Mukasa, S.B.**, Dalziel, I.W.D., and Brueckner, H.K., 1987, Zircon U-Pb ages of marginal basin and arc rocks from the northern Scotia arc. *5th International Symposium on Antarctic Earth Sciences, Cambridge, England, Abst. Prog.*, 102.
- Mukasa, S.B.**, Shervais, J.W., Wilshire, H.G., and Nielson, J., 1987, Isotopic variations in the upper mantle: the Lherz alpine peridotite massif as an example. *Eos*, 68, 1552.
- Mukasa, S.B.**, McCabe, R., and Gill, J.B., 1986, Geochemistry and Pb-isotopic compositions of lavas from the Philippine island arcs. *Terra Cognita*, 6, 198.
- Mukasa, S.B.**, McCabe, R., Gill, J.B., and Newhall, C., 1986, Philippine island arc Pb-isotopic compositions: the Dupal anomaly in a northern hemisphere island arc? *Eos*, 67, 1273.
- Mukasa, S.B.**, and Ludden, J.N., 1986, A Cenomanian-Turonian U-Pb zircon age for plagiogranites from the Troodos ophiolite, Cyprus. *Eos*, 67, 400.
- Mukasa, S.B.**, and Barreiro, B.A., 1985, Pb, Nd and Sr isotopic compositions of feldspar, apatite and sphene as a guide to the nature of the sub-Andean mantle and crust-mantle interaction in the Coastal batholith, Peru. *Geol. Soc. Amer. Abst. Prog.*, 17, 671.
- Mukasa, S.B.**, Dillon, J.T., and Tosdal, R.M., 1984, A Late Jurassic minimum age for the Pelona-Orocopia Schist protolith, southern California. *Geol. Soc. Am. Abst. Prog.*, 16, 323.

**Mukasa, S.B.**, Tilton, G.R., Barreiro, B., and Clark, A.H., 1983, Implications of Pb isotopes for the origin of mineralization in the Western Cordillera, southern Peru. *Geol. Assoc. Can. Abst. Prog. Ann. Meet.*, 8, A49 (Invited).

**Mukasa, S.B.**, and Tilton, G.R., 1983, Temporal relations and Pb isotope systematics in plutonic rocks of the Western and Coastal Cordilleras, Peru. *Eos*, 64, 329 (Invited).

Sutter, J.F., Ratcliffe, N.M., and **Mukasa, S.B.**, 1983, Chronology of metamorphic and tectonic events in Western New England. *Geol. Soc. Amer. Abst. Prog.*, 15, no. 3, 147.

**Mukasa, S.B.**, Sutter, J.F., and Ratcliffe, N.M., 1980, Comparative metamorphic and tectonic history of the Berkshire Massif, N.W. Massachusetts and the Green Mountain Massif, S.W. Vermont. *Geol. Soc. Amer. Abst. Prog.*, 12, no. 2, 74.

**Books reviewed:**

**Mukasa, S.B.**, 1990, Crust/Mantle Recycling at Convergence Zones edited by S.R. Hart and L. Gülen: *Geochimica et Cosmochimica Acta*, 54, no. 1, 256.

**Mukasa, S.B.**, 1992, An Introduction to Metamorphic Petrology by B.W.D. Yardley: *American Mineralogist*, 77, 1122.