

**Kyger C Lohmann
2020 Summary**

Departmental Service

Alumni Relations Coordinator (shared with Adam Simon)
Departmental Newsletter (heavy service)
Undergraduate Advising (shared with Dick, Cory, van der Pluijm Wilson, Smith--
Heavy)
Organizer and Leader of Spring Field Trip (Organized but Cancelled)

Community Outreach

Lecture for Detroit Country Day School (high school science students)
Science Communicator University Museums (obtained certificate and provided
presentations to the public)

Student Mentorship for Honors Research

Skye Caplan: Honor's thesis completion date April 2020

Funding

Title of Project: Collaborative Research: Interglacial climate in Bermuda and Beyond
Sponsor: NSF OCE – Marine Geology and Geophysics
Period of Award: April 2019 to March 2022
Amount of Award: \$394,767
Principal Investigators: Sierra V. Petersen and Kyger Lohmann (Co-PIs)

Title of Project: XR Exploration of Geologic Features in Field Excursions
Sponsor: UM- Academic Innovation
Period of Award: Jan 2021-Jan 2022
Amount of Award: \$6,000
Principal Investigators: Kyger Lohmann

Publications in 2020

Manuscripts Published	1
Manuscripts in Submission/Revision	1

Citations 2020

Google Scholar

Results:	
Sum of Citations:	12786
H-Factor (Feb 2019):	60
Slope	1.37
i10 index	127

KYGER C LOHMANN

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EDUCATION

Bachelor of Science, Geology; University of Kansas, 1972
Doctor of Philosophy, Earth Sciences; SUNY, Stony Brook, 1977

EMPLOYMENT

Research Associate, *Brown University*, R.I.; 1977 to 1979
Research Associate, *SUNY, Stony Brook*; 1979 to 1980
Assistant Professor, Department of Geological Sciences,
University of Michigan, Ann Arbor, Michigan; 1980 to 1985
Associate Professor, Department of Geological Sciences,
University of Michigan, Ann Arbor, Michigan; 1986 to 1993
Professor, Department of Geological Sciences,
University of Michigan, Ann Arbor, Michigan; 1993 to present

HONORS AND AWARDS

1972 Outstanding Senior: University of Kansas, Department of Geology
1983 Outstanding Poster Award: Society of Economic Paleontologists and Mineralogists
1985 Outstanding Speaker: Canadian Society of Petroleum Geologists
1994 University Outstanding Teaching Recognition
1996 College of Literature Science and Arts Award, Excellence in Teaching
1997 College of Literature Science and Arts Award, Excellence in Teaching
1999 College of Literature Science and Arts Award, Excellence in Teaching
2000 College of Literature Science and Arts Award, Excellence in Teaching
2002 College of Literature Science and Arts Award, Excellence in Teaching
2002 Outstanding Alumni Award, University of Kansas
2004-5 Joint Oceanographic Institutes Distinguished Lecturer 2004-2005
2015 Outstanding Teacher Award (Geoclub , University of Michigan)
2017 Excellence in Departmental Advising Award, LSA University of Michigan

RESEARCH INTERESTS

My principal area of specialization in the geological sciences is the broad field of carbonate geochemistry, which utilizes the chemistry and fabric of skeletal and abiotic carbonate minerals to reconstruct the conditions of past and present environments. For example, the isotopic and elemental chemistry of carbonate, whether formed as the shell of an organism or through abiotic chemical reactions, captures a record of the temperature and chemistry of the precipitating fluids and the environmental setting of their formation. As such, carbonate chemistry serves as an important proxy for deciphering Earth history.

Studies undertaken in my program have developed new analytical methodologies and interpretive approaches that have been applied to several areas of exciting research in the earth sciences. Current research is focused on reconstruction of latitudinal thermal gradients during times of global warming; resolution of intra-annual temperature seasonality for continental settings, and reconstruction of

paleoclimate from oceanographic samples. Current projects focus on an evaluation of Δ_{47} –clumped isotope techniques as reliable proxies of paleotemperature. This includes studies in Holocene to Proterozoic sedimentary sequences. to provide constraints on the magnitudes and rates of temperature change as these illuminate the processes which ultimately control these global scaled events.

SERVICE

Editorial

1985-1986: Associate Editor, Journal of Sedimentary Petrology
2008- Associate Editor, Journal of Iberian Geology

Professional

1991-1999: Co-Chair: Stable Isotope Research Group, Society of Economic Paleontologists and Mineralogists
1990: Poster Session Organizer, American Association of Petroleum Geologists.
1990-1992: Career Planning Internship Supervisor, Livonia High School.
1989 - 1990: Co-Convener, Research Conference on Continental Isotopic Indicators of Climate
1985-1986: Associate Editor, Journal of Sedimentary Petrology
1993-1995: Stable Isotope Research Group (Chairman): Society of Sedimentary Petrologists and Mineralogists (3 hours).
1996: External Review Committee, Research Training Group, University of Minnesota
2000 - Manuscript review (medium)
2000 - Goldschmidt Session Co-organizer (light)
2010-2011 – International Association of Sedimentology Session Chair, Zaragoza, Spain
2011-2012 – International Association of Sedimentology Session Chair, Schmallding, Austria
2015 NSF Panel: Geobiology and Low Temperature Geochemistry

University

1993 - 1994: Rackham Divisional Board (light, 10 hrs).
1993 - 1995: Pilot Program, Standing Committee Member (medium, 20 hrs)
1993 - 1994: Academic Judiciary Committee, Literature Science and Arts (light, 6 hrs)
1992 - 1993: Chairman, Residential College Evaluation Committee (heavy, 40 hrs)
1986 - 1992: College Board of Study, Literature Science and Arts (light, 10 hrs).
1995 – 1997: Residential College Planning Committee: (medium, 16 hrs)
1998 –2002: Shipman Society Faculty Advisor: (light, 15 hours).
1999 -- 2003 LSA Academic Judiciary (light, 10 hours)
1999 – 2000 LSA Advising Summit (light, 3 hours)
1999 – 2002: Co-Chair, RC-LSA Liaison Committee (20 hours)
2000: 2000 LSA Corporate Advisory Committee (light, 6 hrs)
2000- 2001 Residential College Renovation Committee (heavy, 20 hrs)
2005 2008 LSA Academic Judiciary (15 hrs)
2000 2010 Campus Day Speaker (light, 1 hr)

Departmental (* Active Service Appointments in Bold)

1993-1995: Office Technology Committee: Networking of Computers (med, 20+ hr).
1993 – 1994: Departmental Space and Renovation (medium, 20 hrs).
1993 – 1997: Keck Foundation Proposal (continuing): Proposal preparation and laboratory design and construction (heavy).
1993 -- 2001: Technical Staff and Laboratory Facilities, Manager (light, 5 hrs)

1993 – 2001: Departmental Concentration Advisor: Student meetings and counseling (prior years heavy, 40 hrs; 2000 light).
 1980 – Spring Field Trip Organization (with Bruce Wilkinson)
 1996 – 1998: Departmental Executive Committee
 1997 – Keck Elemental Geochemistry Laboratory, Director (light, 10 hrs)
 1998 – 1999: Turner Grant Committee: (light, 5 hrs)
 1998 – 2000: Concentration Fair Representative for Geological Sciences (6 hours)
 1998 – Departmental Newsletter (co-editor, H.N. Pollack –medium+, 16 hrs)
 2003 – 2004 Departmental Nominating Committee (shared with Zhang Winter 2004)
 2003 – Departmental Substance Abuse Monitor
 1999: 1999 Teachers as Scholars: LSA Outreach Activity
 1999 – 2002 Departmental Curriculum Committee (medium, 12 hrs)
 1999 – 2001 ECB Writing (light, 2 hrs)
 2000 – 2002: Departmental Executive Committee (heavy) – Winter only
 2000 – 2001: Marine Geology and Geochemistry Search Committee (medium, 12 hrs)
 2000 -- Departmental Alumni Advisory Committee (medium, 15+hrs)
 2000 -- 2001 Departmental Technical Staffing Committee (4 hrs)
 2000: Ombudsperson (2 hrs)
 2000 -- 2002 Mentor for Junior Faculty (unofficial, heavy)
 2000: 2000 GAANN Proposal Preparation (40% with EJE, MCC) (heavy, 30 hours)
 2001 Departmental Promotion Committee (medium, 10 hrs)
 2001 2002 Camp Davis Reunion Organization (light, 10 hrs)
 2004 Camp Davis Getaway Organization (light, 10 hrs)
 2004 Ad Hoc Promotions Committee (Baumiller to Professor)
 2004 Departmental Executive Committee
 2004 – 2005 Co-Chair Faculty Search Committee
 2005 Promotions Committee (Castro for Assoc. Prof.)
 2005 – 2006 Camp Davis Getaway Organization
 2006 Departmental Executive Committee (Departed Fall 2006)
 2006 ESS Faculty Search Committee
 2008 2009 Departmental Executive Committee (Fall 2008)
 1981– Spring Field Trip Organization and Leader
 2009 – 2010 Provost Interdisciplinary Junior Faculty Initiative (Lead on proposal for Cluster Hire in Carbon Mitigation: Capture, Conversion, Containment and Cap-Trade)
 2010 – Promotion Committee Chair for Jeff Alt (shared with Becky Lange)
 2008 –2014 Keck Elemental Geochemistry Laboratory, Director (light, 10 hrs)
 2014-2015 Faculty Search Committee: Paleontology
 2016 Promotion Committee: Ingrid Hendy
 2016 – Promotion Committee for Ben Passey (shared with Ingrid Hendy)
 2017 – Promotion Committee for Adam Simon (shared with Zhang and Lange)
 2017-2019 Departmental Executive Committee (light)
2000 pres Dept. Newsletter (heavy)
2019– pres Spring Field Trip Organization and Leader (heavy)
1998 pres Alumni Relations (shared with Simon, moderate)
2011 pres Undergraduate Advisor

Community Outreach

1997	Alumni Lecturer on tour to Costa Rica
1998	Lecture to Home school Education Program (6 kids)
1999	Alumni Lecturer on tour to Tahiti
1999	Teachers as Scholars Seminar (medium, 20 hrs)
2001	Outstanding Seniors Lecture Series (light, 2 hrs)
2001	Math and Science Camp (medium, 20 hrs)
2001	Lawton Elementary School (light, 5 hours)
2004 - 2005	Distinguished Lecture Series, Joint Oceanographic Institute
2006	pres Lecture for the Detroit Country Day School (high school science students)
2017	pres Science Communicator with University Museums

TEACHING

Courses taught (enrollment, % responsibility)		credit hrs	Q1 Course	Q2 Lecturer
1990	GS 100 - Coral Reefs (204, 100%)	204	4.09	4.64
	GS 305 - Sedimentary Geology (8, 50%)	16	4.00	4.10
	GS 430 - Depositional Environments (5, 50%)	8	4.00	4.10
	GS 530 - Carbonate Sedimentology (5, 100%)	15		
1991	GS 117/119 - Physical Geology (50, 50%)	220		
	GS 305 Sedimentary Geology (8, 50%)	16		
	GS 467 Stratigraphy (7, 50%)	11		
	GS 530 Sediment Diagenesis (9, 50%)	14		
1992	GS 117/19 Physical Geology (41, 50%)	180	4.61	4.10
	GS 305 - Sedimentary Geology (10, 50%)	20	4.42	4.58
	GS 430 - Depositional Environments (6, 50%)	9	4.20	4.38
	GS 100 - Coral Reefs (250, 100%)	250	4.42	4.74
1993	GS 100 - Coral Reefs (200, 100%)	200	4.14	4.50
	GS 117/119 - Physical Geology (61, 50%)	140	4.28	4.50
	GS 305 - Sedimentary Geology (18, 50%)	27	3.95	4.13
	GS 530 - Sediment Diagenesis (6, 100%)	18		
	GS 440 - Field Methods (21, 50%)	84	4.66	4.53
	GS 467 - Stratigraphy (6, 50%)	9	3.95	4.13
1994	GS 100 - Coral Reefs (280, 100%)	280	3.96	4.24
	GS 117 - Physical Geology (27, 100%)	135	4.35	4.13
	GS 118 - Physical Geology Lab (5, 100%)	5	4.00,	4.50
	GS 119 - Physical Geology (25, 100%)	100	4.13	4.10
	GS 305 - Sedimentary Geology (13, 50%)	26	4.00	3.90
	GS 440 - Field Methods (12, 50%)	96	5.00	5.00
	GS 499 – Independent Study (2, 200%)	2		
1995	Leave during Winter term – ODP Cruise			
	GS 100 - Coral Reefs (168, 100%)	168	4.38	4.09
	GS 117 Physical Geology (18, 100%)	90	4.07	4.13
	GS 119- Physical Geology (28, 100%)	112	3.94	4.50
	GS 305 - Sedimentary Geology (18, 50%)	36	4.38	4.28
	GS 100 - Coral Reefs (280, 100%)	280	3.96	4.24
	GS 440 - Field Methods (8, 33%)	21		
1996	Sabbatical Leave Winter term			
	GS 430 - Depositional Environments (5, 100%)	15	4.75	4.75
	GS 440 - Field Methods (20, 33%)	53		
1997	GS 117 Physical Geology (26, 100%)	155	4.64	4.75
	GS 119- Physical Geology (34, 100%)	136	4.65	4.81
	GS 530 - Sediment Diagenesis (8, 100%)	24		
	GS 440 - Field Methods (12, 33%)	32		

	GS 531 – Research Seminar (5, 100%)	5		
1998	GS 117 - Physical Geology (26, 100%)	78	4.38	4.62
	GS 119 - Physical Geology (34, 100%)	102	4.65	4.81
	GS 119 – Physical Geology Discussion (20,100%)	20	4.92	4.92
	GS 100 - Coral Reefs (200, 100%)	200	3.96	4.29
	GS 100 - Coral Reefs (100, 100%)	100	3.92	4.37
	GS 260 - Coral Reef Dynamics (25, 100%)	75	4.50	4.65
	GS 580 - Isotope Geology (20, 50%)	30		
	GS 455 – Methods (5, 15%)	2		
1999	GS 100 – Coral Reefs (427,100%)	427	4.41	4.70
	GS 117 - Physical Geology (71, 100%)	355	4.39	4.75
	GS 119 - Physical Geology (34, 100%)	215	4.39	4.64
	GS 580 - Isotope Geology (20, 50%)	30	4.25	4.25
	GS 455 – Methods (5, 15%)	2		
	GS 530 – Sediment Diagenesis (12, 100)	36	4.75	5.00
2000	GS 100 – Coral Reefs (268,100%)	268	4.41	4.70
	GS 117 - Physical Geology (60, 100%)	300	4.28	4.47
	GS 119 - Physical Geology (63, 100%)	254	4.09	4.53
	GS 580 - Isotope Geology (12, 50%)	18		
	GS 430 – Depositional Environments (12, 100%)	12		
2001	GS 100 – Coral Reefs (130,100%)	130	4.10	4.38
	GS 117 - Physical Geology (52, 100%)	156	4.44	4.61
	GS 119 - Physical Geology (88, 100%)	264	4.32	4.67
	GS 117 – Physical Geology		4.26	4.50
	GS 119 – Physical Geology		3.98	4.59
	GS 499 – Independent Study	10		
	GS 580 -- Isotope Geology (10, .25%)	2.5	4.79	4.79
	GS 995 – Dissertation Research	16		
2002	GS 100 – Coral Reefs (130,100%)	130	4.22	4.59
	GS 530 – Sediment Diagenesis (7, 100%)	21		
***	GS 117 - Physical Geology (97, 50%)	194	4.00	4.34
	GS 119 - Physical Geology (66, 50%)	330	3.93	4.31
	GS 499 – Independent Research (100%)	25		
	GS 580 _ Isotope Geology (7, 50%)	12	4.75	4.25
2003	<i>Winter Term Sabbatical</i>			
	GS 100 – Coral Reefs (,100%)	166	4.22	4.48
	GS 117 - Physical Geology (, 50%)	53	3.54	3.75
	GS 119 - Physical Geology (, 50%)	64	3.71	4.02
2004	GS 100 – Coral Reefs (252,100%)	252	4.28	4.59
	GS 430 – Depositional Environments (12, 100%)	36	4.67	4.94
	GS 100 – Coral Reefs (23 ,100%)	23	4.68	4.94
	GS 117 - Physical Geology (55, 50%)	275	4.00	4.32
	GS 119 - Physical Geology (38, 50%)	152	3.92	4.00
	GS 580 _ Isotope Geology (20, 50%)	30	4.30	4.21
2005	GS 530 Depositional Environments (12, 100%)	36	4.67	4.94
	GS 100 – Coral Reefs (xx ,100%)	240	4.27	4.65
	GS 100 – Coral Reefs (22 ,100%)	22	4.56	4.89
	GS 117 - Physical Geology (49, 100%)	246	4.08	4.57
	GS 119 - Physical Geology (31, 100%)	124	3.95	4.35
	GS 147 – Geologic Evolution of North America*			
2006	GS 430 – Sediment Diagenesis (6, 100%)	18	5.00	5.00
	GS 100 – Coral Reefs (248 ,100%)	248	4.26	4.65
	GS 100 – Coral Reefs (22 ,100%)	30	4.56	4.89
	GS 118 - Physical Geology (47, 100%)	47		
	GS 119 - Physical Geology (72, 100%)	288	4.28	4.59
	GS 305 - Sedimentology (22, 100%)	88	4.50	4.79

Courses taught (enrollment, % responsibility)		credit hrs	Q1	Q2	
2007	GS 499 – Independent Research (5, 100%)	14			
	GS 100 – Coral Reefs (Summer) (248 ,100%)	56	4.21	4.50	
	GS 119 - Physical Geology (100, 100%)	400	4.23	4.57	
2008	GS 305 - Sedimentology (23, 100%)	92	4.50	4.86	
	GS 110 – History of the Oceans (Summer) (40 ,100%)	40	4.03	4.53	
	GS 119 - Physical Geology (118, 100%)	472	4.38	4.85	
2009	GS 305 - Sedimentology (33, 100%)	132	4.07	4.21	
	GS 100 – Coral Reefs ((301 ,100%)	301	3.99	4.60	
	GS 100 – Coral Reefs (Summer) (40 ,100%)	50			
	GS 119 Physical Geology (120, 100%)	600	4.34	4.70	
	GS 171 Global Change I (124, 25%)	124	4.07	4.08	
	GS 305 Sedimentary Geology (25, 100%))	125	4.39	4.81	
	GS 436 Field Studies (8, 100%)	16			
2010	GS 499 Independent Studies (3, 100%)	9			
	GS 100 Coral Reefs Summer	39	4.13	4.14	
	GS 118 Physical Geology Lab	97			
	GS 119 Physical Geology	556	4.30	4.63	
	GS 436 Field Studies	45	4.88	4.88 (Winter)	
	GS 499 Independent Studies	6	5.00	5.00 (Fall)	
	GS 499 Independent Studies	20			
2011	GS 118 Winter -- Physical Geology Lab (55, 50%)	55			
	GS 119 Winter -- Physical Geology (120,50%)	240	4.00	4.63	
	GS 311 Spring – Geology of Michigan (25, 100%)	75	4.00	4.60	
	GS 118 Fall -- Physical Geology Lab (80, 100%)	80			
	GS 119 Fall -- Physical Geology (137, 100%)	548	4.26	4.82	
	GS 580 Isotope Geology with Aciego (15, 50%)	60	3.50	4.38	
2012		Q1	Q2	Q3	Q4
	GS 305 Winter Sedimentology (4 cr, - 128 cr hrs)	4.57	4.85	4.69	4.69
	GS 311 Spring – Geology of Michigan (3 cr – 36 cr hrs)	4.38	4.80	4.80	4.67
	GS 436 Smr -- Geology of Spain (2crs - 35 cr hrs)				
	GS 118 Fall -- Physical Geology Lab (1crs - 87 cr hrs)				
	GS 119 Winter -- Physical Geology (4crs - 424 cr hrs)	4.24	4.78	4.33	3.43
	GS 305 Fall -- Sedimentology (4crs - 96 cr hrs)	4.50	4.80	4.6 3	4.21
2013		Q1	Q2	Q3	Q4
	119 Sum – Physical Geology (4 cr – 120 cr hrs)	4.33	4.61	4.42	4.00
	436 Smr -- Geology of Southwest (2crs - 40 cr hrs)				
	118 Fall -- Physical Geology Lab (1crs - 81 cr hrs)				
	119 Fall -- Physical Geology (4crs - 492 cr hrs)	4.61	4.87	4.63	4.11
	305 Fall -- Sedimentology (4crs - 236 cr hrs)	4.34	4.74	4.47	4.09
	*580 Fall – Isotope Geochemistry (1.5 crs – 72 cr hrs)	4.38	4.60	4.75	4.40
	*overload				
2014		Q1	Q2	Q3	Q4
	119 Sum Physical Geology (4 cr –96 cr hrs)	3.67	4.60	4.13	2.67
	436 Smr -- Geology of the Keewenaw (1crs - 25 cr hrs)				
	119 Fall -- Physical Geology (4crs - 424 cr hrs)	4.26	4.76	4.55	3.64
	305 Fall -- Sedimentology (4crs - 284 cr hrs)	4.31	4.57	4.65	4.15
2015		Q1	Q2	Q3	Q4
	119 Sum Physical Geology (4 cr –96 cr hrs)				
	436 Sum -- Geology of the Southeast and Florida (1crs - 25 cr hrs)				
	305 Fall -- Sedimentology (4crs - 200 cr hrs)	4.31	4.57	4.65	4.15
	467 W15 Stratigraphy and Basin Analysis (100 crhr)	4.67	4.79	4.88	4.50

436 W15 Geology of the Southeast US (50 cr)

2016		Q1	Q2	Q3	Q4
119 Sum	Physical Geology (4 cr –96 cr hrs)	4.58	4.81	4.40	4.00
119 Fall	Physical Geology (4 cr –400 cr hrs)	4.56	4.67	4.52	4.05
305 Fall --	Sedimentology (4crs - 200 cr hrs)	3.80	4.14	4.30	3.63
436 Sum --	Geology of the Southern Ontario and Michigan Upper Peninsula (20 students)				
2017		Q1	Q2	Q3	Q4
119 Sum	Physical Geology (4 cr –18 students)	4.00	4.75	4.00	4.50
305 Fall --	Sedimentology (4crs - 116 cr hrs)	4.08	4.75	4.25	4.42
436 Spr --	Geology of the Southwest: Grand Canyon and Beyond (20 students)				
2018		Q1	Q2	Q3	Q4
119 Wntr	Physical Geology (4 cr –132 students)	4.23	4.73	4.35	3.72
119 Sum	Physical Geology (4 cr –19 students)	4.50	4.70	4.00	4.50
305 Fall --	Sedimentology (4crs – 41 students)	4.12	4.56	4.65	4.07
436 Spr --	Geology of West Texas and New Mexico (30 students)				
2019		Q1	Q2	Q3	Q4
119 Wntr	Physical Geology (4 cr –114 students)	4.54	4.73	4.76	3.80
119 Sum	Physical Geology (4 cr –19 students)	4.90	4.90	4.90	3.50
119 Fall	Physical Geology (4 cr –79 students)	4.50	4.72	4.69	3.85
305 Fall --	Sedimentology (4crs –41 students)	3.77	4.30	4.35	3.33
436 Spr --	Geology of Southeastern US and Florida (24 students)				
2020		Q1	Q2	Q3	Q4
305 Spr	Sedimentology (4crs –17 students)				
305 Fall --	Sedimentology (4crs –42 students)	4.26	4.75	4.61	3.94

INVITED LECTURES

- 1993 • Presented lecture, Northwestern University:
 - *Secular Variation in the Carbon and Oxygen Isotopic Composition of the Paleoc ocean.*
- 1993 • Presented lectures, Norwegian Geological Survey:
 - *Microanalytical Approaches to the Study of Carbonate Diagenetic Systems*
 - *High Resolution Analysis of Climate Seasonality: Deciphering the Paleoclimate of Continental Interiors.*
- 1994 • Presented lecture, University of Rhode Island:
 - *High Resolution analysis in studies of paleoclimate.*
- Presented lecture, University of Texas at Dallas:
 - *Sedimentology and Diagenesis of late Permian Carbonates of Southwest Texas, Wiley and Apache Mountains.*
- 1995 • Presented lecture, Syracuse University:
 - *Reconstruction of High Resolution Paleoclimate Records: Seasonal to Decadal Scales*
- 1996 • Presented lectures, University of New Mexico:
 - *Integrated Isotopic and Elemental Proxies of Paleotemperatures and Paleosalinities.*
 - *Secular Variations in Isotopic Composition of Marine Abiotic Carbonates*
- Presented lecture, New Mexico State University:
 - *Integrated Isotopic and Elemental Proxies of Paleotemperatures and Paleosalinities.*
- Opening Presentation for 70th Anniversary of Greenland Expeditions. Bentley Library. (associated with Catherine Belnap). April 1996.
- 1997 • Presented lecture, Ohio State University – Byrd Polar Institute:

- *Application of elemental and isotopic proxies for reconstruction of annual to interannual variations in paleoclimate*
- 1998 • Presented lecture, Purdue University:
 - *Application of elemental and isotopic proxies for reconstruction of annual to interannual variations in paleoclimate.*
- 1998 • Presented lecture, University of South Florida, St. Petersburg:
 - *Elemental and Isotopic Records of Environmental Change: High resolution studies of Molluscan Carbonate.*
- 1999 • Lecture series, Universidad Complutense de Madrid, Spain: Three-lecture series on carbonate diagenesis including a one-week field excursion into the Cameros Basin, North Spain.
- Presented lectures, National Polar Research Institute, Tokyo Japan:
 - *Carbonate Geochemistry in Antarctic Nearshore Marine Environments.*
 - *Annual To Seasonal Scaled Isotope Variation Of *Adamussium Colbecki*: Proxies Of Environmental Variability In Antarctic Coastal Waters.*
- 2000 • Presented lectures, University of California, Berkeley:
 - *High Resolution Paleoclimate Records in Molluscan Carbonate*
 - *Approaches for Calibration of Elemental and Isotopic Proxies in Marine Invertebrates*
- 2001 • Presented lecture, Washington State University, Pullman, Wash.:
 - *Applications of Molluscan Elemental and Isotopic Sclerochronologies for the Reconstruction of Annual to Decadal Paleotemperatures.*
- Presented lecture, University of Idaho, Moscow, Ida.:
 - *Secular Variations in the Elemental and Isotopic Composition of the Phanerozoic Ocean*
- 2003 • Presented lecture, Iowa State University
 - *The Climate Record of Molluscan Carbonate*
- 2005 JOI- Distinguished Lecture Series:
 - *Unraveling the Archive of Climate Change: Integration of Elemental and Isotopic Proxies in Molluscan Carbonate*
 University of Miami
 Boise State University
 State University of New York, Binghamton
 Millersville University, PA
 Columbus State University, GA
 University of Nebraska, Lincoln
 University of California at Davis
 University of California at Santa Cruz
- 2005 Presented lecture, Universidad Complutense de Madrid, Spain:
 - *Application of Elemental and Isotopic Proxies in Molluscan Carbonate for Paleoclimate Reconstruction.*
- 2006 Presented lectures, Universidad Complutense de Madrid, Spain:
 - *Concepts and Applications of Stable Isotope Geochemistry (12 hours).*
 Presented lecture, University of North Carolina, Chapel Hill:
 - *Application of Elemental and Isotopic Proxies in Molluscan Carbonate for Paleoclimate Reconstruction.*
- 2007 Presented lectures, Universidad Complutense de Madrid, Spain:
 - *Concepts and Applications of Stable Isotope Geochemistry (12 hours).*
- 2009 Presented lectures, Universidad Complutense de Madrid, Spain:
 - *Stable Isotope Geochemistry in Paleoclimatology and Earth Surface Processes (16 hours).*
- 2010 Presented 16 hours of lectures, Universidad Complutense de Madrid, Spain:
 - *The Fundamentals of Elemental and Isotopic Chemistry of Carbonates*
- 2011 Presented lectures, Universidad Complutense de Madrid, Spain:
 - *Stable Isotope Geochemistry in Paleoclimatology and Earth Surface Processes (16 hours).*
 - *Theory and Applications of Clumped Isotope Geothermometry (Lecture)*
 Presented Lecture: International Workshop on Clumped Isotope Geochemistry, London
Perspectives on Clumped Mass-47 Isotope Thermometry, University of Michigan

EXTERNAL FUNDING

1990

- I. *Title of Project:* Isotopic and chemical signatures of paleophreatic lenses at Enewetak Atoll: Constraints on Pleistocene sea level
Period of Support: 1/90-1/92
Sponsor: NSF- Earth Sciences
Amount of Award: \$105,000
Principal Investigator: T. Quinn and K.C Lohmann
- II. *Title of Project:* High Resolution Paleogene latitudinal and vertical temperature gradients of the Indian Ocean:
Period of Support: 1/90-1/92
Sponsor: NSF - OCE
Amount of Award: \$110,000
Principal Investigators: J. Zachos and K. Lohmann
- III. *Title of Project:* Testing Sr isotopes as a correlative tool in shallow-water sequences: Application to the carbonate cap on Enewetak Atoll
Period of Support: 1/90-1/91
Sponsor: American Chemical Society – Petroleum Research Fund
Amount of Award: \$13,000
Principal Investigator: T. Quinn and K.C Lohmann

1991

- I. *Title of Project:* Global Change Graduate Fellowships
Period of Support: 1/91-1/95
Sponsor: Dept. of Energy
Amount of Award: ~\$125,000
Principal Investigator: K.C Lohmann
- II. *Title of Project:* Geologic Record of Continental Seasonality
Period of Support: 1/91-1/93
Sponsor: NSF Global Change
Amount of Award: \$220,000 @ 26%
Principal Investigators: K.C Lohmann
- III. *Title of Project:* Continental Isotopic Indicators of Climate — Workshop
Period of Support: 1/91-1/92
Sponsor: NSF
Amount of Award: \$20,000
Principal Investigator: P. Swart, J. McKenzie, and K.C Lohmann
- IV. *Title of Project:* Proposal for Academic Research Facilities Modernization
Period of Support: 1/91-1/94
Sponsor: NSF -RFM
Amount of Award: \$707,000
Principal Investigators: K. Lohmann and H. Pollack
- V. *Title of Project:* Earliest Oligocene climate transition and the dynamics of continental ice sheet evolution: Constraints from high resolution (10⁴ yr) deep sea foraminifera
Period of Support: 1/91-1/93
Sponsor: NSF - OCE
Amount of Award: \$135,000

Principal Investigators: J. Zachos, T. Quinn, and K. Lohmann

1992

- I. *Title of Project:* Multitracer analysis of diagenetically altered corals in the Pleistocene Key Largo Limestone: Implications for ²³⁰Th ages of corals
Period of Support: 1/92-1/94
Sponsor: American Chemical Society – Petroleum Research Fund
Amount of Award: \$40,000 @ 10%
Principal Investigator: K.C Lohmann
- II. *Title of Project:* U-Pb Dating of Carbonates
Period of Support: 1/93-1/95
Sponsor: NSF
Amount of Award: \$85,000
Principal Investigators: C Jones, A. Halliday, K. Lohmann

1994

- I. *Title of Project:* Seasonality of high latitude marine sites: Late Cretaceous and Paleogene of Antarctica
Period of Support: January 1994 to August 1995
Sponsor: NSF Polar Programs
Amount of Award: \$110,000 @ 50%
Principal Investigator: K.C Lohmann and E. Barrera
- II. *Title of Project:* Geochemical Constraints on Paleoenvironments within the Belt Supergroup (Middle Proterozoic), Montana.
Period of Support: June 1994 to March 1997
Sponsor: NSF Global Change Program
Amount of Award: \$106,000 @ 26%
Principal Investigators: T. Lyons, K.C Lohmann, L.M. Walter
- III. *Title of Project:* Technician Support for the Stable Isotope Laboratory, University of Michigan
Period of Support: June 1994 to May 1997
Sponsor: NSF Earth Sciences
Amount of Award: \$119,970 @ 0%
Principal Investigator: K.C Lohmann, J. R. O’Neil

1995

- I. *Title of Project:* Uplift and exposure history of the Cote d’Ivoire transform margin: Geochemistry of porefilling and fracture vein minerals.
Period of Support: January 1995- January 1997
Sponsor: NSF Ocean Drilling Program
Amount: \$23,752 research support, \$32,000 salary support @ 26%
Principal Investigators: K.C Lohmann.
- II. *Title of Project:* Long term climate and seasonality of Antarctic coastal marine sites: late Cretaceous and Paleogene
Period of Support: January 1995 to January 1997
Sponsor: NSF-OPP
Amount: \$110,000 @ 52%
Principal Investigators: K.C Lohmann and Enriquetta Barrera

1997

- I. *Title of Project:* Acquisition of a High Resolution ICP-MS
Period of Support: June 1996 to June 1997
Sponsor: NSF Instrumentation and Facilities
Amount of Award: \$228,000 (\$110,000 UM match) @ 0%
Principal Investigators: T. Huston, K.C Lohmann, R. Owen, L.M. Walter, Y. Zhang
- II. *Title of Project:* Development of the Keck Facility for Microanalytical Elemental Studies
Period of Support: June 1996 to 1998
Sponsor: W.M. Keck Foundation
Amount of Request: \$500,000 @ 0%
Principal Investigators: K.C Lohmann, T. Huston, R. Owen, L.M. Walter, Y. Zhang

1998

- I. *Title of Project:* Mg/Ca Thermometry for the Marine Mussels *Mytilus californianus* and *M. trossulus* Refinement of an Elemental Thermometer based on Laboratory and Culture Studies
Sponsor: NSF Earth Sciences – Earth System History
Period of Award: January 1998 to August 2000.
Amount of Award: \$53,000 @ 52%
Principal Investigators: K. C Lohmann

2000

- I. *Title of Project:* Evolution of Seasurface Temperatures in the Coastal Antarctic Paleoenvironment during the late Cretaceous and Paleogene
Sponsor: NSF – Office of Polar Programs
Period of Award: January 2000 to August 2003.
Amount of Award: \$150,000 @ 51.5%
Principal Investigators: K. C Lohmann

2002

- I. *Title of Project:* Eocene Climate Record of Seymour Island: The Environmental Context of Evolutionary Change: Collaborative Proposal
Sponsor: NSF OPP – Polar Geology
Period of Award: December 2002 to February 2007
Amount of Award: ~\$250,000 @ 52% (\$158,000 UM part)
Principal Investigators: L. Ivany and K. C Lohmann

2003

- I. *Title of Project:* High Resolution $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ Record of the Late Maastrichtian Early Danian Transition: Evaluation of Rates of Oceanic Recovery from the K/P Event.
Sponsor: USSAC-NSF, Ocean Drilling Program
Period of Award: December 2003 to December 2006
Amount of Award: \$28,187 @ 52%
Principal Investigators: K.C Lohmann
- II. *Title of Project:* Salary Support for Participation on Leg 208
Period of Award: Mar 2003 to May 2003
Amount of Award: \$36,000 @ 26%
Principal Investigators: K.C Lohmann

2007

- I. *Title of Project:* Shell Oil Company Field Excursion: Jackson Hole, Wy
Sponsor: Shell Oil Company
Period of Award: August 2007 to October 2007
Amount of Award: \$25,000 @ 0%
Principal Investigators: K.C Lohmann
- II *Title of Project:* Justification for Acquisition of Mass Spectrometry Instrumentation
Sponsor: University of Michigan
Period of Award: July 2007 to July 2009
Amount of Award: \$500,000 @ 0%
Principal Investigators: Prepared by K.C Lohmann to provide analytical support to Sheldon and Lund

2008

- Principal Investigators:* Provided by K.C Lohmann for Sheldon and Lund
- I. *Title of Project:* Subcontract: The role of round gobies and their impact on native fish communities
Sponsor: NOAA
Period of Award: August 2008 to October 2013
Amount of Award: \$119,092 @ 52% (declined)
Principal Investigators: David Jude, John Janssen (UoM--J.D. Blum and K.C Lohmann)

2009

- I. *Title of Project:* Paleothermometry in Deep Geologic Time: Development of Clumped-47 Approaches for Phreatic Diagenetic Carbonate
Sponsor: NSF – Geobiology and Low Temperature Geochemistry
Period of Award: Sept 2010 to 2013
Amount of Award: \$294,766 @ 26% (declined)
Principal Investigators: K.C Lohmann

2013 – SUBMITTED and REJECTED

- I. *Title of Project:* Refining the Mass-47 Dolomite Paleothermometer: Diagenetic and Paloclimate Applications
Sponsor: NSF – Geobiology and Low Temperature Geochemistry
Period of Award: Sept 2011 to 2014 -- Rejected
Amount of Award: \$350,449 @ 55.5%
Principal Investigators: K.C Lohmann

2011 - 2015 -- FUNDED

- I. *Title of Project:* Mass-47 Paleothermometry in Deep Geologic Time: A Test for Episodes of Extreme Warmth in the Phanerozoic
Sponsor: NSF – Geobiology and Low Temperature Geochemistry
Period of Award: Sept 2011 to 2015
Amount of Award: \$225,000 @ 26%
Principal Investigators: K.C Lohmann

2016 -- SUBMITTED and REJECTED

- I. *Title of Project:* Bermuda and Beyond: Deglacial Metwater Events and Interglacial Gulf Stream Strength
Sponsor: NSF – Global Change OCE
Period of Award: Sept 2017 to 2020
Amount of Award: \$322,600
Principal Investigators: K.C Lohmann (and Sierra V. Petersen)

2019 -- SUBMITTED and REWARDED - ACTIVE

I. Title of Project: Collaborative Research: Interglacial climate in Bermuda and Beyond
Sponsor: NSF OCE – Marine Geology and Geophysics
Period of Award: April 2019 to March 2022
Amount of Award: \$394,767
Principal Investigators: Sierra V. Petersen and Kyger Lohmann (Co-PIs)
Ian Winkelstern (Collaborator at Grand Valley State)

2020 -- SUBMITTED and REWARDED - ACTIVE

Title of Project: XR Exploration of Geologic Features in Field Excursions
Sponsor: UM- Academic Innovation
Period of Award: Jan 2021-Jan 2022
Amount of Award: \$6,000
Principal Investigators: Kyger Lohmann

GRADUATE STUDENT SUPERVISION

Margaret Bickmore	M.S.	(1995)	Luis Gonzalez	M.S.	(1985)
Neil Braunsdorf	M.S.	(1983)		Ph.D.	(1989)
Kathy Breining	M.S.	(1985)	Ellen R. Graber	Ph.D.	(1989)
Scott J. Carpenter	M.S.	(1989)	Franciszek Hasiuk	M.S.	(2005)
	Ph.D.	(1992)		Ph.D.	(2008)
Karen Cercone	Ph.D.	(1984)	Larry Jordan	M.S.	()
Andrea Cicero	M.S.	(2000)	Maria Marcano	M.S.	(1997)
Lana Czerniakowski	M.S.	(1982)		Ph.D.	(2010)
William Defliese	PhD	(2014)	Kyle Myer	Ph.D.	(2018)
David L Dettman	M.S.	(1990)	Eva Moldovanyi	M.S.	(1982)
	Ph.D.	(1994)	Robert Klein	Ph.D.	(1996)
Paul Dunn	M.S.	(1988)	William Patterson	Ph.D.	(1995).
Andrea Dutton	M.S.	(2000)	Sonja Pettingill	M.S.	(1989)
	Ph.D.	(2003)	Elizabeth Smith	M.S.	(2005)
Richard Fernberg	M.S.	(1987)	Brian Stepanek	M.S.	(1984)
Mark H. Frank	M.S.	(1987)	Donna Surge	Ph.D.	(2001)
Kevin R. Given	M.S.	(1983)	Matthew Wasson	M.S.	(2005)
	Ph.D.	(1986)	Ian Winkelstern	Ph.D.	(2016)
Luis Gonzalez	M.S.	(1985)	Jack Zaengle	Ph.D.	(1994)
Tracy Frank	M.S.	(1992)			
	Ph.D.	(1996).			

Graduate Students with Co-supervision

Thomas Algeo	Ph.D.	(1989)	Elizabeth Finkel	M.S.	(1986)
Vee Ann Atnipp	M.S.	(1988)	Neil F. Hurley	Ph.D.	(1986)
Joyce Budai	Ph.D.	(1984)	Athur Leibold	Ph.D.	(1992)
Carl Drummond	M.S.	(1990)	Gale Martin	M.S.	(1985)
	Ph.D.	(1994)			

POST-DOCTORAL FELLOWS AND COLLABORATORS

Dr. David Blake
 Dr. Terrence Quinn
 Dr. Robert T. Klein
 Dr. Sierra Petersen

Dr. James Zachos
 Dr. Charles Jones
 Dr. Maria Isabel Benito

PUBLISHED ARTICLES

1. Kaesler, R.L., and Lohmann, K.C, 1972, Depth distribution of populations of *Krithe producta* (Ostracoda): *Antarctic Journal of the United States*, 7, 197-198.
2. Kaesler, R.L., and Lohmann, K.C, 1976, Phenotypic variation of populations of *Krithe producta* with environment: *Abh. Verh. Naturwiss. Ver. Hamburg*, 18/19 (suppl), 279-285.
3. Lohmann, K.C, 1975, Lower Dresbachian (Upper Cambrian) platform to deep-shelf transition in eastern Nevada and western Utah: an evaluation through lithologic cycle correlation: in *Brigham Young University Geology Studies*, R. Robison and A. Rowell, eds., 23, 111-122.
4. Lohmann, K.C., and Meyers, W.J., 1977, Microdolomite inclusions in cloudy prismatic calcites: a proposed criterion for former high magnesium calcites: *Journal of Sedimentary Petrology*, 47, 1078-88. (131)
5. Meyers, W.J., and Lohmann, K.C, 1979, Reply -- Microdolomite-rich syntaxial cements: proposed meteoric-marine mixing zone phreatic cements from Mississippian limestones, New Mexico: *Journal of Sedimentary Petrology*, 49, 674-76. (41)
6. Matthews, R.K., Curry, W.B., Lohmann, K.C and Sommer, M.A., 1980, Late Miocene paleo-oceanography of the Atlantic: oxygen isotope data on planktonic and benthonic foraminifera: *Nature*, 283(5747), 555-557. (16)
7. Meyers, W.J., Lohmann, K.C, and Cowan, P., 1981, Diagenesis of Mississippian skeletal limestones and bioherm muds, New Mexico: *Symposium on the Paleoenvironmental Setting and Distribution of the Waulsortian Facies*, El Paso Geological Society, 80-95.
8. Wilson, J.L., Wilkinson, B.H., Lohmann, K.C and Hurley, N.H., 1983, Unravelling the diagenetic history of carbonate reservoirs: integration of petrographic and geochemical techniques: in *New Ideas and Methods for Exploration for Carbonate Reservoirs*: Dallas Geological Society, 85 pp.
9. Blake, D.F. and Lohmann, K.C, 1984, The mechanism of closed-system diagenesis of marine magnesium calcite: an AEM study: 42nd Annual Proceedings, *Microbeam Society of America*, Detroit, Michigan, 296-297.
10. Budai, J., Lohmann, K.C and Owen, R.M., 1984, Burial dedolomite in the Madison Limestone Wyoming and Utah thrust belt: *Journal of Sedimentary Petrology*, 54, 276-288. (36)
11. Moldovanyi, E.P. and Lohmann, K.C, 1984, Isotopic criteria for recognition of successive events of phreatic cementation, Sligo and Cupido formations: *Journal of Sedimentary Petrology*, 53, 972-985. (34)
12. Cercone, K.R. and Lohmann, K.C., 1985, Early Diagenesis of middle Silurian pinnacle reefs, Northern Michigan: *Michigan Basin Society, Special Paper, No. 4*, 109-130.
13. Czerniakowski, L.A., Lohmann, K.C and Wilson, J.L., 1985, Closed-system marine burial diagenesis: isotopic chemistry of Austin Chalk: *Sedimentology*, 31, 863-877. (34)
14. Given R.K. and Lohmann, K.C, 1985, Derivation of the original isotopic composition of Permian marine carbonates: *Journal of Sedimentary Petrology*, 55, 430-439. (76)
15. Gonzalez, L. and Lohmann, K.C, 1985, Carbon and oxygen isotopic composition of Holocene reefal carbonates: *Geology*, 13, 811-814. (73)
16. Meyers, W.J. and Lohmann, K.C, 1985, Isotopic geochemistry of regionally extensive calcite cement zones and marine components in Mississippian limestones, New Mexico: in *Carbonate Cements*, N. Schneiderman and Harris, eds., *Society of Economic Paleontologists and Mineralogists, Special Publication, No. 36*, 223- 240.
17. Wilkinson, B.H., Smith, A.L. and Lohmann, K.C, 1985, Sparry calcite marine cement in upper Jurassic Limestones of south-eastern Wyoming: in *Carbonate Cements*, N. Schneiderman and Harris, eds., *Society of Economic Paleontologists and Mineralogists, Special Publication, No. 36*, 169-184.
18. Cercone, K.R. and Lohmann, K.C, 1986, Diagenetic history of a middle Silurian pinnacle reef from the Michigan Basin, in *Reef Diagenesis*, eds. B. Purser and J. Schroeder, 381-398, Elsevier.
19. Freeman-Lynde, R.P., Fulker-Whitley, K., and Lohmann, K.C., 1986, Origin of cements in Bahamian escarpment limestones: *Journal of Sedimentary Petrology*, 56, 799-811. (9)
20. Given, R.K., and Lohmann, K.C, 1986, Isotopic evidence for the early meteoric diagenesis of the reef facies, Permian Reef Complex of West Texas and New Mexico: *Journal of Sedimentary Petrology*, 56, 183-193. (29)
21. Long, K.R., Kelly, W.C., Ohle, E.L. and Lohmann, K.C, 1986, Ground preparation and zinc mineralization in bedded and breccia ores of the Monte Cristo Mine, North Arkansas: *Economic Geology*, 103, 205-222. (12)

22. Martin, G.D., Wilkinson, B.H. and Lohmann, K.C, 1986, The role of skeletal porosity in aragonite neomorphism: *Strombus* and *Montastrea* from the Pleistocene Key Largo Limestone, Florida: *Journal of Sedimentary Petrology*, 56, 194-203. (24)
23. Budai, J. M., Lohmann, K.C, and Wilson, J. L., 1987, Dolomitization of the Madison Group, Wyoming and Utah thrust belt: integrated petrologic and geochemical approaches: *American Association of Petroleum Geologists Bulletin*, 71, 925-937. (14)
24. Cercone, K.R., and Lohmann, K.C., 1987, Late burial diagenesis of Niagaran (Middle Silurian) pinnacle reefs in Michigan Basin: *American Association of Petroleum Geologists Bulletin*, 71, 156-166. (4)
25. Frank, M.H., and Lohmann, K.C, 1987, Textural and chemical alteration of dolomite: interaction of mineralizing fluids and host rock in a Mississippi Valley-type deposit, Bonneterre Formation, Viburnum Trend: *Process Mineralogy VI* -American Institute of Metallurgical Engineers, 103-116.
26. Gonzalez, L.A., and Lohmann, K.C, 1987, Controls on mineralogy and composition of spelean carbonates: Carlsbad Caverns, New Mexico: in *Paleokarst*, eds. N.P. James, and P.W. Choquette, *Society of Economic Paleontologists and Mineralogists, Special Publication*, Tulsa, 81-101.
27. Lohmann, K.C, 1988, Geochemical patterns of meteoric diagenetic systems and their application to studies of paleokarst: in *Paleokarst*, eds. N.P. James, and P.W. Choquette, *Society of Economic Paleontologists and Mineralogists, Special Publication*, Tulsa, 58-80. (125)
28. Carpenter, S.J., Erickson, J.M., Owen, M.R., Lohmann, K.C, 1988, Diagenesis of fossiliferous concretions from the upper Cretaceous Fox Hills Formation, North Dakota: *Journal of Sedimentary Petrology*, 58, 706-723. (32)
29. Freeman-Lynde, R.N., McClain, W.R., and Lohmann, K.C, 1988, Deep-marine origin of equant spar cements in Oligocene-Miocene peri-reef boundstones, Leg 101, Site 635, Northeast Providence Channel, Bahamas: *Proceedings of the Ocean Drilling Program, Scientific Results*, 255-262.
30. Holail, H., Lohmann, K.C and Sanderson, I., 1988, Dolomitization and dedolomitization of Upper Cretaceous carbonates: Bahariya Oasis, Egypt: in *Sedimentology and Geochemistry of Dolostones*, eds., Baker, and Shukla, V., *Society of Economic Paleontologists and Mineralogists, Special Publication, No. 43*, 191-207.
31. McClain, W.R., Freeman-Lynde, R.N. and Lohmann, K.C, 1988, Petrography and stable oxygen and carbon isotope compositions of Campanian grainstones and Rudstones, Northeast Providence Channel, Bahamas: ODP Leg 101, Hole 634A, *Proceedings of the Ocean Drilling Program, Scientific Results*, 245-254.
32. Zempolich, W.G., Wilkinson, B.H. and Lohmann, K.C, 1988, Diagenesis of late Proterozoic carbonates: the Beck Spring Dolomite of Eastern California: *Journal of Sedimentary Petrology*, 58, 656-672. (51)
33. Carpenter, S.J., and Lohmann, K.C, 1989, $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ variations in late Devonian marine cements from the Golden Spike and Nevis reefs, Alberta, Canada: *Journal of Sedimentary Petrology*, 59, 792-814. (52)
34. Graber, E.R., and Lohmann, K.C., 1989, Origin of Basinal 'Deep-Sea' dolomicrite from the Pennsylvanian/Wolfcampian Horquilla Formation, New Mexico: *Journal of Sedimentary Petrology*, 59, 4-12.
35. Hurley, N. F., and Lohmann, K.C., 1989, Diagenesis of Devonian reefal carbonates in the Oscar Range, Canning Basin, Western Australia: *Journal of Sedimentary Petrology*, 59, 127-146. (57)
36. Lohmann, K.C and Walker, J.C.G., 1989, The $\delta^{18}\text{O}$ record of Phanerozoic abiotic marine calcite cements: *Geophysical Research Letters*, 16, 319-322 (122)
37. Walker, J.C.G., and Lohmann, K.C, 1989, Why the oxygen isotope composition of sea water changes with time: *Geophysical Research Letters*, 16, 323-326. (39)
38. Alpers, C., Dettman, D., Lohmann, K.C., Brabec, D., 1990, Stable isotopes of carbon dioxide in soil gas over mass sulfide mineralization at Crandon, Wisconsin: *Journal of Geochemical Exploration*, 38. (1)
39. Algeo, T.J., Wilson, J.L., and Lohmann, K.C., 1991, Eustatic and tectonic controls on cyclic sediment accumulation patterns in Lower- Middle Pennsylvanian strata of the Orogrande Basin, New Mexico: *New Mexico Geological Society Guidebook*, 42nd Field Conf., 203-212.
40. Carpenter, S.J., Lohmann, K.C, Holden, P., Walter, L., Huston, T. and Halliday, A.N., 1991. $\delta^{18}\text{O}$ values, $^{87}\text{Sr}/^{86}\text{Sr}$ and Sr/Mg ratios of late Devonian abiotic marine calcite: implications for the composition of ancient seawater. *Geochimica et Cosmochimica Acta*, 55, 1191-2010. (106)

41. Quinn, T.M, Lohmann, K.C and Halliday, A.N., 1991. Strontium-isotope stratigraphy as a correlative tool in shallow-water carbonate sequences. *Paleoceanography*.
42. Algeo, T., Wilkinson, B.H., and Lohmann, K.C, 1992. Meteoric - burial diagenesis of Pennsylvanian carbonate: water/rock interactions and basin geothermics. *Journal of Sedimentary Petrology*, 62, 652-670. (28)
43. Carpenter, S.J. and Lohmann, K.C, 1992. Sr/Mg ratios of modern marine calcite: Empirical indicators of ocean chemistry and precipitation rate. *Geochimica et Cosmochimica Acta*, 56, 1837-1849. (107)
44. Freeman-Lynde, R., Lohmann, K., 1992, Stable Isotope Composition -- Use in Determining Ages of Bahama Escarpment Deep-Marine Calcite Spars and Implications for Timing of Erosion: *Geology*, v. 20, p. 323-326. (1)
45. Gonzalez, L.A., Carpenter, S.J. and Lohmann, K.C, 1992. Inorganic calcite morphology: roles of fluid chemistry and fluid flow. *Journal of Sedimentary Petrology*, 62, 382-399. (71)
46. Dettman, D.L. and Lohmann, K.C, 1993. Seasonal change in Paleogene surface water $\delta^{18}\text{O}$: fresh-water bivalves of western North America. In *Climate Changes in Continental Isotopic Records*, eds. Swart, P., Lohmann, K.C, McKenzie, J., and Savin, S., American Geophysical Union Monograph 78, 153-164.
47. Rogers, K.L., Larson, E.E., Smith, G., Katzman, D., Smith, G.R., Cerling, T., Wang, T., Baker, R.G., Lohmann, K.C, Repenning, C.A., Patterson, P., Mackie, G., 1992, Pliocene and Pleistocene Geologic and Climatic Evolution in the San-Luis Valley of South-Central Colorado; *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 94, Issue 1-2, P. 55-86 (14)
48. Drummond, C.N., Wilkinson, B., Lohmann, K.C and Smith, G., 1993. Effect of regional topography and hydrology on the lacustrine isotopic record of Miocene paleoclimate in the Rocky Mountains. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 101, 67-79 (22)
49. Drummond, C.N., Wilkinson, B.H. and Lohmann, K.C., 1993. Rock-dominated diagenesis of lacustrine magnesian calcite micrite. *Carbonates and Evaporites*, 8(2), 214-223. (1)
50. Frank, T.D., Wilkinson, B.H. and Lohmann, K.C, 1993. Origin of submarine pisoliths and the sedimentology of Midwestern Silurian reefs. *Journal of Sedimentary Petrology*, 63, 1070-1077. (2)
51. Gonzalez, L., Carpenter, S., Lohmann, K, 1993, Columnar Calcite in Speleothems – Reply: *Journal of Sedimentary Petrology*, v. 63, p. 553-556. (9)
52. Gonzalez, L., Carpenter, S., Lohmann, K, 1993, Inorganic Calcite Morphology – Roles of Fluid Chemistry and Fluid-flow – Reply:: *Journal of Sedimentary Petrology*, v. 63, p. 562-563 (6)
53. Patterson, W., Smith, G. and Lohmann, K.C, 1993. Empirical determination of oxygen isotope thermometry in fish aragonitic otoliths. In *Climate Changes in Continental Isotopic Records*, eds. Swart, P., Lohmann, K.C, McKenzie, J., and Savin, S., American Geophysical Union Monograph 78, 191-202.
54. Suk, D, Van der Voo, R. and Lohmann, K.C., 1993. Late paleozoic remagnetization and its carrier in Trenton and Black River carbonate from the Michigan Basin. *Journal of Geology*, 101, 795-808. (6)
55. Swart, P., Lohmann, K.C, McKenzie, J. and Savin, S., 1993. Climate changes in continental isotopic record. *American Geophysical Union Monograph 78*.
56. Zachos, J.C., Lohmann, K.C, Walker, J.C.G. and Wise, S.W., 1993. Abrupt climate change and transient climates in the Paleogene: a marine perspective. *Journal of Geology*, 101, 191-213. (247)
57. Holail, H. and Lohmann, K.C, 1994. The role of early lithification in development of chalky porosity in calcitic micrites: Upper Cretaceous chalks, Egypt. *Sedimentary Geology*, 88, 193-200. (2)
58. Weidman, C.R., Jones, G.A. and Lohmann, K.C, 1994. The long-lived mollusc *Arctica islandica*: a new paleoceanographic tool for the reconstruction of bottom temperatures for the continental shelves of the northern North Atlantic Ocean. *Journal of Geophysical Research C, Oceans*, 99(9), 18305-18311. (1)
59. Zachos, J., Stott, D. and Lohmann, K.C, 1994. Evolution of Cenozoic marine temperatures: *Paleoceanography*, 9, 353-387. (349)
60. Bralower, T.J., Zachos, J.C., Thomas, E., Parrow, M., Paull, C.K., Kelley, D.C., Silva, I.P., Sliter, W.V., Lohmann, K.C, 1995, Late Paleocene to Eocene paleoceanography of the equatorial Pacific-ocean - stable isotopes recorded at Ocean Drilling Program site-865, Allison-Guyot: *Paleoceanography*, 10(4): 841-865. (111)
61. Carpenter, S.J. and Lohmann, K.C, 1995. $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ values of modern brachiopods. *Geochimica et Cosmochimica Acta*, 59, 3749-3764. (91)

62. Dettman, D., Smith, A., Rea, D., Moore, T. Jr. and Lohmann K.C, 1995. Glacial meltwater in Lake Huron during early postglacial time as inferred from single-valve analysis of oxygen isotopes in ostracodes. *Quaternary Research*, 43, 297-310. (30)
63. Dettman, D.L. and Lohmann, K.C, 1995. Microsampling carbonates for stable isotope and minor element analysis: physical separation of samples on a 20 micrometer scale. *Journal of Sedimentary Research*, 65(3), 566-569. (46)
64. Frank, T.D. and Lohmann, K.C, 1995. Early cementation during marine-meteoritic fluid mixing: Mississippian Lake Valley Formation, New Mexico. *Journal of Sedimentary Research*, 65(2), 263-273. (12)
65. Frank, T.D., Lohmann, K.C and Meyers, W.J., 1996. Chronostratigraphic significance of cathodoluminescence zoning in syntaxial cement: Mississippian Lake Valley Formation, New Mexico. *Sedimentary Geology*, 105, 29-50. (4)
66. Jones, C., Halliday, A.N. and Lohmann, K.C, 1995. The impact of diagenesis on high-precision U-Pb dating of ancient carbonates; an example from the Late Permian of New Mexico. *Earth and Planetary Science Letters*, 134, 409-423. (24)
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