

[Start](#) | [Author Index](#) | [View Uploaded Presentations](#) | [Meeting Information](#)

2015 GSA Annual Meeting in Baltimore, Maryland, USA (1-4 November 2015)

Session No. 68

Sunday, 1 November 2015: 1:30 PM-5:30 PM

Room 310 (Baltimore Convention Center)

T153. MASS EXTINCTION CAUSALITY: RECORDS OF ANOXIA, ACIDIFICATION, AND GLOBAL WARMING DURING EARTH'S GREATEST CRISES II

GSA Mineralogy, Geochemistry, Petrology, and Volcanology Division; Paleontological Society; Volcanic and Magmatic Studies Group; Mineralogical Society of America; Geological Society of London

David P.G. Bond, Paul B. Wignall and Mike Widdowson, Session Chairs

Paper # Start Time

- | | | |
|-----------------------------|---------|--|
| <u>68-1</u> | 1:30 PM | HOW LARGE IGNEOUS PROVINCES AFFECT CLIMATE AND SOMETIMES CAUSE EXTINCTIONS
ERNST, Richard E. , Dept. of Earth Sciences, Carleton University, 1125 Colonel By Drive, Ottawa, ON K1S 5B6, Canada, Richard.Ernst@ErnstGeosciences.com |
| <u>68-2</u> | 1:50 PM | THE ROLE OF OCEAN ANOXIA IN MODULATING EARTH SYSTEM RECOVERY FOLLOWING MASS EXTINCTION EVENTS
PAYNE, Jonathan L. ¹ , LAU, Kimberly V. ¹ , JOST, Adam B. ² , ALTINER, Demir ³ , BACHAN, Aviv ¹ , KUMP, Lee R. ⁴ , LEHRMANN, Daniel J. ⁵ , MAHER, Kate ¹ , MEYER, Katja M. ⁶ and VAN DE SCHOOTBRUGGE, Bas ⁷ , (1)Department of Geological Sciences, Stanford University, 450 Serra Mall, Building 320, Stanford, CA 94305, (2)Department of Earth Science and Geography, Vassar College, 124 Raymond Ave, Poughkeepsie, NY 12604, (3)Department of Geological Engineering, Middle East Technical University, Ankara, 06800, Turkey, (4)Department of Geosciences, Pennsylvania State University, University Park, PA 16802, (5)Geoscience, Trinity University, One Trinity Place, San Antonio, TX 78232, (6)Department of Environmental & Earth Sciences, Willamette University, 900 State Street, Salem, OR 97301, (7)Institute for Earth Sciences, Utrecht University, Budapestlaan 4, Utrecht, 3584 CD, Netherlands, jlpayne@stanford.edu |
| <u>68-3</u> | 2:10 PM | THE EFFECTS OF LARGE IGNEOUS PROVINCES ON THE GLOBAL CARBON AND SULPHUR CYCLES: UNDERSTANDING THE SOURCES, THE SINKS AND ERUPTION STYLES
JERRAM, Dougal A. ¹ , JONES, Morgan T. ² , SVENSEN, Henrik ¹ and PLANKE, Sverre ³ , (1)Centre of Earth Evolution and Dynamics, University of Oslo, Oslo, 0349, (2)Centre for Earth Evolution and Dynamics (CEED), University of Oslo, Oslo, 0315, Norway, (3)Centre of Earth Evolution and Dynamics, University of Oslo, Oslo, 0349, Norway, dougal@dougalearth.com |
| <u>68-4</u> | 2:25 PM | THREE EXTINCTION EVENTS (CAPITANIAN CRISIS, LATEST PERMIAN EXTINCTION, AND THE SMITHIAN/SPATHIAN EXTINCTION) MARKED BY MERCURY ANOMALIES IN NW PANGAEA
GRASBY, Stephen E. , Geological Survey of Canada, Natural Resources Canada, 3303 33rd Street NW, Calgary, AB T2L 2A7, Canada, BEAUCHAMP, Benoit, Geoscience, University of Calgary, 2500 University Dr. NW, Calgary, AB T2N1N4, Canada, BOND, David P.G., School of Geography, Environment & Earth Sciences, University of Hull, Hull, HU6 7RX, United Kingdom, WIGNALL, Paul B., School of Earth and Environment, University of Leeds, Woodhouse Lane, Leeds, LS2 9JT, United Kingdom and SANEI, Hamed, Geological Survey of Canada, Calgary, 3303-33rd Street N.W, Calgary, AB T2L 2A7, Canada, sgrasby@nrcan.gc.ca |
| <u>68-5</u> | 2:40 PM | METHANE HYDRATE: KILLER CAUSE OF EARTH'S GREATEST MASS EXTINCTION
BRAND, Uwe , Earth Sciences, Brock University, St. Catharines, ON L2S 3A1, Canada, BLAMEY, Nigel J.F., Department of Earth Sciences, Brock University, St. Catharines, ON L2S 3A1, Canada, GRIESSHABER, Erika, Department of Earth and Environment Sciences, Ludwig Maximilian Universität, Munich, 80333, Germany, POSENATO, Renato, Dipartimento di Scienze della Terra, Università di Ferrara, Ferrara, 44100, Italy, ANGIOLINI, Lucia, Dipartimento di Scienze della Terra, Università di Milano, Milan, 20133, Italy, AZMY, Kareem, Earth Sciences, Memorial University, St. Johns, NF A1B 3X5, Canada, FARABEGOLI, Enzo, Dipartimento di Scienze della Terra, Università di Bologna, Bologna, 40126, Italy and CAME, Rosemarie E., Department of Earth Sciences, The University of New Hampshire, Durham, NH 03824-3589, ubrand@brocku.ca |
| <u>68-6</u> | 2:55 PM | OCEAN ACIDIFICATION AND THE PERMO-TRIASSIC MASS EXTINCTION: PROCESS AND MANIFESTATION
KASEMANN, Simone A. ¹ , WOOD, Rachel A. ² , CLARKSON, Matthew ³ , LENTON, Timothy ⁴ , DAINES, Stuart ⁴ , RICHOSZ, Sylvain ⁵ , MEIXNER, Anette ⁶ , POULTON, Simon W. ⁷ and TIPPER, Edward ⁸ , (1)Department of Geosciences & MARUM-Center for Marine Environmental Sciences, University of Bremen, Leobener Str, Bremen, 28359, Germany, (2)School of GeoSciences, University of Edinburgh, |

- (3)Department of Chemistry, University of Otago, Union Street, Dunedin, 9016, New Zealand, (4)College of Life and Environmental Sciences, University of Exeter, North Parks Road, Exeter, EX4 4QE, United Kingdom, (5)Institute of Earth Sciences, University of Graz, Heinrichstraße 26, Graz, 8010, Austria, (6)Department of Geosciences & MARUM-Center for Marine Environmental Sciences, University of Bremen, Bremen, 28334, Germany, (7)School of Earth and Environment, Univ. of Leeds, Leeds, LS2 9JT, United Kingdom, (8)Department of Earth Sciences, University of Cambridge, Downing Street, Cambridge, CB2 3EQ, United Kingdom, simone.kasemann@uni-bremen.de
- 68-7** 3:10 PM [TRANSITIONS IN LAVA EMPLACEMENT RECORDED IN THE DECCAN TRAPS SEQUENCE \(INDIA\)](#)
VANDERKLUYSEN, Loyc, Department of Biodiversity, Earth and Environmental Science, Drexel University, Philadelphia, PA 19104, SELF, Stephen, US Nuclear Regulatory Commission, Washington DC 20555; also at Dept. of Earth and Environmental Sciences, The Open University, Milton Keynes, MK76AA, United Kingdom, JAY, Anne E., The Open University, Milton Keynes, MK7 6AA, United Kingdom, SHETH, Hetu C., Department of Earth Sciences, Indian Institute of Technology Bombay, Powai, Mumbai, 400076, India and CLARKE, Amanda B., School of Earth and Space Exploration, Arizona State University, P.O. Box 876004, Tempe, AZ 85287-6004, loyc@drexel.edu
- 68-8** 3:25 PM [EARLY TO LATE MAASTRICHTIAN ENVIRONMENTAL CHANGES LINKED TO DECCAN TRAPS AND NINETYEAST RIDGE VOLCANISM: CASE STUDY OF THE INDIAN OCEAN](#)
MATEO, Paula, KELLER, Gerta and PUNEKAR, Jahnvi, Department of Geosciences, Princeton University, Guyot Hall, Princeton, NJ 08544, mmateo@princeton.edu
- 68-9** 3:40 PM [FINE-TUNING LATE MAASTRICHTIAN FAUNAL UPHEAVALS, CLIMATIC EVENTS AND MAJOR VOLCANIC EPISODES](#)
PUNEKAR, Jahnvi¹, **KELLER, Gerta**¹, FANTASIA, Alicia², **MATEO, Paula**¹, SPANGENBERG, Jorge³ and **ADATTE, Thierry**², (1)Department of Geosciences, Princeton University, Guyot Hall, Princeton, NJ 08544, (2)Institute of Earth Sciences, Université de Lausanne, Géopolis, Lausanne, 1015, Switzerland, (3)Idyst, University of Lausanne, UNIL-Mouline, Bâtiment Géopolis, Lausanne, 1015, Switzerland, jpunekar@princeton.edu
- 68-10** 3:55 PM [THE LAST 250 KYR BEFORE THE END-CRETACEOUS MASS EXTINCTION](#)
KELLER, Gerta¹, PUNEKAR, Jahnvi¹, **MATEO, Paula**¹, **ADATTE, Thierry**², FONT, Eric³ and SPANGENBERG, Jorge⁴, (1)Department of Geosciences, Princeton University, Guyot Hall, Princeton, NJ 08544, (2)ISTE, Institut des Sciences de la Terre, Université de Lausanne, Batiment Geopolis, quartier Moulines, Lausanne, 1015, Switzerland, (3)Faculdade de Ciencias, University of Lisbon, Campo Grande, Edificio C8, Piso 3, Lisbon, 1749-016, Portugal, (4)Idyst, University of Lausanne, UNIL-Mouline, Bâtiment Géopolis, Lausanne, 1015, Switzerland, gkeller@princeton.edu
- 68-11** 4:10 PM [PALEOENVIRONMENTAL INFLUENCE OF DECCAN VOLCANISM RELATIVE TO THE KT EXTINCTION](#)
ADATTE, Thierry¹, **KELLER, Gerta**², SCHOENE, Blair², SAMPERTON, Kyle M.², FONT, Eric³, SIAL, Alcides N.⁴, DE LACERDA, Luiz Drude⁵, PUNEKAR, Jahnvi², FANTASIA, Alicia¹ and KHADRI, Syed⁶, (1)Institute of Earth Sciences, Université de Lausanne, Géopolis, Lausanne, 1015, Switzerland, (2)Department of Geosciences, Princeton University, Guyot Hall, Princeton, NJ 08544, (3)Faculdade de Ciencias, University of Lisbon, Campo Grande, Edificio C8, Piso 3, Lisbon, 1749-016, Portugal, (4)Geosciences, Universidade Federal de Pernambuco, Recife, N7A, Brazil, (5)LABOMAR, Institute of Marine Sciences, Federal University of Ceará, Fortaleza, 60165-081, Brazil, (6)P.G. Department of Geology, Amravati University, Amravati, 444602, India, Thierry.Adatte@unil.ch
- 68-12** 4:25 PM [MODELLED CLIMATIC EFFECTS FROM DECCAN TRAPS CO₂ RELEASE](#)
TOBIN, Thomas S., Geological Sciences, University of Alabama, 201 7th Avenue, Room 2003 Bevil Building, Tuscaloosa, AL 35487-0268 and BITZ, Cecilia M., Atmospheric Sciences, University of Washington, Box: 351640, 4000 15th Ave NE, Seattle, WA 98195, ttobin@ua.edu
- 68-13** 4:40 PM [DISCOVERY OF A PRISTINE CHICXULUB IMPACT GLASS SPHERULE DEPOSIT ON GORGONILLA ISLAND, COLOMBIA, IN THE EASTERN PACIFIC OCEAN](#)
BERMÚDEZ, Hermann Darío¹, **KELLER, Gerta**², STINNESBECK, Wolfgang³, GARCÍA, Jenny¹, TRIELOFF, Mario⁴, RODRÍGUEZ, José Vicente¹, BOLÍVAR, Liliana¹, **MATEO, Paula**² and **ADATTE, Thierry**⁵, (1)Grupo de Investigación Paleoexplorer, Calle 98 Bis #71D-20, Bogotá D.C, 111111, Colombia, (2)Department of Geosciences, Princeton University, Guyot Hall, Princeton, NJ 08544, (3)Institute of Earth Sciences, Heidelberg University, Im Neuenheimer Feld 234-236, Heidelberg, 69120, Germany, (4)Klaus-Tschira-Labor für Kosmochemie, Heidelberg University, Im Neuenheimer Feld 234-236, Heidelberg, 69120, Germany, (5)Institute of Geology and Paleontology, University of Lausanne, Anthropole, Lausanne, CH-2000, Switzerland, hermann.bermudez@paleoexplorer.net
- 68-14** 4:55 PM [NO SAFER IN THE SOUTH: A SHALLOW MARINE MOLLUSCAN RECORD OF THE CRETACEOUS-PALEOGENE \(K-PG\) MASS EXTINCTION EVENT IN ANTARCTICA](#)
WITTS, James D.¹, WHITTLE, Rowan J.², WIGNALL, Paul B.¹, CRAME, J. Alistair², FRANCIS, Jane E.², NEWTON, Robert J.¹ and BOWMAN, Vanessa C.², (1)School of Earth and Environment, University of Leeds, Woodhouse Lane, Leeds, LS2 9JT, United Kingdom, (2)British Antarctic Survey, High Cross, Madingley Road, Cambridge, CB3 0ET, United Kingdom, J.Witts@leeds.ac.uk
- 68-15** 5:10 PM [THE CAUSES AND INTENSITIES OF MASS EXTINCTIONS](#)
STANLEY, Steven M., Geology and Geophysics, University of Hawaii, Post Bldg. 701, 1680 East-West Road, Honolulu, HI 96822, stevenst@hawaii.edu

[<< Previous Session](#) | [Next Session >>](#)
