

Curriculum Vitae

STANLEY M. AWRAMIK

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Stanley M. Awramik
Professor of Biogeology
Department of Earth Science
University of California
Santa Barbara, CA 93106

Education:

Ph.D., Harvard University
A.B., Boston University

Academic Positions:

1986-present	Professor, Department of Earth Science University of California, Santa Barbara
1981-1986	Associate Professor, Department of Geological Sciences University of California, Santa Barbara
1975-1981	Assistant Professor, Department of Geological Sciences University of California, Santa Barbara
1974-1975	Lecturer, Department of Geological Sciences University of California, Santa Barbara
1973-1974	Research Fellow in Biology Harvard University

Administrative Positions:

2001-2002	Associate Vice Chancellor for Academic Personnel University of California, Santa Barbara
1998-2001	Acting Associate Vice Chancellor University of California, Santa Barbara

University Service – Academic Senate (Highlights of Major Service):

2013-2014	Systemwide University Committee on Academic Freedom (Vice Chair)
2012-2104	Council on Faculty Issues and Awards (Vice Chair)
2011- 2013	Faculty Legislature Santa Barbara Division of the Academic Senate
2010-2012	Systemwide University Committee on Committees, Vice Chair (2010-2011), Chair (2011-2012)
2008-2010	Systemwide University Committee on Committees
1996-1998	Systemwide Academic Council of the University of California
1996-1998	Chair of the Santa Barbara Division of the Academic Senate

1993-1996	Vice Chair of the Santa Barbara Division of the Academic Senate
1991-1993	Systemwide University Committee on Committees
1991-1993	Committee on Committees
1988-1989	Systemwide University Committee on Academic Personnel
1986-1989	Committee on Academic Personnel (Vice Chair, 1987-1988; Chair, 1988-1989)

Honors:

Collegium of Distinguished Alumni, Boston University
 Geological Society of Australia, The 1990 Prider Lecture, Perth, Western Australia
 American Association for the Advancement of Science, Fellow
 Geological Society of America, Fellow

Editorial Boards:

1984-present	Associate Editor, <i>University of California Publications in Geology</i>
1992-1995	Editor, <i>University of California Publications in Geology</i>
1989-1995	Associate Editor, <i>Palaios</i>
1988-1994	Editorial Board, <i>Origins of Life</i>
1988-1990	Associate Editor, <i>Paleobiology</i>
1977-1980	Editor, <i>The Stromatolite Newsletter</i>

Service to the Profession (Highlights):

2012	Co-chair of the session: Lacustrine Microbialites: Hydrology, Water Chemistry, Sedimentology and Stratigraphy, Geological Society of America Annual Meeting, November 2012, Charlotte, North Carolina
2007-2012	Committee on the Origins and Evolution of Life, Standing Committee of the Space Studies Board of the National Academies
1991-1995	NASA-American Institute of Biological Sciences Exobiology Peer Review Panel
1990-1992	Project Leader, International Geological Correlation Program, Project 261, "Stromatolites"
1988-1989	Co-Convenor, 28th International Geological Congress, Washington, D.C., 1989, Special Sessions on "Stromatolite Diversity Through Time and Organic Buildups"
1985-1986	Geophysics Film Committee Panel Member, "Fate of Earth" segment for "Planet Earth" television series
1984-1986	Space Science Board of the National Academies

Miscellaneous Professional Activities (Highlights)

2003-present	NASA Planetary Biology Internship Program: University Associated Scientist
2008	Co-Leader, International Fieldtrip: "Eendracht Expedition," June-July, Pilbara Region, Geological Survey of Western Australia (visited key living and Archean microbialite localities)

Talks Delivered (last few years):

- 2013 “Microbialites in Time and Space,” Microbial Carbonates in Space and Time: Implications for Global Exploration and Production, Geological Society of London (keynote)
- 2013 “Precambrian Microfossils: Morphology Matters!” Gordon Research Conference, Ventura, CA
- 2012 “Facies associations and microbialites of giant lake systems; analogs for the pre-salt of offshore Brazil and Angola,” Annual Meeting Geological Society of America, Charlotte, NC
- 2012 “Microbialites, Bacterial Shrubbs, and the Lacustrine Carbonates of the Pre-Salt of the South Atlantic,” Department of Earth and Atmospheric Sciences, University of Houston, Houston, TX
- 2012 “The Quest for Microbialite Analogs to the South Atlantic Pre-Salt Carbonate Hydrocarbon Reservoirs of Africa and South America,” Houston Geological Society, Houston, TX
- 2012 “The Microbialites of Two Giant, Ancient Lake Systems: The Late Archean Meentheena Member and the Eocene Green River Formation,” Annual Meeting AAPG, Long Beach, CA.
- 2011 “Major Characteristics and Aspects of Lacustrine Microbialites,” Houston Geological Society, Houston, TX
- 2011 “The Character and Distribution of Lacustrine Microbialites through Time and Space,” International Limnogeology Congress, Konstanz, Germany
- 2011 “Lacustrine Microbialites,” Annual Meeting Geological Society of America, Minneapolis, MN.
- 2010 “The Oldest Evidence of Life on Earth: The Archean Biosphere,” Universidad San Francisco de Quito, Quito, Ecuador
- 2010 “Stromatolites: The Curse of the Living Dead,” Jet Propulsion Laboratory, Pasadena, CA
- 2010 “Late Archean Lakes of Western Australia,” Stanford University
- 2010 “Eu-like ‘Karyotes,’” Dating Major Events in the Origin and Evolution of Life on Earth, Workshop held at UCLA, Sponsored by the NASA Astrobiology Institute
- 2009 “Marine versus Non-Marine Microbialites,” ExxonMobil, Houston, TX
- 2008 “Laminar Complexity in Fossil Stromatolites – Evidence for a Biogenic Origin,” World Summit on Ancient Microfossils, UCLA
- 2008 “The Quest for Perfection: Biogenicity and the Early Fossil Record,” Geological Society of Australia, Annual Meeting, Perth, Western Australia (keynote)
- 2008 “Coniform Stromatolites from Microbial Mats in Carrizo Creek, California,” SPIE (International Society for Optics and Photonics), Annual Meeting, San Diego
- 2008 “The Meentheena Member (Tumbiana Formation, Fortescue Group): A Late Archean, Large Lake System,” Geological Survey of Western Australia, Perth, Western Australia

- 2007 “Stromatolites: Abiotic and Biotic Controversies,” Department of Earth and Biological Sciences, Loma Linda University, Loma Linda, CA
- 2007 “Stromatolites: Confusion and Biogenicity,” Committee on the Origins and Evolution of Life, Space Studies Board, Irvine, CA
- 2007 “Neoproterozoic Stromatolites of the Death Valley Region: Let the Rehabilitation Begin,” Geological Society of America Annual Meeting, Denver, CO

Publications:

- Noffke, N. and Awramik, S.M., in press. Stromatolites and MISS – Differences between relatives. *GSA Today*.
- Ghinassi, M., D’Orlando, F., Benvenuti, M., Awramik, S., Bartolini, C., Fedi, M., Ferrari, G., Papini, M., Sagri, M., and Talkbot, M., 2012. Shoreline fluctuations of Lake Hayk (northern Ethiopia) during the last 3500 years: Geomorphological, sedimentary, and isotope records. *Palaeo, Palaeo, Palaeo.*, 365-366: 209-226.
- Awramik, S.M. and Buchheim, H.P., 2012. The quest for microbialite analogs to the South Atlantic pre-salt carbonate hydrocarbon reservoirs of Africa and South America. *Houston Geol. Soc. Bull.*, 55(1): 21, 23, 25, 27.
- Mata, S.A., Corsetti, C.L., Corsetti, F.A., Awramik, S.M., and Bottjer, D.J., 2012. Early Cambrian sea anemone burrows from the upper member of the Wood Canyon Formation, Death Valley region, United States: Implications for infaunal ecospace utilization. *Palaios*, 27: 594-606.
- Yin Chongyu, Liu Pengju, Awramik, S.M., Chan Shouming, Tang Feng, Gao Linzhi, Wang Ziqiang, Riedman, L.A., 2011. Acanthomorph biostratigraphic succession of the Ediacaran Doushantuo Formation in the East Yangtze Gorges, South China, *Acta Geologica Sinica-English Edition*, 85: 283-295.
- Igisu, M., Ueno, Y., Shimojima, M., Nakashima, S., Awramik, S.M., and Maruyama, S., 2011. Micro-FTIR spectroscopic imaging of ~1900 Ma stromatolitic chert. In: V.Tewari and J.Seckbach (Eds.), *Stromatolites: Interactions of Microbes with Sediments*. Kluwer Academic Publishers, the Netherlands, pp. 445-461.
- Awramik, S.M. and Buchheim, H.P., 2009. A giant, Late Archean lake system: The Meentheena Member (Tumbiana Formation; Fortescue Group), Western Australia. *Precambrian Research*, 174: 215-240.
- Lamb, D.M., Awramik, S.M., Chapman, D.J., and Zhu, S., 2009. Evidence for eukaryotic diversification in the ~1800 million-year-old Changzhougou Formation, North China. *Precambrian Research*, 173: 93-104.

- Igisu, M., Ueno, Y., Shimojima, S., Awramik, S.M., Ohta, H., and Maruyama, S.M., 2009. Micro-FTIR spectroscopic signatures of bacterial lipids in Proterozoic microfossils. *Precambrian Research*, 173: 19-26.
- Storrie-Lombardi, M.C., Awramik, S.M., and Nesson, J., 2009. 3D characterization of stromatolites and the emergence of complexity. *Proc. SPIE*, 709711:1-11.
- Tang, F., Song, X., Yin, C., Liu, P., Awramik, S.M., Wang, Z., and Gao, L., 2007. Discoveries of Longfengshaniaceans from the uppermost Ediacaran (Sinian) in eastern Yunnan, South China and significance. *Acta Geologica Sinica*, 80: 1643-1649 (in Chinese).
- Tang, F., Song, X., Yin, C., Liu, P., Awramik, S.M., Wang, Z., and Gao, L., 2007. Discoveries of new Longfengshaniaceae from the uppermost Ediacaran in eastern Yunnan, South China and the significance. *Frontiers of Earth Science*, 1: 142-149.
- Awramik, S.M. and McNamara, K.J., 2007. The evolution and diversification of life. In: Sullivan, W. and Baross, J., Eds., *Planets and Life: The Emerging Field of Astrobiology*. Cambridge University Press, Cambridge, pp. 313-334.
- Awramik, S.M. and McNamara, K.J., 2007. The Geological Time Scale. In: Sullivan, W. and Baross, J., Eds., *Planets and Life: The Emerging Field of Astrobiology*. Cambridge University Press, Cambridge, Appendix C, pp. 566-568.
- Lamb, D.M., Awramik, S.M., and Zhu, S., 2007. Paleoproterozoic compression-like structures from the Changzhougou Formation China: Eukaryotes or clasts? *Precambrian Research*, 154: 236-247.
- Awramik, S.M., 2006. Respect for stromatolites. *Nature*, 441: 700-701.
- Igisu, M., Nakashima, S., Ueno, Y., Awramik, S.M., and Maruyama, S., 2006. *In situ* infrared microspectroscopy of ~850 million-year-old prokaryotic fossils. *Applied Spectroscopy*, 60: 1111-1120.
- Shapiro, R.S. and Awramik, S.M., 2006. *Favosamaceria cooperi* new group and form: A widely dispersed, time-restricted thrombolite. *Journal of Paleontology*, 80: 411-422.
- Storrie-Lombardi, M.C. and Awramik, S.M., 2006. A sideways view of stromatolites: Complexity metrics for stromatolite laminae. *Proc. SPIE*, 63090: 1-12.
- Awramik, S.M. and Grey, K., 2005. Stromatolites: Biogenicity, biosignatures, and bioconfusion. *Proc. SPIE*, 5906:1-9.
- Corsetti, F.A., Awramik, S.M., and Pierce, D., 2003. A complex microbiota from snowball Earth times: Microfossils from the Neoproterozoic Kingston Peak Formation, Death Valley, USA. *Proceedings of the National Academy of Sciences*, 100: 4399-4404.
- Corsetti, F.A., Shapiro, R.S., and Awramik, S.M., 2002. Proterozoic-Cambrian of the southern Death Valley region: Microbialites, carbonate depositional environments, and Neoproterozoic glacial strata. In: Corsetti, F.A., Ed., *Proterozoic-Cambrian of the Great*

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- Xu, Z.L. and Awramik, S.M., 2001. New microorganisms from the Gaoyuzhuang Formation of northern Taihang Mountains, China. *Acta Botanica Sinica*, 43(3): 295-311.
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- Sommers, M.G., Awramik, S.M., and Woo, K.S., 2000. Evidence for initial calcite-aragonite composition of Lower Algal Chert Member ooids and stromatolites, Paleoproterozoic Gunflint Formation, Ontario, Canada. *Canadian Journal Earth Sciences*, 37: 1229-1243.
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- Awramik, S.M., Corsetti, F.A., and Shapiro, R.S., 2000. Stromatolites and the pre-Phanerozoic to Cambrian history of the area southeast of Death Valley. *San Bernardino County Museum Association Quarterly*, 47: 65-74.
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- Corsetti, F.A., Awramik, S.M., Pierce, D., and Kaufman, A.J., 2000. Using chemostratigraphy to correlate and calibrate unconformities in Neoproterozoic strata from the southern Great Basin, USA. *International Geology Review*, 42: 516-533.
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- Cohen, A.S., Talbot, M.R., Awramik, S.M., Dettman, D.L., and Abell, P., 1997. Lake level and paleoenvironmental history of Lake Tanganyika, Africa, as inferred from late Holocene and modern stromatolites. *Bulletin of the Geological Society of America*, 109: 440-460.
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- Awramik, S.M., 1991. Archaeal and Proterozoic stromatolites. In: R. Riding (Ed.), *Calcareous Algae and Stromatolites*. Springer-Verlag, Berlin, pp. 289-304.
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- Awramik, S.M., 1986. New fossil finds in old rocks. *Nature*, 319: 446-447.
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- Awramik, S.M., 1982. Biogeochemical evolution of the ocean-atmosphere system. State of the Art Report. In: H.D. Holland and M. Schidlowski (eds.), *Mineral Deposits and the Evolution of the Biosphere*. Dahlem Konferenzen, Springer-Verlag, Berlin, pp. 309-320.
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- Vanyo, J.P., and Awramik, S.M., 1982. Length of day and obliquity of the ecliptic 850 Ma ago: preliminary results of a stromatolite growth model. *Geophysical Research Letters* 9(10):1125-1128.
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