

**Bibliography**

- Karcz, I., and Shanmugam, G. (1974). Decrease in Scour Rate of Fresh Deposited Muds. Proc. American Society of Civil Engineers (ASCE). J. Hydraulics Division, 100 (HY11), 1735–1738.
- Marr, J.G., Harff, P.A., Shanmugam, G., and Parker, G. (2001). Experiments on subaqueous sandy gravity flows: the role of clay and water content in flow dynamics and depositional structures. GSA Bulletin, 113, 1377–1386.
- McPherson, J.G., and Shanmugam, G., Moiola, R.J. (1987). Fan-deltas and braid deltas: varieties of coarse-grained deltas. Geol. Soc. America Bulletin, 99, 331–340.
- Parthasarathy, A., and Shanmugam, G. (1969). Sedimentologic characteristics and their significance - studies on Bagh Sandstones in and around Tankhala, Gujarat State: Proc. 56<sup>th</sup> Session of Indian Science Congress Association, Part 3, Section V, p. 209
- Shanmugam, G. (1968). Geology of Tankhala Area, Gujarat State: Bombay, India: Civil Engineering Department, Indian Institute of Technology: Unpublished M.Sc. Dissertation in Applied Geology, IIT, Bombay, India, p. 84.
- Shanmugam, G. (1970). ACE Language computer program for moment statistics in size-shape studies of sedimentary particles: Geol. Bull. of Civil Engineering Dept., Indian Institute of Technology, Bombay, 1, 13-17.
- Shanmugam, G. (1972). Petrographic Study of Simpson Group (Ordovician) Sandstones, Southern Oklahoma. Ohio University: Unpublished M.S. Thesis in Geology, Athens, Ohio, p. 85.
- Shanmugam, G. (1978). The Stratigraphy, Sedimentology, and Tectonics of the Middle Ordovician Sevier Shale Basin in East Tennessee (Unpublished Ph.D. dissertation). The University of Tennessee, Knoxville, TN, p. 222.
- Shanmugam, G. (1980). "Petroleum Development Geology" by Parke A. Dickey: AAPG Bull. v. 64, pp. 2040- 2041.
- Shanmugam, G. (1985a), Significance of coniferous rain forests and related Organic matter in generating commercial quantities of oil, Gippsland basin, Australia: AAPG Bulletin, 69, 1241-1254.
- Shanmugam, G. (1985b). Ophiolite source rocks for Taconic-age flysch: Trace- element evidence: Discussion: Geol. Soc. America Bulletin, 96, 1221-1222.
- Shanmugam, G. (1985c). Types of porosity in sandstones and their significance in interpreting provenance. In: Zuffa, G.G. (Ed.), Provenance of Arenites. D. Reidel Publishing Company, pp. 115–137.
- Shanmugam, G. (1988). Origin, recognition and importance of erosional unconformities in sedimentary basins. In: Kleinspehn, K.L., Paola, C. (Eds.), New Perspectives in Basin Analysis. Springer-Verlag, New York, pp. 83-108.
- Shanmugam, G. (1990a). Deep-marine facies models and the interrelationship of depositional components in time and space. In: Brown, G.C., Gorsline, D.S., Schweller, W.J. (Eds.), Deep-Marine Sedimentation: Depositional Models and Case Histories in Hydrocarbon Exploration & Development, vol. 66. SEPM Pacific Section Short Course, San Francisco, CA, pp. 199–246.
- Shanmugam, G. (1990b). Porosity prediction in sandstones using erosional unconformities. In: Meshri, I.D., Ortoleva, P.J. (Eds.), Prediction of Reservoir Quality Through Chemical Modelling. AAPG Memoir, pp. 1–23
- Shanmugam, G. (1992). Submarine canyons. 7th Edition of Encyclopedia of Science and Technology, McGraw-Hill Book Company, New York, pp. 548–552.
- Shanmugam, G. (1996). High-density turbidity currents: are they sandy debris flows? J. Sediment. Research, 66, 2–10.
- Shanmugam, G. (1997). The Bouma Sequence and the turbidite mind set. Earth-Science Reviews, 42, 201–229.



- Shanmugam, G. (2000). 50 years of the turbidite paradigm (1950s–1990s): deep-water processes and facies models—a critical perspective. *Marine and Petroleum Geology*, 17, 285–342.
- Shanmugam, G. (2001). Book Review: “Fine-Grained Turbidite Systems” edited by A.H. Bouma and C.G. Stone: Episodes, v. 24, no. 4, p. 284 (2001).
- Shanmugam, G. (2002a). Ten turbidite myths. *Earth-Science Reviews*, 58, 311–341.
- Shanmugam, G. (2002b). Book Review: “Fine-grained turbidite systems” edited by A.H. Bouma and C.G. Stone: *American Association of Petroleum Geologists Bulletin*, vol. 86, No. 6, pp.1133-1134 (June, 2002).
- Shanmugam, G. (2003). Deep-marine tidal bottom currents and their reworked sands in modern and ancient submarine canyons. *Marine and Petroleum Geology*, 20, 471–491.
- Shanmugam, G. (2006a). Deep-Water Processes and Facies Models: Implications for Sandstone Petroleum Reservoirs. Elsevier, Amsterdam, p. 476.
- Shanmugam, G. (2006b). The tsunamite problem. *J. Sedimentary Research*, 76, 718–730.
- Shanmugam, G. (2007). The obsolescence of deep-water sequence stratigraphy in petroleum geology. *Indian Journal of Petroleum Geology*, 16(1), 1–45.
- Shanmugam, G. (2008a). The constructive functions of tropical cyclones and tsunamis on deepwater sand deposition during sea level highstand: implications for petroleum exploration. *AAPG Bulletin*, 92, 443–471.
- Shanmugam, G. (2008b). Chapter 5 Deep-water bottom currents and their deposits. In: Rebesco, M., Camerlenghi, A. (Eds.), *Contourites, Developments in Sedimentology*, Vol. 60. Elsevier, Amsterdam, pp. 59–81.
- Shanmugam, G. (2008c). Leaves in turbidite sand: the main source of oil and gas in the deep-water Kutei Basin, Indonesia: discussion. *AAPG Bull.* 92, 127–137.
- Shanmugam, G. (2008d). Slides, slumps, debris flows, and turbidity currents. In: Steele, J.H., Turekian, K.K., Thorpe, S.A. (Eds.), *Encyclopedia of Ocean Sciences*, second ed. Elsevier, ISBN: 978-0-12-374473-9, pp. 447–467.
- Shanmugam, G. (2008e). Book Review: “Economic and Palaeoceanographic Significance of Contourite Deposits”. Edited by A. R. Viana and M. Rebesco. Geological Society (London) Special Publication 276, 2007. Book review in *Journal of Sedimentary Research*: URL: <http://spot.colorado.edu/~jsedr/BookReviews/bookreviews.htm>
- Shanmugam, G. (2009a). Comment on “Late Holocene Rupture of the Northern San Andreas Fault and Possible Stress Linkage to the Cascadia Subduction Zone” by C. Goldfinger, K. Grijalva, R. Bürgmann, A. E. Morey, J. E. Johnson, C. Hans Nelson, J. Gutierrez-Pastor, A. Ericsson, E. Karabanov, J. D. Chaytor, J. Patton, and E. Grácia. *Bull. Seismol. Soc. America*, 99-4, 2594-2598.
- Shanmugam, G. (2009b). Book Review: “The Cambridge Handbook of Earth Science Data”, by Paul Henderson & Gideon M. Henderson, 2009. Cambridge University Press, The Edinburgh Building, Cambridge CB2 8RU, UK (published in the United States of America by Cambridge University Press, New York). Paperback, 277 pages. Price GBP 17.99; USD 30.00. ISBN 978-0-521-69317-2.
- Shanmugam, G. (2011). Book Review: “Deep-Sea Sediments” by Hüeneke, H., Mulder, T. (Eds.), 2011. Elsevier, Amsterdam, *Developments in Sedimentology* 63”. *Geologos*.
- Shanmugam, G. (2012a). New Perspectives on Deep-Water Sandstones: Origin, Recognition, Initiation, and Reservoir Quality, 9. Elsevier, *Handbook of Petroleum Exploration and Production*, Amsterdam, p. 524.
- Shanmugam, G. (2012b). Process-sedimentological challenges in distinguishing paleo-tsunami deposits. In: Kumar, A., Nister, I. (Eds.), *Paleo-tsunamis. Natural Hazards*, 63, pp. 5–30.
- Shanmugam, G. (2013). Modern internal waves and internal tides along oceanic pycnoclines: challenges and implications for ancient deep-marine baroclinic sands. *AAPG Bulletin*, 97, 767–811.



- Shanmugam, G. (2014). Review of research in internal-wave and internal-tide deposits of China, discussion. *Journal of Palaeogeography*, 3 (4), 332–350.
- Shanmugam, G. (2015). The landslide problem. *Journal of Palaeogeography*, 4(2), 109–166.
- Shanmugam, G. (2016a). Submarine fans: a critical retrospective (1950–2015). *Journal of Palaeogeography*, 5(2), 110–184.
- Shanmugam, G. (2016b). The contourite problem. In: Mazumder, R. (Ed.), *Sediment Provenance*. Elsevier, pp. 183–254. Chapter 9.
- Shanmugam, G. (2016c). The seismite problem. *Journal of Palaeogeography*, 5(4), 318–362.
- Shanmugam, G. (2017a). Global case studies of soft-sediment deformation structures (SSDS): definitions, classifications, advances, origins, and problems. *Journal of Palaeogeography*, 6(4), 251–320.
- Shanmugam, G. (2017b). Contourites: physical oceanography, process sedimentology, and petroleum geology. *Petroleum Exploration and Development*, 44 (2), 183–216.
- Shanmugam, G. (2017c). The response of stromatolites to seismic shocks: tombolites from the Palaeoproterozoic Chaibasa Formation, E India: discussion and liquefaction basics. *Journal of Palaeogeography*, 6 (3), 224–234.
- Shanmugam, G. (2017d). The fallacy of interpreting SSDS with different types of breccias as seismites amid the multifarious origins of earthquakes: implications. *Journal of Palaeogeography*, 6(1), 12–44.
- Shanmugam, G. (2018a). The hyperpycnite problem. *Journal of Palaeogeography*, 7(3), 197–238.
- Shanmugam, G. (2018b). Bioturbation and trace fossils in deep-water contourites, turbidites, and hyperpycnites: a cautionary note. In: Special Issue dedicated to George Devries Klein by the Journal of the Indian Association of Sedimentologists (JIAS). *Journal Indian Association of Sedimentologists*, 35 (2), 13–32.
- Shanmugam, G. (2018c). A global satellite survey of density plumes at river mouths and at other environments: plume configurations, external controls, and implications for deep-water sedimentation. *Petrol. Explor. Development*, 45(4), 640–661.
- Shanmugam, G. (2018d). Preface to the Special Issue dedicated to George Devries Klein by the Journal of the Indian Association of Sedimentologists (JIAS). *Journal Indian Association of Sedimentologists*, 35(2), 1-5.
- Shanmugam, G. (2018e). An extended tribute to Professor George Devries Klein (1933-2018): A sedimentologic pioneer and a petroleum geologist. *Journal of The Indian Association of Sedimentologists*, 35(1), 107–118
- Shanmugam, G., (2018f). Comment on “Iconological analysis of contourites: Past, present and future” by Francisco J. Rodriguez-Tovar and F. Javier Hernández-Molina [*Earth- Science Reviews*, 182 (2018), 28–41]. *Earth-Science Reviews* 184 (2018) 46–49
- Shanmugam, G. (2019a). Global significance of wind forcing on deflecting sediment plumes at river mouths: implications for hyperpycnal flows, sediment transport, and provenance. *Journal Indian Association of Sedimentologists*, 36(2), 1–37.
- Shanmugam, G. (2019b). Reply to discussions by Zavala (2019) and by Van Loon, Hüeneke, and Mulder (2019) on Shanmugam, G. (2018, *Journal of Palaeogeography*, 7 (3): 197–238): the hyperpycnite problem. *Journal of Palaeogeography*, 8 (4): 408–421.
- Shanmugam, G. (2019c). Slides, Slumps, Debris Flows, Turbidity Currents, Hyperpycnal Flows, and Bottom Currents. In: J. Kirk Cochran, Henry J. Bokuniewicz and Patricia L. Yager (Editors-in-Chief), *Encyclopedia of Ocean Sciences (Third Edition) Volume 4*, pp. 228-257.
- Shanmugam, G. (2020). Gravity flows: Types, definitions, origins, identification markers, and problems. *Journal Indian Association of Sedimentologists*, 37(2), 61-90.
- Shanmugam, G. (2021a). Mass transport, gravity flows, and bottom currents: Downslope and alongslope processes and deposits. Elsevier, Amsterdam, ISBN: 9780128225769, p. 608.



- Shanmugam, G. (2021b). "The turbidite-contourite-tidalite-baroclinite-hybridite problem: orthodoxy vs. empirical evidence behind the "Bouma Sequence". *Jour. Palaeogeography*, v. 10, No. 1. Online <https://doi.org/10.1186/s42501-021-00085->
- Shanmugam, G. (2021c). Deep-water processes and deposits. In *Encyclopedia of geology*, ed. David Alderton and Scott A. Elias, 2nd ed., Elsevier, Amsterdam, pp. 965–1009.
- Shanmugam, G. (2022a). Book Review of "River Planet: Rivers from Deep Time to the Modern Crisis by Martin Gibling". *Jour. Palaeogeography*, v. 11, No. 1, 145=150.
- Shanmugam, G. (2022b). Comment on "Ichnological analysis: A tool to characterize deep-marine processes and sediments" by Francisco J. Rodriguez-Tovar [*Earth-Science Reviews*, 228 (2022), 104014]. *Earth-Science Reviews*. Article in press.
- Shanmugam, G. (2022c). Comment on "A new classification system for mixed (turbidite-contourite) depositional systems: Examples, conceptual models and diagnostic criteria for modern and ancient records" by S. Rodrigues, F.J. Hernández-Molina, M. Fonnesu, E. Miramontes, M. Rebesco, D. C. Campbell [*Earth-Science Reviews* (2022), <https://doi.org/10.1016/j.earscirev.2022.104030>]" *Earth-Science Reviews*. Article in press.
- Shanmugam, G. (2022d). Sedimentary Basins: Processes, deposits, palaeogeography, and challenges. Keynote Lecture, 37th Convention of the Indian Association of Sedimentologists, University of Jammu, India, April 27, Wednesday, 10:00 AM (Jammu, India Time), 2022, Virtual Platform. In: IAS Abstract volume. P. 6-26.
- Shanmugam, G. (2022e). 150 Years (1872-2022) of research on deep-water processes, deposits, settings, triggers, and deformation: A difficult domain of progress, dichotomy, diversion, omission, and groupthink. Keynote Lecture. 5<sup>th</sup> International Conference on Palaeogeography. May 14, Saturday, 9:50-10:20 AM (Beijing Time), 2022, Wuhan, China.
- Shanmugam, G. (2022f). 150 Years (1872-2022) of research on deep-water processes, deposits, settings, triggers, and deformation: A difficult domain of progress, dichotomy, diversion, omission, and groupthink. *Jour. Palaeogeography*, v. 11, No. 4, 469-564.
- Shanmugam, G. (2022g). The peer-review problem: a sedimentological perspective. *Journal of the Indian Association of Sedimentologists*, 39, 3-24.
- Shanmugam, G. (2022h). "Fossil Future: Why Global Human Flourishing Requires More Oil, Coal, and Natural Gas--Not Less" by Alex Epstein. Book Review: *Journal of the Indian Association of Sedimentologists*, v. 39 (2), pp. 58–68.
- Shanmugam, G. (2023a). Climate Change: Fossil Fuels, Renewable Energy, Cyclones, Hypocrisy, Governance, CO<sub>2</sub> Coalition, Model, Lessons Learned, and Roadmap. OHIO University Geological Sciences Alumni Symposium, Virtual Lecture, 10:10 -10:40 AM, EST, Saturday, April 15, 2023, OHIO University, Athens, Ohio, USA.
- Shanmugam, G. (2023b). 200 Years of Fossil Fuels and Climate Change (1900-2100). *The Journal of the Geological Society of India*, v. 99, July/August (Editorial, in press).
- Shanmugam, G. (2023c). A tribute to Prof. Zeng-Zhao Feng (6<sup>th</sup> July, 1926–5<sup>th</sup> January, 2023): Reminiscing about an iconic sedimentologist in China. *Journal of Palaeogeography (JoP)*, Editorial, January issue, in Press.
- Shanmugam, G., and Benedict, G.L. (1978). Fine-grained carbonate debris flow, Ordovician basin margin, Southern Appalachians. *J. Sediment. Petrology*, 48, 1233–1240.
- Shanmugam, G., and Benedict III, G.L. (1983). Manganese distribution in the carbonate fraction of shallow and deep marine lithofacies, Middle Ordovician, eastern Tennessee. *Sediment. Geology*, 35, 159–175.
- Shanmugam, G., and Walker, K.R. (1978). Tectonic significance of distal turbidites in the Middle Ordovician Blockhouse and lower Sevier formations in east Tennessee. *Am. Journal of Science*, 278, 551-578.

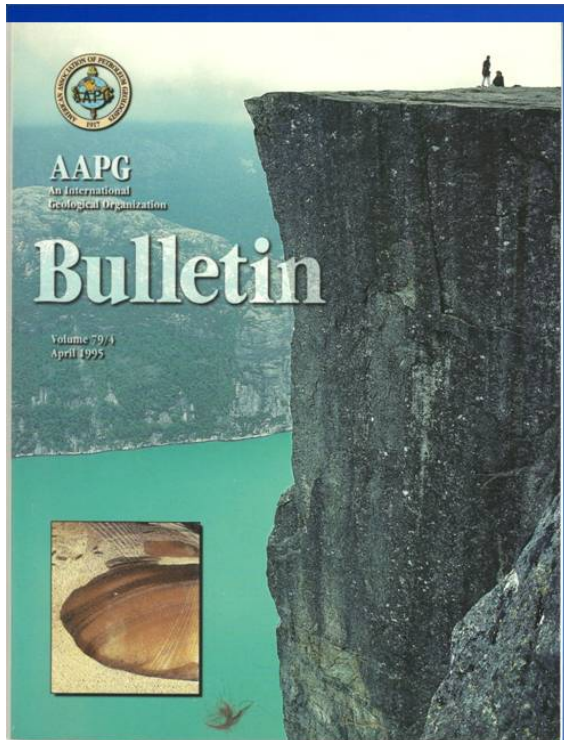


- Shanmugam, G., and Lash, G. G. (1982). Analogous tectonic evolution of the Ordovician foredeeps, southern and central Appalachians. *Geology*, 10, 562-566.
- Shanmugam, G., and Moiola, R.J. (1979). Book Review: "Principles of Sedimentology" by G. M. Friedman and J. B. Sanders: *Jour. Sedimentary Petrology*, v. 49, p. 679-680.
- Shanmugam, G., and Moiola, R.J. (1982). Eustatic control of turbidites and winnowed turbidites. *Geology*, 10, 231-235.
- Shanmugam, G., and Moiola, R. J. (1984). Eustatic control of calciclastic turbidites. *Marine Geology*, 56, 273-278.
- Shanmugam, G., and Moiola, R.J. (1988). Submarine fans: characteristics, models, classification, and reservoir potential. *Earth-Science Reviews*, 24, 383-428.
- Shanmugam, G., and Moiola, R.J. (1995). Reinterpretation of depositional processes in a classic flysch sequence (Pennsylvanian Jackfork Group), Ouachita Mountains, Arkansas and Oklahoma. *AAPG Bulletin*, 79, 672-695.
- Shanmugam, G., and McPherson, J.G. (1987). Sedimentation in the Chile Trench: depositional morphologies, lithofacies, and stratigraphy: discussion and reply. *GSA Bulletin*, 99(4), 598.
- Shanmugam, G., Alhilali, K.A., 1988. Parameters influencing Porosity in sandstones: a model for sandstone porosity prediction: discussion. *AAPG Bulletin*, 72, 852-853.
- Shanmugam, G., and Higgins, J.B. (1988). Porosity enhancement from chert dissolution beneath Neocomian unconformity: Ivishak Formation, North Slope, Alaska. *AAPG Bulletin*, 72, 523-535.
- Shanmugam, G., D and amuth, J.E., Moiola, R.J., (1985). Is the turbidite facies association scheme valid for interpreting ancient submarine fan environments? *Geology*, 13, 234-237.
- Shanmugam, G., Moiola, R. J., and Sales, J. K. (1988). Duplex-like structures in submarine fan channels, Ouachita mountains, Arkansas. *Geology*, 16, 229-232.
- Shanmugam, G., Spalding, T.D., and Rofheart, D.H. (1993). Process sedimentology and reservoir quality of deep- marine bottom-current reworked sands (sandy contourites): an example from the Gulf of Mexico. *AAPG Bulletin*, 77, 1241-1259.
- Shanmugam, G., Lehtonen, L.R., Straume, T., Syversten, S.E., Hodgkinson, R.J., and Skibeli, M., (1994). Slump and debris flow dominated upper slope facies in the Cretaceous of the Norwegian and Northern North Seas (61-67°N): implications for sand distribution. *AAPG Bulletin*, 78, 910-937.
- Shanmugam, G., Bloch, R.B., Mitchell, S.M., Beamish, G.W.J., Hodgkinson, R.J., Damuth, J.E., Straume, T., Syvertsen, S.E., and Shields, K.E., (1995). Basin-floor fans in the North Sea: sequence stratigraphic models vs. sedimentary facies. *AAPG Bulletin*, 79, 477-512.
- Shanmugam, G., Poffenberger, M., and Toro Alava, J. (2000). Tide-dominated estuarine facies in the Hollin and Napo ('T'and 'U') formations (Cretaceous), Sacha field, Oriente Basin, Ecuador. *AAPG Bulletin*, 84, 652-682.
- Shanmugam, G., Shrivastava, S.K., and Das, B. (2009). Sandy debrites and tidalites of Pliocene reservoir sands in upper-slope canyon environments, Offshore Krishna-Godavari Basin (India): implications. *Journal of Sediment. Research*, 79, 736-756.

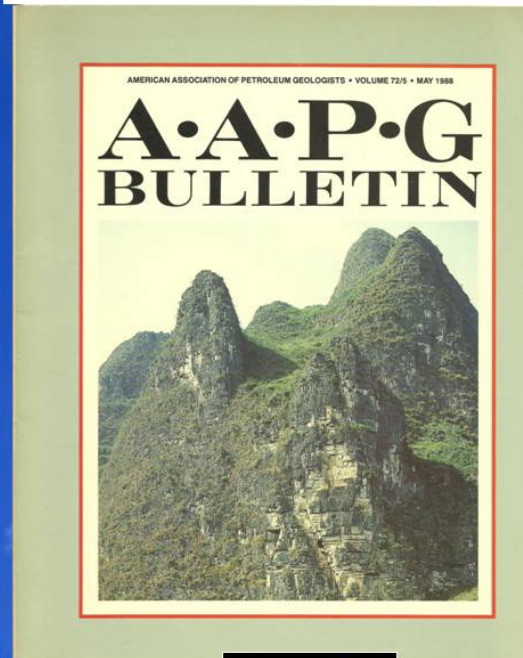


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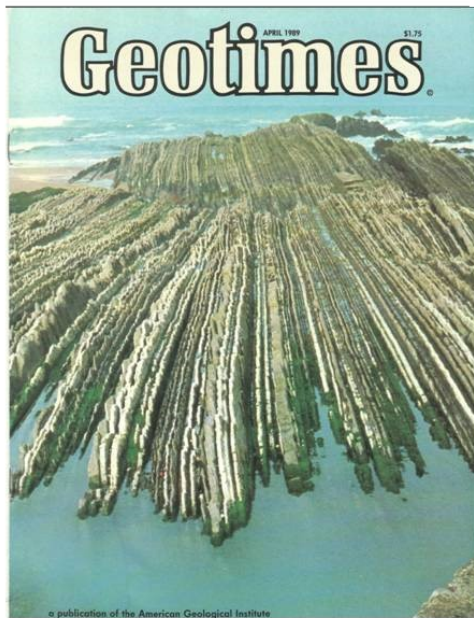


Pulpit Rock, Norway

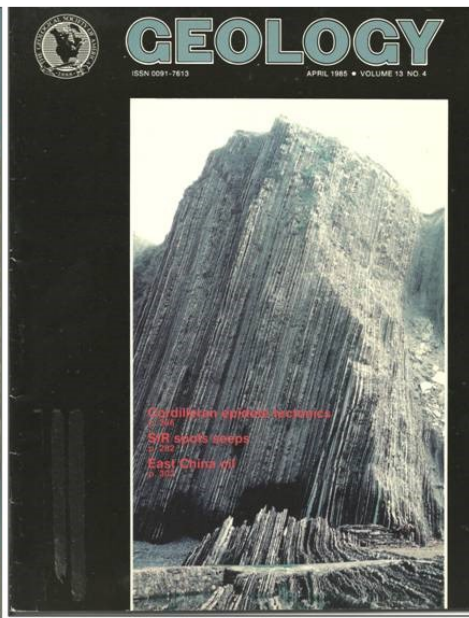


Karst, China

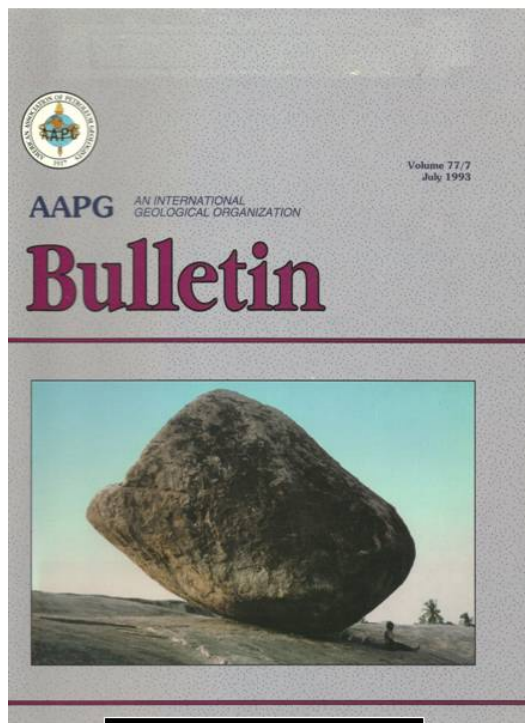




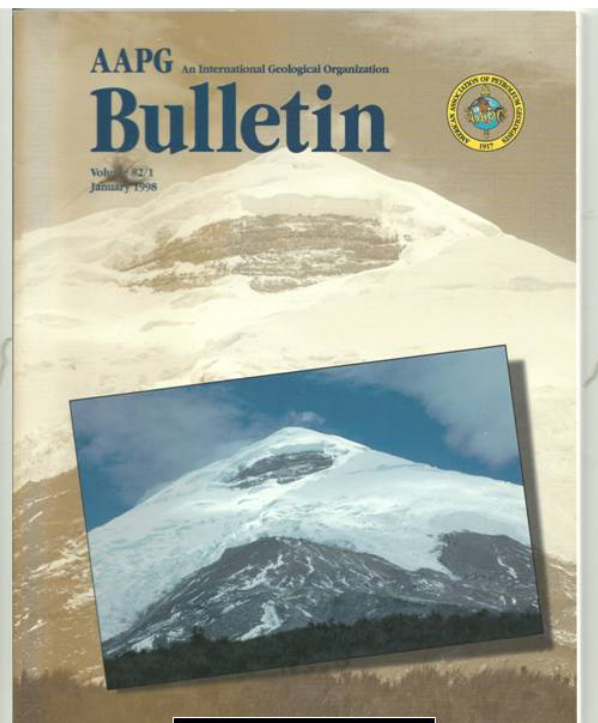
Basin-plain turbidites, Zumaya, Spain



Basin-plain turbidites, Zumaya, Spain



Granitic monolith, India



Cotopaxi, Ecuador



The Journal of  
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The Indian Association of Sedimentologists

Volume 38

No. I

Jan - June 2021



*Sand grain flows on lee side of an eolian dune, Saudi Arabia*

*Courtesy: G. Shanmugam*

**Cover photo:**

Grain flows (avalanches)  
on the "slip face" or lee side  
of an eolian dune in  
Saudi Arabia.

Red scale: 5 cm

Flow velocity: ~1 cm/sec

Photo by G. Shanmugam.

Related article by

G. Shanmugam, 2020,

JIAS, v. 37, No.2, p. 61-90. Fig. 32.