

## CURRICULUM VITAE

NAME: SANKAR CHATTERJEE

ADDRESS:

Department of Geosciences  
 Museum of Texas Tech University, MS/Box 43191  
 Lubbock, TX 79409-3191, USA.  
 Phone: (806) 742-1986  
 Fax: (806) 742-1136  
 E-mail: [sankar.chatterjee@ttu.edu](mailto:sankar.chatterjee@ttu.edu)  
 Website: [http://www.gesc.ttu.edu/Fac\\_pages/chatterjee/](http://www.gesc.ttu.edu/Fac_pages/chatterjee/)

PERSONAL INFORMATION:

Born: May 28, 1943, Calcutta, India.  
 U. S. Citizen  
 Married, two boys.

PRESENT POSITION:

Paul Whitfield Horn Professor of Geosciences and Museum Science; Curator of Paleontology and Director, Antarctic Research Center, Museum of Texas Tech University.

EDUCATION:

- B. S. in Geology Honors, First in First Class, Jadavpur University, 1962.
- M. S. in Applied Geology, First in First Class, Jadavpur University, 1964.
- Predoctoral Fellow, London University, 1967-68.
- Ph. D. in Geology, Calcutta University, Calcutta, India, 1970.
- Postdoctoral Fellow, Smithsonian Institution, 1977-78.

ACADEMIC POSITIONS:

- Honorary Professor, Indian Institute of Science Education and Research, Calcutta, India, 2010 – Present.
- Visiting Professor, Indian Statistical Institute, Calcutta, India, 1996 - Present.
- Paul Whitfield Horn Professor & Curator of Paleontology, Texas Tech University, 1994 - Present.
- Visiting Professor, Tübingen University, Germany, summer, 1992.
- Visiting Professor, Tübingen University, Germany, summer, 1991.
- Professor & Curator of Paleontology, Texas Tech University, 1987-1994.
- Associate Professor & Curator, Texas Tech University, 1984-87.
- Assistant Professor & Curator of Paleontology, Texas Tech University, 1979-84.
- Assistant Professor, George Washington University, 1976-78.
- Visiting Professor, University of California, Berkeley, 1976.
- Senior Lecturer, Indian Statistical Institute, Calcutta, 1968-75.

#### PROFESSIONAL ORGANIZATIONS:

- Geological Society of America.
- Society of Vertebrate Paleontology.
- Paleontological Society.
- American Association for the Advancement of Science.
- Phi Beta Delta.
- Geological Society of India.
- International Society for the Study of the Origin of Life

#### HONORS AND AWARDS:

- National Merit Scholar, Government of India, 1962-64.
- University Gold Medal for standing First in First class B.S. examination, 1962.
- University Gold Medal and P. N. Bose Memorial Medal for standing First in First class in M.S. examination, 1964.
- NERC Fellow, University College, London, 1967-68.
- Smithsonian Postdoctoral Fellow, 1977-78.
- Henry-Marsh Award, National Academy of Sciences, 1979.
- Antarctic Service Medal, National Science Foundation, 1982.
- Research Associate, Smithsonian Institution, 1977-2000.
- Theodore Roosevelt Memorial Fund, American Museum of Natural History, 1990.
- Roberts O. Bass Fund, Field Museum of Natural History, 1990.
- Proclamation by the Senate of the State of Texas in recognition of outstanding scientific contributions, 1991.
- Headliner Award, sponsored by Women in Communications, 1992.
- Best Teacher Award, La Ventana, Texas Tech University Student Publications, 1994.
- Appointment as Paul Whitfield Horn Professor of Geosciences and Museum Science, the highest honor granted to Texas Tech Faculty by the Board of Regents, 1994.
- Elected Fellow, Geological Society of America, 1995.
- Member, Texas Tech Teaching Academy, 1998.
- Honorary Member, Golden Key National Honor Society, 1999.
- Scientist of the Year, Achievement Rewards for the College Scientists, 2000.
- Elected Fellow, American Association for the Advancement of Science, 2001.
- L. Rama Rao Birth Centenary Award, Geological Society of India, 2006.
- Listed in Who's Who In America, 2006.
- Outstanding Researcher, College of Arts & Sciences, Texas Tech University, 2008.
- Best Bengali Scientist, Star Ananda, Calcutta, India, 2010.
- Fulbright-Nehru Academic and Professional Excellence Award, 2013-14.

#### RESEARCH GRANTS:

- 1980: National Geographic Society.
- 1980: National Science Foundation.
- 1981: National Geographic Society.
- 1981: National Science Foundation.
- 1982: National Geographic Society.
- 1983-84: National Science Foundation.
- 1983: National Geographic Society.
- 1984: National Geographic Society.

- 1985: National Geographic Society.
- 1986: National Geographic Society.
- 1987-88: National Science Foundation.
- 1987: Smithsonian Institution.
- 1988: National Geographic Society.
- 1989: Smithsonian Institution Grant.
- 1990: National Geographic Society.
- 1990: American Museum of Natural History.
- 1990: Field Museum of Natural History.
- 1991: Sonderforschungsbereich, Germany.
- 1992: Sonderforschungsbereich, Germany.
- 1992: National Geographic Society.
- 1992: Smithsonian Institution.
- 1994: Dinosaur Society Research.
- 1996: National Geographic Society.
- 1997: Smithsonian Foreign Currency Program.
- 1998: National Geographic Society.
- 1998: South Plains Foundation.
- 2002: National Science Foundation.
- 2000-2004: Private and State Funding for dinosaur exhibit
- 2009: National Science Foundation
- 2011: National Park Service

#### RESEARCH INTERESTS:

Origin, evolution, functional anatomy, and systematics of Mesozoic vertebrates, especially basal archosaurs, dinosaurs, pterosaurs and early birds. Evolution and biomechanics of vertebrate flights. Origin of birds and evolution of flight. Ontogeny and phylogeny of birds, heterochrony and evolution. Plate tectonics and paleobiogeography. KT mass extinction, Shiva Crater and Deccan volcanism. Phylogeny and diversification in cranial kinesis in birds. Evolution of archosaur brain and intelligence. Macroevolution and macrogenesis. Biomimicry and pterodactyl-inspired robot.

#### FIELD EXPERIENCE:

Extensive field experience in geological and paleontological investigation in India, United States, China and Antarctica; discovered scores of new Mesozoic vertebrate fossils that have contributed important knowledge about vertebrate evolution, functional anatomy, and paleobiogeography. Field research has generated one of the best collections of the continental Triassic vertebrates from the American Southwest and the Cretaceous marine vertebrates from Antarctica at the Museum of Texas Tech University

#### SYMPOSIUM ORGANIZED:

Convener, International conference on the "New concepts in Global tectonics" held at the Smithsonian Institution, July 20-21, 1989.

## ATTAINMENT OF NATIONAL/INTERNATIONAL DISTINCTION:

News appearance: Several publications and monographs in prestigious scientific journals. Research work has been cited in books, scientific journals, popular magazines, and newspapers such as Science, Nature, Science, Scientific American, Discovery, Texas Monthly, Geological Society of India, Time, New York Times, Boston Globe, National Geographic, World Street Journal, Life, London Times, Economist, Pravda, World Book, China Daily, USA Today, Dallas Morning News, BBC, CNN, CBS, ABC, NPR, Los Angeles times, Jerusalem Post, Encyclopedia Britannica, as well as several TV networks such as CBS, CNN and PBS. *The Rise of Birds*, published by the Johns Hopkins University Press (1997), received glowing reviews in scientific journals and the New York Times.

Television documentary: Discovery of the earliest bird *Protoavis* was featured in the NOVA series (airdate 1997) *The Case of the Flying Dinosaurs*. Featured in “*Prehistoric Monsters Revealed*” in History channel (airdate 2008). The sailing *Tapejara* and pterodactyl-inspired robot is featured in the award-winning Imax film, *Flying Monsters 3D*, produced by the Atlantic Productions and narrated by David Attenborough (airdate 2011). Proposed documentary on *Indian Dinosaurs* (Optimum Television, UK).

Other achievements: Received numerous awards including Elected Fellow, Geological Society of America; Elected Fellow, American Association for the Advancement of Science; Honorary Member, Golden Key National Honor Society; Best Scientist Award, Achievement Rewards for the College Scientists; L. Rama Rao Birth Centenary Award, Geological Society of India; Outstanding Researcher, Texas Tech University; and Best Bengali Scientist, Star Ananada, Calcutta.

Project Director, Dinosaur Hall, Museum of Texas Tech University.

## PUBLICATIONS:

- Awatar, R., Tewari, R., Agnihotri, D., Chatterjee, S., Pillai, S. S. K., and Meena. 2014. K. L. Late Permian and Triassic palynomorphs from the Allan Hills, central Transantarctic Mountains, South Victoria Land, Antarctica. Current Science, 106: 988-996.
- Hungerbühler, A., Mueller, B., Chatterjee, S. and Cunningham, D. P. 2013. Cranial anatomy of the Late Triassic phytosaur *Machaeropterus*, with the description of a new species from West Texas. Earth and Environmental Science, Transactions of the Royal Society of Edinburgh 103: 269-312.
- Kurochkin, E. N., Chatterjee, S. and Mikhailov, K. E. 2013. An embryonic bird and associated eggs from the Cretaceous of Mongolia. Paleontological Journal, 47 (11): 1252-1269.
- Chatterjee, S., Lind, R., and Roberts, B. 2013. The novel characteristics of pterosaurs: biological inspiration for robotic vehicles. International Journal of Design and Nature and Ecodynamics, 8(2): 113-143.
- Chatterjee, S., Tewari, R., and Agnihotri, D. 2013. A *Dicroidium* flora from the Triassic of Allan Hills, South Victoria Land, Transantarctic Mountains, Antarctica. Alcheringa, 37: 209-221.
- Kumar, K., Chatterjee, S., Tewari, R., Mehrotra, N. C., and Singh, G. V. 2013. Petrographic evidence as an indicator of volcanic forest fire from the Triassic Allan Hills, South Victoria Land, Antarctica. Current Science 104: 422-424.

- Chatterjee, S., Goswami, A., and Scotese, C. R. 2013. The longest voyage: Tectonic, magmatic, and paleoclimatic evolution of the Indian plate during its northward flight from Gondwana to Asia. *Gondwana Research*, 23: 238-267.
- Chatterjee, S. and Templin, R. J. 2012. The flight dynamics of *Tapejara*, a pterosaur from the Early Cretaceous of Brazil with a large cranial crest. *Acta Geologica Sinica* 86: 1377-1388.
- Chatterjee, S. and Templin, R. J. 2012. Palaeoecology, aerodynamics, and the origin of avian flight, pp. 585-612. In: J. A. Talent (editor), *Earth and Life: Global Biodiversity, Extinction Intervals and Biogeographic Perturbations through Time*. Springer, Dordrecht.
- Kumar, M., Tewari, R., Chatterjee, S., and Mehrotra, N. C. 2011. Charcolified plant remains from the Lashly Formation of Allan Hills, Antarctica: Evidence of forest fire during the Triassic Period. *Episodes*, 34: 109-118.
- Roberts, B., Lind, R., and Chatterjee, S. 2011. Flight dynamics of a pterosaur-inspired aircraft utilizing a variable-placement vertical tail. *Bioinspiration and Biomimetics*, 6: doi:10.1088/1748-3182/6/2/026010.
- Novas, F. E., Ezcurra, M. D., Chatterjee, S., and Kutty, T. S. 2011. New dinosaur species from the Upper Triassic Upper Maleri and Lower Dharmaram formations of Central India. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, 101: 333-349.
- Mendez, A. H., Novas, F. E., and Chatterjee, S. 2010. An abelisaurid humerus from the Upper Cretaceous of India. *Paleontology Zeitschrift* 84:421-425.
- Ladkin, N., Johnson, E., Baker, R. J., and Chatterjee, S. 2010. The use of collections in research and teaching at the Museum of Texas Tech University. *University Museums and Collections Journal*, 3: 129-137.
- Chatterjee, S. and Scotese, C. 2010. The wandering Indian plate and its changing biogeography during the Late Cretaceous-Early Tertiary period. In *New Aspects of Mesozoic Biodiversity* (edited by Bandopadhyay, S.), pp. 105-126. Springer, Berlin.
- Novas, F., Chatterjee, S., Rudra, D. K., and Datta, P. M. 2010. *Rahiolisaurus gujaratensis*, n. gen. n. sp., a new abelisaurid theropod from the Late Triassic Cretaceous of India. In *New Aspects of Mesozoic Biodiversity* (edited by Bandopadhyay, S.), pp. 45-62. Springer, Berlin, Germany.
- Chatterjee, S., Roberts, B., and Lind, R. 2010. Pterodrone: a pterodactyl-inspired unmanned air vehicle that flies, walks, climbs, and sails. *Design and Nature*, 138: 301-316.
- Chatterjee, S. 2009. The river of life: a genetic perspective on macroevolution. *Forum on Public Policy Online (Journal of Oxford Round Table)*, Summer 2009 edition, 5(5): 1-43.
- D'Emic, M. D., Wilson, J. A., and Chatterjee, S. 2009. The titanosaur [Dinosauria: Sauropoda] osteoderm record: review and first definitive specimen from India. *Journal of Vertebrate Paleontology* 29: 165-177.
- Chatterjee, S. and Rudra, D. K. 2008. Shiva impact event and its implication for Deccan volcanisms and dinosaur extinction. *Palaeobotanist* 57: 235-250.
- Nesbitt, S. J. and Chatterjee, S. 2008. Late Triassic dinosauriforms from the Post Quarry and the surrounding areas, West Texas, U.S.A. *Neues Jahrbuch für Geologie Paläontologie, Abhandlungen*, 249: 143-156.
- Chatterjee, S. and Scotese, C. 2007. Biogeography of the Mesozoic Lepidosauurs on the wandering Indian plate. In *Paleontologia: Cenários de Vida* (edited by Carvalho, I. S., Cassab, R. C. T., Schwanke, C., Carvalho, M. A., Fernandes, A. C. S., Rodrigues, M. A. C., Carvalho, M. S. S., Arai, M. and Oliveira, M. E. Q.), pp. 559-587. Editoria Interciênciac, Rio de Janeiro, Brazil.

- Kutty, T. S., Chatterjee, S., Galton, P. M., and Upchurch, P. 2007. Basal sauropodomorphs (Dinosauria: Saurischia) from the Lower Jurassic of India: their anatomy and relationships. *Journal of Paleontology*, 81: 1552-1574.
- Chatterjee, S., Templin, R. J., and Campbell Jr., K. E. 2007. The aerodynamics of *Argentavis*, the world's largest flying bird from the Miocene of Argentina. *Proceedings of the National Academy of Sciences*, 104: 12398-12403.
- Chatterjee, S. and Templin, R. J. 2007. Biplane wing planform and flight performance of the feathered dinosaur *Microraptor gui*. *Proceedings of the National Academy of Sciences*, 104: 1576-1580.
- Chatterjee, S., Guven, N., Yoshinobu, and Donofrio, R. 2006. Shiva structure: A possible KT boundary impact crater on the western shelf of India. *Special Publications Museum of Texas Tech University*, 50: 1-39.
- Meekangvan, P., Barhorst, A. A., Burton, T. D., Chatterjee, S., and Schovanec, L. 2006. Nonlinear dynamical model of avian cranial kinesis. *Journal of Theoretical Biology*, 240: 32-47.
- Chatterjee, S. and Zheng, Z. 2005. Neuroanatomy and dentition of *Camarasaurus latus*, pp. 99-211. In Thunder-lizards: The Sauropodomorph Dinosaurs (edited by Tidwell, V. and Carpenter, K.). Indiana University Press, Bloomington.
- Lehman, T. and Chatterjee, S. 2005. Depositional setting and vertebrate biostratigraphy of the Triassic Dockum Group of Texas. *Journal of Earth System Science*, 114: 325-351.
- Chatterjee, S. and Templin, R. J. 2004. Posture, locomotion, and paleoecology of pterosaurs. *Geological Society of America Special Publication* 376: 1-64.
- Chatterjee, S. and Templin, R. J. 2004. Feathered coelurosaurs from China: new light on the arboreal origin of avian flight, pp. 251-281. In Feathered Dragons: Studies on the Transition from Dinosaurs to Birds (edited by Currie, P. J., Koppelhus, E. B., Shugar, M. A. and Wright, J. L.). Indiana University Press, Bloomington.
- Witmer, L. M., Chatterjee, S., Franzosa, J., and Rowe, T. 2003. Neuroanatomy of flying reptiles: implications for flight, posture, and behavior patterns. *Nature*, 425: 950-953.
- Chatterjee, S. and Templin, R. J. 2003. The flight of *Archaeopteryx*. *Naturwissenschaften*, 90: 26-31.
- Stahl, B. J. and Chatterjee, S. 2003. A Late Cretaceous callorhynchid (Chondrichthyes, Holocephali) from Seymour Island, Antarctica. *Journal of Vertebrate Paleontology*, 22: 848-850.
- Chatterjee, S. 2002. The morphology and systematics of *Polarornis*, a Cretaceous loon (Aves: Gaviidae) from Antarctica. *Proceedings of the 5<sup>th</sup> International Meeting of the Society of Avian Paleontology and Evolution* (eds. Z. Zhou and F. Zhang), Science Press, Beijing, pp. 125-155.
- Chatterjee, S. and Zheng, Z. 2002. Cranial anatomy of *Shunosaurus*, a basal sauropod dinosaur from the Middle Jurassic of China. *Zoological Journal of the Linnean Society*, 136: 145-169.
- Chatterjee, S. 2001. *Parasuchus hislopi*, 1885 (Reptilia, Archosauria): proposed replacement of the lectotype by a neotype. *Bulletin of Zoological Nomenclature*, 58(1): 34-36.
- Gaffney, E. S., Chatterjee, S., and Rudra, D. K. 2001. *Kurmademys*, a new side necked turtle (Pelomedusoides: Bothremydidae) from the Late Cretaceous of India. *American Museum Novitates*, 3321: 1-16.
- Bolt, J. R. and Chatterjee, S. 2000. A new temnospondyl amphibian from the Late Triassic of Texas. *Journal of Paleontology*, 19(3): 670-683.

- Chatterjee, S. and Scotese, C. R. 1999. The breakup of Gondwana and the evolution and biogeography of the Indian plate. *Proceedings of Indian National Science Academy*, 65A: 397-425.
- Stahl, B. J. and Chatterjee, S. 1999. A Late Cretaceous chimaerid (Chondrichthyes, Holocephali) from Seymour Island, Antarctica. *Palaeontology*, 42: 979-989.
- Chatterjee, S. 1998. Counting fingers of birds and dinosaurs. *Science*, 280: 335a
- Chatterjee, S. 1998. The avian status of *Protoavis*. *Archaeopteryx*, 16: 99-122.
- Chatterjee, S. 1997. Multiple impacts at the KT boundary and the death of the dinosaurs. *Proceedings of the 30th International Geological Congress*, 26: 31-54.
- Chatterjee, S. 1997. The beginnings of avian flight. In *DinoFest International* (eds. D. L. Wolberg, E. Stump, and G. D. Rosenberg), pp. 311-335. Academy of Natural Sciences, Philadelphia.
- Chatterjee, S. and Rudra, D. K. 1996. KT events in India: impact, volcanism and dinosaur extinction. In *Proceedings of the Gondwana Dinosaur Symposium*, (eds. F. A. Novas & R. E. Molnar), Memoirs of the Queensland Museum 39(3): 489-532.
- Chatterjee, S. 1995. The Triassic bird *Protoavis*. *Archaeopteryx*, 13: 15-31.
- Chatterjee, S. and Creisler, B. S. 1994. *Alwalkeria* (Theropoda) and *Morturneria* (Plesiosauria), new names for preoccupied *Walkeria* Chatterjee, 1987 and *Turneria*. *Journal of Vertebrate Paleontology*, 14: 142.
- Chatterjee, S. 1993. *Shuvosaurus*, a new theropod. *National Geographic Research and Exploration*, 9(3): 274-285.
- Wu, X. C. and Chatterjee, S. 1993. *Dibothrosuchus elaphros*, a crocodylomorph from the Early Jurassic of China and the phylogeny of the Sphenosuchia. *Journal of Vertebrate Paleontology*, 13(1): 58-89.
- Chatterjee, S. 1992. The dawn of the age of dinosaurs. In *Ultimate Dinosaur*, (edited by Preiss, B. & Silverberg, R.), pp. 2-9. Bantam, New York.
- Chatterjee, S. 1992. A kinematic model for the evolution of the Indian plate since the Late Jurassic. In *New Concepts in Global Tectonics* (edited by Chatterjee, S. and Hotton, N.), Texas Tech University Press, Lubbock, pp. 33-62.
- Lehman, T., Chatterjee, S. and Schnable, J. 1992. The Cooper Canyon Formation (Late Triassic) of western Texas. *Texas Journal of Science*, 44(3): 349-355.
- Chatterjee, S. 1991. Cranial anatomy and relationships of a new Triassic bird from Texas. *Philosophical Transactions of the Royal Society of London*, B 332: 277-342.
- Chatterjee, S. and Small, B. J. 1989. New plesiosaurs from the Upper Cretaceous of Antarctica. In *Origins and Evolution of Antarctic Biota* (edited by Crame, J.), pp. 197-215, Geological Society Publishing House, London.
- Basu, A. R., Chatterjee, S., and Rudra, D. 1988. Shock-metamorphism in quartz grains at the base of the Deccan Traps: evidence for impact-triggered flood basal volcanism at the Cretaceous-Tertiary Boundary. *EOS (Transactions, American Geophysical Union)*, 69(44): 1487.
- Chatterjee, S. 1987. A new theropod dinosaur from India with remarks on the Gondwana-Laurasia connection in the Late Triassic. In *Gondwana Six: Stratigraphy, Sedimentology and Paleontology* (edited by McKenzie, G. D.), pp. 787-793. Geophysical Monograph 41. Washington, D.C.: American Geophysical Union.
- Chatterjee, S. and Majumdar, P. K. 1987. *Tikisuchus romeri*, a new rauisuchid reptile from the Late Triassic of India. *Journal of Paleontology*, 61(4): 787-793.
- Grande, L. and Chatterjee, S. 1987. New Cretaceous fish fossils from Seymour Island, Antarctic Peninsula. *Palaeontology*, 30(4): 829-837.
- Chatterjee, S., Jain, S. L., Kutty, T. S. & Roy Chowdhury, T. 1987. Mesozoic Gondwana vertebrates of the Pranhita-Godavari Valley, Deccan-- a review. In *Three Decades of*

- Developments in Paleontology and Stratigraphy of India. Geological Survey of India Special Publications, No. 11, pp. 195-212.
- Chatterjee, S. and Hotton, N. 1986. The paleoposition of India. Journal of Southeast Asian Earth Sciences, 1(3): 145-189.
  - Chatterjee, S. 1986. The Late Triassic Dockum vertebrates: their biostratigraphic and paleobiogeographic significance. In *The Beginning of Age of Dinosaurs* (edited by Padian, K.), pp. 139-150, Cambridge University Press, Cambridge.
  - Chatterjee, S. 1986. *Malerisaurus langstoni*, a new diapsid reptile from the Triassic of Texas. Journal of Vertebrate Paleontology, 6(4): 297-312.
  - Chatterjee, S. 1985. *Postosuchus*, a new thecodontian reptile from the Triassic of Texas and the origin of tyrannosaurs. Philosophical Transactions of the Royal Society of London, B 309: 395-460.
  - Chatterjee, S. 1984. A new ornithischian dinosaur from the Triassic of North America. Naturwissenschaften, 71: 630-631.
  - Chatterjee, S. 1984. The drift of India: a conflict in plate tectonics. Memoir Geological Society of France, New Series, 147: 43-48.
  - Chatterjee, S., Small, B. J. and Nickell, M. W. 1984. Late Cretaceous marine reptiles from Antarctica. Antarctic Journal of the United States, Annual Review, 19(5): 7-8.
  - Chatterjee, S. 1983. An ictidosaur fossil from North America. Science, 220: 1151-1153.
  - Chatterjee, S., Borns, H. and Hotton, N. 1983. Gondwana rocks of the Allan Hills, Antarctica. Antarctic Journal of the United States, Annual Review, 18(5): 11-14.
  - Chatterjee, S. 1982. Significance of ankle structure in archosaur phylogeny. Nature, 299: 657-658.
  - Chatterjee, S. 1982. Phylogeny and classification of thecodontian reptile. Nature, 295: 317-320.
  - Chatterjee, S. 1982. A new cynodont reptile from the Triassic of India. Journal of Paleontology, 56(1): 203-214.
  - Chatterjee, S. and Zinsmeister, W. J. 1982. Late Cretaceous marine vertebrates from Seymour Island, Antarctic Peninsula. Antarctic Journal of the United States, Annual Review, 27(5): 66.
  - Chatterjee, S. 1981. Problems in the Indo-Antarctic fit. Antarctic Journal of the United States, Annual Review, 16(5): 1-3.
  - Chatterjee, S. 1981. Review of: Aspects of Vertebrate History, edited by L. L. Jacobs, 1980. Journal of Vertebrate Paleontology, 1(2): 235-237.
  - Chatterjee, S. 1980. *Malerisaurus*, a new eosuchian reptile from the Late Triassic Maleri Formation of India. Philosophical Transactions of the Royal Society of London B 290: 219-258.
  - Chatterjee, S. 1980. The evolution of rhynchosaurs. Memoir Geological Society of France, New Series, 139: 57-65.
  - Chatterjee, S. 1980. The paleoposition of Marie Byrd Land, West Antarctica. Antarctic Journal of the United States, Annual Review, 15(5): 17-18.
  - Sohn, I. G. and Chatterjee, S. 1979. Freshwater ostracodes from the Late Triassic coprolite in Central India. Journal of Paleontology, 53(3): 578-586.
  - Jain, S.L., Kutty, T. S., Roy Chowdhury, T. and Chatterjee, S. 1979. Some characteristics of *Barapasaurus tagorei*, a sauropod dinosaur from the Lower Jurassic of Deccan, India. In *Fourth International Gondwana Symposium Papers*, (edited by Laskar, B. and Raja Rao, C. S.), pp. 204-216. Hindustan Publishing Co., New Delhi.
  - Chatterjee, S. 1978. *Indosuchus* and *Indosaurus*, Cretaceous carnosauroids from India. Journal of Paleontology, 52(3): 570-580.
  - Chatterjee, S. 1978. A primitive parasuchid (phytosaur) reptile from the Upper Triassic Maleri Formation of India. Palaeontology, 21(1): 83-127.

- Jain, S.L., Kutty, T. S., Roy Chowdhury, T. & Chatterjee, S. 1975. The sauropod dinosaur from the Lower Jurassic Kota Formation of India. Proceedings of the Royal Society of London, A 188: 221-228.
- Chatterjee, S. 1974. A rhynchosaur from the Upper Triassic Maleri Formation of India. Philosophical Transactions of the Royal Society of London, B 267: 209-261.
- Chatterjee, S. 1974. Symbolic nomenclature in taxonomy. Bulletin Botanical Society of Bengal, 28: 123-131.
- Chatterjee, S. and Roy Chowdhury, T. 1974. Triassic Gondwana vertebrates from India. Indian Journal of Earth Sciences, 1(1): 96-112.
- Chatterjee, S., Jain, S. L., Kutty, T. S. and Roy Chowdhury, T. 1969. On the discovery of the Triassic cynodonts from India. Science and Culture, 35: 411.
- Chatterjee, S. 1969. Rhynchosaurus in time and space. Proceedings of the Geological Society of London, 1958: 203-208.
- Chatterjee, S. 1967. New and associated phytosaur material from the Upper Triassic Maleri Formation of India. Bulletin Geological Society of India, 4(4): 108-110.
- Chatterjee, S. 1967. New discoveries contributing to the stratigraphy of the continental sediments of the Pranhita-Godavari Valley. Bulletin Geological Society of India, 4(2); 37-41.

#### Books and Popular Articles

- Chatterjee, S. and Templin, R. J. 2005. From the trees down. Natural History, 114(5); 54-55.
- Chatterjee, S. 1998. Dinosaurs are coming to town. Lubbock Magazine, 4(3): 58-61.
- Chatterjee, S. 1997. The Rise of Birds. Johns Hopkins University Press, Baltimore, 312p.
- Chatterjee, S. 1995. The last dinosaurs of India. The Dinosaur Report, Fall 1995, p. 12-18.
- Chatterjee, S. and Hotton, N. (editors). 1992. New Concepts in Global Tectonics. Texas Tech University Press, Lubbock, 449p.
- Chatterjee, S. 1989. Icecap. In The World Book of Encyclopedia, 10: 19. World Book, Chicago.
- Chatterjee, S. 1989. South Pole. In The World Book of Encyclopedia, 18: 686. World Book, Chicago.

#### Abstracts, Papers Presented at Professional Society Meetings

- Chatterjee, S. 2014. Macroevolution and macrogenesis: evolution in the fast lane. 10<sup>th</sup> North American Paleontological Convention, Abstract book. The Paleontological Society Special Publications, 13: 50.
- Chatterjee, S. 2014. The RNA-Protein World and the hierarchical origin of life. Gordon Research Conferences on the origin of Life, Galveston, Texas.
- Chatterjee, S. 2013. Impact, RNA-Protein World, and the endoprebiotic origin of life. GSA Abstracts with Programs, 45(7): 694.
- Chatterjee, S., Alexander, D. E., and Templin, R. J. 2012. Flight-initiating quadrupedal jump in the giant pterodactyloid *Quetzalcoatlus*: Fact or fantasy? GSA Abstracts with Programs, 44(7): 500.
- Chatterjee, S., Goswami, A., and Scotese, C. R. 2011. The longest journey: mantle plume, continental rifting, collision tectonics and evolution of the Indian plate. GSA Abstracts with Programs, 43(5):143.

- Chatterjee, S., Wang, T., Pan, S. G., Dong, Z., Wu, X. C., and Upchurch, P. 2010. A complete skeleton of a basal sauropod from the Early Jurassic of China and the origin of Sauropoda. *GSA Abstracts with Programs*, 42(5):26.
- Chatterjee, S. 2009. Vertebrate paleontology collection at the Museum of Texas Tech University: Its role in teaching, display, and research. UMAC abstract volume, University of California, Berkeley.
- Chatterjee, S. and Mehrotra, N.M. 2009. The significance of the contemporaneous Shiva impact structure and Deccan volcanism at the KT boundary. *GSA Abstracts with Programs*, 41(7): 160.
- Chatterjee, S., Alexander, D. E., Lind, R., and Gedeon, A. 2009. The sailing performance of the crested pterodactyloid *Tapejara* from the Early Cretaceous of Brazil. *GSA Abstracts with Programs*, 41(7): 685.
- Chatterjee, S., Lind, R., Gedeon, A., and Roberts, B. 2008. Pterodactyl-inspired unmanned aerial vehicle with multimodal locomotion. *GSA Abstracts with Programs*, 40(6): 394.
- Chatterjee, S. and Templin, R. J. 2008. The flight performance of the crested pterodactyloid *Tapejara* from the Early Cretaceous of Brazil. *GSA Abstracts with Programs*, 40(6): 542.
- Mueller, J., Reisz, R., Chatterjee, S., and Kutty, T. S. 2007. A passage to India: a small captorhinid from the Upper Permian Kundaram Formation and the postglacial dispersal of early reptiles. *Journal of Vertebrate Paleontology*, Abstract, 27(3): 121A.
- D'Emic, M., Wilson, J. and Chatterjee, S. 2007. The first definitive titanosaur (Sauropoda) osteoderm from India and the nature of the titanosaur osteoderm. *Journal of Vertebrate Paleontology*, Abstract, 27(3): 65A.
- Mueller, B. and Chatterjee, S. 2007. Dicynodonts (Synapsida: Therapsida) from the Late Triassic Dockum group of Texas. *Journal of Vertebrate Paleontology*, Abstract, 27(3): 121A.
- Chatterjee, S. and Templin, R. J. 2006. A new fossil loon from the Late Cretaceous of Antarctica and early radiation of foot-propelled diving birds. *Journal of Vertebrate Paleontology*, Abstract, 26(3): 49A.
- Chatterjee, S. 2005. Indian Mesozoic lepidosaurs and their paleobiogeographic implication. In II Congresso Latino-Americano de Paleontologia de Vertebrados, Boletim de Resumos, (edited by Kellner, A. W. A., Henriques, D. D. R., and Rodrigues, T.), Rio de Janeiro Museu Nacional, p. 78.
- Chatterjee, S. and Templin, R. J. 2005. The feathered dinosaur Microraptor: its biplane wing planform and flight performance. *GSA Abstracts with Programs*, 37(7): 88
- Chatterjee, S., Templin, R. J., and Campbell, K. 2004. The flight performance of the giant bird *Argentavis* (Ciconiiformes: Teratornithidae). *Journal of Vertebrate Paleontology*, Abstract, 24(3): 46A.
- Chatterjee, S., Guven, N., Yoshinobu, A., and Donofrio, R. 2003. The Shiva crater: implications for Deccan volcanism, India-Seychelles rifting, dinosaur extinction, and petroleum entrapment at the KT boundary. *GSA Abstracts with Programs*, 35(6): 168.
- Hungerbuhler, A., Chatterjee, S. and Cunningham, D. P. 2003. A new phytosaurs from the Triassic of Texas: new information on cranial anatomy, taxonomy, and sexual dimorphism. *Journal of Vertebrate Paleontology*, Abstract, 23(3): 63A.
- Mueller, B. and Chatterjee, S. 2003. Skull anatomy of *Libognathus shedi* (Parareptilia: Procolophonia) from the Upper Triassic Cooper Canyon Formation of West Texas. *Journal of Vertebrate Paleontology*, Abstract, 23(3): 80A.
- Chatterjee, S. and Guven, N. 2002. The Shiva geophysical structure: another possible KT boundary impact crater on the western shelf of India. Abstract, 8<sup>th</sup> International Symposium on Mesozoic Terrestrial Ecosystems, Cape Town, South Africa, p 36.

- Chatterjee, S. and Scotese, C. R. 2002. Evolution of Biogeography of the Indian plate since the Cretaceous. GSA Abstracts with Program, 34(6): 315.
- Cunningham, D. P., Hungerbuehler, A., and Chatterjee, S. 2002. Late Triassic vertebrates from the Patricia site near Post, Texas. Abstract, Journal of Vertebrate Paleontology, 22(3): 47A.
- Hungerbuehler, A., Chatterjee, S., and Kutty, T. S. 2002. New phytosaurs from the Upper Triassic of India. Abstract, Journal of Vertebrate Paleontology, 22(3): 68A.
- Witmer, L. M., Chatterjee, S., Rowe, T., and Franzosa, J. 2002. Anatomy of the brain and vestibular apparatus in two pterosaurs: implications for flight, head posture, and behavior. Abstract, Journal of Vertebrate Paleontology, 22(3): 120A-121A.
- Chatterjee, S. and Templin, R. J. 2001. The flight of pterosaurs. Abstract, Journal of Vertebrate Paleontology, 21(3): 40A.
- Chatterjee, S. and Templin, R. J. 2001. The aerodynamics of pterosaurs. GSA Abstracts with Programs, 33(6): A-389.
- Chatterjee, S. 2000. The role of heterochrony in the evolution of birds. Abstract, Journal of Vertebrate Paleontology, 20(3): 35A.
- Chatterjee, S. 1999. Feathered coelurosaurs and the evolution of avian flight. Abstract, Journal of Vertebrate Paleontology, 19(3): 37A.
- Gaffney, E. S., Tong, H., Chatterjee, S., Moody, R. T. J. and Hirayama, R. 1998. Evolution of the bothremyid turtles. Journal of Vertebrate Paleontology, 18(3): 44A.
- Chatterjee, S. 1998. Reassessment of *Procompsognathus* skull. Abstract, DinoFest International Symposium, Academy of Natural Sciences, p. 6.
- Chatterjee, S. and Scotese, C. R. 1998. Dinosaurs in the land of Gonds. Abstract Journal of Vertebrate Paleontology, 18(3): 33A.
- Chatterjee, S. and Zheng, Z. 1997. The feeding strategies in sauropods. Abstract, Journal of Vertebrate Paleontology, 17(3): 37A.
- Chatterjee, S. 1996. An unusual basal archosaur from the Triassic of Texas. Abstract, Journal of Vertebrate Paleontology, 16(3): 17A.
- Chatterjee, S. 1996. Origin and early evolution of birds and their flight. 4<sup>th</sup> International Meeting, Society of Avian Paleontology and Evolution, Smithsonian Institution, Washington, DC, p. 2-3.
- Chatterjee, S. 1996. Impact on the India-Seychelles plate and death of the dinosaurs Abstract, 30th International Geological Congress, Beijing, p. 3.
- Chatterjee, S. 1996. Origin and early evolution of birds and their flight. Abstract, DinoFest International Symposium, Arizona State University, p. 38.
- Chatterjee, S. 1995. The KT impact events: new links between the Chicxulub and the Shiva Crater. Abstract, Journal of Vertebrate Paleontology, 15(3): 23A.
- Chatterjee, S. 1994. *Protoavis* from the Triassic of Texas: the oldest bird. Journal für Ornithologie, 135: 330. International Ornithological Congress, Vienna.
- Chatterjee, S. and Kurochkin, E. N. 1994. A new embryonic bird from the Cretaceous of Mongolia. Abstract, Journal of Vertebrate Paleontology, 14(3): 20A.
- Chatterjee, S. 1993. *Procompsognathus* from the Triassic of Germany is not a crocodylomorph. Abstract, Journal of Vertebrate Paleontology, 13(3): 29A.
- Chatterjee, S. and Rudra, D. K. 1993. Shiva Crater: a possible K/T boundary impact structure at the India-Seychelles plate margin. Abstract, 74th Annual meeting of the Pacific Division, American Association for the Advancement of Science, Montana, 12(1): 38.
- Chatterjee, S. 1992. A remarkable pterosaur skull from the Early Cretaceous of Brazil. Abstract, Journal of Vertebrate Paleontology, 12(3): 23A.

- Chatterjee, S. 1991. An unusual toothless archosaur from the Triassic of Texas: the world's oldest ostrich dinosaur? Abstract, Journal of Vertebrate Paleontology, 8(3): 11A.
- Chatterjee, S. 1990. A possible K/T impact site at the India-Seychelles boundary. Abstract, Lunar and Planetary Science Conference, 11: 182-183.
- Chatterjee, S. 1990. Impact volcanism and dinosaur extinction at the K-T boundary, India. Abstract, Journal of Vertebrate Paleontology, 10(3): 17A.
- Murali, A. V., Liu, Y. G., Schmit, R. A., and Chatterjee, S. 1989. Chemical signatures of the intratrappean sediments of Deccan Traps of India, and their implications to the K/T boundary scenario. Abstract, Lunar and Planetary Science Conference, XX, p. 741-742.
- Chatterjee, S. 1989. The oldest Antarctic bird. Abstract, Journal of Vertebrate Paleontology, 9(3): 16A.
- Chatterjee, S. 1988. Functional significance of the semilunate carpals in archosaurs and birds. Abstract, Journal of Vertebrate Paleontology, 8(3): 11A.
- Basu, A. R. Chatterjee, S., and Rudra, D. 1988. Shock-metamorphism in quartz grains at the base of the Deccan Traps: evidence for impact-triggered flood basalt volcanism at the Cretaceous-Tertiary boundary, EOS (Transactions, American Geophysical Union), 69(44): 1487.
- Chatterjee, S. 1987. Skull of *Protoavis* and early evolution of birds. Abstract, Journal of Vertebrate Paleontology, 7(3): 14A.

#### PROFESSIONAL ACTIVITIES:

- Reviewer, Research Grant Proposals of National Science Foundation and National Geographic Society.
- Editorial Board member, PalArch, webbased Netherlands Scientific Journal.
- Referees of several scientific journals, including Science, Nature, Proceedings of the National Academy of Sciences, Journal of Vertebrate Paleontology, Journal of Paleontology, Palaeogeography, Palaeoecology and Palaeoclimatology, Canadian Journal of Earth Sciences, Southeast Asian Earth Sciences, Geobios, Journal of Experimental Biology, Naturwissenschaften, and various symposium volumes.
- Popular scientific lecturers at local schools, societies, and other civic organizations.
- Leader of several paleontological expeditions to China, India, Antarctica and USA.
- Project Director, Dinosaur Hall, Texas Tech University Museum.
- Board Member, Vietnam Center, TTU.
- Past Board Member, Urban Design & Historical Preservation Commission, City of Lubbock.
- Editorial Board, PalArch, Netherlands Scientific Journal.
- Past Board Member, All Saints Episcopal School.
- Past Board Member, Silent Wing Museum.
- Past Editor, Special Publications, Journal of Paleontology.
- Panelist for the Global Lens film series, Texas Tech University.

#### SCIENTIFIC COLLABORATORS

- D. K. Rudra and T. S. Kutty, Indian Statistical Institute, Calcutta: Shiva crater, Indian Gondwana vertebrates.
- Robert Reisz, University of Toronto: Indian captorhinomorphs.
- Mark Goodwin, University of California, Berkeley: Indian pachycephalosaur.
- Xiao-chun Wu, Canadian Museum of Nature: Indian crocodylomorph.
- Dong Zhiming, IVPP, China: Chinese Sauropod dinosaurs.
- Eugene Gaffney, American Museum of Natural History: Cretaceous turtles of India.
- Sterling Nesbitt, University of Washington: Triassic theropods.

- Peter Galton, Bridgeport University, Connecticut: Prosauropods.
- Tom Lehman, Texas Tech University: Dockum biostratigraphy.
- Larry Witmer, Ohio University: Evolution of archosaur brain.
- R. J. Templin, Aerodynamic Laboratory, NRC, Ottawa: Flight of pterosaurs and birds.
- L. Schovanec and A. Barhorst, Texas Tech University: avian cranial kinesis.
- Walter Bock, Columbia University: avian cranial kinesis.
- Erich Weber, Tübingen University, Germany: avian cranial kinesis.
- Fernando Novas, National Museum of Natural History, Buenos Aires, Argentina: Cretaceous abelisaurs and Triassic theropods.
- Richard Lind, Aerospace Engineering, University of Florida. Pterosaur-inspired UAV aircraft.
- Julia Clarke, University of Texas at Austin: Cretaceous Antarctic birds.
- Rajni Tewari and Naresh Mehrotra, Birbal Sahni Institute of Paleobotany, Lucknow, India: Antarctic Plant fossils.
- Ranadhir Mukhopadhyay, National Institute of Oceanography, Goa, India, Shiva crater
- Om Prakash Pandey, National Geophysical Research Institute, Hyderabad, India, Shiva crater

#### RECENT GRADUATE ADVISEES

- Zhong Zheng (1996)
- Mark Pollinger (1997)
- Kyle McQuilkin (1998)
- David Munson (1998)
- Eric Simpson (1999)
- Amy Edler (2000)
- Niko Herzog (2000)
- Momchil Atanassov (2002)
- Jonathan Weinbaum (2002)
- Jeff Martz (2002)
- Kathryn McDonald (2003)
- James Lehane (2005)
- Sean Foley (2005)
- Jeff Martz (2008)
- Cristina Chavez (2011)
- Jeremiah Kokes (present)
- Bill Mueller (present)
- Jacob Van Veldhuizen (present)
- Kevin Hoch (present)
- Volkan Sarigul (present)
- Zujjaj Talpur

#### POSTDOCTORAL FELLOW

- Axel Hungerbühler (2002-2003)

#### UNDERGRADUATE RESEARCH MENTOR

- Clark Scholar Program and Howard Hughes Medical Institute Program, Texas Tech University