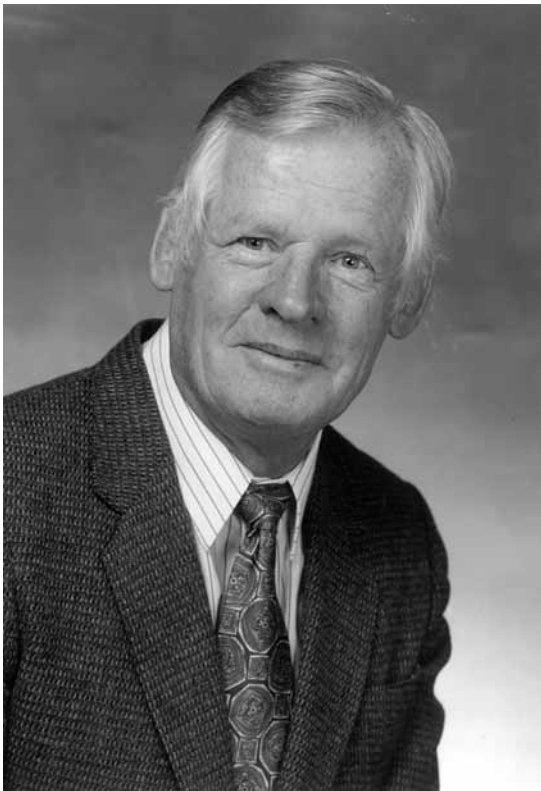


## **Gerd E.G. Westermann (11.05.1927–5.11.2014)**

Alberto C. RICCARDI

Gerd Ernst Gerold Westermann was born on May 11, 1927 in Berlin. In 1930, his family moved to the medieval town of Goslar, the center of the “Klassische Geologische Quadratmeile”, described by J.W. Goethe. When the loss of Germany's eastern territories in 1945 destroyed Gerd's childhood dreams to become a forester, he followed his other interests – geology and fossils. After a brief service in the Volksturm and a few months internment in what he described as “a starvation camp under free skies”, he finished high school in 1946. German universities having essentially closed down, he spent part of the following two years working underground in the famous medieval gold and silver (lead-zinc) mines, Rammelsberg and Bad Grund of the Harz Mountains, around Goslar, and studied ore paragenesis in the mine laboratories; made many excursions into the surrounding “Squaremile” (c. 7×7 km); guided students of the near-by Mining Academy of Clausthal, studied geology books; made up collections of hand-shaped rock specimens of rectangular shapes for teaching; and catalogued 4,000 specimens of fossil invertebrates in the Goslar Museum. To win a place at a university, he then worked producing bricks for the rebuilding of the universities destroyed during the war. Making the best of it, he invented a method to cast and collect large Hauterivian ammonites exposed by the power shovels directly in clay pit, which ended up at the Hannover Geological Survey.



In 1949 he finally began his geology studies at the Technical University of Braunschweig, where geology and paleontology was thought by P. Dorn. There he obtained his Vordiplom in 1950. Then he moved to the University of Tübingen, to study with one of the leading paleontologists and ammonitologists of the time, Prof. Otto H. Schindewolf. Gerd proposed to write his thesis on the Otoitidae based on a precise collecting in the old shale pit of Gerzen, near Alfeld. He would excavate long trenches and record the entire macro-fauna every decimeter, as done previously by Brinkmann in England. Schindewolf's paleontological laboratory was carried out by H. Hölder. Gerd went to Hannover to discuss his research project with Prof. A. Bentz, President of the Geological Survey, who became his sponsor and ordered the Survey to pay his and two laborers expenses during six weeks of fieldwork. In 1952 the Geological Survey in Hannover gave Gerd a temporary employment in the Paleontology Division, where thanks to Prof. Bentz he received enough technical support to complete his thesis. In 1953 he obtained his Diplom in Geologie and Doktor der Naturwissenschaften, completing an outstanding study on the Jurassic ammonite family Otoitidae of northern Germany and the world, which was published in 1954. This work set the style he was to maintain throughout his scientific career, a world-wide interest in the Jurassic, a zest to face large and complex projects and to finish them in the shortest possible time.

From 1953 to 1957 he worked as geologist and paleontologist in the Geological Survey of Lower Saxony in Hannover. There he wrote monographs on Bajocian and Bathonian ammonites and, in 1957, passed the 2nd State Examination of the German Geological Survey. During these years, Gerd began to realize his world-wide interest in the Jurassic with a brief biostratigraphic study of the Sierra de la Demanda, northern Spain, where he was sent by Prof. Bentz, and had the help of the then geology student W. Huf. For 1956 it became clear to Gerd that “in the New World... new discoveries awaited”, and in 1957 he moved to McMaster University (Hamilton, Ontario, Canada), which for the next 40 years would become known, thanks to Gerd, as a center for excellence in ammonite and Mesozoic research. Many aspects of this period of his life were included in an illustrated unpublished account written by Gerd in 2006 to be circulated to his family and friends, under the title “Memories good and bad truly told”.

At the close of the 1950's, studies of Jurassic ammonites of the United States of America and Canada were conducted by the respective geological surveys, where Ralph Imlay and Hans Frebold were the leading specialists. Consequently, Gerd extended his studies to Triassic bivalves of Canada and to Jurassic ammonites of other regions. The first area chosen was in south Alaska where, under inclement weather conditions and accompanied only by a student assistant and a rifle, he collected most of the ammonite fauna he would monograph in the following years (1964, 1969). Similarities between some Aalenian specimens from Alaska and the Andes brought Gerd's attention to the Middle Jurassic fauna of South America. As a result, he spent most of his first (1965) sabbatical leave in Chile and Argentina.

During his first visit to Buenos Aires, I had the opportunity to meet him and to participate in his first field trip to the Jurassic of west-central Argentina. Thus I was initiated in the study of Jurassic ammonites and biostratigraphy and we began a cooperative work and close friendship that continued for almost fifty years. In a few weeks, we traversed the best Jurassic sections of the area and collected large numbers of ammonites. Long days of fast walking and vigorous activity ended beside an open fire under a sky full of stars, with Gerd playing old songs on his always present mouth organ. Thus was born a monographic series on the Middle Jurassic ammonites of the Andes that would continue for the next decades, and on which we were still working when he died.

Early in his career, Gerd became interested in the biological approach to fossils through his studies on the significance of population variation and sexual dimorphism in ammonite taxonomy, as well as ammonite ecology as based on shell architecture. His studies on the function of septum and suture (1956) were extended to the whole ammonite shell (1971), and to other cephalopods in a seminal paper (1973) on depth limits of belemnites and nautiloids based on the strength of concave septa. Meanwhile he secured a research grant to support new field work on living *Nautilus* around the Fiji Islands. Gerd contributed substantially and frequently to the debate, sometimes heated, on the significance of ammonoid shell architecture, on the controversy of the origin of shell perforations (mosasaur predation vs. limpet home scars), and more recently on the species concept as applied to ammonite species.

As stated in the dedication of the Lifetime Achievement Award he received from the VI International Symposium Cephalopods Present & Past (2004), “in our life time, no ammonite worker has become more synonymous with the functional morphology and mode of life of ammonites than Gerd Westermann. His name is intimately associated with questions of the functional significance of septa, buoyancy, and the siphuncular tube. Armed with a formidable intellect, and insatiable curiosity, and a no-nonsense style, he has introduced the rigorous concepts and theories of architecture and engineering, pressure and depth, to the field of ammonite studies and has thus transformed our view of how those animals lived and evolved”.

Meanwhile, Gerd continued his research on the systematics, stratigraphy and world-wide chronology of Jurassic ammonites. The scope of his studies became even larger, geographically and in time. His research on the Middle Jurassic and, in some cases, Upper Jurassic and even Lower Cretaceous ammonites was extended to Mexico and Peru as well as to more distant areas of the world, especially East Africa (Kenya, Tanzania), India (Kuchchh), the Himalayas (Nepal, Tibet), and Oceania (New Guinea, New Zealand). Special mention is due to his 1976 expedition to the



Sula Island in the Moluccas of Indonesia, an area whose important ammonite fauna became known through studies by G. Boehm early in the last century, but lacked all stratigraphic information until Gerd's visit.

Gerd was not intimidated by the staggering scope of his projects and in many instances has had others participate, often with lasting cooperation. He attracted graduate students, postdoctoral fellows and visiting scientists from different parts of the world, who worked with him at McMaster University: Theo A. Getty (England) and Jay Krishna (India) worked on Middle-Upper Jurassic ammonites of New Guinea and India; Harish Verma (India), José Sandoval (Spain), Federico Olóriz (Spain) and Mike Marshall (Canada) on Middle and Upper Jurassic ammonites of Mexico; Russell Hall (Australia) and Paul Smith (England) on Lower and Middle Jurassic ammonites of Canada; David Taylor (USA) on Middle Jurassic ammonites of Oregon; Mike Geraghty (Canada) on ammonite concretions of Germany; Yigang Wang (China) on Middle Jurassic ammonites of Tibet; Peter Ward (USA) on Cretaceous ammonite of USA and living *Nautilus* of Fiji; Roger Hewitt (England), Raúl Vicencio (Chile), John Chamberlain (USA), Antonio Checa (Spain), and Cameron Tsujita (Canada) on ammonite shell architecture and/or ecology; and I myself on the Jurassic of the Andes.

Gerd organized a number of symposia. Especially memorable was "Sexual Dimorphism in Fossil Invertebrates" which took place during the ill-fated International Geological Congress in Prague, 1968, from which he used to mention that the windows had to be closed to muffle the exhaust noise of the passing Soviet tanks. In 1982, he held the Calgary symposium on "Jurassic-Cretaceous Biochronology and Biogeography of North America" to honor Ralph Imlay and George Jeletzky. He also promoted and edited "The Jurassic Ammonite Zones of the Soviet Union" (1988). In 1975, he founded the Circum-Pacific Jurassic Research Group IGCP #171 which he led for 10 years. It included many scientists from different countries and disciplines, convened in Argentina, Canada and Japan, and resulted in a series of "Taxa Range and Correlation Charts" as well as the monumental synthesis "Circum-Pacific Jurassic".

In 1988, Gerd retired early from his McMaster professorship, but as Professor Emeritus retained his office and research grant – so that he could spend full time on research, travel and collaboration with graduate students and colleagues abroad. In the 1990's, he spent extended periods in New Zealand to solve the intricate problems of taxonomy and inter-regional time-correlation caused by the highly endemicity of its faunas. He founded an international research group, "Friends of Paleobiogeography", comprising specialists in most marine taxa, extinct and extant. They worked on the first Guidelines for Biogeographic Classification and on the confusing nomenclature of past bioprovinces and realms. Their first meeting was held in Italy at the conference "Paleobiogeography & Paleoecology 2001", which he co-chaired. During the first decade of the 21 century, even if retired and with some heart problems, Gerd was still following in many of the new developments produced in the scientific fields on which he worked all his life. He still published a number of papers on the terminology of extinction in Middle Jurassic ammonoids, finite elements analysis of simulated ammonoid septa, new evidences on Bajocian ammonoids off-shore of Australia, *Gravesia* homomorphs of the Late Kimmeridgian of Mombasa, and hydrostatics, propulsion and life-habits of the Cretaceous ammonoid *Baculites*.

Gerd passed away peacefully, after a week of being in hospital, with his family by his side, at Oakville-Trafalgar Memorial Hospital, Ontario, Canada, on Wednesday, November 5, 2014 at the age of 87.

Gerd Westermann's contribution to Jurassic biostratigraphy, ammonite taxonomy and cephalopod paleobiology has been immense. The impact of his 24 monographs and books and over 170 papers is larger than the numbers suggest, as many deal with areas where all previous information was wanting or scanty. They represent by areas covered the largest contribution



made by a single author to the Jurassic of the world during the last half of the twentieth century. Probably no other specialist studied so many Jurassic outcrops and examined so many collections around the world.

An illustrated account of his most important field trips was prepared by Gerd in 2005 to be circulated to his family and friends, under the title “World Travels of an Ammonitologist”. Over 1000 slides were reduced to 400 prints of six selected trips (Alaska Peninsula, Peru and Northern Chile, Espinacito Pass in Argentina, Tibet and Nepal, Sula Islands in Indonesia, and New Guinea). Each of these expeditions was preceded by an introduction with maps and ended with an easy-to-understand summary of the scientific results, such as illustrating new species and sometimes genera. As stated by him each of those trips “lasted only a few weeks, but the preparation and, especially, evaluation of the Jurassic ammonites found in those remote areas took many months to years. But the results in the form of many new species, genera and even families, as well as in the form of revised stratigraphic sequences, proved that they were essential to ammonite paleontology and Jurassic biostratigraphy – besides being lots of fun”. In total he proposed 8 new subfamilies, 32 genera and subgenera and 180 species and subspecies of Jurassic ammonites.

Gerd was honoured with the Billings Medal (1995) by the Canadian Geological Association and with a Lifetime Achievement Award by the VI International Symposium Cephalopods – Present and Past (2004). Gerd was a member of the International Stratigraphic Commission and of several of its Working Groups; a corresponding member of the National Academy of Exact, Physical and Natural Sciences of Argentina (1991) and of the Argentinean Geological Society (1992); he was member of many national and international scientific societies; and served two terms as Secretary-General (1968–76) of the International Paleontological Union and its successor, the International Paleontological Association, during its most difficult years of re-organization.

To Gerd, scientific honesty was a must for himself and assumed of others, and differences in scientific matters were never personal. Gerd’s commitment to the study of ammonites and the Jurassic as well as cephalopod paleobiology was beyond usual standards. He not only loved it, he lived it. But Gerd had many other attributes of a gifted person. He loved classical music, arts, architecture, archeology as well as gardening, hiking and all aspects of nature. Every time he saw a bird, a squirrel, a sunset, a snow fall, or any other manifestation of the natural world he enjoyed it as it would have seen it for the first time. In many occasions he would take a nice photograph, scribble a few words in its back and send it by mail to his friends, to share his wonder. He was a very sensitive human being, always ready to help others, especially those close to him such as his family, friends and colleagues. The hospitality of Gerd and his wife, Jean, was well known to all who were their guests at their home on the shores of Lake Ontario in Canada.

As a colleague and as a friend, through the years and distance, Gerd was always a mentor and role model; it was rewarding to share a life of common interests, full of unforgettable memories. For all that, thank you Gerd. We will miss you.

## PUBLICATIONS OF PROFESSOR G.E.G. WESTERMANN

### BOOKS AND MONOGRAPHS

- WESTERMANN G.E.G., 1954 — Monographie der Otoitidae (Ammonoidea). *Beihefte zum Geologischen Jahrbuch*, **15**: 1–364.
- WESTERMANN G.E.G., 1956 — Monographie der Bajocien-Gattungen *Sphaeroceras* und *Chondroceras* (Ammonoidea). *Beihefte zum Geologischen Jahrbuch*, **24**: 1–125.
- WESTERMANN G.E.G., 1958 — Ammoniten Fauna und Stratigraphie des Bathonien NW Deutschlands. *Beihefte zum Geologischen Jahrbuch*, **32**: 1–103.
- WESTERMANN G.E.G., 1964 — The ammonite fauna of the Kialagvik Formation at Wide Bay, Alaska Peninsula. Part I, Lower Bajocian (Aalenian). *Bulletins of American Paleontology*, **47**, 216: 325–503.
- WESTERMANN G.E.G., 1967 — Allemagne, Jurassique Moyen (Alpes exclues). In: *Lexique Stratigraphique International*, I, Europe, Fascicule 5f2: 1–197 [in German]. Centre National de la Recherche Scientifique.
- WESTERMANN G.E.G., 1969 — The ammonite fauna of the Kialagvik Formation at Wide Bay, Alaska Peninsula, Part II, Sonninia-sowerbyi Zone (Bajocian). *Bulletins of American Paleontology*, **57**, 255: 1–226.
- WESTERMANN G.E.G. (Ed.), 1969 — Sexual dimorphism in fossil Metazoa and taxonomic implications. *International Union of Geological Sciences*, Ser. A, **1**: 1–251.
- WESTERMANN G.E.G., GETTY T.A., 1970 — New Middle Jurassic Ammonitina from New Guinea. *Bulletins of American Paleontology*, **57**, 256: 227–321.

- WESTERMANN G.E.G., RICCARDI A.C., 1972 — Middle Jurassic ammonoid fauna and biochronology of the Argentine-Chilean Andes, Part I: Hildocerataceae. *Palaeontographica*, **A140**: 1–116.
- MAMET B.L., WESTERMANN G.E.G., EDS, 1972 — Paleontology. XXIV International Geological Congress, Section 7: 1–650.
- VERMA H.M., WESTERMANN G.E.G., 1973 — The Tithonian (Jurassic) ammonite fauna and stratigraphy of Sierra Catorce, San Luis Potosi, Mexico. *Bulletins of American Paleontology*, **63**, 277: 103–320.
- WESTERMANN G.E.G., RICCARDI A.C., 1979 — Middle Jurassic ammonoid fauna and biochronology of the Argentine-Chilean Andes, Part II: Bajocian Stephanocerataceae. *Palaeontographica*, **A164**: 85–188.
- HALL R.L., WESTERMANN G.E.G., 1980 — Lower Bajocian (Jurassic) cephalopod faunas from Western Canada and proposed assemblage zones for the Lower Bajocian of North America. *Paleontographica Americana*, **9**, 52: 1–93.
- VERMA H.M., WESTERMANN G.E.G., 1984 — The ammonoid fauna of the Kimmeridgian-Tithonian boundary beds of Mombasa, Kenya. Royal Ontario Museum. *Life Sciences Contributions*, **135**: 1–124.
- WESTERMANN G.E.G., ED., 1984 — Jurassic-Cretaceous Biochronology and Biogeography of North America. *Geological Association of Canada, Special Paper*, **27**: 1–315.
- WESTERMANN G.E.G., CALLOMON J.H., 1988 — The Macrocephalitidae and associated Bathonian and early Callovian (Jurassic) Ammonitina of the Sula Islands and New Guinea. *Palaeontographica*, **A203**, 1–3: 1–90.
- KRYMHOLTS G.A., MESEZHNIKOV M.S., WESTERMANN G.E.G. (eds), 1988 — The Jurassic ammonite zones of the Soviet Union. *Geological Society of America, Special Papers*, **223**: 1–116.
- GRADSTEIN F.M., GIBLING M.R., JANSÁ L.F., KAMINSKI M.A., OGG J.G., SARTI M., THUROW J.W., RAD U.V., WESTERMANN G.E.G., 1989 — Mesozoic stratigraphy of Thakkhola, Central Nepal. Centre for Marine Geology, Dalhousie University, Special Report, **1**: 1–115. Halifax.
- WESTERMANN G.E.G., RICCARDI A.C., EDS, 1988–1994 — Jurassic Taxa Ranges and Correlation Charts for the Circum Pacific. 1, Soviet Union; 2, China (People's Rep.); 3, South America and Antarctic Peninsula; 4, Japan and South-East Asia; 5, North America. *Newsletters on Stratigraphy*, **19**: 1–130, **21**: 75–147, **24**: 75–80, **31**: 33–70. Berlin.
- SANDOVAL J., WESTERMANN G.E.G., MARSHALL M.C., 1990 — Ammonite fauna, stratigraphy and ecology of the Bathonian-Callovian (Jurassic) Tecocoyunca Group, South Mexico. *Palaeontographica*, **A210**: 93–149.
- RICCARDI A.C., WESTERMANN G.E.G., 1991 — Middle Jurassic ammonoid fauna and biochronology of the Argentine-Chilean Andes. III, Bajocian Callovian Eurycephalitine, Stephanocerataceae. *Palaeontographica*, **A216**: 1–110.
- RICCARDI A.C., WESTERMANN G.E.G., 1991 — Middle Jurassic ammonoid fauna and biochronology of the Argentine-Chilean Andes. IV, Bathonian-Callovian Reineckeidae. *Palaeontographica*, **A216**: 111–145.
- WESTERMANN G.E.G., ED., 1992 — The Jurassic of the Circum-Pacific. 676 p. Cambridge University Press.
- GRANT-MACKIE J.A., FRANCIS G., WESTERMANN G.E.G., CHALLINOR A.B., 2006 — Jurassic molluscan palaeontology of the Telefomin area, Papua New Guinea. Geological Survey of Papua New Guinea, *Memoir*, **18**: 1–102.

## PAPERS

- WESTERMANN G.E.G., 1955 — Biostratigraphische Untersuchungen im Jura südlich der Sierra de la Demanda (N. Spanien), *Geologisches Jahrbuch*, **70**: 515–534 [in Spanish In: *Notas y Comunicaciones del Instituto Geológico y Minero de España*, **45**: 3–36].
- WESTERMANN G.E.G., 1956 — Phylogenie der Stephanocerataceae und Perisphinctaceae des Dogger. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen*, **163**, 1/2: 233–279.
- WESTERMANN G.E.G., 1957 — Schichtlücken und Diskordanzen im Dogger. *Zeitschrift Deutsches Geologisches Gessellschaft*, **109**: 271–273.
- WESTERMANN G.E.G., 1958 — The significance of septa and sutures in Jurassic ammonite systematic. *Geological Magazine*, **95**, 6: 441–455.
- WESTERMANN G.E.G., 1958 — Exkursion in den Malm und tiefen Wealden am südlichen Deister. *Zeitschrift Deutsches Geologisches Gessellschaft*, **109**: 336–339.
- WESTERMANN G.E.G., 1962 — Succession and variation of *Monotis* and the associated fauna in the Norian Pine River Bridge section, British Columbia (Triassic, Pelecypoda). *Journal of Paleontology*, **36**: 745–792.
- WESTERMANN G.E.G., 1962 — The Mid-Triassic brachiopod “*Spiriferina*” *stracheyi* (Salter) from the Canadian Rocky Mountains. *Alberta Society of Petroleum Geologists*, **10**: 593–609.
- WESTERMANN G.E.G., 1963 — Occurrence and significance of *Nevadites merriami* Smith in the Toad formation of northeast British Columbia (Ammonoidea, Mid Triassic). *Journal of Paleontology*, **37**, 2: 496–499.
- AGER D.V., WESTERMANN G.E.G., 1963 — New Mesozoic brachiopods from Canada. *Journal of Paleontology*, **37**: 595–610.
- WESTERMANN G.E.G., 1964 — El Hammatoceratido *Podagrosiceras athleticum* Maubeuge y Lambert, del Bayociano inferior (Aaleniano) del Neuquén central, Argentina (Ammonitina, Jurásico). *Ameghiana*, **3**, 6: 173–181.
- WESTERMANN G.E.G., 1964 — Occurrence and significance of the Arctic *Arkelloceras* in the Middle Bajocian of the Alberta foothills (Ammonitina, Jurassic). *Journal of Paleontology*, **38**, 2: 405–409.

- WESTERMANN G.E.G., 1964 — The terminology of the ammonoid septal suture. *Journal of Paleontology*, **38**, 5: 993–998.
- WESTERMANN G.E.G., 1964 — Possible mechanical function of shell plication in a Triassic brachiopod. *Canadian Journal of Earth Sciences*, **1**: 99–120.
- WESTERMANN G.E.G., 1964 — Sexual-Dimorphism bei Ammonoideen und seine Bedeutung für die Taxonomie der Otoitidae. *Palaeontographica*, **A124**: 33–73.
- WESTERMANN G.E.G., 1965 — Septal and sutural patterns in evolution and taxonomy of Thamboceratidae and Clydoniceratidae (Jurassic Ammonitina). *Journal of Paleontology*, **39**, 5: 864–874.
- WESTERMANN G.E.G., 1966 — The holotype (Plastotype) of ?*Titanites occidentalis* Frebold from the Kootenay Sandstone (Upper Jurassic) of Southern British Columbia. *Canadian Journal of Earth Sciences*, **3**: 623–625.
- WESTERMANN G.E.G., 1966 — Covariation and taxonomy of the Jurassic ammonite *Sonninia adicra* (Waagen) period: *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen*, **124**, 3: 289–312.
- WESTERMANN G.E.G., 1966 — New occurrences of *Monotis* from Canada (Triassic Pelecypoda). *Canadian Journal of Earth Sciences*, **3**: 975–986.
- WESTERMANN G.E.G., 1967 — The umbilical lobes of Stephanoceratacean ammonites. *Journal of Paleontology*, **41**: 259–261.
- WESTERMANN G.E.G., 1967 — Sucesión de ammonites del Jurásico medio en Antofagasta, Atacama, Mendoza y Neuquén. *Revista de la Asociación Geológica Argentina*, **22**, 1: 65–73.
- WESTERMANN G.E.G., VERMA H., 1967 — The Norian Pine River Bridge Section, British Columbia, and the succession of *Monotis*. *Journal of Paleontology*, **41**, 3: 798–803.
- WESTERMANN G.E.G., 1968 — Evolution and taxonomy of Pachyceratidae and Mayaitidae, as suggested by septal patterns (Jurassic ammonitina). XXII International Geological Congress, India 1964, Part VIII, Proceedings of Section 8: 1–14. New Delhi.
- WESTERMANN G.E.G., 1968 — Species distribution of the World-wide Triassic pelecypod *Monotis* Bronn. XXII International Geological Congress, India 1964, Part VIII, Proceedings of Section 8: 374–389. New Delhi.
- CECIONI G., WESTERMANN G.E.G., 1968 — The Triassic/ Jurassic marine transition of coastal central Chile. *Pacific Geology*, **1**: 41–75.
- WESTERMANN G.E.G., 1969 — Sexual dimorphism, migration and segregation in living cephalopods. In: Sexual dimorphism in fossil Metazoa and taxonomic implications (Ed. G.E.G. Westermann). *International Union of Geological Sciences, Ser. A*, **1**: 18–20.
- WESTERMANN G.E.G., 1969 — Proposal: classification and nomenclature of dimorphs at the genus-group level. In: Sexual dimorphism in fossil Metazoa and taxonomic implications (Ed. G.E.G. Westermann). *International Union of Geological Sciences, Ser. A*, **1**: 234–238.
- WESTERMANN G.E.G., 1970 — Occurrence of *Monotis subcircularis* Gabb in central Chile and the dispersal of *Monotis* (Triassic Bivalvia). *Pacific Geology*, **2**: 35–40.
- RICCARDI A.C., WESTERMANN G.E.G., 1970 — The Valanginian *Dobrodgeicerias* Nikolov (Ammonitina) from Peru. *Journal of Paleontology*, **44**, 5: 888–892.
- WESTERMANN G.E.G., 1971 — Ammonite succession of the Middle Jurassic in the southern Andes. *Mémoire Bureau Recherches Géologiques et Minières de France*, **75**: 423–430.
- WESTERMANN G.E.G., 1971 — Form, structure and function of shell and siphuncle in coiled Mesozoic ammonoids. Royal Ontario Museum. *Life Science Contributions*, **78**: 1–39.
- WESTERMANN G.E.G., 1971 — Memorial to Otto H. Schindewolf, 1896–1971. The Geological Society of America, *Memorials*, 1971: 1–4.
- RICCARDI A.C., WESTERMANN G.E.G., LEVY R., 1971 — The Lower Cretaceous Ammonitina *Olcostephanus*, *Leopoldia*, and *Favrella* from west-central Argentina. *Palaeontographica*, **136A**: 83–121.
- WESTERMANN G.E.G., 1972 — Doubtful distinction of the Aalenian ammonite genus *Tugurites* Kalacheva and Sei, 1970. *Journal of Paleontology*, **46**, 5: 779–780.
- WESTERMANN G.E.G., 1972 — The case of alleged inversion of septal sutures in ammonites. *Lethaia*, **5**: 165–167.
- WESTERMANN G.E.G., RICCARDI A.C., 1972 — Amonitas y estratigrafía del Aaleniano-Bayociano de los Andes argentino-chilenos. *Ameghiniana*, **9**, 4: 357–389.
- WESTERMANN G.E.G., 1973 — The Late Triassic bivalve *Monotis*. In: Atlas of Palaeobiogeography (Ed. A. Hallam): 251–258. Elsevier.
- WESTERMANN G.E.G., 1973 — New Constitution for the International Paleontological Association. *Lethaia*, **6**: 91–99.
- WESTERMANN G.E.G., 1973 — Strength of concave septa and depth limits of fossil cephalopods. *Lethaia*, **6**: 383–403.
- WESTERMANN G.E.G., 1974 — Sido M., Zalanyi B., Schreter Z., Neue palaeontologische Ergebnisse aus dem Oberpaläozoicum des Bukkgebirges. Akad. Kiado, Budapest, 1974. Palaeontological Association, Circular (Review).
- WESTERMANN G.E.G., 1975 — Bajocian ammonites of Tethyan affinities from the Kambe Limestone Series of Kenya and implications to plate tectonics. *Newsletters on Stratigraphy*, **4**, 1: 23–48.
- WESTERMANN G.E.G., 1975 — *Alfeldites* nom. nov. for *Germanites* Westermann, 1954 non Schindewolf, 1929, Jurassic Ammonitina. *Journal of Paleontology*, **49**, 1: 229.
- WESTERMANN G.E.G., 1975 — Remarks on Mutvei and Reyment's hypothesis regarding ammonoid phragmocones. *Palaeontology*, **18**, 2: 437–439.
- WESTERMANN G.E.G., 1975 — Architecture and buoyancy of simple cephalopod phragmocones and remarks on ammonites. *Paläontologische Zeitschrift*, **49**, 3: 221–234.

- WESTERMANN G.E.G., 1975 — A model for origin, function, and fabrication of fluted septa. *Paläontologische Zeitschrift*, **49**, 3: 235–253.
- WESTERMANN G.E.G., 1975 — Geology and palaeontology of Southeast Asia (eds T. Kobayashi, R. Toriyama), vol. 1–13. University of Tokyo Press. *Geoscience Canada*, **2**, 2: 188–219 (Review).
- WESTERMANN G.E.G., RICCARDI A.C., 1975 — Edad y taxonomía del género *Podagrosiceras* Lambert y Maubeuge (Ammonitina, Jurásico medio). *Ameghiniana*, **12**, 3: 242–252.
- WESTERMANN G.E.G., RIOULT M., 1975 — The lectotype of *Cadomites psilacanthus* (Wernbter). *Palaeontology*, **18**, 4: 871–877.
- WESTERMANN G.E.G., RICCARDI A.C., 1976 — Middle Jurassic ammonite distribution and affinities of the Andean faunas. Primer Congreso Geológico Chileno, **1**: C23–C39.
- STIPANIC P.N., WESTERMANN G.E.G., RICCARDI A.C., 1976 — The Indo-Pacific Ammonite *Mayaites* in the Oxfordian of the Southern Andes. *Ameghiniana*, **12**, 4: 281–305.
- CHAMBERLAIN J.A., JR., WESTERMANN G.E.G., 1976 — Hydrodynamic properties of cephalopod shell ornament. *Paleobiology*, **2**, 4: 316–331.
- WARD P.D., WESTERMANN G.E.G., 1976 — Sutural inversion in a heteromorph ammonite and its implication for septal formation. *Lethaia*, **9**: 357–361.
- WESTERMANN G.E.G., 1977 — Form and function of orthoconic cephalopod shells with concave septa. *Paleobiology*, **3**: 300–321.
- WESTERMANN G.E.G., 1977 — Comments to Hallam's conclusion regarding the first marine connection between the eastern Pacific and western Tethys. In: Paleontology and plate tectonics with special reference to the Atlantic Ocean (Ed. R.M. West). *Miwaukee Public Museum Special Publications in Biology and Geology*, **2**: 35–38.
- WARD P.D., WESTERMANN G.E.G., 1977 — First occurrence, systematics and functional morphology of *Nipponites* (Cretaceous Lytoceratina) from the Americas. *Journal of Paleontology*, **51**, 2: 367–372.
- WARD P.D., STONE R., WESTERMANN G.E.G., MARTIN A., 1977 — Notes on animal weight, cameral fluids, swimming speed, and color polymorphism of the cephalopod *Nautilus pompilius* in the Fiji Islands. *Paleobiology*, **3**, 4: 377–388.
- WESTERMANN G.E.G., 1978 — *Alaskinia* nom. nov. for *Alaskoceras* Westermann, 1969 non Miller and Kummel, 1945; Jurassic Ammonitina. *Journal of Paleontology*, **52**, 3: 604.
- WESTERMANN G.E.G., 1978 — Ontogeny and phylogeny (Ed. S.J. Gould), Belknap Press of Harvard University Press. *Geoscience Canada*, **5**: 160 (Review).
- WESTERMANN G.E.G., SATO T., SKWARKO S.K., 1978 — Brief report on the Jurassic biostratigraphy of the Sula Islands, Indonesia. *Newsletter on Stratigraphy*, **7**, 2: 96–101.
- SATO T., WESTERMANN G.E.G., SKWARKO S.K., HASIBUAN F., 1978 — Jurassic biostratigraphy of the Sula Islands, Indonesia. *Geological Survey of Indonesia, Bulletin*, **4**, 1: 1–28.
- WESTERMANN G.E.G., 1979 — Troublesome definition of the Lower/Middle Jurassic boundary. *Canadian Journal of Earth Sciences*, **16**: 2060–2062.
- DELLAPE D.A., MOMBRU C., PANDO G.A., RICCARDI A.C., ULIANA M.A., WESTERMANN G.E.G., 1979 — Edad y correlación de la Formación Tábanos en Chacay Melehue y otras localidades de Neuquén y Mendoza. Con consideraciones sobre la distribución y significado de las sedimentitas del Loteniano. *Obra Centenario Museo La Plata*, **5**: 81–105.
- WESTERMANN G.E.G., 1980 — Ammonite biochronology and biogeography of the Circum-Pacific Middle Jurassic. In: The Ammonoids (eds M.R. House, J.R. Senior). *Systematics Association Special Volume*, **18**: 459–498.
- WESTERMANN G.E.G., RICCARDI A.C., 1980 — The Upper Bajocian ammonite *Strenoceras* in Chile: first circum-Pacific record of the Subfurcatum Zone. *Newsletters on Stratigraphy*, **9**, 1: 19–29.
- WESTERMANN G.E.G., WARD P., 1980 — Septum morphology and bathymetry in cephalopods. *Paleobiology*, **6**, 1: 48–50.
- WESTERMANN G.E.G., RICCARDI A.C., PALACIOS O., RANGEL C., 1980 — Jurásico medio en el Perú. Instituto Geológico Minero y Metalúrgico, Serie D, Boletín, **9**: 1–47.
- COLLINS D., WARD P.D., WESTERMANN G.E.G., 1980 — Function of cameral water in *Nautilus*. *Paleobiology*, **6**, 2: 168–172.
- WESTERMANN G.E.G., 1981 — Ammonoid biochronology and biogeography of the circum-Pacific Middle Jurassic. In: The Ammonoidea (eds M.R. House, J.R. Senior). *The Systematics Association Special Volume*, **18**: 459–498.
- WESTERMANN G.E.G., SEYED-EMAMI K., 1981 — Occurrence of the Upper Triassic bivalve *Monotis* in Iran. *Paläontologische Zeitschrift*, **55**, 2: 173–174.
- WESTERMANN G.E.G., 1982 — The connecting rings of *Nautilus* and Mesozoic ammonoids: implications for ammonoid bathymetry. *Lethaia*, **15**: 373–384.
- BROOKFIELD M.E., WESTERMANN G.E.G., 1982 — Mesozoic ammonites from the Spong Valley, Zanskar, N.W. India. *Geological Society of India, Journal*, **23**: 263–266.
- WESTERMANN G.E.G., RICCARDI A.C., 1982 — Ammonoid fauna from the early Middle Jurassic of Mendoza province, Argentina. *Journal of Paleontology*, **56**, 1: 11–41.
- WESTERMANN G.E.G., 1983 — The Upper Bajocian and Lower Bathonian (Jurassic) ammonite faunas of Oaxaca, Mexico and West-Tethyan affinities. *Paleontologia Mexicana*, **46**: 1–63.
- WESTERMANN G.E.G., 1983 — Circum-Pacific Jurassic Research Group Report No. 1, 160 p., 10 pls. (Group Circular).

- HEWITT R.A., WESTERMANN G.E.G., 1983 — Mineralogy, structure and homology of ammonoid siphuncles. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen*, **165**, 3: 378–396.
- WESTERMANN G.E.G., 1984 — The Late Bajocian *Duashnoceras* association (Jurassic, Ammonitina) of Mixtepec in Oaxaca, Mexico. III Congreso Latinoamericano de Paleontología, *Memoria*: 192–199.
- WESTERMANN G.E.G., 1984 — Gauging the duration of Stages: a new approach for the Jurassic. *Episodes*, **7**, 2: 26–28.
- WESTERMANN G.E.G., 1984 — Summary of Symposium papers on the Jurassic-Cretaceous biochronology and paleogeography of North America. In: Jurassic-Cretaceous Biochronology and Biogeography of North America (Ed. G.E.G. Westermann), Geological Association of Canada, *Special Paper*, **27**: 307–315.
- WESTERMANN G.E.G., 1984 — Circum-Pacific Jurassic Research Group Report No. 2, 117 p. (Group Circular).
- WESTERMANN G.E.G., CORONA R., CARRASCO R., 1984 — The Andean Mid-Jurassic *Neuquenicer* ammonite assemblage of Cualac, Mexico. In: Jurassic-Cretaceous Biochronology and Biogeography of North America. Geological Association of Canada (Ed. G.E.G. Westermann), *Special Paper*, **27**: 99–112.
- TAYLOR D.G., CALLOMON J.H., HALL R., SMITH P., TIPPER H.W., WESTERMANN G.E.G., 1984 — Jurassic ammonite biogeography of western North America, the Plate Tectonic implications. In: Jurassic-Cretaceous Biochronology and Biogeography of North America (Ed. G.E.G. Westermann). Geological Association of Canada, *Special Paper*, **27**: 121–142.
- RICCARDI A.C., WESTERMANN G.E.G., 1984 — Amonitas y estratigrafía del Aaleniano-Bajociano de la Argentina. Noveno Congreso Geológico Argentino, *Actas*, **4**: 362–393.
- WESTERMANN G.E.G., 1985 — Post-mortem descent with septal implosion in Silurian nautiloids. *Paläontologische Zeitschrift*, **59**, 1/2: 79–97.
- WESTERMANN G.E.G., 1985 — Exploding *Nautilus* camerae does not test septal strength index. *Lethaia*, **18**: 348.
- WESTERMANN G.E.G., ED., 1985 — Paleocology and stratigraphy of northeast Asia. IGCP 171, *Special Paper*, **10**.
- WESTERMANN G.E.G., RICCARDI A.C., 1985 — Middle Jurassic ammonite evolution in the Andean Province and Emigration to Tethys. In: Sedimentary and Evolutionary Cycles (eds U. Bayer, A. Seilacher). *Lecture Notes in Earth Sciences*, **1**: 6–34.
- BARTOK P.E., RENZ O., WESTERMANN G.E.G., 1985 — The Siquisique ophiolites, Northern Lara State, Venezuela: a discussion on their Middle Jurassic ammonites. *Geological Society of America, Bulletin*, **96**: 1050–1055.
- HILLEBRANDT A.V., WESTERMANN G.E.G., 1985 — Aalenian (Jurassic) ammonite faunas and Zones of the southern Andes. *Zitteliana*, **12**: 3–55.
- KRISHNA J., WESTERMANN G.E.G., 1985 — Progress report on the Middle Jurassic ammonite zones of Kachchh, India. *Newsletters on Stratigraphy*, **14**, 1: 1–11.
- WARD P.D., WESTERMANN G.E.G., 1985 — Cephalopod paleocology. In: Paleocology of molluscs. *Geological Society of America, Short-course Notes*, 215–229.
- HEWITT R.A., WESTERMANN G.E.G., 1986 — Function of complexly fluted septa in ammonoid shells, I. Mechanical principles and functional models. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen*, **172**, 1: 47–69.
- SANDOVAL J., WESTERMANN G.E.G., 1986 — The Bajocian (Jurassic) ammonite fauna of Oaxaca, Mexico. *Journal of Paleontology*, **60**, 6: 1220–1271.
- SEI I.I., KALACHEVA E.O., WESTERMANN G.E.G., 1986 — The Jurassic ammonite *Pseudolioceras* (*Tugurites*) of the Bering province. *Canadian Journal of Earth Sciences*, **23**: 1042–1045.
- WESTERMANN G.E.G., 1987 — Das Klima der Kreide-Zeit (Ed. E. Kemper), *Geologisches Jahrbuch*, **A96**. *Geosciences Canada*, **14**: 237 (Review).
- WESTERMANN G.E.G., 1987 — Diachronous ammonite extinction across Jurassic bioprovinces. 4th North American Paleontological Convention, Boulder 1986. Abstract.
- HEWITT R.A., WESTERMANN G.E.G., 1987 — Function of complexly fluted septa in ammonoid shells, II. Septal evolution and conclusions. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen*, **174**, 2: 135–169.
- HEWITT R.A., WESTERMANN G.E.G., 1987 — *Nautilus* shell architecture. In: *Nautilus*, the biology and paleobiology of a living fossil (eds B. Saunders, N.H. Landman). Plenum Publ. Co., New York and London. *Topics in Geobiology*, **6**: 435–461.
- KRISHNA J., WESTERMANN G.E.G., 1987 — The faunal associations of the Middle Jurassic ammonite genus *Macrocephalites* in Kachchh, western India. *Canadian Journal of Earth Sciences*, **24**: 1570–1582.
- WESTERMANN G.E.G., 1988 — Middle Jurassic ammonite biogeography supports ambi-Tethyan origin of Tibet. In: Gondwana and Tethys (eds M.G. Audley-Charles, A. Hallam). *Geological Society Special Publication*, **37**: 235–239.
- WESTERMANN G.E.G., 1988 — Duration of Jurassic stages based on averaged and scaled subzones. In: Recent Advances in Quantitative Stratigraphic Correlation (eds F.P. Agterberg, N. Rao), p. 90–100. Hindustan Publishing. Co., Delhi.
- WESTERMANN G.E.G., WANG Y., 1988 — Middle Jurassic Ammonites of Tibet and the age of the lower Spiti Shales. *Palaeontology*, **31**, 2: 295–339.
- HEWITT R.A., WESTERMANN G.E.G., 1988 — Stress and strain in *Nautilus* shells: some limitations on the buoyancy control and vertical migration of ectocochliates. In: Cephalopods – Present and Past: 705–712. Schwitzerbart'sche Verlagsbuchhandlung, Stuttgart.
- HEWITT R.A., WESTERMANN G.E.G., 1988 — Nautiloid septal strength: revisited and revised concepts. *Alcheringa*, **12**: 123–128.
- HEWITT R.A., WESTERMANN G.E.G., 1988 — Application of buckling equations to the functional morphology of nautiloid and ammonoid phragmocones (eds J. Wiedmann, J. Kullmann). *Historical Biology*, **1**: 225–231.



- PANDEY D.K., WESTERMANN G.E.G., 1988 — First record of Bathonian *Bullatimorphites* (Jurassic, Ammonitina) from Kachchh, India. *Journal of Paleontology*, **62**, 1: 148–150.
- GRADSTEIN F.M., AGTERBERG F.P., AUBRY M.-P., BERGGREN W.A., FLYNN J.J., HEWITT R., KENT D.V., KLITGORD K.D., MILLER K.G., OBRADOVICH J., OGG J.G., PROTHERO D.R., WESTERMANN G.E.G., 1988 — Chronology of fluctuating sea levels since the Triassic – a critique. *Science*, **241**: 599–601.
- RICCARDI A.C., WESTERMANN G.E.G., ELMI S., 1988 — The Bathonian-Callovian Ammonite Zones of the Argentine-Chilean Andes. 2nd International Symposium on Jurassic Stratigraphy, Proceedings: 347–358. Lisboa.
- RICCARDI A.C., WESTERMANN G.E.G., ELMI S., 1988 — Las Zonas de amonites del Bathoniano-Calloviano inferior de los Andes Argentino-Chilenos. V Congreso Geológico Chileno, **2**: C415–C426.
- WANG Y., CAO M., CHEN CH., DONG Z., MA Q., PAN H., SHAN Y., SUN D., WANG Z., WEN S., YE M., CHEN F., LUI B., XU Y., LIN Q., MA F., WANG S., WESTERMANN G.E.G., 1988 — China. In: Jurassic taxa ranges and correlation charts for the Circum Pacific (eds G.E.G. Westermann, A.C. Riccardi). *Newsletters on Stratigraphy*, **19**: 95–130.
- WESTERMANN G.E.G., 1989 — New developments in ecology of Jurassic-Cretaceous ammonoids. In: Atti Secondo Convegno Internazionale, Fossili, Evoluzione, Ambiente (eds G. Pallini *et al.*), Pergola, 1987: 459–478.
- WESTERMANN G.E.G., RICCARDI A.C., 1989 — Jurassic stage boundaries in South America (IGCP 171 meeting, Washington, July 15, 1989). *International Subcommission on Jurassic Stratigraphy, Newsletter*, **19**: 16–22. Copenhagen.
- CHECA A., WESTERMANN G.E.G., 1989 — Segmental growth in planulate ammonites: inferences on costae function. *Lethaia*, **22**: 95–100.
- SANDOVAL J., WESTERMANN G.E.G., 1989 — Bioestratigrafía y biogeografía de los ammonites del Jurásico Medio de Oaxaca y Guerrero (Sur de México). *Revista de la Sociedad Mexicana de Paleontología*, **2**: 18–25.
- HEWITT R.A., DOKAINISH M.A., EL AGHOURY M., WESTERMANN G.E.G., 1989 — Bathymetric limits of a Carboniferous orthoconic nautiloid deduced by finite element analysis. *Palaaios*, **4**: 157–167.
- RICCARDI A.C., WESTERMANN G.E.G., ELMI S., 1989 — The Middle Jurassic Bathonian-Callovian ammonite zones of the Argentine-Chilean Andes. *Geobios*, **22**, 5: 553–597.
- HEWITT R.A., WESTERMANN G.E.G., 1990 — *Nautilus* shell strength variance as an indicator of habitat depth limits. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen*, **179**, 1: 71–95.
- HEWITT R.A., WESTERMANN G.E.G., 1990 — Mosasaur tooth marks on the ammonite *Placenticerias* from the Upper Cretaceous Bearpaw Formation of Alberta. *Canadian Journal of Earth Sciences*, **27**: 469–472.
- HAHN W., WESTERMANN G.E.G., JORDAN R., 1990 — Ammonite fauna of the Upper Bathonian *hodsoni* Zone (Middle Jurassic) at Lechstedt near Hildesheim, northwest Germany. *Geologisches Jahrbuch*, **A121**: 21–63.
- RICCARDI A.C., WESTERMANN G.E.G., DAMBORENEA S.E., 1990 — Middle Jurassic of South America and Antarctic Peninsula. In: Jurassic Taxa Ranges and Correlation Charts for the Circum Pacific (eds G.E.G. Westermann, A.C. Riccardi). *Newsletters on Stratigraphy*, **21**, 2: 105–128.
- SMITH P.L., WESTERMANN G.E.G., STANLEY G.D., YANCEY T.E., 1990 — Paleobiogeography of the Ancient Pacific. *Science*, **249**: 680–686.
- WESTERMANN G.E.G., HUDSON N., 1991 — The first find of Eurycephalitinae (Jurassic Ammonitina) in New Zealand and its biogeographic significance. *Journal of Paleontology*, **65**, 4: 689–693.
- GRADSTEIN F.M., GIBLING M.R., SARTI M., RAD U.V., THUROW J.W., OGG J.G., JANSÁ L.F., KAMINSKI M.A., WESTERMANN G.E.G., 1991 — Mesozoic Tethyan strata of Thakkhola, Nepal: evidence for the drift and breakup of Gondwana. *Palaeoogeography, Palaeoclimatology, Palaeoecology*, **88**: 193–218.
- HEWITT R.A., YOSHIKI T., WESTERMANN G.E.G., 1991 — Shell microstructure and ecology of the Cretaceous coleoid *Naefia* from the Santonian of Japan. *Cretaceous Research*, **12**: 47–54.
- HEWITT R.H., CHECA A., WESTERMANN G.E.G., ZABORSKI P.M., 1991 — Chamber growth in ammonites inferred from colour markings and naturally etched surfaces of Cretaceous vascoceratids from Nigeria. *Lethaia*, **24**: 271–287.
- RICCARDI A.C., WESTERMANN G.E.G., ELMI S., 1991 — Biostratigraphy of the South American Upper Bajocian-Middle Callovian. *Journal South American Earth Sciences*, **4**, 3: 149–157.
- WESTERMANN G.E.G., 1992 — Papua New Guinea. In: The Jurassic of the Circum Pacific (Ed. G.E.G. Westermann): 187–193. Cambridge University Press.
- WESTERMANN G.E.G., 1992 — Ammonite zones of the Circum-Pacific region: Middle Jurassic. In: The Jurassic of the Circum Pacific (Ed. G.E.G. Westermann): 253–261. Cambridge University Press.
- WESTERMANN G.E.G., 1992 — Ammonites of the Circum-Pacific region, Middle Jurassic. In: The Jurassic of the Circum Pacific (Ed. G.E.G. Westermann): 345–351. Cambridge University Press.
- WESTERMANN G.E.G., 1992 — Ammonite biogeography and ecology modify Meso-American reconstruction. In: The Jurassic of the Circum Pacific (Ed. G.E.G. Westermann): 355–357. Cambridge University Press.
- DETTERTMAN R.L., WESTERMANN G.E.G., 1992 — Southern Alaska. In: The Jurassic of the Circum Pacific (Ed. G.E.G. Westermann): 49–57. Cambridge University Press.
- SALVADOR A., WESTERMANN G.E.G., 1992 — Meso-America: Western Mexico. In: The Jurassic of the Circum Pacific (Ed. G.E.G. Westermann): 93–100. Cambridge University Press.

- SUKAMTO R., WESTERMANN G.E.G., 1992 — Indonesia. *In: The Jurassic of the Circum Pacific* (Ed. G.E.G. Westermann): 181–187. Cambridge University Press.
- WESTERMANN G.E.G., 1992 — Formation and function of suspended organic cameral sheets in Triassic ammonoids – discussion. *Paläontologische Zeitschrift*, **66**, 3/4: 437–441.
- WESTERMANN G.E.G., 1992 — Correlation of Jurassic events in South America, Santiago, Chile, 27 Nov – 5 Dec, 1992 (IGCP Conference Report). *Episodes*, **15**, 4: 267–268.
- GRADSTEIN F.M., GIBLING M.R., JANSÁ L.F., KAMINSKI M.A., KRISTIANSEN I.L., OGG J.G., ROHL U., SARTI M., THUROW J.W., RAD U.V., WESTERMANN G.E.G., WIEDMANN J., 1992 — Stratigraphy and depositional history of the Mesozoic continental margin of Central Nepal. *Geologisches Jahrbuch*, **B77**: 1–141.
- WESTERMANN G.E.G., 1993 — Limits of global bio-event correlation: diachronous ammonite "extinction" across Jurassic bioprovinces. *Revista de la Asociación Geológica Argentina*, **47**, 4: 353–364.
- WESTERMANN G.E.G., 1993 — On alleged negative-buoyancy of ammonoids. *Lethaia*, **26**: 246.
- WESTERMANN G.E.G., 1993 — Hydrostatics and hydrodynamics of cephalopod shells: form, structure and function. *Academia Nacional de Ciencias Exactas, Físicas y Naturales, Anales*, **45**: 183–204.
- FRANCIS G., WESTERMANN G.E.G., 1993 — The Kimmeridgian problem in Papua New Guinea and other parts of the Indo-Southwest Pacific. *In: Petroleum Exploration and Development in PNG* (eds G.J. Carman, Z. Carman). 2nd PNG Petroleum Convention (Port Moresby, 1993), Proceedings: 75–93a.
- WANG Y., WESTERMANN G.E.G., 1993 — Paleoecology of Triassic ammonoids. *Geobios*, M.S. **15**: 373–392.
- WESTERMANN G.E.G., 1993 — Global bio-events in mid-Jurassic ammonites controlled by seaways. *In: The Ammonoidea: Environment, Ecology, and Evolutionary Change* (Ed. M.R. House). *Systematics Association Special Volume*, **47**: 187–226.
- HEWITT R.A., ABDELSALAM U.A., DOKAINISH M.A., WESTERMANN G.E.G. 1993 — Comparison of the relative strength of siphuncles with prochoanitic and retrochoanitic septal necks by finite-element analysis. *In: The Ammonoidea: Environment, Ecology and Evolutionary Change* (Ed. M.R. House). *Systematics Association Special Volume*, **47**: 85–98. Clarendon Press, Oxford.
- HEWITT R.A., WESTERMANN G.E.G., CHECA A., 1993 — Growth rates of ammonites estimated from Aptychi. *Geobios*, M.S. **15**: 203–208.
- GERAGHTY M.D., WESTERMANN G.E.G., 1994 — Origin of Jurassic ammonite concretions assemblages at Alfeld, Germany: a biogenic alternative. *Paläontologische Zeitschrift*, **68**, 3/4: 473–490.
- WESTERMANN G.E.G., 1995 — Do limpet pits indicate that desmoceratacean ammonites lived mainly in surface waters? *Lethaia*, **28**: 24.
- WESTERMANN G.E.G., HILLEBRANDT A.V., 1995 — A Late Bathonian morphoceratid (Jurassic, Ammonitina) from Peru. *Mitteilungen der Bayerischen Staatssammlung für Paläontologie und historische Geologie*, **35**: 27–37.
- WESTERMANN G.E.G., 1996 — Mid-Jurassic Ammonitina from the Central Ranges of Irian Jaya and the origin of the stephanoceratids. *In: Géczy Jubilee Volume* (Ed. A. Galacz). *Hantkeniana*, **1**: 105–118.
- WESTERMANN G.E.G., 1996 — Ammonoid life and habitat. *In: Ammonoid Paleobiology* (eds N.H. Landman *et al.*): 607–707. Plenum Press, NY.
- WESTERMANN G.E.G., 1996 — Correlating New Zealand regional Stages by ammonites. *In: Advances in Jurassic Research* (Ed. A.C. Riccardi). *GeoResearch Forum*, **1/2**: 93–100.
- WESTERMANN G.E.G., 1996 — New Mid-Jurassic Ammonitina from New Zealand: implications for biogeography and oceanography. *In: Advances in Jurassic Research* (Ed. A.C. Riccardi). *GeoResearch Forum*, **1/2**: 179–186.
- WESTERMANN G.E.G., 1996 — Circum-Gondwanan ammonite correlation at the Bathonian-Callovian boundary. *In: Advances in Jurassic Research* (Ed. A.C. Riccardi). *GeoResearch Forum*, **1/2**: 485–491.
- HEWITT R.A., WESTERMANN G.E.G., 1996 — Post-mortem behaviour of Early Paleozoic nautiloids and paleobathymetry. *Paläontologische Zeitschrift*, **70**, 3/4: 405–424.
- HEWITT R.A., WESTERMANN G.E.G., 1997 — Mechanical significance of ammonoid septa with complex sutures. *Lethaia*, **30**: 205–212.
- OLÓRIZ F., WESTERMANN G.E.G., 1998 — The perisphinctid ammonite *Sulaites* n. gen. from the Upper Jurassic of the Indo-Southwest Pacific. *Alcheringa*, **22**: 231–240.
- TSUJITA C.J., WESTERMANN G.E.G., 1998 — Ammonoid habitats and habits in the Western Interior Seaway: a case study from the Upper Cretaceous Bearpaw Formation of southern Alberta, Canada. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **144**: 135–160.
- WESTERMANN G.E.G., 1998 — Life habits of Nautiloids. *In: Functional Morphology of the Invertebrate Skeleton* (Ed. E. Savazzi): 263–298. John Wiley & Sons Ltd.
- WESTERMANN G.E.G., TSUJITA C.J., 1999 — Life habits of ammonoids. *In: Functional Morphology of the Invertebrate Skeleton* (Ed. E. Savazzi): 299–325. John Wiley & Sons Ltd.
- WESTERMANN G.E.G., RICCARDI A.C., LEHMANN U., 1999 — A new Anaptychus-like jaw apparatus of Jurassic ?*Lytoceras* from Argentina. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte*, **1**: 21–28.
- RICCARDI A.C., WESTERMANN G.E.G., 1999 — An Early Bathonian ammonite fauna from Argentina. *Palaeontology*, **42**, 2: 193–209.
- HEWITT R.A., WESTERMANN G.E.G., JUDD R.L., 1999 — Buoyancy calculations and ecology of Callovian (Jurassic) cylindroteuthid belemnites. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen*, **211**, 1/2: 89–112.
- OLÓRIZ F., VILLASEÑOR A.B., GONZÁLEZ ARREOLA C., WESTERMANN G.E.G., 1999 — Ammonite biostratigraphy and correlations in the Upper Jurassic-Lowermost Cretaceous La Caja Formation of North-Central Mexico (Sierra de Catorce, San Luis Potosí).

- In: Advancing Research on Living and Fossil Cephalopods* (eds F. Olóriz, F.J. Rodríguez-Tovar): 463–492. Kluwer Academic/Plenum Publishers.
- WESTERMANN G.E.G., 2000 — Biochore classification and nomenclature in palaeobiogeography: an attempt at order. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **158**: 1–13.
- WESTERMANN G.E.G., 2000 — Marine faunal realms of the Mesozoic: review and revision under the new guidelines for biogeographic classification and nomenclature. *Palaeogeography, Paleoclimatology, Palaeoecology*, **163**: 49–68.
- WESTERMANN G.E.G., HUDSON N., GRANT-MACKIE J.A., 2000 — Bajocian (Middle Jurassic) Ammonitina of New Zealand. *New Zealand Journal of Geology and Geophysics*, **43**: 33–57.
- WESTERMANN G.E.G., 2001 — Modes of extinction, pseudo-extinction and distribution in Middle Jurassic ammonoids: Terminology. *Canadian Journal of Earth Sciences*, **38**: 187–195.
- TSUJITA C.J., WESTERMANN G.E.G., 2001 — Were limpets or mosasaurs responsible for the perforations in the ammonite *Placentiaceras*? *Palaeogeography, Palaeoclimatology, Palaeoecology*, **169**: 245–270.
- WESTERMANN G.E.G., HUDSON N., GRANT-MACKIE J., 2002 — New Jurassic Ammonitina from New Zealand: Bathonian-Calloviaian Eurycephalitinae. *New Zealand Journal of Geology and Geophysics*, **45**: 499–525.
- HASSAN M.A., WESTERMANN G.E.G., HEWITT R.A., DOKAINISH M.A., 2002 — Finite-element analysis of simulated ammonoid septa (extinct Cephalopoda): septal and sutural complexities do not reduce strength. *Paleobiology*, **28**, 1: 113–126.
- CECCA F., WESTERMANN G.E.G., 2003 — Toward a guide to palaeobiogeographic classification. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **201**: 179–181.
- HEWITT R.A., WESTERMANN G.E.G., 2003 — Recurrences of hypotheses about ammonites and *Argonauta*. *Journal of Paleontology*, **77**, 4: 792–795.
- WESTERMANN G.E.G., 2005 — Ammonites. *In: Encyclopedia of Geology*: 396–407. Elsevier Ltd.
- RIDING J.B., WESTERMANN G.E.G., DARBYSHIRE D.P., FIONA, 2010 — New evidence for the age of the Athol Formation (Middle Jurassic; Bajocian) in the Tusk-1 and Tusk-2 wells, offshore Carnarvon Basin, Western Australia. *Alcheringa*, **34**, 1: 21–35.
- WESTERMANN G.E.G., 2010 — Comment (949) to: R.F. Chandler & J.H. Callomon (2009). *Zentralblatt für Geologie und Paläontologie*, **2**: 719–727.
- WESTERMANN G.E.G., 2012 — Lasting memories of my most spectacular field trip with Alberto. *Revue de Paléobiologie*, VS **11**: 6–7.
- SCHWEIGERT G., ZEISS A., WESTERMANN G.E.G., 2012 — The *Gravesia* homeomorphs from the latest Kimmeridgian of Mombasa, Kenya. *Revue de Paléobiologie*, VS **11**: 13–25.
- WESTERMANN G.E.G., 2013 — Hydrostatic, propulsion and life-habits of the Cretaceous ammonoid *Baculites*. *Revue de Paléobiologie*, **32**, 1: 249–265.