

## Eulogy for Dieter Meischner (21 November 1934 – 24 May 2012)

Wolfgang Franke · Gerold Wefer

Published online: 15 March 2013  
© Springer-Verlag Berlin Heidelberg 2013



Dieter Meischner was born in Braunschweig and studied geology and palaeontology at Göttingen, where he passed his examinations in record time. From 1970 to his retirement in 2000, he served as a professor and head of the sedimentary geology group in Göttingen. He was awarded the Hermann Credner Prize of the *Deutsche geologische Gesellschaft* (1969) and the Gustav Steinmann Medal of the *Geologische Vereinigung* (1996). Dieter Meischner's scientific oeuvre covers an enormous range of topics: Palaeozoic biostratigraphy, facies and tectonics, circulation and ecology of marginal seas, palaeoecology, cold-water carbonates, modern carbonate systems as sea-level gauges, carbonate diagenesis, speleology, construction of marine sampling tools and even the detailed planning of a research submarine.

For his doctoral thesis, Dieter Meischner studied the sedimentology and palaeogeography of an early Carboniferous

sequence of basinal bioclastic limestones, from which he deduced the basics of limestone turbidites. In the same profiles, he established the biostratigraphy of Viséan conodonts. Together with fourteen students, Dieter Meischner produced a new, precise geological map of the Kellerwald area in the eastern Rhenish Massif, based on numerous conodont datings of rocks devoid of macrofossils. These findings not only led to a revolution in large-scale palaeogeography, but also yielded complex tectonic profiles with duplex structures and evidence of long-distance tectonic transport—results which later proved indispensable in plate tectonic interpretations of the German Variscides.

Dieter Meischner greatly respected the work of his own supervisor, Hermann Schmidt, who had aroused his interest both in Palaeozoic facies and in marine geology. Following H. Schmidt's example, Meischner set-up a low-budget but highly efficient research programme, delving into the marine geology of the Adriatic, beginning at Rovinj. A small but devoted working group mapped the sea floor and studied benthic communities, hydrographic profiles and sediment cores, which documented—among other features—profiles of pH and Eh as the driving forces of early diagenesis. Did you know that there are Slovenian rosé wines with a pH of 2.5?

Forty years ago, research in the Yugoslavian Adriatic was an adventure that called for a lot of improvisation, in spite of Dieter Meischner's meticulous planning. Most instruments and spare parts had to be imported and crammed into minibusses, in which driver and co-pilot occupied the front seats while two others were trying to sleep on top of the load behind—a difficult task, especially with Dieter at the wheel. After passing two frontiers with lots of bureaucracy, the cargo would be set-up in some makeshift laboratory and sampling tools launched from a hired fish trawler. The remains of the night's catch in the stern net

---

W. Franke (✉) · G. Wefer  
Frankfurt, Germany  
e-mail: w.franke@em.uni-frankfurt.de

often provided lunch. Research assistants were put to hard tests, such as instructing a Yugoslavian metal worker to produce a missing nut and screw of exactly this or that dimension from a solid block of brass, or rousing a sleepy apothecary because some chemicals were needed to continue analyses in the laboratory—all in a mixture of Slovenian, Italian, German and English. Evading generous offers of Slivovitz or wine were part of the challenge during such enterprises. The crew only mutinied when Dieter proposed a 100 km hydrochemical traverse from the Yugoslavian coast to Venice in a small rubber dinghy. These campaigns, often fraught with troubles, traditionally ended in an enormous feast with local wines and seafood, where Dieter demonstrated his remarkable abilities also as a cook.

In later years, Dieter Meischner spent much time in the Bermudas, where he worked towards the construction of a sea-level curve and studied the history of sediment deposition and related diagenesis of carbonates. One of the favourite working areas of Dieter Meischner was the Harrington Sound. During a visit in 1975, we (GW) anchored with a dinghy somewhere in the middle of the sound. With a large notepad and felt-tipped pen, Dieter Meischner rapidly drew near publication-quality figures illustrating the morphology and sediment deposits in Harrington Sound while delivering a concise commentary on the sedimentary processes. Further excursions then took us into the North Shore Lagoon and to the northern and southern reefs. Dieter Meischner published several papers on depth limits of Bermudian scleractinian corals, diagenesis in coastal carbonates related to Pleistocene sea level and on species composition and distribution of sessile invertebrate communities from reefs of Bermuda.

To retrieve long cores in coarse sediments, Dieter Meischner developed innovative new pile-driving and drilling equipment. Of course, they had not been perfected yet, and one always had to be careful and maintain a safe distance, because hoses would often burst or something else would go wrong. The crowning conclusion to such an exhausting day was, of course, to cruise to a nice restaurant on the water, or we would meet at Meischner's house at the banana plantation to share the evening with Ute Meischner and the three children, Ute, Tim and Wolf.

Dieter Meischner was frequently a trailblazer in the field of new drilling techniques in the deep sea. He developed a piston corer that significantly increased penetration length compared to previous methods. GW had the opportunity to

work with the new piston corer in the Bransfield Strait in the Antarctic. Although the rig was occasionally brought back up to the ship tangled in ropes and cables, we were still able to retrieve many cores with deep penetration and undisturbed sediment sequences.

Dieter Meischner was a brilliant lecturer and teacher. His lucid presentations were based on his ability to fit bits and pieces into a coherent story, and on his splendid illustrations, whether they were with pencil and ink for a publication, or with chalk on the classroom blackboard. WF remembers very well his lectures on marginal seas as models for larger-scale marine basins, on carbonate sedimentology and chemistry, and on turbidite systems—all of them well advanced with respect to the published state of the art.

These abilities attracted many interested and active students. Dieter Meischner mentored well over 100 Diploma and 26 doctoral theses. Working with Dieter was always highly stimulating, but not always easy. There were very few colleagues with Dieter's quickness of apprehension. WF remembers presenting to him the solution to a tectonic problem he had taken months to solve during his doctoral thesis: Dieter came up with the solution before the student had the chance to finish the explanation of the issue. From his staff, students and colleagues, Dieter Meischner demanded the same zeal and ingenuity he invested himself, and often failed to realize that he was expecting too much. When confronted with Dieter's impressive abilities, less gifted colleagues sometimes took offence.

Unfortunately, many of Dieter Meischner's scientific achievements have not been appropriately published. He was a perfectionist who would rather leave a project unfinished than publish what he himself regarded as unsatisfactory. Also, his insatiable curiosity often carried him on to new problems. Unfortunately, his plans for the completion of past and ongoing projects were disrupted in 1993 when he barely survived a fall from a quarry face in the Harz Mountains. He never fully recovered from this accident.

We cherish the memory of Dieter Meischner as a distinguished research personality, characterized by high self-expectations, who delivered important impulses for continued development of his research fields. It was not always easy to work with him. These difficulties, however, were eclipsed by the creativity and enthusiasm Dieter Meischner passed on to us. He always challenged those around him.