

In Memoriam

Prof. Dr. Dr. h.c.
Gerd Alberti

* January 12th, 1943
† November 9th, 2016

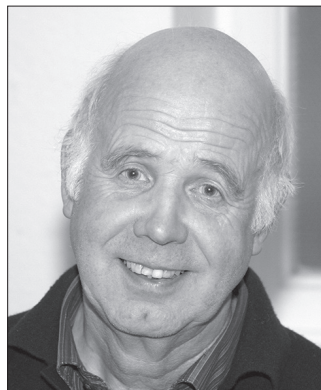


Photo: Michael Schmitt

It is with deep sadness that we report the passing of our good friend, colleague and teacher Prof. Dr. Dr. h.c. Gerd Alberti. He was a renowned zoologist and systematic biologist, who was instrumental in advancing the study and our understanding of invertebrate and soil zoology in Germany and worldwide.

Gerd Alberti was born in Wiener Neustadt, Austria, and went to school in Glücksburg and Flensburg near the Baltic Sea in the far-northern state of Schleswig-Holstein in Germany. After finishing his military service in the early 1960s, he began his biology studies at the Christian-Albrechts-University of Kiel in 1964. He completed these studies in 1972 with his dissertation on ‘Comparative Bionomic and Anatomical Studies of Snout Mites (Bdellidae)’ under the supervision of Prof. Reinhart Schuster. Afterwards, from 1972 to 1980, Gerd Alberti worked as a scientific assistant at the Zoological Institute of the University of Kiel. He completed his habilitation in 1980 with the topic ‘Ultrastructure of the Sperms of Arachnids (Arachnida) with special emphasis on mites (Acari)’, with important papers, i.e., on sperm ultrastructure and spermatogenesis of both actinotrichidid and anactinotrichidid mites; a research theme he continued throughout his career.

In 1980 Gerd Alberti moved to the Zoological Institute of the Ruprecht-Karls-University of Heidelberg in southwest Germany with the position of academic counsellor (‘Akademischer Rat’), becoming there adjunct professor in 1987 and senior academic counsellor in 1992. Besides continuing his research (see below), he taught important courses in, i.e., zoomorphology and systematics, animal histology and anatomy, and soil zoology. In 1996 he

followed the call for a full professorship for general and applied zoology at the Ernst-Moritz-Arndt-University of Greifswald, thus returning to what he called his favorite landscape of the wide, open northern German plains. In Greifswald he became the director of the Zoological Institute and Museum in 1997, a position he retained until 2006. Prof. Alberti formally retired in 2008, but continued to be an incredibly active researcher at the University of Greifswald until his premature death last month.

Prof. Alberti devoted the majority of his scientific work to ultrastructural studies of arachnids (emphasizing in particular Acari, but also of, i.e., Araneae, Opiliones, Palpigradi, Ricinulei, Scorpiones, Solifugae, and Uropygi), but also studied other invertebrate groups such as, e.g., Onychophora, Priapulida, or Polychaeta. His meticulous and detailed descriptions of the ultrastructure of a variety of organ systems and his painstaking phylogenetic comparisons were characteristic of his work. Without doubt, his knowledge of the internal and external anatomy of arachnids was outstanding. The main focus of his studies laid on the male genital tract, sperm fine morphology and spermatogenesis, where he pioneered detailed and comparative descriptions for e.g. mites, ricinuleids, and palpigrades. His enormous knowledge on and phylogenetic comparisons of the male structures as well as other organ systems within Chelicerata led him to take a clear stand for the diphyly of Acari many years ago, considering the evolution of Actinotrichida and Anactinotrichida to be independent – a hypothesis supported by recent phylogenomic analyses.

A second scientific focus of Gerd Alberti was soil zoology and the ecology of microarthropods (which he sometimes called his ‘hobby’). Here, he concentrated on relevant environmental topics such as the effects on soil-arthropod communities of long-term, geogenic heavy metal contamination, nature-protection measures of, i.e., rare sand-flora landscapes or forest conversion from pine to mixed and deciduous forests. Gerd Alberti had a very keen intuition for interesting field sites, which always led to fascinating soil-zoological studies and results.

Throughout his career, Gerd Alberti produced more than 200 original, peer-reviewed publications, 20 books and book chapters as well as numerous popular-science articles. Most notable among his several books and book

chapters are, e.g., the 1000-page two volumes on Acari in Harrison's 'Microscopic Anatomy of Invertebrates' (1999, together with L.B. Coons; which was decisive for our understanding of the anatomy and morphology of ticks and mites and today represents a standard reference), the various chapters in Jamieson's 'Progress in Male Gamete Ultrastructure and Phylogeny' of Adiyodi & Adiyodi's *Reproductive Biology of the Invertebrates* (2000), or the chapters on Chelicerata in the various editions of Westheide & Rieger's 'Spezielle Zoologie' (the last edition in 2013). For a complete list see <http://www.gerdalberti.de/publikationen.html>. Additionally, he was an active member of the editorial boards of numerous scientific journals, for instance *Acarina*, *Entomologia*, *Entomological Research*, *International Journal of Acarology*, the *Journal of Morphology*, *Redia – Journal of Zoology*, and *Soil Organisms*, among others.

Furthermore, Gerd Alberti successfully strived for intense international cooperation and the exchange of young researchers, leading to long-term scientific cooperation and personal friendships with, i.e., Prof. Romano Dallai (University of Siena, Italy), Prof. Roy Norton (University of Syracuse, USA), and in particular with Prof. Antonella di Palma (University of Foggia, Italy) and Prof. Czesław Błaszak (Adam Mickiewicz University of Poznań, Poland), to name but only a few. The cooperation (including many teaching stays of both in each other's universities) and friendship with Czesław Błaszak, which began in 1983, was intense and deeply personal, continuing for many decades until Prof. Alberti's death.

Gerd Alberti received many honors for his academic achievements, including the Alexander von Humboldt Foundation Honorary Research Fellowship of the Foundation for Polish Science (2003), honorary memberships of the International Society of Arachnology (2010), the Polish Acarological Society (2010), and the International Congress of Acarology (2014). In 2005 he became honorary member of the Accademia Italica Entomologiae in Florence (Italy). In his honorary speech he clearly synthesized and summarized his findings and ideas regarding the diphyly of Acari, focusing on the profound differences between anactinotrichid and actinotrichid mites for the first time. A highlight in the scientific career of Gerd Alberti certainly took place in May 2009, when he received an honorary doctorate from the Adam Mickiewicz University of Poznań (Poland). In his acceptance speech, he stated in his own inimitable way 'here stands before you one who prefers to sit at his electron microscope in a quiet, dark laboratory studying animals that hardly anyone knows or at best finds ugly and disgusting'. This humbleness stands in strong contrast not only to his outstanding scientific achievements

and knowledge, but also to, e.g., his excellent teaching abilities, in which he always conveyed – without trying or even thinking about it – his fascination for science in general and invertebrate zoology, morphology and evolutionary systematics in particular. His ability to communicate morphological and anatomical details in the context of evolutionary development led his students to view (soil) invertebrates as the most beautiful and fascinating animals in the world.

The species *Halolaelaps albertii* Błaszak & Ehrnsberger, 1993 (Gamasina, Acari) and *Pseudechiniscus alberti* Dastych, 1987 (Tardigrada) were named after Gerd Alberti in his honor.

Prof. Gerd Alberti was always honest and direct, critically commenting with his typical dry and very witty 'northern German' humor on societal and political developments in general and the state of academics in particular. A fan of western films, an adamant family man (he leaves behind his beloved wife Ingrid, three children as well as two grandchildren), science was otherwise his life. With his intelligence, observations and excellent personal example, he never allowed us to become lazy or inattentive in our science and stimulated us to maximum scientific and personal performance. Gerd Alberti still had many scientific goals and the world is now a lesser place without him. We will sorely miss him, but he will always strongly remain in our hearts and minds.

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