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Introduction: Proceedings of the 4th Triennial Mosasaur Meeting. Dallas, Texas, May 20-25, 2013

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Nearly 11 years has passed since the convening of the First International Mosasaur Meeting, held in Maastricht, The Netherlands, May 8-12, 2004. That conference set the standard and format for what has now become a triennial pilgrimage for researchers studying these unique marine tetrapods. It is only fitting that the first meeting was held near the site where the first mosasaur fossil discovery was made. Similarly, the Second International Mosasaur Meeting in 2007 was held at Hays, Kansas, near the North American source of many of the classic mosasaur collections held worldwide. The Third International Mosasaur Meeting took place in Paris, France, now home of the "Grand Animal de Maestricht" and many other significant mosasaur specimens from Europe, North Africa, and North America.

Although the picturesque settings, facilities, and collections of these venues contributed greatly, what truly makes these meetings such wonderful successes are the people. A gathering of specialists, a relatively small group, provides opportunities for interaction among colleagues that share both fascination and passion for the evolution, systematics, function, and ecology of mosasaurs and their role in the oceans they inhabited. Sharing and openness leads to collaboration and allows mentoring, training, and recruitment of the next generation of scientists.

Following on the success of the previous meetings and benefitting greatly from the sage advice of previous hosts, the 4th International Mosasaur Meeting was held in Dallas, Texas, at Southern Methodist University, May 20-25, 2013. Over 30 scientists from 10 countries were in attendance, with 37 talks and 5 posters presented over three days, interspersed with guest speakers and tours during lunch breaks. This was followed by two days of field trips visiting localities representing ~25 Ma record of mosasaur evolution in north Texas at the southern end of the Western Interior Seaway. The presentations published herein cover a range of topics from historical summaries (Sachs et al., this volume), to evaluation of taxonomic concepts and reports of new specimens (Schulp and Jagt, this volume; Harrell and Martin, this volume; Ikejiri and Lucas, this volume; Hornung and Reich, this volume), paleogeography (Rabinovich et al., this volume), associated fauna and faunal transition (Gallagher, this volume; Araujo et al., this volume a,b), and refined dating and inferences of paleoecology through the application of geochemistry (Strganac et al., this volume a,b; Harrell and Pérez-Huerta, this volume).

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References

Araújo, R., Polcyn, M.J., Lindgren, J., Jacobs, L.L., Schulp, A.S., Mateus, O., Gonçalves, A.O. & Morais, M.L., (this volume). New aristonectine elasmosaurid plesiosaur specimens from the Lower Maastrichtian of Angola and comments on paedomorphism in plesiosaurs. Netherlands Journal of Geosciences.

***Araújo, R.**, **Polcyn, M.J.**, **Schulp, A.S.**, **Mateus, O.**, **Jacobs, L.L.**, **Gonçalves, A.O.**, **& Morais, M.L.**, (this volume). A new elasmosaurid from the early Maastrichtian of Angola and the implications of girdle morphology on swimming style in plesiosaurs. Netherlands Journal of Geosciences.

***Gallagher, W.B.**, (this volume). Greensand Mosasaurs of New Jersey and the Cretaceous-Paleogene biotic transition of marine mertebrates. Netherlands Journal of Geosciences.

***Harrell, T.L., Jr. & Pérez-Huerta, A.**, (this volume). Habitat preference of mosasaurs indicated by rare earth element (REE) content of fossils from the Upper Cretaceous marine deposits of Alabama, New Jersey, and South Dakota (USA). Netherlands Journal of Geosciences.

***Harrell, T.L., Jr. & Martin, J.E.**, (this volume). A mosasaur from the Maastrichtian Fox Hills Formation of the northern Western Interior Seaway of the United States and the synonymy of Mosasaurus maximus with Mosasaurus hoffmanni (Reptilia: Mosasauridae). Netherlands Journal of Geosciences.

***Hornung, J.J. & Reich, M.**, (this volume). Tylosaurine mosasaurs (Squamata) from the Late Cretaceous of northern Germany. Netherlands Journal of Geosciences.

***Rabinovich, R.**, **Ginat, H.**, **Schudack, M.**, **Schudack, U.**, **Ashckenazi-Polivoda, S.**, **& Rogolsky, G.**, (this volume). A Late Cretaceous Elasmosaurid of the Tethys sea margins (Southern Negev, Israel), and its palaeogeographic reconstruction. Netherlands Journal of Geosciences.

***Sachs, S.**, **Hornung, J.J. & Reich, M.** (this volume). Mosasaurs from Germany – a brief history of the first 100 years of research. Netherlands Journal of Geosciences.

***Schulp, A.S. & Jagt, J.W.M.**, (this volume). New material of Prognathodon (Squamata, Mosasauridae) from the type Maastrichtian of the Netherlands. Netherlands Journal of Geosciences.

***Ikejiri, T. & Lucas, S.G.**, (this volume). Osteology and taxonomy of Mosasaurus conodon Cope 1881 from the Late Cretaceous of North America. Netherlands Journal of Geosciences.

***Strganac, C.**, **Jacobs, L.L.**, **Polcyn, M.J.**, **Mateus, O.**, **Myers, T.S.**, **Salminen, J.**, **May, S.R.**, **Araújo, R.**, **Ferguson, K.M.**, **Gonçalves, A.O.**, **Morais, M.L.**, **Schulp, A.S.**, **& Tavares, T. da S.**, (this volume a). Geological setting and paleoecology of the Upper Cretaceous Bench 19 marine mertebrate monebed at Bentiaba, Angola. Netherlands Journal of Geosciences.

***Strganac, C.**, **Jacobs, L.L.**, **Polcyn, M.J.**, **Ferguson, K.M.**, **Mateus, O.**, **Gonçalves, A.O.**, **Morais, M.L. & Tavares, T. da S.**, (this volume b). Stable oxygen isotope chemostratigraphy and paleotemperature regime of mosasaurs at Bentiaba, Angola. Netherlands Journal of Geosciences.

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