

NCS Subcommittee Cretaceous – Activity report 2024

Compilation: M. Dusar, secretary (21.1.2024)

Members: Johan VELLEKOOP (KULeuven/RBINS) has joined the Subcommittee.

No other changes in the subcommittee membership have occurred.

Special manifestations:

Special Issue in the Netherlands Journal of Geosciences: Jagt, John W.M., Fraaije, René H.B., Jagt-Yazykova, Elena A. & Vellekoop, Johan (eds). Aspects of Maastrichtian (Late Cretaceous) stratigraphy and palaeontology. Netherlands Journal of Geosciences, volume 103, e2.



Current research (unpublished)

Molecular structure of organic-walled dinocysts from noreholes Kallo and Nieuwkerke (S. Louwye, UGent)

Natural heritage from the Cretaceous in Riemst commune (M. Lahaye PhD in heritage studies, UAntwerpen, promoters T. De Kock & M. Dusar)

Publication list 2024 of Subcom members

Fay, Ophélie; Kroth, Mateus; Claes, Hannes; Farrant, Andrew; Vandycke, Sara; Woods, Mark, 2024. Chalk marl seams: not quite what they seem... In: 19ème Congrès Français de Sédimentologie, Lille, 27-29 novembre 2024. Association des Sédimentologues Français – ASF. <https://hdl.handle.net/20.500.12907/50156>

Fay, O., Claes, H., Gonze, N., Pigot, L., Georgieva, T., Van Malderen, E., De Oliveira-Silva, R., Sakellariou, D., Galaup, S., Ajdanlijsky, G., Kouzmanov, K., Vandycke, S., Descamps, F., & Swennen, R. (11 September 2024). Effect of water saturation on the mechanical properties of various chalks characteristic of the Northwest European geoheritage [Paper presentation]. International Geologica Belgica Meeting 2024, Liège, Belgium. <https://hdl.handle.net/20.500.12907/49658>

Fay, O., Vandycke, S., Claes, H., Swennen, R., & Descamps, F. (26 June 2024). Lithofacies and depositional settings of the Coniacian- Campanian Chalk in the Mons Basin [Paper presentation]. IAS Conference 2024, Aberdeen, United Kingdom. <https://hdl.handle.net/20.500.12907/49444>

Jagt, J.W.M.; Jagt-Yazykova, E.A., del Prado-Rebordinos & Teschner, E.N., (eds.) The 175th Anniversary of the Maastrichtian – a Celebratory Meeting, Maastricht, September 8-11, 2024 / Mosasaur Meeting. 7th Triennial Mosasaur Meeting – A global perspective on Mesozoic marine amniotes, Maastricht, September 12-15, 2024. Natuurhistorisch Museum Maastricht / Maastricht University / Centre Céramique. Abstract Volume and Programme: 214 p. (ISBN 9789464916560).

Jagt, J.W.M., Deckers, M.J.M. & Jagt-Yazykova, E.A., 2024. ‘Changing of the guard’ amongst holasteroid echinoids in the upper Maastrichtian of the south-east Netherlands: exit Echinocorys, enter Hemipneustes. *Cretaceous Research*, 158: 105850. <https://doi.org/10.1016/j.cretres.2024.105850>

Schulp, A.S., Sloopjes, D., Jagt, J.W.M., Mulder, E.W.A. & Bardet, N., 2024. A nomenclatural note on *Mosasaurus hoffmanni* (Squamata, Mosasauroida). In: Jagt, J.W.M., Fraaije, R.H.B., Jagt-Yazykova, E.A. & Vellekoop, J. (eds). *Aspects of Maastrichtian (Late Cretaceous) stratigraphy and palaeontology*. *Netherlands Journal of Geosciences*, 103: e2. <https://doi.org/10.1017/njg.2023.13>

Barten, L.P.J., Mulder, E.W.A. & Jagt, J.W.M., 2024. A plesiosaurian autopodial element (Plesiosauria indet.) with remarkable articular subchondral surfaces from the Maastrichtian type area (south-east Netherlands). In: Jagt, J.W.M., Fraaije, R.H.B., Jagt-Yazykova, E.A. & Vellekoop, J. (eds). *Aspects of Maastrichtian (Late Cretaceous) stratigraphy and palaeontology*. *Netherlands Journal of Geosciences*, 103: e8. <https://doi.org/10.1017/njg.2024.4>

Field, D.J., Benito, J., Werning, S., Chen, A., Kuo, P.-C., Crane, A., Widrig, K.E., Ksepka, D.T. & Jagt, J.W.M., 2024. Remarkable insights into modern bird origins from the Maastrichtian type area (north-east Belgium, south-east Netherlands). In: Jagt, J.W.M., Fraaije, R.H.B., Jagt-Yazykova, E.A. & Vellekoop, J. (eds). *Aspects of Maastrichtian (Late Cretaceous) palaeontology and stratigraphy*. *Netherlands Journal of Geosciences*, 103: e15. <https://doi.org/10.1017/njg.2024.11>

Jagt, J.W.M., Claessens, L.P.A.M., Fraaije, R.H.B., Jagt-Yazykova, E.A., Mulder, E.W.A., Schulp, A.S. & Wallaard, J.J.W., 2024. The Maastrichtian type area (Netherlands-Belgium): a synthesis of 250+ years of collecting and ongoing progress in Upper Cretaceous stratigraphy and palaeontology. In: Clary, R.M., E.J. Pyle & W.M. Andrews (eds). *Geology’s significant sites and their contributions*

to geoheritage. Geological Society (London), Special Publication, 543: 281-294.
<https://doi.org/10.1144/SP543-2022-232>

Mitchell, S.F., Steuber, T. & Jagt, J., 2024. Comment on Dubicka et al. (2024): Multi-proxy record of the mid-Maastrichtian event in the European Chalk Sea: paleoceanographic implications. *Gondwana Research*, 129, 1-22. *Gondwana Research*, 134: 410-412. <https://doi.org/10.1016/j.gr.2024.07.012>

Vallon, L.H., Milàn, J., Jagt, J.W.M. & Bromley, R.G., 2024. Marvellous Maastrichtian miners – bioerosional trace fossils as natural casts from the type area of the Maastrichtian Stage, the Netherlands. In: Jagt, J.W.M., Fraaije, R.H.B., Jagt-Yazykova, E.A. & Vellekoop, J. (eds). *Aspects of Maastrichtian (Late Cretaceous) stratigraphy and palaeontology*. *Netherlands Journal of Geosciences*, 103: e20. <https://doi.org/10.1017/njg.2024.19>

Huygh, J.J.C., Sinnesael, M., Kaskes, P., Vellekoop, J., Van der Geest, H., Jagt, J.W.M. & Claeys, P., 2024. Astronomical pacing of flint bands in the Maastrichtian chalk sea of north-western Europe, pp. 65-67. In: Jagt, J.W.M., E.A. Jagt-Yazykova, A. del Prado-Rebordinos & E. Teschner (eds). *Maastrichtian 175 years. The 175th Anniversary of the Maastrichtian – a Celebratory Meeting, Maastricht, September 8-11, 2024/Mosasaur Meeting. 7th Triennial Mosasaur Meeting – A global perspective on Mesozoic marine amniotes, Maastricht, September 12-15, 2024. Abstract volume and programme: 65-67*. Maastricht, Natuurhistorisch Museum Maastricht/Maastricht University/Centre Céramique. ISBN 9789464916560

Kaskes, P., Vellekoop, J., Percival, L., Jagt, J.W.M., Claeys, P. & Smit, J., 2024. A geochemical revisit of the expanded Cretaceous-Paleogene (K/Pg) boundary section in the Maastrichtian type area, pp. 87-90. In: Jagt, J.W.M., E.A. Jagt-Yazykova, A. del Prado-Rebordinos & E. Teschner (eds). *Maastrichtian 175 years. The 175th Anniversary of the Maastrichtian – a Celebratory Meeting, Maastricht, September 8-11, 2024/Mosasaur Meeting. 7th Triennial Mosasaur Meeting – A global perspective on Mesozoic marine amniotes, Maastricht, September 12-15, 2024. Abstract volume and programme: 87-90*. Maastricht, Natuurhistorisch Museum Maastricht/Maastricht University/Centre Céramique. ISBN 9789464916560

Vellekoop, J., Kaskes, P., Sinnesael, M., Jagt, J.W.M., Renkens, S., Nieuwenhuis, E. & Zijlstra, H.J.P., 2024. The Maastrichtian Geoheritage Project, a fertile cross-pollination of citizen science and academia, pp. 178-181. In: Jagt, J.W.M., E.A. Jagt-Yazykova, A. del Prado-Rebordinos & E. Teschner (eds). *Maastrichtian 175 years. The 175th Anniversary of the Maastrichtian – a Celebratory Meeting, Maastricht, September 8-11, 2024/Mosasaur Meeting. 7th Triennial Mosasaur Meeting – A global perspective on Mesozoic marine amniotes, Maastricht, September 12-15, 2024. Abstract volume and programme: 178-181*. Maastricht, Natuurhistorisch Museum Maastricht/Maastricht University/Centre Céramique. ISBN 9789464916560

Van Bakel, B.W.M., Jagt, J.W.M., Fraaije, R.H.B., Guinot, D., Artal, P. & Goolaerts, S., 2024. Binkhorstiidae, a new family of crabs (Decapoda, Brachyura, Retroplumoidea) from the Upper Cretaceous of the Netherlands and Belgium. In: Jagt, J.W.M., Fraaije, R.H.B., Jagt-Yazykova, E.A. & Vellekoop, J. (eds). *Aspects of Maastrichtian (Late Cretaceous) stratigraphy and palaeontology*. *Netherlands Journal of Geosciences*, 103: e21. <https://doi.org/10.1017/njg.2024.16>

Claeys, P.; Senel, C. B.; Kaskes, P.; Temel, O.; Vellekoop, J.; Goderis, S.; Prins, M. A.; Karatekin, O., 2024. Fine silicate dust from Chicxulub crater excavation shuts down photosynthesis for up to 2 years after the K-Pg impact. *EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024* <doi: 10.5194/egusphere-egu24-6595 >

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Lahaye, M. & De Kock, T., 2024. A historical perspective on underground limestone quarrying in Limburg, Belgium: the archives of the former Department of Mines. International Geologica Belgica Meeting 2024, Liège, Belgium: 163-164.

Walschot, L. et al.(Lahaye, M.), 2024. Lespakket Mergel (kinderen), 20 p.

Walschot, L. et al. (Lahaye, M.), 2024. Mergel lespakket voor volwassenen, 28 p.