

## A new Late Ordovician bubble-headed trilobite species from South West Wales and its implications for biostratigraphy

Manus G. Leidi, Lucy M.E. Mccobb, Patrick D. Mcdermott, and Alan W. Owen *Acta Palaeontologica Polonica* 69 (1), 2024: 57-72 doi:10.4202/app.01120.2023

A new species of bubble-headed trilobite, *Staurocephalus oliveae* sp. nov., is described from 250 specimens collected from a recently discovered locality in the Sholeshook Limestone Formation (upper Katian, Upper Ordovician; Ashgill, Cautleyan Zone 1 equivalent) in the village of Llanddowror, Carmarthenshire. Although no fully articulated specimens were found, the material is the most abundant and well-preserved of any Ordovician *Staurocephalus* species known from Britain and Ireland, and enables the complicated 3D structure of its cephalon to be reconstructed. *Staurocephalus oliveae* sp. nov. is the earliest representative of the genus recorded in Avalonia, following its presumed migration into the area from Laurentia or Baltica. Recognition of this Cautleyan species resurrects the potential usefulness of the long established, widely distributed, *Staurocephalus clavifrons* as a latest Katian (= Rawtheyan) indicator.

**Key words:** Trilobita, Phacopida, Encrinuridae, *Staurocephalus*, Late Ordovician, biostratigraphy, Wales, Great Britain.

Manus G. Leidi [LeidiM@cardiff.ac.uk; ORCID: https://orcid.org/0009-0009-8726-5784 ], School of Biosciences, Cardiff University, Cardiff CF10 3AX, Wales, UK. Lucy M.E. McCobb [lucy.mccobb@museumwales.ac.uk ; ORCID: https://orcid.org/0000-0002-8035-3337] (corresponding author), Department of Natural Sciences, Amgueddfa Cymru-National Museum Wales, Cardiff CF10 3NP, Wales, UK. Patrick D. McDermott [rock\_nibbler@outlook.com ], Flat 4, 12 Quay St., Carmarthen, SA31 3JT, Wales, UK. Alan W. Owen [alan.owen@glasgow.ac.uk ; ORCID: https://orcid.org/0000-0002-6558-5498 ], School of Geographical and Earth Sciences, University of Glasgow, Glasgow G12 8QQ, Scotland, UK. Attribution License (for details please see <u>creativecommons.org</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

