

the Association for early-career Women Archaeologists and Paleontologists

## PRESENTS



3rd Virtual Conference for Women

## Archaeologists and Paleontologists

6TH-8TH MARCH 2023, ONLINE

Abstract Book





## Preliminary palaeontological investigation based on fossil finds from Praia da Foz do Sizandro of Lusitanian Basin in Portugal

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The Lusitanian Basin is located in the western part of Portugal (mainland), which was formed during the opening of North Atlantic Ocean in the beginning of Mesozoic Era. The geological cross section of this basin is reached approximately 5-6 km thickness and consists of Upper Triassic to Lower Cretaceous sedimentary deposits. The infill sequences of sedimentary rocks in this basin were formed under several phases of the rifting processes. In the central and west parts of Lusitanian Basin (onshore) were happened an inner division into Consolação, Arruda, Bombarral, and Turcifal sub-basins during the third phase of rifting. These smaller basins were mainly filled by the Upper Jurassic - Lower Cretaceous siliciclastic depositional input. The main known palaeontological evidence of vertebrates is recorded in the Upper Jurassic sequence stratigraphy of the Consolação, Turcifal, and southern part of Bombarral sub-basins. Most likely, it was a favorable palaeoenvironment for the vertebrates here. However, a new palaeontological investigation should be done in the overlooked areas. For this study, we collected and analysed new fossil finds from Praia da Foz do Sizandro in Turcifal sub-basin. Here, the sedimentary rocks show a high taxonomic diversity of vertebrate fossils as isolated teeth of ?Pycnodus sp. and theropods as well as parts of turtle shells and appendicular material of Pleurosternidae and Plesiochelidae. The aim of this research is to improve our understanding of Late Jurassic palaeoecology and palaeoenvironment conditions based on new fossils assemblage from the aforementioned location of Portugal.

Keywords: Late Jurassic; remains; fish; dinosaurs; turtle