K / T - MACROPALEONTOLOGY

1116 - Ammonite bioevents in the Berriasian Valanginian boundary interval in Bulgaria

Ivanov Marin [1], Idakieva Vyara [1]
Sofia University "St. Kliment Ohridski" Department of Geology, Palaeontology and Fossil Fuels Sofia-Bulgaria [1]

In the last years the ammonite distribution in the Berriasian/Valanginian boundary interval in Bulgaria has been subject of new investigations and revisions. Our recent observations on continuous sediment successions in this stratigraphic interval allowed us to define bioevents of the first and last occurrence of "key" ammonite taxa. The first occurrence of *Tirnovella alpillensis, Thurmanniceras otopeta* and *Th. petransiens*, which are used to define Interval Zones and Subzones are precisely established. The first appearance of *Kilianella* spp. has been determined in the T. alpillensis Subzone, while its mass occurrence is observed in the Th. otopeta Subzone. The last occurrence of *T. alpillensis* and *Berriasella* spp. (gr. *B. calisto*) is identified in at the lower parts of the Th. otopeta Subzone. The first representatives of *Olcostephanus* have been recorded from Th. otopeta Subzone. The Berriasian/Valanginian boundary is drawn by the first occurrence of *Th. petransiens* coinciding approximately with the appearance of *Neocomites* and *Sarasinella*. In the hemipelagic and siliciclastic deposits of North Bulgaria are recognized the Berriasian Suibthurmannia boissieri Zone with T. alpillensis and Th. otopeta Subzones and the Th. petransiens Zone at the base of the Valanginian. These biostratigraphic units are precisely characterized and correlated with the Mediterranean standard zonation.

1142 - Echinoid species distribution in the Upper Cretaceous of Dobrogea SE Romania

Gallemí Jaume [1], López Gregorio [1], Martínez Ricard [2], Lazăr Iuliana [3]
Museu de Geologia-MCNB Dpt. Paleontologia Barcelona-Spain [1] Universitat Autònoma de Barcelona Dpt. Geologia (Paleontologia) Bellaterra-Spain [2] University of Bucharest Lab. of Paleontology (Dpt. of Geology) Bucharest-Romania [3]

In 1956, Chiriac studied the taxonomy and biostratigraphy of the cretaceous echinoids of southern Dobrogea (Moesian Platform) but no echinoids had been reported until now from the Cretaceous formations of northern Dobrogea (Babadag Syncline). Fieldwork (2008 to 2010) in both areas provided ammonoids and inoceramids allowing setting a biostratigraphic framework for the echinoids. Chiriac's 1956 echinoids collection (University of Bucharest and National Museum of Geology, Bucharest) was also revised.
Species identified in the Moesian Platform include: Conulus subrotundus Mantell, 1822 and Camerogalerus minimus (Desor, 1842) from the lower Middle Turonian to the Upper Turonian; Protocardiaster cotteauanus (d'Orbigny, 1855) from the lower Middle Turonian; Epiaster michelini (Agassiz, 1847) in the middle part of the Upper Turonian, and Micraster normanniae Bucaille, 1883 in the upper Middle Turonian and the uppermost Turonian.
The species recognised in the Babadag Syncline are Plesiocorys (Plesiocorys) placenta (Agassiz, 1847) in the Lower Coniacian and Rispolia subtrigonata (Catullo, 1827) from the Lower Coniacian to the uppermost Lower Coniacian. Two holasteroids (Holasteropsis?) have also appeared in the Lower Coniacian.
This is a contribution to projects "Moesian Platform" (Museu de Geologia de Barcelona-MCNB) and CGL2011-25581 (Ministerio de Ciencia e Innovación, Spain).

1238 - Preliminary ammonite zonation for the Aptian-Lower Albian of Mexico Central Atlantic Domain

Barragán Ricardo [1], Moreno-Bedmar Josep Anton [1], González-Arreola Celestina [1]
Instituto de Geología, Universidad Nacional Autónoma de México Paleontology México D.F.-Mexico [1]

Focus of this research stands out the problems of using the Mediterranean standard ammonite zonation, Tethyan Domain sensu stricto, in Lower Cretaceous rocks from Mexico. The abundance of some endemic Mexican species and genera makes the use of the Mediterranean ammonite zonation very difficult when dealing with Mexican facies. Taking this into account, a proper ammonite zonation for Mexico and the Central Atlantic Domain is under construction. This Atlantic ammonite zonation can ultimately also be applied to coeval rocks from the south of the United States, from countries in Central America, and probably from countries in the northern portion of South America as well. Several sections in northeast and central Mexico were sampled on a bed-by-bed basis. A posterior study of the ammonite stratigraphic ranges was accomplished, towards the construction of the composite biozonation. Sections studied include the Francisco Zarco Dam section in Durango State, the "La Boca" Canyon and the "La Huasteca" sections in Nuevo León State, several sections in the Lampazos area in Sonora State, the "Cerro Chino" section in Chihuahua State and the "Mina Texali" section in Puebla State. Our integrated study allowed for