



2003 Meeting Report Form

Re: UNESCO-IUGS Contract and IUGS Supplementary Contribution

Project Number and Title: IGCP 467. Triassic time and trans-Panthalassan correlations.

MEETING:

Date: 23th-28th May, 2003

Place: Vancouver, BC, Canada.

Itinerary: 3 technical sessions 26th-28th May, plus a poster session, a conodont workshop, and a business meeting.

SCOPE AND RESULTS OF MEETING:

Scope of Meeting (program or outline of geological study)

The meeting was a Special Session 18 (SS18) of the annual GAC-MAC-SEG Joint Annual Meeting. SS18 (*Extinction events, faunal turnovers and natural boundaries within and around the Late Triassic*) was co-sponsored by IGCP projects 467 and 458 (*Triassic-Jurassic boundary events*), and the Subcommittee of Triassic Stratigraphy (STS), and was organized and chaired by M.J. Orchard and C.R. McRoberts (co-leader IGCP458). The meeting comprised 15 oral and 5 poster presentations on subjects relating to Triassic biochronology, diversity and extinction analyses within the late Triassic and the Triassic/Jurassic boundary, and geological, geophysical, and geochemical events of the Late Triassic and Early Jurassic. In addition to the talks, a conodont workshop was held during the preceding days, 23th-25th May, and a business meeting was convened following the session on the 27th May.

Achievements of Meeting

The pattern of extinction in the Late Triassic and at the Triassic/Jurassic boundary was the theme considered by researchers on radiolarians (Cater and Hori), ammonoids (Krystyn), conodonts (Orchard), bivalves (McRoberts), and non-marine tetrapod (Lucas et al) faunas. The most striking example of sudden extinction at the T-J boundary came from the turnover in radiolarian faunas, but a gradual decline during the Late Triassic was noted in the other groups, notwithstanding the final extinction of conodonts at the boundary. Non-biotic boundary data was presented in talks on the timing of igneous activity and its linkage to the extinction event (Marzoli et al.; Pálffy); on carbon isotope records across the boundary in Canada (Ward, Atudorei et al.), Greenland (Mcelwain et al.), and Nevada (Taylor); and on impact ejecta from the ?Norian of England (Walkden et al). Several talks provoked considerable discussion amongst participants who were left with a better appreciation of the wealth of data that can serve as correlation tools in the boundary interval. The need to fully integrate these data will result in future collaborative research.

The conodont workshop focused on Upper Triassic conodont faunas and their taxonomy and distribution. Conodont collections from Carnian-Norian boundary beds in British Columbia and Sicily formed the basis for discussion. Key researchers came to a consensus on some crucial taxonomic, nomenclatural, and biogeographic aspects of the group, which will serve to define and/

or correlate Upper Triassic stages. The business meeting served as a forum to review the state of the Triassic time scale and potential GSSPs for all Triassic stages.

Outcome of Meeting

The meeting resulted in a renewed impetus toward multidisciplinary research in the Late Triassic and T-J boundary beds. A deeper understanding and more uniform approach to conodont identity resulted from the workshop with increased nomenclatural and taxonomic convergence between European and North American researchers. This should lead to a global biochronology that can bring much greater precision to dating and correlating Late Triassic strata.

During the business meeting, a full program of future meetings through 2007 was identified. (India, Italy, China, New Zealand, Spitzbergen, USA).

Signature of Project Leader and Date