

**PREFACE****Thematic section: Proceedings of InterRad XV****1 | INTRODUCTION**

InterRad is the International Association of Radiolarian Paleontologists. Meetings of InterRad, which include the former Eurorad, have been held every 3 years since 1970. InterRad XV was held in Niigata, Japan, from 20 October to 1 November, 2017, and was co-hosted by the International Association of Radiolarian Paleontologists, the Geological Society of Japan, the Paleontological Society of Japan, the Geological Survey of Japan, AIST (National Institute of Advanced Industrial Science and Technology), and the Society of Science on Form. The InterRad meeting returned to Japan after 23 years, since the 7th meeting was held in Osaka in October, 1994. At InterRad XV, 187 participants from 16 countries were present. During the scientific sessions (23–27 October) at Niigata University, 128 papers, including oral and poster presentations, were presented and the abstracts were printed as volume 40 of *Radiolaria*, the formal newsletter of InterRad.

The first two days (23–24 October) were devoted to special symposium consisting of five oral sessions: Paleooceanography of Tethys ad Panthalassa (chairs: S. Takahashi and P.O. Baumgartner), Cenozoic Paleooceanography in Marginal Seas (T. Itaki, Y. Okazaki, and R.W. Jordan), Biology and Paleobiology of Shelled Protista (K. Kimoto and F. Not), An Interface between Function and Evolution (Y. Tokuda and Y. Shiino), and Jurassic–Cretaceous Boundary (A. Matsuoka and G. Li). The last two days (26–27 October) were devoted to a general symposium, consisting of eight oral sessions: Insightful Studies for Radiolarians (Y. Aita and J. Gorges), Biosiliceous Records (J. Rogers and Y. Aita), Modern Oceanography (R.S. Hori and K. Kuwahara), Paleobiogeography (K. Kuwahara and R.S. Hori), Evolution and Diversity (W.H. He, W.H. and M. Chiari), Biostratigraphy (M. Chiari and W.H. He), Tibetan Tectonics (T. Danelian and H. Luo), and European Tectonics (H. Luo and T. Danelian).

Five excursions (A–E) were planned: two pre-, two mid-, and one post-conference. Although pre-conference excursion A (Boso-Bandai) was canceled, pre-conference excursion B (Inuyama), two mid-conference excursions to Itoigawa UNESCO Global Geopark (C) and the Tainai area (D), and post-conference excursion E (Okinawa) were undertaken. The excursion guides were published in a volume of *Science Reports of Niigata University (Geology)*.

The volumes on the proceedings of InterRad XV have been or will be published as special issues of *Island Arc* (this volume), *Paleontological Research*, *Bulletin of the Geological Survey of Japan* and *Revue de Micropaleontologie*.

At the business meeting on 27 October, it was decided that the InterRad XVI meeting will be held in Ljubljana, Slovenia, in September, 2020.

**2 | CONTRIBUTIONS TO THIS ISSUE**

In response to the call for submission of papers for a special issue, six articles have been contributed by the presenters of InterRad XV.

Chen et al. (2019) report the abundant Triassic radiolarian fossils from varicolored bedded cherts exposed in the Buruocang section near Jinlu village, Zedong, southern Tibet. The radiolarian-bearing rocks represent fragmented remnants of Neotethys oceanic sediments, belonging to the mélangé complex in the eastern part of the Yarlung–Tsangpo Suture Zone. The authors distinguish two middle Late Anisian radiolarian assemblages from this section, designated *Oertlispongus inaequispinosus* and *Triassocampe deweveri*, which are compared with those known from Europe, the Russian Far East, Japan, and Turkey. These new chronological data improve the time constraints on the evolution of Neotethys in southern Tibet.

Munasri and Putra (2019) report the occurrence of Middle to Late Triassic (Ladinian–Carnian) radiolarian fauna in cherts of the Situlanglang Member of the Garba Formation, South Sumatra, which is generally regarded as of Late Jurassic–Early Cretaceous age. This fauna is characterized by the presence of *Annulotriassocampe sulovensis*, *Triassocampe postdeweveri*, *Spongortilispinus tortilis*, *Poulpus piabyx*, *Canoptum levis* and others. This evidence possibly indicates that the deposition of the Situlanglang cherts took place after the collision of the Sibumasu and East Malaya blocks, as recorded by the Bentong–Raub Suture on the Malay Peninsula in late Permian–Early Triassic times.

Ito and Matsuoka (2018) investigated the lithology and radiolarian ages of the Ryogami-yama Chert, in the Southern Chichibu terrane, eastern Mt. Ryokami, Kanto Mountains, Japan. The Ryokami-yama Thrust has been considered an out-of-sequence thrust and might represent a former décollement zone in the formation's Permian pelagic sequences. The basal part of the Ryokami-yama Chert Formation consists of pale-green basaltic tuff breccia and overlying red-ocher thick-bedded chert, yielding radiolarians of the *Pseudoalbaillella lomentaria* Range-Zone of the Sakmarian (Cisuralian: lower Permian). The following hypothesis is proposed: the basaltic rock underlying the Sakmarian chert acted as a décollement zone in the Permian pelagic sequences of some geologic units of the mid-Mesozoic accretionary complexes.

Ito et al. (2018) discuss and describe the dimorphism of the Permian albaillellarian radiolarians, *Albaillella sinuata* Ishiga and Watase, from a red chert bed of the Waji section of Ie Island, Okinawa Prefecture, Japan. Some taxa of the order Albaillellaria (radiolaria) are dimorphic, with both normal and swollen types. The observational and biometric results indicate that the swollen-type *A. sinuata* is characterized by a swollen apical portion and a shorter overall height compared

with the normal-type *A. sinuata*. However, there is no clear difference in the width of the basal part of the shell between the normal and swollen types. This dimorphism involving normal and swollen types is recognized within several lineages of the Albaillellaria, with previous reports of occurrence of the swollen type in the Permian.

Tekin et al. (2019) investigated the biostratigraphy of the radiolarians, benthic foraminifers, and conodonts in the pelagic Permian blocks/tectonic slices and the geochemistry of the associated volcanic rocks in the Mersin Mélange, southern Turkey. They also discuss the development of the Northern Neotethys. The basal part of the Permian sequence, composed of alternating chert and mudstone with basic volcanics, is assigned to the late Asselian (early Permian). The next basaltic interval in the sequence is dated to the Kungurian. The highly alkaline basic volcanics in the sequence are extremely enriched. Trace-element systematics suggest that these lavas were generated in a continental margin from a metasomatized subcontinental lithospheric mantle source. The middle part of the Permian sequences includes detrital limestones with chert interlayers and neptunian dykes of middle Wordian to earliest Wuchiapingian age. Higher in the sequence, detrital limestones are overlain by alternating chert and mudstone, with intermittent microbrecciated beds of early Wuchiapingian to middle Changhsingian (late Permian) age. All these findings indicate that a continental rift system associated with a possible mantle plume existed during the late early to late Permian.

Li et al. (2019) investigated the radiolarian-based ocean plate stratigraphy of the mélange and reconstructed the subduction-accretion process in the western sector of the Yarlung Tsangpo Suture Zone, southern Tibet. The reconstructed ocean plate stratigraphy includes Lower Jurassic limestone within the chert sequence that accumulated at depth near the CCD, Upper Jurassic thin-bedded chert interbedded with claystone deposited in the wide ocean basin, and Lower Cretaceous chert with siliceous mudstone, representing the middle parts of the ocean plate stratigraphy. These results highlight the fabric of brecciated chert on the mesoscopic scale, which is thought to be attributable to localized overpressure. The formation of mesoscopic and microscopic block-in-matrix fabrics in the mélange is proposed for the chert and siliceous mudstone, with different degrees of consolidation and competence during the progressive deformation of accreted sediments during shallow-level subduction.

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