August 3rd (Thursday)			
OTEMACHI SANKEI PLAZA Building close to the Otemachi Station			
18:00-20:00	3		

August 4th (Friday)					
	ITO HALL Ito International Research Center				
9:00–9:45	Opening ceremony				
9:45–10:30	Plenary session 1				
10:30–10:45	break EVENT SPACE & GALLERY 1				
	Ito International Research Center				
10.45-11:45	Poster session core time 1				
11:45-13:00	lunch break				
	ITO HALL Ito International Research	SEMINAR ROOM Ito International Research	AUDITORIUM Faculty of Science 2nd	MUSE HALL University Museum	
13:00–14:30	S01 Early life, Cambrian explosion, and later macroevolutionary events	S02 Fossil record of mammals and their allies	S04 Big Data of Palaeontology and Stratigraphy	S06 Molecular palaeobiology and molecular evolution	
14:30-15:00	break				
15:00–16:00	S01 Early life, Cambrian explosion, and later macroevolutionary events	S03 Mesozoic terrestrial ecosystem	S05 Cenozoic floristic evolution in Asia	S07 Geochemical proxies discovering palaeoecology, palaeoenvironment, and their interactions	
16:00-16:30					
16:30–17:30	S01 Early life, Cambrian explosion, and later macroevolutionary events	S03 Mesozoic terrestrial ecosystem	S05 Cenozoic floristic evolution in Asia	S08 Foraminiferal biology and paleontology for understanding life, environmental histories and	

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August 5th (Saturday)					
	ITO HALL				
		Ito International	Research Center		
9:00-10:30	Plenary session 2				
10:30-10:45	break				
	EVENT SPACE & GALLERY 1 Ito International Research Center				
10.45–11:45	Poster session core time 2				
11:45-13:00	lunch break				
	ITO HALL Ito International Research	SEMINAR ROOM Ito International Research	AUDITORIUM Faculty of Science 2nd	MUSE HALL University Museum	
13:00–14:30	S01 Early life, Cambrian explosion, and later macroevolutionary events	S02 Fossil record of mammals and their allies	S11 Mesozoic terrestrial biota in the realm of Angiosperm diversification	S12 Analytical approaches for evolutionary morphology	
14:30-15:00					
15:00–16:00	S09 Evolution of reptiles including birds	S10 Palaeozoic macroevolutionary events (IGCP653 Joint session)	S05 Cenozoic floristic evolution in Asia	S13 Linkage of Cretaceous solid earth dynamics, greenhouse climate, and response of ecosystems on land and in the oceans in Asia (IGCP679 Joint Session)	
16:00-16:30		break			
16:30–17:30	S09 Evolution of reptiles including birds	S10 Palaeozoic macroevolutionary events (IGCP653 Joint session)	S05 Cenozoic floristic evolution in Asia	S13 Linkage of Cretaceous solid earth dynamics, greenhouse climate, and response of ecosystems on land and in the oceans in Asia (IGCP679 Joint Session)	

August 6th (Sunday)					
	ZOOM Online				
9:00–9:45	Plenary session 3				
9:45–10:30	Online oral session				
10.30–11:30					
11:30–12:30	lunch break				
	AUDITORIUM Faculty of Science 2nd Building	MUSE HALL University Museum			
12:30-14:00	S14 Diversification and evolution of vascular plants	S15 Diversity of non-tetrapod vertebrates			
14:00-14:30	break				
14:30-15:30	S14 Diversification and evolution of vascular plants	S22 Open session			
15:30-16:00	break				
16:00-17:00	S22 Open session	S22 Open session			
OTEMACHI SANKEI PLAZA					
	Building close to the Otemachi Station				
18:00-20:00	Banquet				

August 7th (Monday)							
	TO HALL						
	Ito International Research Center						
9:00-10:30	Plenary session 4						
10:30-10:45		break					
	EVENT SPACE & GALLERY 1 Ito International Research Center						
10.45-11:45	Poster session core time 3						
11:45-13:00	lunch break						
	ITO HALL Ito International Research	SEMINAR ROOM Ito International Research	AUDITORIUM Faculty of Science 2nd	MUSE HALL University Museum			
13:00–14:30		S18 Tomographic techniques and computer-aided visualization in palaeontology	S19 Diversity change and evolutionary history of radiolarians	S20 Mesozoic and Paleozoic Oceanic Anoxic Events			
14:30-15:00		bro	eak				
15:00–16:00	S17 Triassic-Jurassic transition and biota	S22 Open session	S19 Diversity change and evolutionary history of radiolarians	S21 Secular fluctuations in microbialite development throughout Earth's history			
16:00-16:30			eak				
	ITO HALL Ito International Research Center						
16:30–17:00	General assembly						
17:00–17:15	Closing ceremony						

DETAILED PROGRAM

CEREMONIES AND PLENARY SESSIONS

August 4th (Friday)

Opening ceremony 9:00–9:45 **ITO HALL**Plenary session 1 9:45–10:30 **ITO HALL**

Chair: Makoto Manabe

[K-1] 9:45-10:30 Major events of human evolution from early primates—Implications of the Asian fossil evidence

Xijun NI

August 5th (Saturday)

Plenary session 2 9:00–10:30 ITO HALL

Chair: Tatsuo Oji

[K-2] 9:00–9:45 Early life and the Cambrian Explosion

Maoyan ZHU

[K-3] 9:45–10:30 Paleozoic paleobiogeography of the Korean Peninsula: Research history

Dong-Chan LEE

August 6th (Sunday)

Plenary session 3 9:00–9:45 **ZOOM**

Chair: Tamaki Sato

[K-4] 9:00-9:45 Functional adaptations during marine colonization and oceanic dispersal by

Mesozoic marine reptiles

Ryosuke MOTANI

August 7th (Monday)

Plenary session 4 9:00–10:30 **ITO HALL**

Chair: Robert Jenkins

[K-5] 9:00-9:45 Time machine biology: Paleobiology, biodiversity, and climate change

Moriaki YASUHARA

[K-6] 9:45–10:30 Phylogeography of sand dollars from Taiwan

Jih-Pai LIN

Closing ceremony 16:30–17:15 ITO HALL

ONLINE SESSIONS

Online oral session

August 6th (Sunday) 9:45-10:30

ZOOM

Chair: Takao Ubukata

[VO-1] 9:45-10:00 Understanding Chilika Lagoon's paleoenvironmental reconstruction using benthic foraminiferal records

Anupam GHOSH, Utsha DASGUPTA, Ritsuo NOMURA, Akira TSUJIMOTO and Pratul Kumar SARASWATI

[VO-2] 10:00–10:15 Geometric morphometrics sheds new light on the past and present diversity of the genus *Odobenus* (Carnivora: Pinnipedia)

Mathieu BOISVILLE, Narimane CHATAR and Naoki KOHNO

[VO-3] 10:15–10:30 New fossils remain of Rhinocerotidae from the early Late Miocene Tebingan site, Myanmar: the oldest fossil record of the genus Rhinoceros in Southeast Asia Morgane LONGUET, Zin-Maung-Maung-ThEIN, Thaung-HTIKE, Man-Thit-NYEIN and Masanaru TAKAI

Online poster session (core time)

August 6th (Sunday) 10:30-11:30

ZOOM (breakout room)

- [VP-1] Holocene pollen record in the Yellow River subaqueous delta: Controls from transport regimes Weifen HU, Shihao LIU and Shenliang CHEN
- [VP-2] Analyzing shell (test) thickness in Foraminifera (*Nonionella* sp.) using 3D X-ray microscopy: A comparative study between arctic and tropical latitudes Rohan SUBBA and Anupam GHOSH
- [VP-3] Triassic times and the early radiation of 'flying' fishes (Neopterygii, †Thoracopteroidea) Chenchen SHEN and Gloria ARRATIA

ORAL SESSIONS (ON-SITE)

S01 Early life, Cambrian explosion, and later macroevolutionary events

August 4th (Friday) 13:00–17:30 & 5th (Saturday) 13:00–14:30 ITO HALL

Conveners: Huaqiao ZHANG

August 4th 13:00-14:30 Chair: Fangchen ZHAO

- [S01-1] 13:00–13:15 Stromatolites in Nepal Himalaya: Present status and research gaps Kabi Raj PAUDYAL, Ram Bahadur SAH and Michał KROBICKI
- [S01-2] 13:15–13:30 Tonian carbonaceous compressions from North China shed new light on *Horodyskia*, one of the oldest macrofossils
 - Ke PANG, Guangjin LI, Lei CHEN, Qing TANG, Chengxi WU, Xunlai YUAN, Chuanming ZHOU and Shuhai XIAO
- [S01-3] 13:30–13:45 The Ediacaran rangeomorph fossil Charnia from the Shibantan biota in the Yangtze Gorges area of South China
 - Chengxi WU, Ke PANG, Zhe CHEN, Xiaopeng WANG, Chuanming ZHOU, Bin WAN, Xunlai YUAN and Shuhai XIAO
- [S01-4] 13:45–14:00 A new enigmatic bifurcating radial fossil from the Shibantan Member, Dengying Formation, South China
 - Yarong LIU, Zhe CHEN, Chengxi WU, Xiaopeng WANG, Ke PANG and Xunlai YUAN
- [S01-5] 14:00–14:15 In pursuit of metazoan evolution in the late Ediacaran and early Cambrian in Mongolia: A summary of more than ten-years survey in western Monglia Tatsuo OJI
- [S01-6] 14:15–14:30 Affinity of the Cambrian Fortunian microfossil *Saccorhytus* Huaqiao ZHANG and Yunhuan LIU

August 4th 15:00–16:00 Chair: Huaqiao ZHANG

- [S01-7] 15:00 15:15 The anatomy and phylogenetic affinity of a tubicolous enigma from the early Cambrian Chengjiang biota
 - Haijing SUN, Fangchen ZHAO and Maoyan ZHU withdraw
- [S01-8] 15:15–15:30 Thecate medusozoans (Cnidaria) from the early Cambrian Chengjiang biota Hanzhi QU, Kexin LI and Qiang OU
- [S01-9] 15:30–15:45 Fossils from the early Cambrian Chengjiang fauna: Implications for the origin of arthropods
 - Han ZENG, Fangchen ZHAO, Diying HUANG and Maoyan ZHU
- [S01-10] 15:45–16:00 The Marjum Burgess-Shale biota: A mid-Cambrian fossilized Eden in the desert of Utah, USA

Rudy LEROSEY-AUBRIL, Robert COLEMAN, Lucas Del MOURO, Robert R. GAINES, Luke A. PARRY, Jacob SKABELUND and Javier ORTEGA-HERNÁNDEZ

August 4th 16:30–17:30 Chair: Stephen PATES

- [S01-11] 16:30–16:45 Cambrian Burgess Shale-type Lagerstatten in South China Fangchen ZHAO
- [S01-12] 16:45–17:00 Implications of *Isoxys* from the Chengjiang biota on the early euarthropod evolution
 - Caixia ZHANG, Yu LIU, Javier ORTEGA-HERNÁNDEZ, Joanna M. WOLFE, Changfei JIN, Huijuan MAI, Xianguang HOU, Jin GUO and Dayou ZHAI
- [S01-13] 17:00–17:15 Miaolingian–Furongian reef complexes and pelmatozoan thickets from the Alborz Mountains, Iran
 - J. Javier ALVARO, Aram BAYET-GOLL and Mehdi DARAEI
- [S01-14] 17:15–17:30 Analysis of fossil arthropod shells of the upper Cambrian Alum Shale Ayari YANAGIHARA and Gengo TANAKA

August 5th 13:00-14:30 Chair: Ke PANG

- [S01-15] 13:00–13:15 The Cambrian origin of chelicerates—Insights from external and internal anatomy
 - Javier ORTEGA-HERNÁNDEZ and Rudy LEROSEY-AUBRIL
- [S01-16] 13:15–13:30 Rapid growth in a large Cambrian apex predator Stephen PATES, Yu WU, Daniel PAULY, Dongjing FU and Xingliang ZHANG
- [S01-17] 13:30 13:45 The middle Cambrian Lagerstatte from the North China Craton: A new window on Cambrian evolutionary fauna
 - Zhixin SUN, Han ZENG and Fangehen ZHAO withdraw
- [S01-18] 13:45–14:00 Early annelids from the Cambrian Burgess Shale—New discoveries and prospects
 - Hatena OSAWA and Jean-Bernard CARON
- [S01-19] 14:00–14:15 New observations on the morphologies and stratigraphical extension of the Cambrian bivalved euarthropod genus *Pectocaris*
 - Changfei JIN, Huijuan MAI, Chen HONG, Yu LIU, Xianfeng YANG and Dayou ZHAI
- [S01-20] 14:15–14:30 A 'Fantastic Voyage' through Cambrian Organ Systems: A three-dimensional perspective on the evolution of the arthropod body plan
 - Emma Jayne LONG, Martin R. SMITH, Alavya DHUNGANA, Katherine J. DOBSON, Yang JIE and Xi-Guang ZHANG

S02 Fossil record of mammals and their allies

August 4th (Friday) 13:00–14:30 & 5th (Saturday) 13:00–14:30

SEMINAR ROOM

Conveners: Yuri KIMURA and Tao DENG

August 4th 13:00–14:30 Chair: Tao DENG

[S02-1] 13:00–13:15 The holes in the moles: The first record of a Neogene mole (Talpidae, Mammalia) from Japan

Yuri KIMURA, Olivier MARIDET, Takahisa GODA and Yusuke ANDO

[S02-2] 13:15–13:30 Middle Pleistocene rodents from Jiaji locality, Yunnan, southwestern China, and their indicative significance for paleoenvironment

Hao GONG, Feng GAO, Qiang LI and Xijun NI

[S02-3] 13:30–13:45 New discoveries from the museum's classic fossil collections Kumiko MATSUI, Ana M. VALENZUEL-TORO and Nicholas D. PYENSON

[S02-4] 13:45–14:00 High Diversity of Oligocene *Ruminantia* (Mammalia: Artiodactyla) in Saint Jacques, Inner Mongolia, China

Bian WANG, Qian WANG and Zhaoqun ZHANG

[S02-5] 14:00–14:15 *Karakoromys* (Ctenodactylidae, Rodentia) from the Ulantatal sequence (Nei Mongol, China): biostratigraphical distribution, diversity and their response to the Eocene-Oligocene transition

Zhaoqun ZHANG and Rancheng XU

[S02-6] 14:15 14:30 Using multiple methods to explore the morphological characteristics, feeding behavior, and migration of individuals with ICD practice in Northeast Asia

Qiyu YIN, Qiang LI, Hucai ZHANG, Ning MA, Wei ZHANG and Xijun NI withdraw

August 5th 13:00-14:30 Chair: Yuri KIMURA

[S02-7] 13:00–13:15 Phylogeny of giant rhinos and their dispersal across Tibet Tao DENG, Xiaokang LU, Shiqi WANG, Lawrence J. FLYNN and Danhui SUN

[S02-8] 13:15–13:30 A new elasmothere genus and species from the Middle Miocene of Tongxin, Ningxia, China, and its phylogenetic relationship

Danhui SUN and Tao DENG

[S02-9] 13:30 13:45 Lufengpithecus inner ear shed lights on the locomotor and auditory evolution of apes

Yinan ZHANG, Xijun NI, Qiang LI, Thomas STIDHAM, Dan LU and Terry HARRISON withdraw

[S02-10] 13:45–14:00 Intra-ecoregional variations and covariations of limb morphology in the raccoon dog, *Nyctereutes procyonoides* (Mammalia, Carnivora), inform approaches to historical ecomorphology and ecometrics

Susumu TOMIYA, Morgane C. LONGUET and Julie A. MEACHEN

[S02-11] 14:00–14:15 New data on the Eocene-Oligocene cricetid rodents of Central and Eastern Europe: Towards a new scenario of the "Grande Coupure" for all mammals in Europe Olivier MARIDET, Jérémy TISSIER, Damien BECKER and Vlad CODREA

[S02-12] 14:15–14:30 Growth and trends in the dentitions of *Stegodon* from insular Southeast Asia Meyrick TABLIZO, Gerrit van den BERGH and Allan Gil FERNANDO

S03 Mesozoic terrestrial ecosystem

August 4th (Friday) 15:00–17:30

SEMINAR ROOM

Conveners: Bo WANG

15:00-16:00 Chair: Bo WANG

[S03-1] 15:00–15:15 New cockroach assemblage from the Lower Cretaceous Kitadani Formation, Fukui, Japan

Nozomu OYAMA, Hirokazu YUKAWA and Takuya IMAI

[S03-2] 15:15–15:30 Coleoptera from the Jinju Formation: Insect fauna and paleodiversity of Korea during the Early Cretaceous

Soo Bin LEE, Yan-Da LI, Chenyang CAI, Michael S. ENGEL, Gi Soo NAM and Jong kyun PARK

[S03-3] 15:30–15:45 Exceptional preservation of reproductive organs and giant sperm in Cretaceous ostracods

He WANG, Renate MATZKE-KARASZ and David J. HORNE

[S03-4] 15:45–16:00 Aetosaurs from the Upper Triassic of India revealing new insights on their diversity, biostratigraphy and palaeobiogeography

Atrayee HALDAR, Sanghamitra RAY and Saswati BANDYOPADHYAY

16:30-17:30 Chair: Bo WANG

[S03-5] 16:30–16:45 New Polyphaga beetles from the Cretaceous amber of special significance to paleoecology

Tong BAO

[S03-6] 16:45–17:00 Host switch of nematodes from Cretaceous to Cenozoic Cihang LUO

[S03-7] 17:00–17:15 Divergent orbital forcing in Early Jurassic climate and carbon cycle revealed by the high-latitude continental Junggar Basin

Yanan FANG, Paul OLSEN, Jingeng SHA and Bo WANG

[S03-8] 17:15–17:30 Journey to the West (during the Early Cretaceous): From Jehol to Araripe, with a stop at Las Hoyas

Hugo MARTÍN-ABAD, Jesús MARUGÁN-LOBÓN, Romain VULLO, Candela BLANCO-MORENO, Ismar de Souza CARVALHO, Zhonghe ZHOU and Ángela D. BUSCALIONI

S04 Big data of palaeontology and stratigraphy

August 4th (Friday) 13:00–14:30 AUDITORIUM

Conveners: Honghe XU and Bing HUANG

Chair: Honghe XU and Bing HUANG

[S04-1] 13:00–13:15 Macroevolution of the robustness of paleobiogeographical networks during Phanerozoic

Minghao DU and Wenhui WANG

[S04-2] 13:15–13:30 How to further improve Ordovician chitinozoan research Yan LIANGA, Olle HINTSB, Jaak NÕLVAKB and Peng TANGA

[S04-3] 13:30–13:45 Quantitative paleogeographical reconstructions and basin evolution of South China during the Ordovician

Linna ZHANG, Junxuan FAN, Bo WANG, Yuandong ZHANG, Jianbo LIU, Hao HUANG and Qing CHEN

[S04-4] 13:45–14:00 Biodiversity of Early to Middle Triassic ammonoids from China Cheng JI and Xiu-hua CHEN

[S04-5] 14:00–14:15 Macroevolutionary patterns of persistent diversity imbalance across vertebrates

Isaac TRINDADE-SANTOS, Michael ALFARO, Jonathan CHANG and Lauren SALLAN

[S04-6] 14:15–14:30 Identifying ostracods automatically with deep learning Jiamian HU, Yuanyuan HONG, Yihua CHEN and Moriaki YASUHARA

S05 Cenozoic floristic evolution in Asia

August 4th (Friday) 15:00–17:30 & 5th (Saturday) 15:00–17:30 AUDITORIUM

Conveners: Atsushi YABE and Tao SU

August 4th 15:00–16:00 Chair: Tao SU

[S05-1] 15:00–15:15 Paleovegetation and chronological significance of Early Pleistocene flora from Honbetsu Town, eastern Hokkaido, Japan.

Atsufumi NARITA, Yasuyuki OPPATA, Takafumi EN'YA and Koh KUBOMI

[S05-2] 15:15-15:30 A new flora from Henan Province indicates humid past in the Eocene of Central China

Hui JIA, Cheng QUAN, Ping LIU, Junjie WANG and Mingyue LUO

[S05-3] 15:30–15:45 Glacial expansion of cold-tolerant species in low latitudes: Megafossil evidence and species distribution modelling

- Luliang HUANG, Shufeng LI, Weiye HUANG, Helanlin XIANG, Jianhua JIN and Alexei A. OSKOLSKI
- [S05-4] 15:45–16:00 First reliable Miocene fossil winged fruits record of *Engelhardia* in Asia through anatomical investigation
 - Hanzhang SONG, Luliang HUANG, Helanlin XIANG, Cheng QUAN and Jianhua JIN

August 4th 16:30-17:30 Chair: Atsushi YABE

- [S05-5] 16:30–16:45 Paleopolyploidy promoted ancient adaptation of Tibetan sclerophyllous oaks to aridity triggered by the rise of the Himalaya
 - Jin-Jin HU, Wen-Guang SUN, Jia LIU, Robert A. SPICER, Zhuo ZHOU, Yong-Jiang HUANG, Yao-Wu XING, Zhi-Min LI, Tao SU, Ting-Shen HAN, He TANG, Lin-Bo JIA, Yun-Heng JI, Hang SUN and Zhe-Kun ZHOU
- [S05-6] 16:45–17:00 Late Oligocene fruiting catkins of *Alnus* from Guangxi, South China: The lowest latitudinal distributed fossil record
 - Xiaoyan LIU, Steven R. MANCHESTER, Cheng QUAN and Jianhua JIN
- [S05-7] 17:00–17:15 Monsoonal climate of East Asia in the Eocene indicated by vegetation dynamics
 - Qijia LI, Torsten UTESCHER, Yusheng (Christopher) LIU, David FERGUSON, Hui JIA and Cheng QUAN
- [S05-8] 17:15–17:30 Differential appearance of evergreen broadleaved forests in East Asia evidenced by plant fossils
 - Jiagang ZHAO, Shufeng LI, Jian HUANG, Mengxiao WU, Tao SU, Yaowu XING and Zhekun ZHOU

August 5th 15:00-16:00 Chair: Atsushi YABE

- [S05-9] 15:00–15:15 Insect folivory in the Miocene of the Qaidam Basin Cui WANG, Qijia LI, Hui JIA and Cheng QUAN
- [S05-10] 15:15–15:30 The oldest fossil record of *Bauhinia* (Leguminosae) from the Tibetan Plateau sheds light on its evolutionary and biogeographic implications
 - Yi GAO, Ai SONG, Wei-Yu-Dong DENG, Lin-Lin CHEN, Jia LIU, Wei-Cheng LI, Gaurav SRIVASTAVA, Robert A. SPICER, Zhe-Kun ZHOU and Tao SU
- [S05-11] 15:30–15:45 The evolutionary history of plant diversity in central Tibetan Plateau from the Eocene to the Miocene and its environmental driving factors
 - Xinwen ZHANG, Tao SU, Zhekun ZHOU, Jia LIU, Shufeng LI and Jian HUANG
- [S05-12] 15:45–16:00 The modernization of plant diversity in southwestern China Tao SU, Jian HUANG, Jia LIU, Shu-Feng LI, Meng-Xiao WU, Robert A. SPICER and Zhe-Kun

August 5th 16:30-17:30 Chair: Tao SU

- [S05-13] 16:30–16:45 Infructescence of *Banisteriaecarpum giganteum* from the lower Miocene Nakamura Formation in Gifu Prefecture, central Japan
 - Megumi NISHINO, Kazuhiko UEMURA and Toshihiro YAMADA
- [S05-14] 16:45–17:00 First fossil fruit of *Palaeophytocrene* (Icacinaceae) in East Asia and its phytogeographical implication
 - Xinkai WU, Steven MANCHESTER, Yan WU, Tatiana KODROL and Jianhua JIN
- [S05-15] 17:00–17:15 Fossil Leaves: Morphotype diversity in the Miocene of Thailand Lalana LAPYEN, Wassana RATTANAAURAI, Bouziane KHALLOUFI and Pasakorn BUNCHALEE
- [S05-16] 17:15–17:30 Late Miocene vegetation and climate of northern Vietnam Hung Ba NGUYEN, Jian HUANG, Truong Van DO, Hoa Mai Thi NGUYEN, Shu-Feng LI, Zhe-Kun ZHOU and Tao SU

S06 Molecular palaeobiology and molecular evolution

August 4th (Friday) 13:00–14:30

MUSE HALL

Conveners: Kazuyoshi ENDO and Yanhong PAN

Chair: Kazuyoshi ENDO and Yanhong PAN

- [S06-1] 13:00–13:15 Insect evolution: Integrating phylogenomic and fossil data Chenyang CAI, Erik TIHELKA, Diying HUANG, Davide PISANI and Philip C. J. DONOGHUE
- [S06-2] 13:15–13:30 Bio-molecular analyses enable new insights into the taphonomy of feathers Yanhong PAN and Tao ZHAO
- [S06-3] 13:30–13:45 A diagenetic framework for understanding the persistence of proteins in the fossil record
 - Raman UMAMAHESWARAN, Suryendu DUTTA, Guntupalli. V. R. PRASAD, Mahasin Ali KHAN, Sumit KUMAR and Hukam SINGH
- [S06-4] 13:45-14:00 Calibration of the tardigrade tree of life using redescribed Cretaceous fossils Marc A. MAPALO, Joanna M. WOLFE and Javier ORTEGA-HERNÁNDEZ
- [S06-5] 14:00–14:15 A rich dental proteome from cf. *Plesiohipparion* from the Pliocene (3.9Ma) Beaver Pond site from Canada's High Arctic
 - Ryan PATERSON, Meaghan MACKIE, Andreas Christian STRANGE, Ioannis PATRAMANIS, Johanna KRUEGER, Esther LIZANO, Tomas MARQUÈS-BONET, Natalia RYBCZYNSKI, Ross MACPHEE and Enrico CAPPELLINI

[S06-6] 14:15–14:30 Roles of the signaling factor Wnt in the shell growth mechanisms in living gastropods

Shigeaki OHTA, Koji NOSHITA, Katsunori KIMOTO, Keisuke SHIMIZU, Akito ISHIKAWA and Kazuyoshi ENDO

S07 Geochemical proxies discovering palaeoecology, palaeoenvironment, and their interactions

August 4th (Friday) 15:00-16:00

MUSE HALL

Conveners: Kazuyoshi MORIYA, Kotaro SHIRAI and Wei WANG

Chair: Kazuyoshi MORIYA

[S07-1] 15:00–15:15 Sr isotope records in columnals of a modern stalked crinoid *Metacrinus* rotundus

Moe KATO and Keita ITANO

[S07-2] 15:15–15:30 The necessity of oxygen in the evolution of the terminal Ediacaran biota, South Shina

Qian XIAO and Zhenbing SHE

[S07-3] 15:30–15:45 CCD evolution since the Miocene: Evidence from nannofossils assemblage and element geochemistry in the south part of Central Indian Ocean Basin

Zhenyou LIU, Chendong GE, Xuefa SHI, Xinqing ZOU and Mu HUANG

[S07-4] 15:45–16:00 Anomalous positive peak of europium in skeletal specimens recovered from a Late Triassic monotaxic phytosaur bonebed of India.

Aishee SANYAL and Sanghamitra RAY

S08 Foraminiferal biology and paleontology for understanding life, environmental histories and biostratigraphy

August 4th (Friday) 16:30–17:30 MUSE HALL

Conveners: Takashi TOYOFUKU, Hiroki HAYASHI, Hiroki MATSUI and Haruka TAKAGI

Chair: Takashi TOYOFUKU

[S08-1] 16:30–16:45 Carboniferous-Permian fusulines from Xinjiang, NW China Xing HUANG, Yichun ZHANG and Yue WANG

[S08-2] 16:45–17:00 The origin of primitive archaediscacean foraminifers and the development of their wall structure

Qingyi SHENG

[S08-3] 17:00–17:15 Oligocene planktic foraminifera assemblage at DSDP Site 317 on the Manihiki Plateau in the South Pacific: Comparison with the equatorial Pacific Hiroki MATSUI, Mizuki ISHIKAWA, Akira YAMAZAKI and Takuya SAGAWA

[S08-4] 17:15–17:30 Vertical distribution of planktonic foraminiferal communities and its controlling environmental factors in the eastern South Pacific

Yusei MIYAMOTO1 and Haruka TAKAGI1

S09 Evolution of reptiles including birds

August 5th (Saturday) P.M. 15:00-17:30

ITO HALL

Conveners: Soki HATTORI

15:00–16:30 Chair: Soki HATTORI

[S09-1] 15:00–15:15 New fossil birds in Taiwan reveal novel Pleistocene migratory avifauna in East Asia

Siao-Man WU, Junya WATANABE, Trevor H. WORTHY and Chien-Hsiang LIN

[S09-2] 15:15–15:30 Lindholmemydid turtles (Order Testudines: Family Lindholmemydidae; Superfamily Testtudinoidea) from the Late Cretaceous Tamagawa Formation of Iwate Prefecture, Japan

Ren HIRAYAMA, Tai KUBO, Mugino O. KUBO and Toshio TAKISAWA

[S09-3] 15:30–15:45 The impact of skull table sutures on pseudosuchian cranial reorganization Hiu Wai LEE, Zachary S. MORRIS and Arkhat ABZHANOV

[S09-4] 15:45–16:00 New insights into the homology of the soft tissues in the pelvic region of Archosauria

Hirochika UEDA and Takanobu TSUIHIJI

16:30-17:30 Chair: Hirochika UEDA

[S09-5] 16:30–16:45 The evolutionary process of the avian wing musculoskeletal structure based on postures preserved in fossils

Yurika UNO and Tatsuya HIRASAWA

[S09-6] 16:45–17:00 A change in occupancy—Ecological implications of shifts in skull shape and dentition in flying Mesozoic reptilians

Gauweiler JOSHUA, Marie K. HÖRNIG, Steffen HARZSCH and Joachim T. HAUG

[S09-7] 17:00–17:15 Evolution of *Megaraptora* (Dinosauria: Theropoda) in Asia Adun SAMATHIA, Suravech SUTEETHORN and Varavudh SUTEETHORN

[S09-8] 17:15–17:30 Dinosaurs in Nong Bua Lumphu Provine, Thailand Tanachot BOONJARERN, Adun SAMATHIA, Suravech SUTEETHORN, Krishna SUTCHA and Varavudh SUTEETHORN

S10 Palaeozoic macroevolutionary events (IGCP653 Joint session)

August 5th (Saturday) P.M. 15:00-17:30

SEMINAR ROOM

Conveners: Renbin ZHAN, Yuandong ZHANG, Dong-chan LEE and Yukio ISOZAKI 15:00–16:00 Chair: Yukio ISOZAKI

- [S10-1] 15:00–15:15 New data on the conodont biostratigraphy and correlation of the transitional Cambrian-Ordovician sedimentary succession in the Guizhou Province, South China Hadi JAHANGIR-OGHLI and Renbin ZHAN
- [S10-2] 15:15–15:30 Ordovician integrative stratigraphy, biotas and palaeogeographical evolution of the Qinghai-Tibet Plateau and its surrounding regions Xiang FANG, Yong Yi ZHEN, Guangxu WANG, Xin WEI, Zhongyang CHEN, Yan LIANG, Xuejin WU, Wenjie LI, Chao LI, Renbin ZHAN and Yuandong ZHANG
- [S10-3] 15:30 15:45 Stylophorans (echinoderms) from the Ordovician of the Baltie:

 Paleobiogeographical significance and analysis of axial symmetry

 Sergey V. ROZHNOV withdraw
- [S10-4] 15:45–16:00 Anji Biota, a Konservat-Lagerstatte after the end-Ordovician Mass Extinction from South China Zhang YUANDONG, Joseph P. BOTTING, Lucy A. MUIR, Ma JUNYE, Zhang JUNPENG, Wu XUEJIN and Wang HAN

16:30-17:30 Chair: Renbin ZHAN

- [S10-5] 16:30–16:45 Basin history and associated macroevolutionary events during the Ordovician-Silurian transition in the Northwestern Domain of Peninsular Malaysia Muhammad Aqqid SAPARIN, Mohd Suhaili ISMAIL and Khairul Azlan MUSTAPHA
- [S10-6] 16:45–17:00 Characters of Changhsingian deep-water faunas in South China and implication for the Permian-Triassic mass extinction Weihong HE, Kexin ZHANG, G. R. SHI, Yifan XIAO, Han WANG, Elizabeth A. WELDON, Tinglu YANG, Songzhu GU, Xingfang PENG, Xionghua ZHANG and Noritoshi SUZUKI
- [S10-7] 17:00–17:15 Two pulses of increasing terrestrial input to marine environment during the Permian-Triassic transition

 Yafei HUANG, Weihong HE, Wei LIAO, Yonghiao WANG, Zhixing YI, Hao YANG and
 - Yafei HUANG, Weihong HE, Wei LIAO, Yongbiao WANG, Zhixing YI, Hao YANG and Guoshan LI
- [S10-8] 17:15–17:30 Comparative study of the Paleozoic extinctions in view of non-bolide extraterrestrial cause Yukio ISOZAKI

S11 Mesozoic terrestrial biota in the realm of Angiosperm diversification
August 5th (Saturday) 13:00–14:30

AUDITORIUM

Conveners: Harufumi NISHIDA and Ge SUN

Chair: Ge SUN

[S11-1] 13:00–13:15 Late Cretaceous Gymnosperm diversity in Hokkaido, Japan: A possible new order based on a permineralized fructification exhibiting new type of seed enclosure and pollentube fertilization

Harufumi NISHIDA, Aya KUBOTA, Yusuke TAKEDA and Yasuhiro IBA

[S11-2] 13:15–13:30 Diverse sap beetles (Coleoptera: Nitidulidae) in mid-Cretaceous amber from northern Myanmar

Qian ZHAO, Diying HUANG and Chenyang CAI

[S11-3] 13:30–13:45 Late Cretaceous palynofloral provinces of China Yixiao WU and Jianguo LI

[S11-4] 13:45–14:00 Turonian to Santonian paleovegetation changes reconstructed from palynological records of the Haborogawa Formation, Yezo Group, Hokkaido, Japan Maho HAYAKAWA, Masashi A. IKEDA, Hideto NAKAMURA, Ken SAWADA, Reishi TAKASHIMA and Hiroshi NISHI

[S11-5] 14:00–14:15 Reconstruction of the Early Cretaceous terrestrial paleoenvironment by biomarker analysis of the fluvial sediments of the Kitadani Dinosaur Quarry, Central Japan Hiroki YANO, Hideto NAKAMURA, Hirokazu YUKAWA and Takuto ANDO

[S11-6] 14:15–14:30 New elements on the Cretaceous evolution and diversification of angiosperms in eastern Asia from their pollen record in the Yezo Group, Hokkaido Julien LEGRAND, Miyu BABA, Toshihiro YAMADA, Masayuki IKEDA, Tomohiro NISHIMURA and Harufumi NISHIDA

S12 Analytical approaches for evolutionary morphology

August 5th (Saturday) 13:00–14:30 MUSE HALL

Conveners: Takao UBUKATA

Chair: Takao UBUKATA

[S12-1] 13:00–13:15 Analysis of wing shape evolution in Neuroptera using theoretical morphospace method

Yuming LIU, William DEAKIN, Emily RAYFIELD and Philip DONOGHUE

[S12-2] 13:15–13:30 Planar graph representations of fifty-nine specimens of radiolarian genus Pantanellium

Takashi YOSHINO, Atsushi MATSUOKA, Katsuroni KIMOTO and Naoko KISHIMOTO

[S12-3] 13:30–13:45 The numbers behind claws—Comparing claws in bilaterian animals using the mathematics behind the logarithmic spiral

Pia ALTHOFF and Joachim T. HAUG

[S12-4] 13:45–14:00 Functional forelimb morphology of medium-sized carnivores in Japan, including an extinct badger, *Meles leucurus kuzuuensis*

Emma DANGERFIELD and Yuri KIMURA

[S12-5] 14:00–14:15 Gastropods did not follow Thorson's rule during the Permian-Triassic global warming

Li TIAN, Xin SUN, Haijun SONG, Jacopo Dal CORSO and Jinnan TONG

[S12-6] 14:15–14:30 Hydrodynamic control on trilobite head shapes Stephen PATES and Harriet B. DRAGE

S13 Linkage of Cretaceous solid earth dynamics, greenhouse climate, and response of ecosystems on land and in the oceans in Asia (IGCP679 Joint Session)

August 5th (Saturday) 15:00–17:30

MUSE HALL

Conveners: Takashi HASEGAWA and Gang LI

15:00-16:00 Chair: Takashi HASEGAWA

[S13-1] 15:00–15:15 Cretaceous in Asia: Palaeontology, stratigraphy and palaeoclimate—Progress of IGCP 679

Gang LI, Eduardo A. M. KOUTSOUKOS, Takashi HASEGAWA, Dae Kyo CHEONG and Vandana PRASAD

[S13-2] 15:15–15:30 Radiolarian-bearing clasts within the Jurassic–Cretaceous neritic–terrestrial strata in East Asia: Observation on etched surfaces for linking land and ocean Tsuyoshi ITO

[S13-3] 15:30–15:45 Evidence of enhanced continental weathering during oceanic anoxic event 2 (OAE2) and mid-Cenomanian event (MCE) in the eastern Asian continental margin Arisa NAKANO1, Yuko KAMIGATA, Ryota HIGUCHI, Haruka TAKAGI and Tohru OHTA

[S13-4] 15:45–16:00 Biostratigraphy and palaeogeography of the non-marine ostracod fauna from the Xiagou Formation, northwest China Yaqiong WANG

16:30-17:30 Chair: Gang LI

[S13-5] 16:30–16:45 Application of paleomagnetic methods in constraining solid Earth dynamics and environmental characteristics during the Cretaceous Period Yong ZHANG, Diying HUANG and Wei LI

[S13-6] 16:45–17:00 The discovery of clam shrimp (Spinicaudata) from the upper part of Hekou Group of Lanzhou, Northwest China: Implications for taxonomy and stratigraphy Yan XUE, Gang LI and Xiao TENG

- [S13-7] 17:00–17:15 Introduction of a robust chemical weathering index for sediments containing authigenic and biogenic materials and its application to Cretaceous strata distributed in SE Asia Tenichi CHO, Tohru OHTA and Gang LI
- [S13-8] 17:15-17:30 Terrestrial and marine molecular fossil fingerprints of the Yezo Group record the Late Cretaceous paleoenvironmental evolution in the NW Pacific Margin Hideto NAKAMURA, Takuto ANDO, Masashi A. IKEDA, Ken SAWADA, Reishi TAKASHIMA and Hiroshi NISHI

S14 Diversification and evolution of vascular plants

August 6th (Sunday) 12:30–15:30 AUDITORIUM

Conveners: Toshihiro YAMADA and Jinzhuang XUE

12:30-14:00 Chair: Toshihiro YAMADA

- [S14-1] 12:30–12:45 The microfossils of early terrestrial flora: New evidence from China Kai WANG, Hong-He XU, Bing-Cai LIU and Yi WANG
- [S14-2] 12:45–13:00 Whole plant reconstruction of the earliest Permian marattialean fern *Scolecopteris libera* from China
 - Dandan LI, Jason HILTON, Wenjun SUN, Weiming ZHOU, Mingli WAN, Jiří BEK, Josef PŠENIČKA and Jun WANG
- [S14-3] 13:00–13:15 *In situ* preservation enhances systematic study: a case in research of the Wuda Tuff Flora, Inner Mongolia
 - Jun WANG, Mingli WAN, Weiming ZHO and Dandan LI
- [S14-4] 13:15–13:30 Hidden diversity of rhyniopsids from the Lower Devonian of South China Block

Pu HUANG

- [S14-5] 13:30–13:45 Coevolution of seed size in Juglandaceae and body size of its dispersers Jie ZHU, Qiuyue ZHANG and Yaowu XING
- [S14-6] 13:45–14:00 Frenguellia (Lycopsida) from the uppermost Devonian of West Junggar, Xinjiang Uygur Autonomous Region, NW China, and its implications on protolepidodendralean leaf morphology and paleophytogeography
 - Bing-Cai LIU, Kai WANG, Rui-Wen ZONG, Jiao BAI, Ning YANG, Yi WANG and Hong-He XU

14:30–15:30 Chair: Jinzhuang XUE

[S14-7] 14:30–14:45 Evolution of subterranean organs in lycophytes based on *Lycopodium clavatum* root characters

Yuki ITO, Rieko FUJINAMI, Ryoko IMAICHI and Toshihiro YAMADA

- [S14-8] 14:45–15:00 Stipule of Marattiaceae is homologous to aphlebia of Psaroniaceae Weiming ZHOU and Jun WANG
- [S14-9] 15:00–15:15 A Kasimovian (late Carboniferous) permineralized plant assemblage from the Yangquan City, North China, with reference to its palaeoecological and evolutionary significance Mingli WAN, Keyu WANG, Wan YANG, Xing HUANG, Qiulai WANG and Jun WANG
- [S14-10] 15:15–15:30 The evolution of phylogenetic community structure of the northern temperate flora

Qiuyue ZHANG, Nicolas SALAMIN, Daniele SILVESTRO and Yaowu XING

S15 Diversity of non-tetrapod vertebrates

August 6th (Sunday) 12:30–14:00 MUSE HALL

Conveners: Shinya MIYATA and Yoshitaka YABUMOTO

Chair: Shinya MIYATA

[S15-1] 12:30–12:45 Evolutionary flexibility and constraint of fish otoliths: a case in Sciaenidae (croakers)

Siao-Man WU, Hao-Chun HSU and Chien-Hsiang LIN

[S15-2] 12:45–13:00 Exploring the potential fish fossils in Taiwan to uncover the biodiversity and evolutionary history of the Indo-West Pacific region

Chien-Hsiang LIN

[S15-3] 13:00–13:15 † *Tribodus limae* Brito and Ferreira, 1989 from the Lower Cretaceous (Santana Formation, Araripe Basin, Brazil) revisited

Paulo M. BRITO and Yoshitaka YABUMOTO

[S15-4] 13:15–13:30 Diversity of otodontid sharks in the Coniacian–Santonian (Late Cretaceous) northwestern Pacific Ocean

Taichi KATO, Yasuhisa NAKAJIMA, Yuri KIMURA and Hisao ANDO

- [S15-5] 13:30–13:45 Cenozoic ray-finned fishes of Thailand: Overview and new findings Bouziane KHALLOUFI, Uthumporn DEESRI, Lalana LAPYEN, Wassana RATTANAAURAI and Pasakorn BUNCHALEE
- [S15-6] 13:45–14:00 Pleistocene Ayu sweetfish (Teleostei: Osmeriformes) from the Masuda Formation of Tanegashima Island, Japan

Mori CHIDA and Yoshitaka YABUMOTO

S16 Secondary aquatic adaptation of tetrapods

August 7th (Monday) 13:00–14:30 ITO HALL

Conveners: Yasuhisa NAKAJIMA and Jun LIU

Chair: Yasuhisa NAKAJIMA

[S16-1] 13:00–13:15 It's all in your head: A taphonomic investigation into Toarcian teleosauroids (Crocodylomorpha: Thalattosuchia) from the Posidonienschiefer Formation, Germany

Michela M. JOHNSONA, Eudald MUJALA, Samuel L. A. COOPERA and Erin E. MAXWELL

[S16-2] 13:15–13:30 Unique morphology and functional significance of spinous processes in the fossil porpoise from the Miocene-early Pliocene Koetoi Formation, Hokkaido, Japan.

Naoki MORITA, Mizuki MURAKAMI and Yasuhisa NAKAJIMA

[S16-3] 13:30–13:45 Long bone cross-sectional geometry and compactness give new insights on the life traits of *Colossosuchus techniensis* (Phytosauria, Mystriosuchinae)

Pratyusha SARKAR and Sanghamitra RAY

[S16-4] 13:45–14:00 The origins and early evolution of Sauropterygia Andrzej S. WOLNIEWICZ, Yuefeng SHEN, Qiang LI, Yuanyuan SUN, Yu QIAO, Yajie CHEN, Yiwei HU and Jun LIU

[S16-5] 14:00–14:15 A new tanystropheid (Diapsida: Archosauromorpha) from the Middle Triassic of SW China and the biogeographic origin of Tanystropheidae Jun LIU and Yu-Ting LU

[S16-6] 14:15–14:30 A new specimen of stem odontocete dolphin from the Oligocene of Japan and its implications for the evolution of hearing ability Zixuan GUO, Tomoyuki OHASHI and Naoki KOHNO

S17 Triassic-Jurassic transition and biota

August 7th (Monday) 15:00–16:00

ITO HALL

Conveners: Yongdong WANG, Benjamin BREEDEN and Cheng QUAN

Chair: Yongdong WANG

[S17-1] 15:00–15:15 An ecological study on the Middle-Late Jurassic water boatman *Karataviella popovi*

Diying HUANG, Yanzhe FU and Chenyang CAI

[S17-2] 15:15–15:30 An Early Jurassic stem turtle from Japan provides the earliest evidence of marine adaptations in a testudinate

Benjamin T. BREEDEN III1, Makoto MANABE, Kentaro IZUMI, Fumio TAKAHASHI, Yoshikazu HASEGAWA, Randall B. IRMIS and Chisako SAKATA

[S17-3] 15:30–15:45 First corystosperm wood record in Laurasia Zikun JIANG, Ning TIAN, Yongdong WANG, Fangyu LI, Junling PEI, Dieter UHL, Marion BAMFORD, Paul GROTE, Ning LU, Yanbin ZHU, Ya LI, Yong CAO, Hao WU, Zhenguo NING, Jie QIN and Quanguo LI

[S17-4] 15:45-16:00 Oscillations of a fluvial-lacustrine system from NE Sichuan Basin and its ecological response prior to the end-Triassic

Ning LU, Yongdong WANG, Yuanyuan XU, Liqin LI, Xiaoping XIE, Mihai Emilian POPA, Hongyu CHEN, Micha RUHL and Wolfram Michael KÜRSCHNER

S18 Tomographic techniques and computer-aided visualization in palaeontology

August 7th (Monday) 13:00–14:30 SEMINAR ROOM

Conveners: Soichiro KAWABE, Takuya IMAI and Yu LIU

Chair: Soichiro KAWABE

[S18-1] 13:00–13:15 Applications of synchrotron radiation to non-invasive, micro-scale observation of macro-fossil inner structures: Case studies at spring-8

Takuya IMAI, Soki HATTORI, Masato HOSHINO and Kentaro UESUGI

[S18-2] 13:15–13:30 Three-dimensional reconstruction of the in situ mode of life of embedded Cambrian coralla using grinding tomography

Mei KISHIDA, Yusuke TAKEDA, Yoichi EZAKI, Natsuko ADACHI, Jianbo LIU and Yasuhiro IBA

[S18-3] 13:30–13:45 Comparative anatomy of the trigeminal nerve pathway in the skull of cryptodiran turtles revealed by non-destructive soft-tissue imaging techniques Noriyuki WAKIMIZU and Takanobu TSUIHIJI

[S18-4] 13:45–14:00 Virtual palaeontology in ancient seas Michel SCHMIDT

[S18-5] 14:00–14:15 Virtual palaeontology—a new world of studying Cambrian (Series 2, Stage 3) arthropods

Maotian LI, Yu LIU, Xianguang HOU, Huijuan MAI and Daiyou ZHAI

[S18-6] 14:15–14:30 Morphological variation in different distributions of neurovascular canals in the upper jaws of ceratopsian dinosaurs: toward estimation of the distribution of the keratinous beak

Kodai SAKANE, He YIMING, Kyo TANOUE, Yuji TAKAKUWA and Soichiro KAWABE

S19 Diversity change and evolutionary history of radiolarians

August 7th (Monday) 13:00–16:00 AUDITORIUM

Conveners: Noritoshi SUZUKI, Lanlan ZHANG and Xin LI

13:00–14:30 Chair: Noritoshi SUZUKI and Xin LI

[S19-1] 13:00–13:15 High-resolution biostratigraphy and composite timelines from late Permian deep-water environments, South China: Quantitative stratigraphic approach

Han WANG, Noritoshi SUZUKI and Weihong HE

[S19-2] 13:15–13:30 Depositional conditions of siliceous microfossil-rich shale during the Ordovician–Silurian transition of South China: Implication for organic matter enrichment

Ruining HU, Wenhui WANG and Jingqiang TAN

[S19-3] 13:30–13:45 Evolution and paleoecology of the radiolarian family Follicucullidae Yifan XIAO, Noritoshi SUZUKI, Weihong HE and Tinglu YANG

[S19-4] 13:45–14:00 Biodiversity of radiolarians in surface sediments of the East Indian Ocean and their implication for water masses

Lanlan ZHANG, Zhuoya QIU, Xiawen CHENG and Rong XIANG

[S19-5] 14:00–14:15 New progress on the radiolarian study from west Yarlung Zangbo Suture Zone of Tibet

Hui LUO, Xiaohui CUI, Xin LI and Jonathan C. AITCHISON

[S19-6] 14:15–14:30 Classification and evolution of the Late Paleozoic radiolarian *Albaillella* Kaiyue WANG, Yifan XIAO, Noritoshi SUZUKI, Weihong HE and Li TIAN

15:00-16:00 Chair: Xin LI and Lanlan ZHANG

[S19-7] 15:00–15:15 Latest Darriwilian radiolarians of the Wulalike Formation from the northwestern Ordos Basin, North China

Xuejin WU, Zhengliang HUANG, Hui LUO, Zhenghong CAI, Yaoxuan GUO, Yang LIU, Yujing WANG and Yuandong ZHANG

[S19-8] 15:15–15:30 Review and prospects of Paleozoic radiolarians study Chao GUO and Yi-Ming GONG

[S19-9] 15:30–15:45 Upper Jurassic–Lower Cretaceous radiolarian assemblages from Shiquanhe ophiolite, NW Tibet: implications for the Meso-Tethys Ocean evolution Xiaohui CUI, Xin LI and Hui LUO

[S19-10] 15:45–16:00 Application of radiolarian biostratigraphy along the Yarlung–Tsangpo suture zone

Xin LI, Atsushi MATSUOKA, Marco CHIARI, Angela BERTINELLI and Noritoshi SUZUKI

S20 Mesozoic and Paleozoic Oceanic Anoxic Events

August 7th (Monday) 13:00–14:30 MUSE HALL

Conveners: Reishi TAKASHIMA and Hiroshi NISHI

Chair: Reishi TAKASHIMA and Hiroshi NISHI

[S20-1] 13:00–13:15 The ETE of the Junggar Basin, NW China: Sudden temperature drop is the executioner of terrestrial biota

Jingeng SHA

[S20-2] 13:15–13:30 The marine biotic and environmental recovery from the end-Permian Mass Extioncion: Stratigraphic record of the Hiraiso and Osawa formations, Northeast Japan Yuichi ENDO and Yasunari SHIGETA

- [S20-3] 13:30–13:45 Paleoceanographic importance of long chain alkenones through the early phase of Cretaceous Oceanic Anoxic Event 2 from the southern high latitude of the proto-Indian Ocean Takashi HASEGAWA and Akiko. S. GOTO
- [S20-4] 13:45–14:00 The Intensive Ocean Anoxia during the Carnian Pluvial Episode in South China
 - Shixin LI, Tingshan ZHANG, Zhiheng MA, Jianli ZENG, Xi ZHANG and Wei YANG
- [S20-5] 14:00–14:15 Terrestrial plant fossils in deep-sea chert during the OAE 1a: Implications for enhanced hydrological cycle
 - Yuki NAKAGAWA, Julien LEGRAND, Maximilien BÔLE, Rie S. HORI, Junichiro KURODA, Hitoshi HASEGAWA and Masayuki IKEDA
- [S20-6] 14:15–14:30 A dynamic oceanic anoxic event during the Carnian Humid Episode Yadong SUN

S21 Secular fluctuations in microbialite development throughout Earth's history

August 7th (Monday) 15:00–16:00 MUSE HALL

Conveners: Yoichi EZAKI and Jianbo LIU

Chair: Yoichi EZAKI and Jianbo LIU

- [S21-1] 15:00–15:15 Stromatoporoid survivors formed the Akiyoshi reefs on a Panthalassan seamount in the early late Carboniferous (Bashkirian)
 - Yoichi EZAKI, Mitsuru MASUI, Koichi NAGAI, Gregory E. WEBB, Koki SHIMIZU, Shota SUGAMA, Natsuko ADACHI and Tetsuo SUGIYAMA
- [S21-2] 15:15–15:30 Unlocking the mystery of Renalcis with Electron Backscatter Diffraction Maria Simonet RODA and Jeong-Hyun LEE
- [S21-3] 15:30–15:45 Middle Holocene reefal microbialites from Okinawa Island, the Ryukyu Archipelago

Kazuhiko FUJITA

[S21-4] 15:45-16:00 Control factors and environmental significance of rare Earth elements in ancient microbialites

Jianbo LIU and Yuxuan CHEN

S22 Open session

August 6th (Sunday) 16:00–17:00

AUDITORIUM

Chair: Mori Chida

[S22-1] 16:00–16:15 Fossil schizothoracines from the Oligocene of northwestern Qaidam Basin and their implications

Tao YANG, Feixiang WU and Defei YAN

[S22-2] 16:15–16:30 The Cenozoic fish fauna of the rising Qinghai-Tibetan Plateau Feixiang WU, Dekui HE, Mee-mann ChANG, Gengyu FANG and Tao YANG

[S22-3] 16:30–16:45 Taphonomic process of whale bone from Miocene Kinkomanai Formation from Hokkaido, Japan with special interests on microbial activities and chemical reaction during early diagenesis

Yuma MIYAKE and Robert G. JENKINS

[S22-4] 16:45–17:00 Proposal of new genicular joint angle criteria for flexor muscle (musculus semimembranosus) during the walking terrestrial mammals

Fumihiro MIZUNO and Naoki KOHNO

August 6th (Sunday) 14:30–17:00 MUSE HALL

14:45-15:30 Chair: Moriaki Yasuhara

[S22-5] 14:30–14:45 Ecology in deep time: How morphology can elucidate predatory and predatoravoiding specialisations of extinct insects

Christine KIESMÜLLER, Joachim T. HAUG and Marie K. HÖRNIG

[S22-6] 14:45–15:00 Fossilization process of deep-sea animal assemblage from the Yamami Formation of the Morozaki Group

Haruka KATADA, Hidekazu YOSHIDA and Tatsuo OJI

[S22-7] 15:00–15:15 Polychaetes communities in/on a whale carcass two years after deployment on shallow-sea floor at the Tsukumo Bay, Noto Peninsula, Japan Sea

Mayu YAMAMOTO and Robert G. JENKINS

[S22-8] 15:15–15:30 Two undescribed species of the genus Aurila and Callistocythere from the Kaigarabashi Formation, Imagane Town, Hokkaido, Japan Kazumasa MUKAI and Gengo TANAKA

16:00-17:00 Chair: Tsuyoshi Ito

[S22-9] 16:00–16:15 Latitudinal biodiversity gradients in a greenhouse world: Were Eocene tropics too hot to support high biodiversity? A test using shallow-marine ostracods

Jingwen ZHANG and Moriaki YASUHARA

[S22-10] 16:15–16:30 Conodont biostratigraphy of two deepwater sections in South China and the tempo of the Talung Formation

Fen YANG, Yadong SUN, Lin LUO and Jingwen E

[S22-11] 16:30–16:45 Early Devonian conodonts from the Junggar–Tianshan, Xinjiang of NW China

Jiayi YIN, Ruiwen ZONG and Yiming GONG

[S22-12] 16:45-17:00 The first discovery of Lochkovian (Lower Devonian) conodonts in central

Guangxi, South China and its geological implications Jian-Feng LU, Wen GUO, Yi WANG and Hong-He XU

August 7th (Monday) 15:00–16:00

SEMINAR ROOM

Chair: Yuta Shiino

- [S22-13] 15:00–15:15 Shells for understanding Hong Kong subtidal ecosystem history: A conservation baseline
 - Pedro J. JIMENEZ, Yuanyuan HONG, Wai C. CHU, Jason K. C. YAU, Nicole KHAN, David M. BAKER, Kenneth M. Y. LEUNG, Yusuke YOKOYAMA and Moriaki YASUHARA
- [S22-14] 15:15–15:30 Taxonomy and paleoecology of *Nipponitrigonia* from the mid-Cretaceous Goshoura Group, Kyushu, Japan.
 - Koki YOSHINAGA, Koji HIROSE and Haruyoshi MAEDA
- [S22-15] 15:30–15:45 Palaeobiogeographical/palaeoclimatical distribution of Permian and Jurassic Eurasian gigantic bivalves from Thailand and Nepal perspective respectively Michał KROBICKI and Mongkol UDCHACHON
- [S22-16] 15:45–16:00 Novel nanoscale taxonomic traits provided by organic fossils: Reclassification in the Cretaceous bivalve Trigonioidoidea (Palaeoheterodonta) Taro YOSHIMURA, Kentaro NAKAYAMA, Kaito ASATO, Yoshikazu NODA and Takenori SASAKI

POSTER SESSIONS (ON-SITE) CORE TIME

Poster session core time 1

August 4th (Friday) 10:45-11:45

EVENT SPACE & GALLERY 1

- P01 Early life, Cambrian explosion, and later macroevolutionary events
- [P01-1] Unveiling the nature of post-early Cambrian archaeocyaths Jeong-Hyun LEE
- [P01-2] Tube-building behaviour in the early Paleozoic: Ecological links between the Ediacaran-Cambrian-Ordovician
 - Karma NANGLU and Javier ORTEGA-HERNÁNDEZ
- [P01-3] Recovery of new fossil remains of bovids from the Siwaliks of Pakistan
 Riffat YASIN, Rana Mehroz FAZAL, Anila Bakhtawar SEEMAB, Farhat IQBAL, Itrat AYISHA
 and Mannal MARYAM
- [P01-4] A short-lived oxidation event during the early Ediacaran and delayed oxygenation of the Proterozoic ocean
 - Bo CHEN, Chunlin HU, Benjamin J.W. MILLS, Tianchen HE, Morten B. ANDERSEN, Xi CHEN, Pengju LIU, Miao LU, Robert J. NEWTON, Simon W. POULTON, Graham A. SHIELDS and Maoyan ZHU
- [P01-5] Two euarthropods with 'great appendage'-like frontal-most appendages from the Chengjiang biota
 - Robert O'FLYNN and Yu LIU
- [P01-6] The Marjum Konservat-Lagerstatte (Utah, USA): A mid-Cambrian poriferan diversity hotspot Lucas Del MOURO, Rudy LEROSEY-AUBRIL, Joseph BOTTING, Robert COLEMAN, Robert R. GAINES, Jacob SKABELUND and Javier ORTEGA-HERNÁNDEZ
- [P01-7] Reavaluating the earliest putative jellyfish community from middle Cambrian of Utah Luke A. PARRY, Rudy LEROSEY-AUBRIL, Robert COLEMAN, Lucas Del MOURO, Robert R. GAINES, Jacob SKABELUND, James C. WEAVER and Javier ORTEGA-HERNANDEZ
- [P01-8] A bivalved arthropod from the Lower Ordovician Fezouata Shale—The post-Cambrian survival and gigantism of isoxyids
 - Saraku YOSHINO and Tatsuo OJI
- P02 Fossil record of mammals and their allies
- [P02-1] Rhinocerotoid fossils of the Linxia Basin in northwestern China as late Cenozoic biostratigraphic markers
 - Tao DENG, Xiaokang LU, Danhui SUN and Shijie LI
- [P02-2] New dental remains of *Anisodon salinus* from the Potwar Plateau, Pakistan Muhammad Akbar KHAN, Ari GROSSMAN and Sayyed Ghyour ABBAS

[P02-3] Bovids from Tatrot Formation (Upper Siwalik) of Pakistan Kiran AFTAB, Muhammad Akbar KHAN and Anam ZAHID

[P02-4] A report of a new specimen of *Allodesmus sinanoensis* (Mammalia: Carnivora) from the Bessho Formation (Miocene) of Nagano Prefecture, Japan

Hiroki ISHIKAWA, Takanobu TSUIHIJI and Yoshikazu HASEGAWA

[P02-5] A re-examination of morphological characterization of molar teeth in Japanese dormice (Mammals: Gliridae: *Glirulus japonicus*)

Tomohiko HORI

[P02-6] The Paleogene mammals of the Pongsan Coalfield of North Korea revisited Takehisa TSUBAMOTO and Yukimitsu TOMIDA

[P02-7] A new fossil physeterid (Cetacea: Odontoceti) from the Middle Miocene of the western North Pacific

Ayako KAWATANI and Naoki KOHNO

[P02-8] A review of late Cenozoic fossil Rhinocerotidae from Japan Naoto HANDA

[P02-9] Finding one of the oldest Abudhabia (Muridae, Rodentia) from the Nakali Formation, nothern Kenya

Yoshiki TANABE, Masato NAKATSUKASA, Yutaka KUNIMATSU and Hideo NAKAYA

[P02-10] New specimen of paleoparadoxiid (Mammalia, Desmostylia) from the Shukunohora Formation of the Mizunami Group in Kamado-cho, Mizunami City, Gifu, Japan Hiromichi KITAGAWA, Yusuke ANDO, Toshiaki IRIZUKI, Tatsuya KAEDE, Takahisa GODA and Naoki KOHNO

[P02-11] The morphology and phylogenetic position of *Stegolophodon* (Proboscidea) based on reexamination of syntypes and new materials from the Miocene in Japan

Katsunori IIZUMI, Hisao ANDO, Kunihiro SUZUKI, Yoshiki KODA and Yuri KIMURA

[P02-12] New fossil remains of Rhinoceroses (Perissodactyla: Mammalia) from the Siwaliks of Pakistan

Khizar SAMIULLAH, Kiran NAJIMA, Shehnaz AKHTAR and Fouzia QASIM

P03 Mesozoic terrestrial ecosystem

[P03-1] Freshwater gastropods from the Cretaceous/Paleocene boundary in the Songliao Basin, NE China: biostratigraphy and calibration to the geomagnetic polarity time scale Tingting YU, Sha LI, Rodrigo B. SALVADOR, Dangpeng XI, Haichun ZHANG and Xiaoqiao WAN

[P03-2] Calibrating the early Jehol Biota in Luanping, Northeastern China Daran ZHENG

[P03-3] Bite marks on Hyperodapedon (Archosauromorpha, Rhynchosauria) and their probable

producers: Late Triassic predator-prey interaction from India

Urmi CHAKRABORTY, Debarati MUKHERJEE and Sanghamitra RAY

[P03-4] Ecology and complexity of the Las Hoyas Cretaceous wetland

Jesus MARUGÁN-LOBÓN, C. BLANCO-MORENO, H. MARTÍN-ABAD and A. D. BUSCALIONI

[P03-5] Taphonomy of *Fukuititan nipponensis* from the Lower Cretaceous Kitadani Formation, Katsuyama, Fukui, central Japan

Takuya IMAI, David J. VARRICCHIO, Masateru SHIBATA, Toru SEKIYA and Hiroshi NISHI

[P03-6] Evolutionary radiation of Neuroptera in the late Mesozoic of China

Chaofan SHI, Qiang YANG and Dong REN withdraw

[P03-7] New dinosaur tracksite from the Upper Cretaceous Djadokhta Formation, central Gobi Desert, Mongolia.

Buuvei MAINBAYAR, Shinobu ISHIGAKI, Khishigjav TSOGTBAATAR and Mototaka SANEYOSHI

[P03-8] Dental microwear texture analysis of *Omeisaurus* and other sauropods reveals variation in dinosaur feeding modes

Tai KUBO, Homare SAKAKI, Ren HIRAYAMA, Wenjie ZHENG, Xingsheng JIN, Mugino O. KUBO and Lauren SALLAN

P04 Big data of palaeontology and stratigraphy

[P04-1] Did the Late Ordovician mass extinction event trigger the earliest evolution of 'strophodontoid' brachiopods?

Bing HUANG, Di CHEN, David A.T. HARPER and Jiayu RONG

[P04-2] Spatial-temporal distribution of Upper Ordovician-Lower Silurian graptolites of hydrocarbon source rocks around the Proto-Tethys Ocean

Shucan ZHENG and Qinglai FENG

[P04-3] A multi-dimensional dataset of Ordovician to Silurian graptolite specimens for virtual examination, global correlation and shale gas exploration

Honghe XU, Yansen CHEN and Wen GUO

[P04-4] Permian-Triassic insect evolution

Shuangmao GUI, Li TIAN and Jacopo Dal CORSO

P05 Cenozoic floristic evolution in Asia

[P05-1] How did the East Asian temperate forest form? Insights from the Late Miocene-Pliocene "Mitoku-type" flora of Japan

Atsushi YABE, Michiyo SHIMIZU, Marina HIRANO and Sachiko AGEMATSU

[P05-2] Paleoclimatic reconstruction for a Miocene flora from the Guiping Basin, Guangxi, South China

- Hao ZHANG, Cheng QUAN and Jianhua JIN
- [P05-3] The earliest fossil record of *Ilex* Sect. Prinoides from the Miocene of Guangxi, southern China and its paleoecological implications
 - Bingshan NIU, Qijia LI, Jianhua JIN and Cheng QUAN
- [P05-4] Different climate-driven mechanisms regulate the distribution changes of Tsuga in different regions
 - Shumei XIAO, Shufeng LI, Jian HUANG, Xiaojun WANG, Mengxiao WU and Tao SU
- [P05-5] A new Cenozoic fossil record of Adiantum L. (Pteridaceae) from the Qaidam Basin in China Hong-Yu CHEN, Tao YANG, Lei HAN, Li ZHANG, Yong-Dong WANG and De-Fei YAN
- [P05-6] Paleo-vegetation around mangrove swamp in the northern Central Japan during the Miocene Climatic Optimum
 - Chiho MOCHIZUKI, Atsushi YABE, Kazuo TERADA, Ryo TATEISHI, Takeshi SAITO and Shin-ichi SANO
- P06 Molecular palaeobiology and molecular evolution
- [P06-1] Proteomic approaches in molecular palaeontology

 Kazuyoshi ENDO, Dai TAKAHASHI, Nao MASUDA and Akito ISHIKAWA
- P07 Geochemical proxies discovering palaeoecology, palaeoenvironment, and their interactions
- [P07-1] Assessing the diagenesis of fossils in Kem Kem Group using acetic acid treatment and trace element analysis
 - Ryuji HATTORI, Hisashi ASANUMA, Yasuhisa NAKAJIMA, Zuorui LIU, Amy PRENDERGAST, Jan-Hendrik MAY and Kotaro SHRIAI
- [P07-2] Production and preservation of foraminiferal carbonate and organic carbon in the Cenomanian/Turonian and Santonian/Campanian boundaries
 - Kazuyoshi MORIYA, Toshikazu FURUYA and Yasuko MIYAKURA
- [P07-3] Terrestrial environmental changes across the Eocene-Oligocene transition in Qaidam Basin, NE Tibetan Platean, using biomarkers as molecular fossils
 - Fan YI, Haisheng YI, Wenqiang TANG, Na LI, Yun CHEN, Kangzhi TIAN, Yuxiang SHI, Jinxuan WU and Guoqing XIA
- P08 Foraminiferal biology and paleontology for understanding life, environmental histories and biostratigraphy
- [P08-1] Open the blackbox of foraminiferal chamber formation Takashi TOYOFUKU and Yukiko NAGAI
- [P08-2] Three-dimensional observation of fusulinoideans shell structure, especially the layered structure of spirotheca, by synchrotron X-ray micro-CT Masahiro ICHIDA, Akio YONEYAMA and Tomoki KARASAWA

[P08-3] Reconstruction of the Polar Front over the past 700 kyrs in the Indian sector of the Southern Ocean

Megumi HIRAYAMA, Kentaro SAWADA, Hiroki MATSUI, Xavier CROSTA and Minoru IKEHARA

[P08-4] Foraminifera limitation in marine facies identification in the late Quaternary sediments of the southeast China's bays

Jing CHEN, Ping LIU and Junjie YU

[P08-5] Responses to environmental stressors in photosymbiotic planktonic foraminifera *Trilobatus* sacculifer

Haruka TAKAGI and Hiroaki SAITO

[P08-6] Anthropogenic impacts on vegetation and biodiversity of the lower Yangtze region during the mid-Holocene

Maotian LI, Yan LIU, Li XIAO, Xiaoqiang LIU, Jinqi DAI, Zhongyuan CHEN and Qianli SUN withdraw

[P08-7] Calcification response of the planktic foraminifer during the Paleocene-Eocene thermal

Yoshimi KUBOTA, Katsunori KIMOTO, Tatsuhiko YAMAGUCHI, Shunichi KINOSHITA and Richard D. NORRIS

[P08-8] Potential invasive expansion of tropical larger foraminifera *Amphistegina* in the western part of Japan Sea

Hiroki HAYASHI

[P08-9] Revisiting the Planktonic Foraminiferal Sharp Surface, a middle Miocene local datum plane of Japan

Hiroki HAYASHI

[P08-10] Vertical distribution of planktonic foraminifera in the western Pacific warm pool Shuai ZHANG, Zhoufei YU and Baohua LI

[P08-11] New fossil balaenopterid (Cetacea: Mysticeti) from the Middle Miocene Bessho Formation of Nagano Prefecture, Japan

Sena HIGUCHI and Naoki KOHNO

Poster session core time 2

August 5th (Saturday) 10:45-11:45

EVENT SPACE & GALLERY 1

P09 Evolution of reptiles including birds

[P09-1] A unique locality of Late Cretaceous marine reptiles in between Europe and Asia Nikolay G. ZVERKOV, Dmitry V. GRIGORIEV and Anatoly V. NIKIFOROV

[P09-2] A new ornithomimosaurian theropod from the Lower Cretaceous Kitadani Formation of Fukui,

Japan

Soki HATTORI, Masateru SHIBATA, Soichiro KAWABE and Takuya IMAI

[P09-3] Morphological diversity and functional adaptations of the non-avian maniraptoran manual claws and indication of their ecological niche shifts

Zichuan QIN, Yuming LIU, Shiying WANG, Congyu YU, Xing XU, William DEAKIN, Emily RAYFIELD and Mike BENTON

[P09-4] Sexual dimorphism of cranial growth dynamics and allometry in the green pheasant (*Phasianus versicolor*): implications for evolutionary modularity in the avian skull Tomoya HANAI and Takanobu TSUIHIJI

[P09-5] A taxonomic revision of the *Sinopterus complex* (Pterosauria, Tapejaridae) from the Early Cretaceous of China

Xuanyu ZhOU, Rodrigo V. PÊGAS, Xingsheng JIN, Kai WANG, Waisum MA and Yoshitsugu KOBAYASHI

[P09-6] Investigation on sexual dimorphism in the caudal skeleton in extant squamates (Reptilia, Lepidosauria) and its paleontological implications

Masato KIKUCHI and Takanobu TSUIHIJI

[P09-7] Evaluation of the aerodynamic performance of feathered dinosaur *Anchiornis huxleyi* using wind tunnel test

Yusuke YAMAZAKI, Yoshinobu INADA and Kazuhiko KAKUTA

[P09-8] Multibody dynamics and finite element analyses illuminate ornithischian dinosaur mastication: A case study of ankylosaurian *Panoplosaurus mirus*

Waisum MA and Hans-Dieter SUES

[P09-9] Diversification dynamics of the Mesozoic dinosaurs

Shuhei SHIMIZU and Yoshitsugu KOBAYASHI

[P09-10] Phylogenetic relationships of fossil Ranidae in Japan

Noriyuki FUJIWARA and Sachiko AGEMATSU

[P09-11] Cranial and endocranial morphology of cf. *Mesodermochelys* and provisional systematic revision of the genus

Seishiro TADA, Ren HIRAYAMA and Takanobu TSUIHIJI

[P09-12] A possible ornithopod sternum from the Upper Cretaceous Ashizawa Formation of the Futaba Group in Iwaki City, Fukushima Prefecture, Japan

Masami KONDO, Kohei TANAKA, Fumiaki UTAGAWA and Junki YOSHIDA

[P09-13] The first Pan-Carettochelys from the Early Cretaceous of South Korea Minguk KIM, Min HUH, Jongyun JUNG and Hyemin JO

[P09-14] The long-forgotten paleoherpetology and gigantic fossil reptiles from the Pleistocene of Taiwan

Yi-Lu LIAW, Yi-Yang CHO and Cheng-Hsiu TSAI

[P09-15] The new finds on terrestrial vertebrates from the Lower Triassic Hiraiso Formaion, Inai Group in northeastern Japan

Sakura KOIZUMI and Yasuhisa NAKAJIMA

P10 Palaeozoic macroevolutionary events (IGCP653 Joint session)

[P10-1] A quantitative review on taxonomy of *Cathaysia* and *Paryphella* (Productida, Brachiopoda) Yejin ZHOU, Weihong HE, Baozhong YANG, Yafei HUANG and Yadong XU

[P10-2] Silurian isolated graptolites from middle-upper Yangtze region of China Huaqing WANG and Yuandong ZHANG

[P10-3] Evolution of the Carboniferous conodonts Keyi HU

[P10-4] Encrustation patterns on brachiopods and corals from the Middle-Upper Devonian and their paleo-environmental implications

Xiaolin CHANG and Mingcai HOU

[P10-5] Subduction of Paleotethyan Ocean during the assembly of Pangea and its lethal to life in the Permian-Triassic mass extinction

Weihong HE, Kexin ZHANG and G. R. SHI

[P10-6] Late Darriwilian ostracods of Valcour Island, New York State, USA Yichi ZHANG, Moriaki YASUHARA, Skye Yunshu TIAN and Melanie HOPKINS

[P10-7] No Furongian Biodiversity Gap: Evidence from South China

Yiying DENG, Junxuan FAN and Shengchao YANG

[P10-8] Volcanism-driven marine eutrophication in the end-Ordovician: Evidence from radiolarians and trace elements of black shale in South China

Xuejin WU, Hui LUO, Junpeng ZHANG, Qing CHEN, Xiang FANG, Wenhui WANG, Wenjie LI, Zhensheng SHI and Yuandong ZHANG

[P10-9] Toxic seas and ancient blooms—A study on phytoplankton during the end-Devonian Hangenberg Crisis: Project outline

David M. KROECK, Thomas SERVAIS and Tong BAO

[P10-10] Marine food web after the Permian-Triassic boundary and its global spatiotemporal variation reconstructed from coprolites

Yu KUKUCHI and Yasuhisa NAKAJIMA

[P10-11] The siphonotretide brachiopod *Schizambon* from the Early Ordovician of South China—Ontogeny and affinity

Hadi JAHANGIR-OGHLI, Zhiliang ZHANG, Leonid E. POPOV, Lars E. HOLMER, Mansoureh Ghobadi POUR and Renbin ZHAN

P11 Mesozoic terrestrial biota in the realm of Angiosperm diversification

[P11-1] Paleoecological and phytogeographical inferences of Iran-Afghanistan during the Middle Jurassic

Mohammad Taghi BADIHAGH, Mihai Emilian POPA, Dieter UHL, Maria BARBACKA, Firoozeh Hashemi YAZDI, Yongdong WANG and Giovanni Giuseppe SCANU

[P11-2] Comparative study of Late Jurassic floral assemblages and environments between the Karakuwa, Oshika and Soma areas of northeastern Honshu, Japan

Hideo TAKIMOTO, Julien LEGRAND, Christian POTT and Tamiko OHANA

[P11-3] Anatomically preserved pentamerous flower from the Late Cretaceous (Turonian) of Hokkaido, Japan

Aya KUBOTA, Shin IKEGAMI, Yusuke TAKEDA, Yasuhiro IBA and Harufumi NISHIDA

P12 Analytical approaches for evolutionary morphology

[P12-1] An inverse estimation of ontogenetic trajectory of ammonoid shell shape using Bayesian inference

Takao UBUKATA

[P12-2] Dental microwear texture analysis revealed intraspecific dietary variation of Japanese macaques (*Macaca fuscata*)

Kazuha HIRATA, Mugino Ozaki KUBO and Masanaru TAKAI

[P12-3] The evolution of folivory in colobines monkeys of Eurasia: New insights from dental topography

Ghislain THIERY and Masanaru TAKAI

[P12-4] Locomotory mechanism of earliest Silurian planktonic graptolite *Demirastrites* revealed by computational fluid dynamics simulations

Shijia GAO and Wenhui WANG

- P13 Linkage of Cretaceous solid earth dynamics, greenhouse climate, and response of ecosystems on land and in the oceans in Asia (IGCP679 Joint Session)
- [P13-1] Mid-Cretaceous rudists in the northern part of Myanmar and their paleobiogeographic significance

Shin-ichi SANO, Yasuhiro IBA, Aya KUBOTA, Tin Tin LATT, Saw Mu Tha Lay PAW and Thura OO

- [P13-2] Geological and paleontological records from the Torinosu Group of the southern Chichibu belt in southwest Japan and their contribution to the Jurassic-Cretaceous boundary issue Atsushi MATSUOKA
- [P13-3] Large ammonoid shellbed and huge calcareous concretion bed in shallow-marine fine sandstone of the lower Coniacian Ashizawa Formation, Futaba Group, Northeast Japan Hisao ANDO, Hikaru OMORI, Yusuke MURAMIYA, Fumiaki UTAGAWA, Ryusei KUMA and Hidekazu YOSHIDA

[P13-4] Paleoceanographic significance of Mid-Cenomanian Event in southern high latitude of proto-Indian Ocean, IODP Site U1516

Takashi HASEGAWA and Hiromichi KOMIYA

[P13-5] The duplivincular ligament of *Trichites* suggests its possible assignment to the Pterineidae (Bivalvia)

Mori MEGUMI and Shin-ichi SANO

[P13-6] Stable carbon-isotope stratigraphy preliminary regional correlation of the Upper Jurassic-Lower Cretaceous Tetori Group, Central Japan

Mayuko KAMIMURA, Yoichi USUI and Takashi HASEGAWA

[P13-7] Early Jurassic and earliest Cretaceous belemnites from the Inner Zone of Southwest Japan and their paleobiogeographic significance

Yuki MARUYAMA and Shin-ichi SANO

Poster session core time 3

August 7th (Monday) 10:45-11:45

EVENT SPACE & GALLERY 1

P14 Diversification and evolution of vascular plants

[P14-1] Phylogenetic analysis of Taxodioid Cupressaceae (former Taxodiaceae) based on morphological characters with addition of newly found ovulate corns from Hokkaido, Japan Songyao JIANG and Toshihiro YAMADA

[P14-2] Oldest terrestrial flora of Japan obtained from the Devonian Nakazato Formation of the South Kitakami Belt, Northeast Japan

Ahmed MAHER, Toshifumi KOMATSU, Toshihiro YAMADA and Julien LEGRAND

[P14-3] Diversity of Cretaceous Stems in Heilongjiang, Northeast China Cheng YEMING, Liu FENGXIANG, Wang XI and Yang XIAONAN

P15 Diversity of non-tetrapod vertebrates

[P15-1] The developmental origins of key traits and early diversity in ray finned fishes (Actinopterygii)

Lauren SALLAN withdraw

[P15-2] Miocene freshwater fishes from Iki Island, Nagasaki, Japan, with comments on the origin of extant freshwater fishes in East Asia

Yoshitaka YABUMOTO

[P15-3] First fossil sturgeon from the Upper Cretaceous of Northwest Pacific region Shinya MIYATA, Yasuhisa NAKAJIMA, Isao MOTOYAMA, Tomohiro NISHIMURA and Yoshitaka YABUMOTO

[P15-4] Deep-sea fish otoliths from the Miocene of central Japan Yuki TSUCHIYA and Atsushi UJIHARA [P15-5] An new odontobutid fish (Gobiiformes, Gobioidei) from the Oligocene of Ningming, south China

You HE, Gengjiao CHEN and Mee-mann CH

[P15-6] Late Jurassic actinopterygian fishes of Russia

Alina KANARKINA

[P15-7] Classification and body size estimation of a gigantic chondrichthyan from the Upper Devonian of Morocco: A preliminary report.

Kiyomasa MORIOKA and Yasuhisa NAKAJIMA

P16 Secondary aquatic adaptation of tetrapods

[P16-1] A new species of *Mixosaurus* (Ichthyosauria: Mixosauridae) from the Middle Triassic of Luxi County, Yunnan Province, South China

Ye-Wei FANG, Andrzej Stefan WOLNIEWICZ and Jun LIU

[P16-2] A new pachypleurosaur (Reptilia: Sauropterygia) from the Middle Triassic of southwestern China

Yi-Wei HU, Qiang LI and Jun LIU

P17 Triassic-Jurassic transition and biota

[P17-1] Morphology and paleoecology of Early Triassic discinid brachiopod from the Osawa Formation in the Southern Kitakami Terrane, Japan

Yoshino ISHIZAKI, Yuta SHIINO and Masayuki EHIRO

[P17-2] Palynological record of the Carnian Pluvial Episode from the northwestern Sichuan Basin, SW China

Liqin LI, Wolfram M. KÜRSCHNER, Ning LU, Hongyu CHEN, Pengcheng AN and Yongdong WANG

[P17-3] Biotic and environmental turnover across Triassic–Jurassic transition in response to volcanic and astronomical forcing

Masayuki IKEDA, Maximilien BÔLE and Julien LEGR

P18 Tomographic techniques and computer-aided visualization in palaeontology

[P18-1] An enigmatic new taxon from Central Pacific highlights mosaic evolution among the family Hippuritidae (Bivalvia)

Ayaka ITO, Shin-ichi SANO, Yasuhiro IBA, Yusuke TAKEDA, Peter W. SKELTON, Yolanda M. AGUILAR, Roberto S. P. de OCAMPO and Tomoki KASE

[P18-2] A new nodosaurid (Dinosauria: Ornithischia) from mid-Cretaceous Hikagenosawa Formation in Japan reveals high heterogeneity of the Asian ankylosaur fauna

Shumpei OYABU and Yoshitsugu KOBAYASHI

P19 Diversity change and evolutionary history of radiolarians

[P19-1] Radiolarians based sea surface temperature estimates in the Northwest Pacific: Suitability and

potential limits

Kenji M. MATSUZAKI, Takuya ITAKI, Kyung Eun LEE, Yoshimi KUBOTA, Takuya SAGAWA, Keiji HORIKAWA, and Masafumi MURAYAMA

[P19-2] Toward AI-based classification of radiolarians using the new system for high throughput slide scanning

Takuya ITAKI, Ayumu MIYAKAWA and Minoru IKEHARA

[P19-3] Middle/Late Jurassic to Early Cretaceous radiolarians from ophiolite belts of Myanmar Hisashi SUZUKI, Kyaw TEZA, Maung MAUNG, Tun Min TUN and Kotaro ISHIDA

[P19-4] Changes in radiolarian species composition and diversity in the Cenomanian/Turonian of the Upper Cretaceous Suhaylah Formation, Oman Ophiolite

Ryo KANDA and Toshiyuki KURIHARA

[P19-5] Evolution and origin of Cycladophora nakasekoi (Radiolaria) in the Japan Sea.

Akira SUGAI, Isao MOTOYAMA and Takuya ITAKI

[P19-6] Radiolarian faunal turnover and Japan Sea paleoceanography during the late Miocene global cooling

Mizuki TOJIMA, Kenji M. MATSUZAKI and Masayuki IKEDA

P20 Mesozoic and Paleozoic Oceanic Anoxic Events

[P20-1] Acritarchs in the mid-Cretaceous OAEs: Interpretation from modern species Takuto ANDO, Ken SAWADA, Reishi TAKASHIMA and Hiroshi NISHI

[P20-2] Climate, vegetation and oceanographic change in the eastern margin of Asia during Oceanic Anoxic Event 2 driven by pulsed Large Igneous Province activity

Reishi TAKASHIMA, David SELBY, Toshiro YAMANAKA, Yoshihiro KUWAHARA, Hideto NAKAMURA, Ken SAWADA, Masashi A. IKEDA, Takuto ANDO, Keiichi HAYASHI, Hiroshi

NISHI, Azumi KUROYANAGI and Babu Ram GYAWALI

[P20-3] Examining the effect of Cretaceous oceanic anoxic events (OAEs) on the evolutionary trend of planktonic foraminifera

Azumi KUROYANAGI, Hodaka KAWAHATA, Kazumi OZAKI, Atsushi SUZUKI, Hiroshi NISHI and Reishi TAKASHIMA

[P20-4] Paleoenvironments of the Lower Triassic Osawa Formation in the Southern Kitakami Terrane, Japan: insights into ocean redox stratification and faunal recovery Yoshino ISHIZAKI and Yuta SHIINO

P21 Secular fluctuations in microbialite development throughout Earth's history

[P21-1] Cambrian through Ordovician reef transitions in North and South China: Changes in reef construction and background geobiological environments

Natsuko ADACHI, Yoichi EZAKI, Jianbo LIU and Zhen YAN

[P21-2] Construction and depositional environment of oncoids in the lower Cambrian Bayan Gol

Formation in the Gobi-Altai, western Mongolia

Aoi UEMURA, Natsuko ADACHI, Yoichi EZAKI, Jianbo LIU, Mahito WATABE, Gundsambuu ALTANSHAGAI, Batkhuyag ENKHBAATAR and Dorj DORJNAMJAA

P22 Open session

- [P22-1] Reconstruction of the paleoceanographic condition in the northwestern Pacific sub-tropical gyre over the last 150 kyr based on calcareous nannofossils assemblages and total organic carbon Ryuma TATSUZAWA and Shun CHIYONOBU
- [P22-2] Vertebrate-fall community: Overview of its fossil record and perspectives from modern experimental studies

Robert G. JENKINS

[P22-3] Mary Stopes (1880-1958) and Kono Yasui (1880-1971)—The beginning of paleobotany in Japan

Michiko YAJIMA

[P22-4] Fossil preservation of luminous organs of Miocene deep-sea fishes from Chita Peninsula, central Japan

Haruyoshi MAEDA, Gengo TANAKA, Kumiko NENOKI, Yukiko KASE and Yasuhiro ITO

- [P22-5] Museum fossil collections in the digital age: the current status and future prospects in Japan Takenori SASAKI and Yasuhiro ITO
- [P22-6] Cocoon fossils of clitellates (Annelid) from the upper Cretaceous Tamagawa Formation, Kuji, Iwate, Japan: Identification of strange fossil, "Mayumodoki" Hikaru UNO, Toshio TAKISAWA and Ren HIRAYAMA
- [P22-7] Bored volcanic cobbles produced by the rock-boring clam *Penitella kamakurensis* in Hokkaido—Focusing on rhyolite cobbles washed ashore on the Hamanaka Beach of Yoichi Town Akihiko SUZUKI, Takafumi ENYA and Koh KUBOMI
- [P22-8] The evolutionary history of Late Cretaceous nostoceratid "heteromorph" ammonoids in the northwestern Pacific region: review and prospect
- [P22-9] Paleoceanography based on benthic foraminifera in the Kiwada Formation of the Kazusa Group, distributed in the Boso Peninsula, central Japan

Chika ONAI, Koji KAMEO, Hiroshi KITAZATO and Koji KAMEO

[P22-10] Restoration of low-budget dinosaur skeletal models using a 3D printer. Shinkai OGINO

[P22-11] Disaster research using paleontology

Akihisa KITAMURA

Daisuke AIBA

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