



THE FIFTH INTERNATIONAL SYMPOSIUM OF THE INTERNATIONAL GEOSCIENCE PROGRAMME PROJECT 679

Sep. 4th, 2025, Hannover, Germany

PROGRAMME

*“Linkage of Cretaceous solid earth dynamics, greenhouse climate, and
response of ecosystems on land and in the oceans in Asia”*

Cretaceous Earth Dynamics and Climate in Asia



The Fifth International Symposium of IGCP 679 will be held on Sep. 4th, 2025 by a joint session during the 12th International Cretaceous Symposium (Aug. 1st–Sep. 5th, 2025, Hannover, Germany).

Title: The Fifth International Symposium of the International Geoscience Programme Project 679

Thursday, September 4 th , 2025	
Sesstion 6a: Workshop of IGCP 679: Cretaceous Earth dynamics and climate in Asia (IGCP679 Joint Session) Conveners: Gang LI and Takashi HASEGAWA Session 1: 9:00-9:45 Chairman: Takashi HASEGAWA	
9:00-9:15 ID: 130	Opening address Progress of IGCP 679: Cretaceous Earth Dynamics and Climate in Asia: Gang LI , Takashi HASEGAWA, Dae Kyo CHEONG and Vandana PRASAD
9:15-9:30 ID: 153	Paleoclimate reconstruction of Early Cretaceous East Asia using whole-rock geochemistry and climate modeling Tenichi CHO , Taro HIGUCHI, Tohru OHTA, Arisa NAKANO, Hitoshi HASEGAWA, Ayako ABE-OUCHI, Wing-Le, CHAN, Gang LI
9:30-9:45 ID: 384	Detrital zircon U-Pb geochronology of the Cretaceous Goheung Basin, southern margin of the Korean Peninsula Taejin CHOI , Seung-Ik PARK

Session 2: 9:45-10:30 Chairman: Gang LI	
9:45-10:00 ID: 159	Mid-Cretaceous Oceanic Anoxic Events in the eastern Tethys: Calcareous nannofossil biostratigraphy and carbon Meiling HAN , Gang LI, Ulrich HEIMHOFER, Jörg MUTTERLOSE
10:00-10:15 ID: 185	The contribution of Deccan traps to the mass extinction at K-Pg boundary in east China Suping LI , Zhenguo NING, Tianquan QU, Weiqing LIU
10:15-10:30 ID: 370	Middle Cretaceous terrestrial vegetation evolution and paleoclimate change across the OAE2 event: Insights from the palynological evidence of the SK3, Songliao Basin, NE China Zihan ZHOU , Dangpeng XI, Xiaoqiao WAN
10:30-11:00	Break
Session 3: 9:45-10:30 Chairman: Tohru OHTA	
11:00-11:15 ID: 146	Mesozoic and Cenozoic stratigraphy of Zaamar District, Northern Khentii, Mongolia: Insights from K-Ar Dating, Petrography of basalts, and Lower Cretaceous Palynology Bat-Erdene TUMURCHUDUR , Choimbol, TUMURCHUDUR, Niiden ICHINNOROV, Purevsuren SUKHBAT, Dulguun DAYARSAIKHAN, Enkhtuya BAYARAA
11:15-12:30	Business meeting of IGCP 679

Poster session 14:45-16:00 Sep. 4th, 2025

Topics: 6a - Cretaceous Earth dynamics and climate in Asia –

Workshop IGCP 679 (Gang LI, Takahashi HASEGAWA)

ID: 253

The Albian Palynological assemblages of the eastern Mongolia

Ichinnorov Niiden¹, Purevsuren Sukhbat¹, Eviikhuu Adiya², Tsolmon Gombosuren¹, Odgerel Nyamsambuu³

¹Institute of Paleontology, Mongolian Academy of Sciences, Mongolia; ²Uyan Geo Resource LLC, Ulaanbaatar, Mongolia; ³National University of Mongolia, Ulaanbaatar, Mongolia.

ID: 192

Provenance discrimination of quartz grains by cathodoluminescence and application to Cretaceous detritus

Shota Hanada, Tohru Ohta
Waseda University, Japan

ID: 162

Paleoclimate analysis of the East Asian continent margin during the Triassic to Middle Cretaceous

Kumpei Hara, Tohru Ohta, Ryutarou Komiya
Waseda University, Japan

ID: 260

A carbon isotope stratigraphy toward composite stratigraphy for regional correlation of the Upper Jurassic to Lower Cretaceous Tetori Group in central Japan

Mayuko Kamimura¹, Mitsuhiro Nagata², Takuto Ando³, Koichi Hoyanagi⁴, Yoichi Usui¹, Sota Niki⁵, Takafumi Hirata⁶, Takashi Hasegawa¹
¹Kanazawa University, Japan; ²Nihon University, Japan; ³Akita University, Japan; ⁴Shinshu University, Japan; ⁵Nagoya University, Japan; ⁶The University of Tokyo, Japan

ID: 165

Paleoenvironment and paleoecology of the Cretaceous Sayeonri Formation in Ulju-gun, Ulsan, Korea

Hyun Joo Kim¹, In Sung Paik¹, Seung-Gyun Baek², Eunkyong Jeong³
¹Pukyong National University, Korea, Republic of (South Korea); ²Gematek Co. Ltd.; ³Dalseong Fossil Museum

ID: 161

Grain shape evaluation by elliptic Fourier and principal component analyses: Application to the paleoenvironment analysis of Cretaceous sediments.

Yushiro Maeda, Tohru Ohta
Waseda University, Japan

ID: 139

Provenance discrimination of quartz grains based on the cathodoluminescence spectrum using machine learning

Naoya Miyashiro, Yasunori Marumo, Masahito Osawa, Tohru Ohta
Waseda University, Japan

ID: 195

Enhanced continental weathering during the Oceanic Anoxic Event 2 (OAE2) in the eastern Asian continental margin

Arisa Nakano¹, Yuko Kamigata¹, Haruka Takagi², Tohru Ohta¹

¹Waseda University, Japan; ²Atmosphere and Ocean Research Institute, the University of Tokyo, Kashiwa, Japan

ID: 166

The Cretaceous climate of Vietnam: insights from the geochemical and mineral composition of terrigenous sediments

Thi Nga Pham¹, Tohru Ohta¹, Taro Higuchi^{2,3}, Kohei Ikenaga¹, Quoc Dinh Nguyen⁴

¹Waseda University, Tokyo, Japan; ²Atmosphere and Ocean Research Institute, the University of Tokyo, Kashiwa, Japan; ³Earth-Life Science Institute, Institute of Science Tokyo, Tokyo, Japan; ⁴Environmental Chemistry and Ecotoxicology LAB, Phenikaa University, Hanoi, Vietnam

ID: 322

Mesohibolitid belemnites from the Torinosu Group in Southwest Japan, and their palaeobiogeographical implications

Kota SAKAI¹, Tomihoro MIZOBUCHI², **Shin-ichi SANO**¹

¹University of Toyama, Japan; ²Sakawa Geology Museum and Institute, Japan

ID: 380

Dynamic interchange between deltaic to open shelf environment in the Early Cretaceous at the passive margin of the north-eastern Gondwana (based on sequence in the Thakkhola Graben, central Nepal Himalaya)

Krzysztof Starzec¹, **Anna Kwietniak**¹, Michał Krobicki¹, Justyna Kowal-Kasprzyk¹, Jan Barmuta²

¹AGH University of Krakow, Poland; ²Institute of Geological Sciences Polish Academy of Sciences, Poland

ID: 160

Grain shape evaluation by elliptic Fourier and principal component analyses: Application to Cretaceous thin sections and modern foreshore sands

Ipppei Tajima, Tohru Ohta

Waseda University, Japan

ID: 132

New non-marine Ostracod fauna from the Lower Cretaceous Xiaonangou Formation of the Baishan Basin, NE China

Yaqiong Wang

Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences, China, People's Republic of

ID: 138

**Paleoenvironmental Reconstruction of the Cretaceous Choshi Group using
Elliptic Fourier-Principal Component Analysis**

Tomoo Yokoyama, Tohru Ohta

Waseda University, Japan