

# International Association for Gondwana Research



## 2023 Convention and 20<sup>th</sup> International Conference on Gondwana to Asia

### *Conference Program*

<sup>1</sup>Department of Geology, Faculty of Science, Niigata University, Ikarashi Niigata 950-2181, Japan

<sup>2</sup>School of Earth Sciences and Resources, China University of Geosciences Beijing, 29 Xueyuan Road, Beijing 100083, China



新潟大学  
NIIGATA UNIVERSITY



フォッサマグナミュージアム  
Fossa Magna Museum

*Organized by*

Niigata University, Niigata and Fossa Magna Museum, Itoigawa

October 07<sup>th</sup> to 12<sup>th</sup> 2023, Niigata.

# IAGR 2023 Niigata

 <b>International Association for Gondwana Research 2023 Convention and 20th International Conference on Gondwana to Asia</b>	
<b>October 7, 2023: Venue: ANA Crowne Plaza Niigata</b>	
<b>17:00-20:00</b>	Registration
<b>18:00-20:00</b>	Ice breaker
<b>October 8, 2023: Venue: Library Hall, Ikarashi Campus, Niigata University, Japan</b>	
<b>9:30-9:45</b>	<b>Inaugural Ceremony</b> Welcome Speech by Prof. Norikazu Ohtori, Dean, Faculty of Science, Niigata University <b>Inauguration Speech by Prof. Tatsuo Ushiki, President, Niigata University</b> Address by Prof. M. Santosh, IAGR Secretary General Address by Prof. Yunpeng Dong, IAGR President Vote of thanks by Prof. M. Satish-Kumar, Chair, Local Organizing Committee
<b>Chair: M. Santosh, Co-chair: Cheng-Xue Yang</b>	
<b>9:45-10:15</b>	<b>Keynote Talk 1:</b> <b>Prof. Gupta Harsh Kumar, CSIR-National Geophysical Research Institute, India</b> <b>Indian Tsunami Early Warning System (ITEWS)</b>
<b>10:15-10:30</b>	Dr. Van der Meer Douwe G., Utrecht University, Netherlands Long-term Phanerozoic global mean sea level: Insights from strontium isotope variations and estimates of continental glaciation
<b>10:30-10:45</b>	Prof. Farquharson Jamie, Niigata University, Japan Rainfall-driven volcanic hazards in a changing climate
<b>10:45-11:15</b>	<b>Photo Session and Coffee Break</b>
<b>Chair: Yunpeng Dong, Co-chair: Fumiko Higashino</b>	
<b>11:15-11:30</b>	Prof. Kataoka Kyoko, Niigata University, Japan Crisis hazard assessment for lahars at snow-covered volcanoes in Japan: Examples from the most recent phreatic eruptions at Mts. Ontake and Kusatsu-Shirane
<b>11:30-11:45</b>	Prof. Johnston T. Stephen, University of Alberta, Canada Upper versus Lower Plate Ore Deposits and Hydrocarbon Endowments: A case study from the Canadian Cordillera
<b>11:45-12:00</b>	Prof. Zhang Wengang, Chongqing University, China A Physics-informed data-driven model for landslide susceptibility assessment
<b>12:00-12:15</b>	Prof. Sun Shengsi, Northwest University, China Rheology and seismic anisotropy of continental lithosphere
<b>12:15-12:30</b>	Dr. Erath Shaji, Kerala University, India Groundwater quality of India: a status review
<b>12:30-13:00</b>	<b>Lunch Break</b>
<b>13:00-14:00</b>	<b>Poster Session core time</b>
<b>Chair: Hokada Tomokazu, Co-chair: A. Vasanthi</b>	
<b>14:00-14:15</b>	Dr. Dunkley Daniel J., Polish Academy of Sciences, Poland Vaguely right or exactly wrong: some thoughts on complex zircon and the handling of isotopic age data from microbeam analysis
<b>14:15-14:30</b>	Dr. Król Piotr, Polish Academy of Sciences, Poland Complex polymetamorphic and magmatic history in Napier Mountains, East Antarctica revealed by zircon
<b>14:30-14:45</b>	Prof. Krishnan Sajeev, Indian Institute of Science, India Genesis of Olivine-charnockite and its Gondwana connections
<b>14:45-15:00</b>	Prof. Malaviarachchi P.K. Sanjeewa, University of Peradeniya, Sri Lanka 'Selective' UHT metamorphism in the deep crust
<b>15:00-15:15</b>	Dr. Liu Qian, Northwest University, China Early Cambrian high pressure/low temperature metamorphism in the southeastern Tarim craton associated with cold subduction along circum-Gondwana
<b>15:15-15:30</b>	Mr. Hsia Jui-yen, Sun Yat-sen University, Guangzhou, China Miocene-Pliocene UHT metamorphism in Western Sulawesi, Indonesia
<b>15:30-15:45</b>	<b>Coffee Break</b>
<b>Chair: Yongjiang Liu, Co-chair: Inna Safonova</b>	

# IAGR 2023 Niigata

 <b>International Association for Gondwana Research 2023 Convention and 20th International Conference on Gondwana to Asia</b>	
<b>15:45-16:00</b>	Dr. Chang Ruihong, The University of Hong Kong, China Protolith and metamorphic ages of eclogites from the Eastern Alps: Implications for the Permian to Cretaceous Wilson cycle of the Austroalpine mega-unit
<b>16:00-16:15</b>	Dr. Dan Wei, Chinese Academy of Sciences, Guangzhou, China Correlation and comparison of Paleozoic oceans in NE and NW Gondwana
<b>16:15-16:30</b>	Dr. Higashino Fumiko, Kyoto University, Japan Post-peak fluid-induced metamorphic microstructures and the P-T conditions from Perlebandet, Sør Rondane Mountains, East Antarctica
<b>16:30-16:45</b>	Prof. Geoffrey Hugo Grantham, University of Johannesburg, South Africa Neoproterozoic to Cambrian granitoids of northern Mozambique and Dronning Maud Land Antarctica: Implications for the assembly of Gondwana
<b>16:45-17:00</b>	Prof. Kawakami Tetsuo, Kyoto University, Japan Boron isotope compositions of coexisting kornepurine and tourmaline in high-grade metabasic rocks: an example from Akarui Point, Lützow-Holm Complex, East Antarctica
<b>17:00</b>	Departure from Niigata University (pick up by Chartered Bus)
<b>18:00</b>	Arrival at ANA Crowne Plaza, Niigata
<b>18:30-20:30</b>	<b>Banquet (Venue: ANA Crowne Plaza Niigata)</b> IAGR General Assembly Gondwana Research 2023 Best Paper Award Ceremony Geoscience Frontiers Best Paper Award Ceremony
<b>21:00</b>	IAGR Executive Council Meeting
<b>October 9, 2023: Venue: Library Hall, Ikarashi Campus, Niigata University, Japan</b>	
<b>8:00</b>	Departure from ANA Crowne Plaza Niigata to Ikarashi Campus (pick up by chartered bus)
<b>Chair: M. Satish-Kumar, Co-chair: T. Tsunogae</b>	
<b>9:00-9:30</b>	<b>Keynote Talk 2:</b> Prof. Dong Yunpeng, Northwest University Neoproterozoic tectonic evolution and proto-basin of the Yangtze Block, China
<b>9:30-10:00</b>	<b>Keynote Talk 3:</b> Dr. Meert Joseph G., University of Florida, USA India and South China in the Tonian: New Constraints from the Harohalli Alkaline Province
<b>10:00-10:30</b>	<b>Keynote Talk 4:</b> Prof. Safonova Inna, South-West Jiaotong University, China Intra-plate oceanic island basalts: from formation to accretion
<b>10:30-10:45</b>	Coffee Break
<b>Chair: Joseph Meert, Co-chair: T. Kawakami</b>	
<b>10:45-11:00</b>	Prof. Festa Andrea, Università di Torino, Italy Significance of mélanges in the evolution of subduction complexes and orogenic belts
<b>11:00-11:15</b>	Prof. Takazawa Eiichi, Niigata University, Japan Redox state of upper mantle recorded in the mantle peridotites of Oman ophiolite
<b>11:15-11:30</b>	Dr. Zhang Donghai, Northwest University, China Apparent standstill of the Mongolia block in the Carboniferous: decelerated plate motion in a true polar wander frame
<b>11:30-11:45</b>	Dr. Anthwar Vasanthi, CSIR-National Geophysical Research Institute, Hyderabad, India Finite Element Approach to compute long-wavelength gravity and isostatic anomalies
<b>11:45-12:00</b>	Dr. Rehman Hafiz, Kagoshima University, Japan Zircon U-Pb and Hf isotope data from Himalayan Metamorphic Belt, Kaghan Valley, Pakistan constraining crustal growth in Archean and Proterozoic, recycling and regeneration in Paleozoic, and metamorphic regrowth during Mesozoic
<b>12:00-12:15</b>	Dr. Sarkar Dyuti Prakash, Hiroshima University, Japan Fault delineation, deformation microstructures and temperature estimations from shallow to mid-crustal parts of Main Himalayan Thrust, NW India
<b>12:15-12:30</b>	Dr. Das Kaushik, Hiroshima University, Japan 2-D thermal modeling for thrust-related cratonization of hot deep crust: An example from the Eastern Ghats Belt, India

# IAGR 2023 Niigata


 <b>International Association for Gondwana Research 2023 Convention and 20th International Conference on Gondwana to Asia</b>	
<b>12:30-13:00</b>	<b>Lunch Break</b>
<b>13:00-13:30</b>	<b>Poster Session Core Time</b>
<b>Chair: E. Shaji, Co-chair: Sanghoon Kwon</b>	
<b>13:30-13:45</b>	Prof. Zhu Wenbin, Nanjing University, China A late Paleoproterozoic collisional orogenic event in the northern Tarim Craton
<b>13:45-14:00</b>	Mr. Chong Fubao, Northwest University, China Formation age and tectonic significance of Yellow River terrace sequences in Xinghai area, northeast Tibetan Plateau
<b>14:00-14:15</b>	Prof. Cai Keda, China University of Geosciences Beijing, China Diapir Melting of Subducted Mélange Generating Alkaline Arc Magmatism and Its Implications for Material Recycling at Subduction Zone Settings
<b>14:15-14:30</b>	Dr. Nambaje Claude, Niigata University, Japan SHRIMP U-Th-Pb dating of Rwandan tin mineralisation and associated tectonic processes
<b>14:30-14:45</b>	Prof. Lin Shoufa, University of Waterloo, Canada Eastern South China as an Appalachian-style accretionary orogen
<b>14:45-15:00</b>	Dr. Hui Bo, Northwest University, China Early Neoproterozoic subduction-related tectonics along the northwestern margin of the Yangtze Block, South China
<b>15:00-15:15</b>	Dr. Wang Lijun, University of Waterloo, China Yangtze and Cathaysia blocks of South China: Their separate positions in Gondwana until early Paleozoic juxtaposition
<b>15:15-15:30</b>	Prof. V. J. Rajesh, Indian Institute of Space Science and Technology, India Origin and Tectonothermal Evolution of Lodestones in the Layered Ultramafic Intrusions of Coorg Block: Insights from Textural, Chemical, and Geothermometric Constraints
<b>15:30-15:45</b>	<b>Coffee Break</b>
<b>Chair: Geoffrey Hugo Grantham, Co-chair: Hui-Chun Chen</b>	
<b>15:45-16:00</b>	Assoc. Prof. Zhang Feifei, Northwest University, China Silurian gabbros and granitoids along the Erlangping tectonic belt in Tongbai orogen: Implications for the Late Paleozoic tectonic evolution of the Qinling-Tongbai orogen, China
<b>16:00-16:15</b>	Prof. Liu Yongjiang, Ocean University of China, China Mesozoic tectonics of NE China in eastern Central Asian Orogenic Belt
<b>16:15-16:30</b>	Prof. Liu Lin, Ocean University of China, China Mantle dynamics of the North China Craton originating from slab dehydration
<b>16:30-16:45</b>	Prof. Shao Longyi, China University of Mining and Technology Beijing, China The chemical index of alteration in Permo-Carboniferous strata in North China as an indicator of environmental and climate change throughout the late Paleozoic Ice Age
<b>16:45-17:00</b>	Mr. Li Yixi, Northwest University, China Rheology of basement complex from the middle and lower crust of the North Qinling Orogenic Belt
<b>17:00-17:15</b>	Prof. Zou Hao, Chengdu University of Technology, China Mesozoic Large-scale barite-fluorite mineralization in Yangtze Block, China
<b>17:15-17:45</b>	<b>Plenary Session Chair: M. Santosh</b>
<b>17:45</b>	Departure from Niigata University (pick up by chartered bus)
<b>18:45</b>	Arrival at ANA Crowne Plaza, Niigata
<b>19:15-22:00</b>	GR and GSF editorial meeting
<b>October 10-11, 2023: Field Excursion to Itoigawa: Overnight stay at Itoigawa</b>	
<b>October 10, 8:30</b>	Pick up at ANA Crowne Plaza



**International Association for Gondwana Research 2023 Convention and 20th  
International Conference on Gondwana to Asia**

**October 8, 2023: Poster Presentation, Library Hall, Ikarashi Campus, Niigata University, Japan**

Poster No.	Name	Affiliation	Title
P-01	Miyamoto Tomoharu	Kyushu University	Petrography and Rb-Sr mineral age of mafic dyke rocks on Niban-Rock, Lützow-Holm Complex (LHC), East Antarctica.
P-02	Park Seongjae	Chonnam National University	Preliminary works on the structural interpretation of the Seosan-Taeon area, western Gyeonggi Massif, Korea
P-03	Chen Long	Ocean University of China	The garnet effect on hafnium isotope compositions of granitoids during crustal anatexis
P-04	Wang Ming-Xian	China University of Geoscience (Beijing)	Trondhjemites from the Western Dharwar Craton, Southern India: Implications for Mesoarchean crustal growth
P-05	Kitano Ippei	Kyushu University	New zircon U–Pb geochronology of high-pressure schists from the Itoigawa-Omi area in the Hida Gaien Belt, Japan
P-06	Samuel O. Vinod	Yonsei University	Geochemical evolution of fertile upper mantle peridotite implies unbroken mantle keel beneath East Asia
P-07	Chen Hui-Chun	National Cheng Kung University	Mineral chemistry and thermobarometry of xenoliths from the Kyrgyz-Tianshan basalts
P-08	Kim Changyeob	Yonsei University	Preliminary studies on structural evolution at an oblique Transverse Zone, Okcheon fold-thrust belt, Korea
P-09	Gao Pin	China University of Geosciences Beijing	Meso- to Neorarchean Geological Evolution of the Wutai Complex, North China Craton: Implications from Geochemistry and Zircon Geochronology on the Metavolcanics
P-10	Tsunogae Toshiaki	University of Tsukuba	Proterozoic intracratonic reworking in southern Africa: implications for episodic thermal events related to supercontinent amalgamation
P-11	Yoshida Masaru	Gondwana Institute for Geology and Environment	Traversing the Himalayan Orogen 2023-Report of the 11th Student Himalayan Field Exercise Tour
P-12	Suzuki Keisuke	Geological Survey of Japan	Paleozoic sedimentary history of the Hida Gaien belt (Inner zone of Southwest Japan) in relation to the breakup of Gondwana and the assembly of Northeast Asia
P-13	P. Gopinathan Athira	Niigata University	Tracing crustal evolution using detrital zircon and monazite from beach placers of Gondwana
P-14	Bui Thi Sinh Vuong	Vietnam Academy of Science and Technology	Monazite dating of pelitic gneisses in the Dai Loc Complex, Truong Son Belt, Vietnam
P-15	Lakshmanan Sreehari	Shimane University	Structural evolution and stratigraphic relations in the Western Dharwar Craton (WDC) and its implications in regional scale tectonics
P-16	V. T. Muhammed Shamil	Indian Institute of Technology Kanpur	Mineralogical and Chemical characterization of Allanite from Moyar Shear Zone, India
P-17	Takehara Mami	National Institute of Polar Research	Zircon geochemistry of felsic gneisses from Harvey Nunatak, Napier Complex in East Antarctica
P-18	M. Satish-Kumar	Niigata University	Carbon geodynamic cycle in the continental crust

 <b>International Association for Gondwana Research 2023 Convention and 20th International Conference on Gondwana to Asia</b>			
<b>P-19</b>	Yang Chengxue	China University of Geosciences (Beijing)	Crustal evolution of the Coorg Block, Southern India: Implications for Mesoarchean plate tectonics
<b>P-20</b>	Liu Boran	Ocean University of China	Geological control of the eastern Great Wall: Mountain-basin relationships in the eastern North China Craton
<b>P-21</b>	Arya Prakash Chandra	Indian Institute of Science	Neoproterozoic paleo-ocean fluid inclusions inside Himalayan magnesite crystals
<b>P-22</b>	Tao Ni	Northwest University	Paleozoic tectonothermal evolution of the Jinchuan Ni-Cu sulfide deposit, NW China: New constraints from $^{40}\text{Ar}/^{39}\text{Ar}$ and (U-Th)/He thermochronology
<b>P-23</b>	A. S. Silpa	Shimane University	Subcontinental Lithospheric mantle evolution in Archean: insights from the geochemistry of mafic dyke swarms
<b>P-24</b>	Zhang Lijuan	Peking University	Massive abiotic methane production in eclogite during cold subduction
<b>P-25</b>	Zhang Xiu-Zheng	Guangzhou Institute of Geochemistry	Tibetan Plateau growth linked to crustal thermal transitions since the Miocene
<b>P-26</b>	Anil Kumar Haritha	Indian Institute of Space Science and Technology	Ultramafic-Hosted Magnesite Deposits of Salem Mafic-Ultramafic Complex, Southern India: Spectral and Stable Isotopic Insights
<b>P-27</b>	Li Zhiwu	Chengdu University of Technology	Correlating multiple-stage exhumation processes in central Tibetan Plateau and its margins: Implications for plateau uplift and growth
<b>P-28</b>	Cui Xing	The University of Hong Kong	A review of the prolonged early Paleozoic retreating subduction and accretionary orogenesis of the Altai Zone, Central Asian Orogenic Belt
<b>October 9, 2023: Poster Presentation, Library Hall, Ikarashi Campus, Niigata University, Japan</b>			
<b>P-29</b>	Van der Meer Douwe G.	Utrecht University	Mantle impressions of East Asian subduction history
<b>P-30</b>	Kurihara Toshiyuki	Niigata University	Radiolaria- and zircon U–Pb-dated Permian strata on Sado Island, central Japan, and their geotectonic significance
<b>P-31</b>	Yamada Raiki	Niigata University	Magmatic and crustal evolution of volcanic arcs through back-arc spreading: A case study of the opening of the Japan Sea
<b>P-32</b>	Yoshida Takumi	Niigata University	Paleozoic high pressure schists in the Omi area, Itoigawa city, Niigata.
<b>P-33</b>	Sasidharan Kiran	Niigata University	Application of Raman spectra of carbonaceous material and carbon isotope thermometries in low-medium grade metacarbonates from the Chitradurga Schist Belt, Dharwar Craton
<b>P-34</b>	Yang Yongqiang	China University of Geosciences (Beijing)	Detrital Minerals Geochronology Applied to Tectonics and Paleogeography at Nianzigou, Inner Mongolia
<b>P-35</b>	Yao Jinlong	Northwest University	Establishment of modern plate tectonic regime and modern Earth system in the late Neoproterozoic- early Cambrian
<b>P-36</b>	Chen Anqing	Chengdu University of Technology	Updating the digital paleogeographic maps for East Tethys from Middle Permian to Middle Triassic
<b>P-37</b>	Wang Lili	China University of Geosciences (Beijing)	Peer Review in Academic Publishing: Threats and Challenges



 <b>International Association for Gondwana Research 2023 Convention and 20th International Conference on Gondwana to Asia</b>			
<b>P-38</b>	Gao Fei	China University of Geosciences (Beijing)	Open Access in Geoscience Journals: Challenges and Opportunities for Journal Development
<b>P-39</b>	Zhang Jinhai	Chinese Academy of Sciences (Beijing)	Statistical periodicities of Japan earthquakes detected by Hi-Net seismic network
<b>P-40</b>	Xiong Fuhao	Chengdu University of Technology	How deceptive is typology of granitic rocks? Insights from the Triassic Xiangride felsic igneous complex in Kunlun Orogen, North Tibet
<b>P-41</b>	Yuan Xiaoyu	Ocean University of China	Evidence for breakup of Rodinia supercontinent from mid Neoproterozoic rocks in the northeastern Yangtze Block, China
<b>P-42</b>	P. V. Thanooja	CWRDM, Calicut, India	Felsic – mafic magmatism in the Madras Block, India: Insights into Neoarchaean tectonics
<b>P-43</b>	Abewardana U. G. A. M. Pahan	University of Peradeniya	Petrological and Geochemical Variations of Charnockitic rocks in the Wannu Complex, Sri Lanka
<b>P-44</b>	Xue Fei	Hohai University, China	Lithium sources and enrichment mechanisms in salt lakes: A comparative Li-H-O isotopic and geochemical study of Laguo Co and Cangmu Co, northern Tibetan
<b>P-45</b>	Hokada Tomokazu	National Institute of Polar Research	Geologic evolution of the Indian Ocean sector of the Antarctic continent - update of recent two decades
<b>P-46</b>	Zhu Junjiang	Ocean University of China	Lithosphere subduction process of the Molucca Sea microplate
<b>P-47</b>	Toyoshima Tsuyoshi	Niigata University	Form line map, geological structures, and crustal unit divisions of the Lützow-Holm Complex, East Antarctica