



Renewal Application for 2026-2030 of International Lithosphere Program Task Force VI on Sedimentary Basins

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I. Introduction

The ILP Task Force VI Sedimentary Basins have reached its objectives successfully during the last 5 years (2021-2025) under the leadership of Prof. Liviu Matenco (University of Utrecht, The Netherlands) and Prof. Fadi Henri Nader (IFP Energies Nouvelles, France, and University of Utrecht, The Netherlands) by means of yearly international workshops dedicated to specific topics, rotating from one continent to the other, and to the organization of special sessions at EGU in Vienna and other international conferences. This has been done in order to keep the network attractive for any participant, even if they could not attend other more specific Task Force meetings in other continents. The continuation of the Task Force under new leadership intends to benefit and continue this successful activity with the same main objectives and some additional tasks, described below.

II. Objectives

The main objectives of the ILP Task Force on Sedimentary Basins are:

- to assist the international community of Earth Scientists involved in the study of asthenospheric and deep lithospheric/crustal processes to exchange views with colleagues involved in the study of sedimentary basins, and to promote collaborative projects integrating surface and deep processes for regional case studies, and vice-versa, to provide a platform for in-depth communication between stratigraphers, sedimentologists etc. on one side, and geophysicist, structural geologists etc. on the other.
- to promote regular meetings involving colleagues from universities, research institutes as well as the industry;
- to organize webinars, invited lectures, schools that would be used to disseminate latest achievements in the field of broadly understood studies of sedimentary basins amongst researchers, in particular early career scientists and graduate (PhD) students)
- to provide support for young scientists (PhD students and post-docs) to participate in the activities of this international network.

III. Scientific focus

The focus of the Task Force 6 activities is to foster collaborations between academia, research institutes and industry in all domains relevant for the understanding of sedimentary basins, from regional to nano-scale, from the deep earth to near surface processes. Sedimentary basins contain the critical geo-resources needed for the development of human societies and also the place of major populations around the planet, where geo-hazards also prevail with sometimes devastating impacts. Therefore, understanding the processes influencing such systems is primordial for the future of human societies, especially in current turbulent times when we are all facing numerous challenges related to energy transition.

We propose to encourage the development and validation of novel concepts of sedimentary basin evolution and topography building by incorporating geological/geophysical datasets and methodologies applied to worldwide natural laboratories. We aim to understand and predict the processes that control the formation and evolution of the coupled orogens and sedimentary basins system through integration of field studies, analytical techniques and numerical/analogue modelling.

This scientific focus is welcoming integrative collaborative research achieved by a wide range of approaches. We aim to promote research in the domain of sedimentary basins evolution and quantitative tectonics for the study of mountain building and the subsequent extensional collapse, and their quantitative implications for vertical motions on different temporal and spatial scales. The implications of tectonics on basin fluids (rock-fluid interactions and flow) are important to understand and predict geo-resources. Important are initiate innovative research lines in linking the evolution of sedimentary systems by integrating cross-disciplinary expertise with a focus on integrated sedimentary basins and orogenic evolution. The key is to strengthen the synergy between academic research and applied industry in large (inter)national interdisciplinary research networks able to tackle complex problems at integrated system level. We aim to be involved in creating a stimulating and motivating scientific environment for PhDs and post-doctoral fellows in collaboration with industry and research institutes. We also plan to develop series of webinars, invited lectures and/or summer schools focused on various aspects of formation and evolution of sedimentary basins.

Tectonic, surface and external forcing processes are responsible for the growth and decay of continental topography and sedimentary basins, i.e. the interplay between sediment supply and mass (re)distribution with the full range of deep Earth to surface processes. These are important to assess the impact of tectonics and sediment distribution in highly populated areas, affected by flooding events, regional landslides and active seismicity. The mechanisms that link exhumation, formation of topography, sedimentation and the evolution of geo-fluids are poorly understood because of a lack of insight into the variability of the rates and scales of the underlying processes. It is important to explore the dynamics of these processes by quantifying the link between tectonics and sedimentation with a multi-scale approach that combines field and laboratory studies, and basin-wide observations with process-oriented modelling and its feedback to original observations. This will provide new opportunities to analyze and quantify the interplay between deep Earth and surface processes in sedimentary basins, critical for understanding geo-resources and natural hazards. We plan that in coming years range of studies devoted to various aspects of geothermal energy will be one of important areas of activity of ILP Task Force VI. These studies will include, but will not be limited to, basin-scale appraisal of Earth's thermal field, analyses of role of various tectonic processes in formation of geothermal reservoirs including also salt tectonics, and reservoir modeling. Along those lines, we plan to reach out to international and local geothermal communities and societies such as International Geothermal Association, European Geothermal Energy Council and Geothermal Energy Association, in order to establish links and foster specific research projects, workshops etc. It is our ambition that ILP Task Force VI might become one of hubs that might stimulate research development in this particular area that will bring on board PhD students and early career scientists.

IV. Cooperation

The previous 10 years of activity of the Task Force VI on Sedimentary Basins were outstandingly successful – expressed by the yearly conferences and resulting special volumes/publications – and we intend to benefit by building on this success and extend the activities of Task Force VI for another period of 5 years, i.e., for 2026 to 2030. We aim to continue securing interactions between the participating teams and industry by the yearly dedicated seminars of the Task Force in the same 3 days format of indoor presentations linked with a 2-days field-trip. The expected impact of such meeting has been already proved by the high interest of the applied research and industry in all organized meetings, where the local organizers have already secured a significant amount of sponsorships.

Because of IUGS/IUGG commitments, the ILP task Force on Sedimentary Basin has global significance, we propose to keep the same policies of previous yearly international workshops, i.e., to move alternatively from the western to the eastern hemisphere, and from the northern to the southern hemisphere. It is expected that participating members from different continents will still help organize future meetings in various parts of the world. It is expected that the meetings will address general topics especially relevant for the area where the meeting takes place, and accompanying field trips can provide specific insights. We will also continue our involvement in the EGU annual convention in Vienna.

Two co-PIs, Remziye Akdoğan (Turkey) and Helen Cromie (Denmark) will be supporting us in our efforts. Additionally, we also plan to nominate local Task Force VI “representatives” for other areas than Europe and China covered by authors of this renewal proposal, i.e. for North America, South America, Africa, India, SE Asia, and Australia and New Zealand. This should greatly help disseminate activities of the Task force VI and broaden its community.

List of (tentative) meetings to be organized in years 2026-2030

2026

We are considering organizing ILP Task Force VI workshop in 2026 in Mendoza, Argentina, in conjunction with the 7th International Conference of Paleogeography organized by International Society of Paleogeography (we are both Council Members of ISP). This should allow for much wider outreach and should significantly increase number of participants of the workshop. Such combined meeting should also provide ideal platform for interaction between researchers from different disciplines of Earth sciences working on various aspects of formation and evolution of sedimentary basins. Mendoza and the Andes will provide an excellent background for in-depth discussion on various aspects of evolution of foreland basins and fold-and-thrust belts.

2027-2030

At this stage, with very complex world-wide political situation, it is difficult to predict where exactly next four workshops might take place, although several locations are being considered:

2027: Sydney, Australia: key topics of this meeting would be use of thermochronology in sedimentary basin studies, and salt tectonics; possible field trip could be to Flinders Ranges with world-class outcrops of salt structures

2028: Chengdu, China: formation and evolution of sedimentary basins in central Asia, role of strike-slip tectonics in basin formation

2029: Libreville, Gabon or Rio do Janeiro, Brazil: formation and evolution of extensional basins, opening of central Atlantic, salt tectonics and associated depositional systems on passive margins

2030: Parma, Italy: Alpine and Apennines FTBs and associated sedimentary basins

IV. Outreach

By fostering the collaboration with the industry and research institutes, the Task Force is already involved in promoting a significant number of dedicated geo-resources projects, such as in the field of geo-fluids, geothermal energy or conventional/unconventional georesources that have paramount importance for energy transition. Such initiatives will place the Task Force in a unique position for quantifying georesources-related processes and provide their novel understanding. A key step in achieving this objective will be to integrate observations in natural laboratories, fluid-rock-interaction and coupled fluid/mass transport, with scale modelling work on orogenic and basin-scale deformation, and with process-oriented modelling.

We try to keep registration prices for our yearly international workshops as low as possible for students and participants from the universities. Further support to the students is provided in the form of travel grants, up to the maximum limit allowed to keep our budget balanced.

The format of our meetings is excellent to stimulate the interactions between Industry and academia, and initiate new collaborative work between new comers. Although ILP seed funding would not be sufficient to support alone the cost of the venues and expenses related to the invitation of key note speakers, we have up to now benefited from enough, although not regular, sponsorship from the industry, thus helping to maintain the registration prices at a reasonable level.

V. Key potential partners within this Task Force

name	email	institution	country	task / expertise	career status
Remziye Akdoğan	remziyeak@gmail.com	Istanbul Technical University	Turkey	tectonics and sedimentation; siliciclastic rocks; basin analysis	assistant professor, early career researchers (female)
Wei An	anwei@hfut.edu.cn	Hefei University of Technology	China	tectonics and sedimentation; subduction-related basin; siliciclastics	associate professor, early career researcher (female)
Andrea Artoni	andrea.artoni@unipr.it	University of Parma	Italy	foreland basins and fold-and-thrust belts	professor
Attila Balazs	attila.balazs@erdw.ethz.ch	ETH	Switzerland	modelling of sedimentary basins	research assistant
Sam Boone	samuel.boone@sydney.edu.au	University of Sydney	Australia	thermochronology, plate tectonics, numerical Earth system modeling	lecturer
Joe Cartwright	joe.cartwright@earth.ox.ac.uk	University of Oxford	UK	evolution of sedimentary basins, magmatic intrusions, evaporitic basins	professor
Sierd Cloetingh	S.A.P.L.Cloetingh@uu.nl	University of Utrecht	Netherlands	sedimentary basins evolution	professor
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Marek Jarosiński	marek.jarosinski@pgi.gov.pl	Polish Geological Institute	Poland	geophysics, sedimentary basins	professor
Hehe Jiang	jiang.hehe@mail.iggcas.ac.cn	Institute of Geology and Geophysics, Chinese Academy of Sciences	China	tectonics and sedimentation; weathering and climate; siliciclastic rocks	assistant professor, early career researcher (female)
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Fanwei Meng	fwmeng@isl.ac.cn	China University of Mining and Technology	China	evaporitic basins	professor
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Walter Mooney	mooney@usgs.gov	US Geological Survey	USA	crustal control on evolution of sedimentary basins	senior researcher
Andrea Moscariello	Andrea.Moscariello@unige.ch	University of Geneva	Switzerland	geothermal systems	professor
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Michal Nemcok	rmgeology@rmgeology.sk	Technical University of Ostrava	Czech Republic	foreland basins and fold-and-thrust belts,	professor

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Magdalena Scheck- Wenderoth	leni@gfz-potsdam.de	GFZ	Germany	numerical modelling, sedimentary basins	professor (female)
Aleksandra Stachowska	aleksandra.stachowska@twarda.pan.pl	Institute of Geological Sciences, Polish Academy of Sciences	Poland	inversion-related sedimentation, transform margins	early career researcher (female)
Hans Thybo	h.thybo@gmail.com	ILP coordination	Denmark	geophysics, basins evolution	professor
Benjamin Van Wij de Vries	ben.vanwyk@uca.fr	University Clermont Ferrand	France	societal relevance	professor
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Liviu Matenco	l.c.matenco@uu.nl	Utrecht University	Netherlands	sedimentary basins	professor
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Nevena Andric- Tomasevic	nevena.tomasevic@kit.edu	KIT Karlsruhe	Germany	sedimentary systems	professor (female)
Barbara Tomaszewska	tomaszewska@min-pan.krakow.pl	Mineral and Energy Economy Research Institute of the Polish Academy of Sciences	Poland	geothermal energy, hydrogeology, hydrogeochemistry	professor (female)
Jiangang Wang	wangjiangang@iggcas.ac.cn	Institute of Geology and Geophysics, Chinese Academy of Sciences	China	tectonics and sedimentation; siliciclastic rocks; basin analysis	associate professor
Weiwei Xue	weiwei_xue@yeah.net	Guangzhou Institute of Geochemistry, Chinese Academy of Sciences	China	tectonics and sedimentation; siliciclastic rocks; basin analysis	early career researcher

Jianghai Yang	yangjh@cug.edu.cn	China University of Geosciences, Wuhan	China	tectonics and sedimentation; palaeoclimate; siliciclastics	professor
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Education

1992: MSc in Geology, Jagiellonian University, Kraków, Poland

1992: MSc in Exploration Geophysics, AGH University of Science & Technology, Kraków, Poland

1998: PhD in Geophysics / Tectonics, AGH University of Science & Technology, Kraków, Poland in co-operation with Imperial College, London, UK

2005: Habilitation, AGH University of Science & Technology, Kraków, Poland

Employment history

1993-1995: Department of Geophysics, AGH University of Science & Technology, Kraków, Poland (research assistant)

1996-2012: Polish Geological Institute, Warsaw, Poland (various assignments including head of Department of Geophysics)

2012-2017: ION Geophysical (seismic interpreter)

2012-recent: Institute of Geological Sciences, Polish Academy of Sciences, Warsaw, Poland (professor, Head of the “SeisSed” Seismic Interpretation & Basin Analysis Research Group)

Research Interests

- Formation and evolution of sedimentary basins, in particular of foreland basins and basin during inversion
- Influence of inversion tectonics on syn-tectonic depositional systems

- Role of salt tectonics in evolution of sedimentary basins and its control on depositional systems
- Strike-slip domains and transform continental margins: tectonics versus sedimentation
- History of geosciences

Publications

h-index / citations: 33 / 4247 (Google Scholar)

Author of approx. 560 conference abstracts, peer reviewed papers (Marine & Petroleum Geology, Tectonics, Tectonophysics, Solid Earth, Journal of Paleogeography, Geosciences, Geological Quarterly, Acta Geologica Polonica) and book chapters (Elsevier, Geological Society of London, Geological Society of America, Springer, Polish Geological Institute)

guest editor of special issues / sections of the Polish Geological Institute Transactions, Interpretation, Solid Earth and Global & Planetary Change

recent papers (2021-2025):

1. **Krzywiec P.**, Arndt A., 2021, Development of paleontological art in Poland (1764 – 1846). [in]: Clary R., G.D. Rosenberg, Evans D. (eds.), The Evolution of Paleontological Art. Geological Society of America Memoir 218: 91-100 [https://doi.org/10.1130/2021.1218\(11\)](https://doi.org/10.1130/2021.1218(11))
2. Stachowska A., **Krzywiec P.**, 2021, Depositional architecture of the Upper Cretaceous succession in central Poland (Grudziądz–Polik area) based on regional seismic data. Geological Quarterly, 65: 21, <http://dx.doi.org/10.7306/gg.1589>
3. Warsitzka M., Závada P., Jähne-Klingberg F., **Krzywiec P.**, 2021, Contribution of gravity gliding in salt-bearing rift basins – a new experimental setup for simulating salt tectonics under the influence of sub-salt extension and tilting, Solid Earth, 12(8) 1987–2020, <https://doi.org/10.5194/se-12-1987-2021>
4. Kufraś M., **Krzywiec P.**, 2021, Impact of mechanical stratification on the structural style of the Lublin Basin, SE Poland: results of seismic interpretation and implications for quantification of deformation within the frontal parts of thin-skinned fold-and-thrust belts. International Journal of Earth Sciences, 111: 659–673 <https://doi.org/10.1007/s00531-021-02140-7>
5. **Krzywiec P.**, Kufraś M., Poprawa P., Mazur S., Koperska M., Ślęmp P., 2022, Together but separate: decoupled Variscan (late Carboniferous) and Alpine (Late Cretaceous – Paleogene) inversion tectonics in NW Poland, Solid Earth, 13, 639–658, <https://doi.org/10.5194/se-13-639-2022>
6. Stachowska A., **Krzywiec P.**, 2023, The Late Cretaceous tectono-sedimentary evolution of northern Poland – a seismic perspective on the role of transverse and axial depositional systems during basin inversion. Marine & Petroleum Geology, 152, 106224, <https://doi.org/10.1016/j.marpetgeo.2023.106224>
7. Poprawa P., Nejbert K., **Krzywiec P.**, Krzemińska E., Krzemiński L., Mazur S., Słaby E., 2024, Alkaline magmatism from the Lublin-Baltic area of Poland (SW slope of the East European Craton) – manifestation of hitherto unrecognized early Carboniferous igneous province. Terra Nova, 36: 77-88, <https://doi.org/10.1111/ter.12681>
8. Ponikowska M., Stovba S.M., Mazur S., Malinowski M., **Krzywiec P.**, Nguyen Q., Hübscher C., 2024, Crustal-scale pop-up structure at the junction of two continental-scale deformation zones in the southern Baltic Sea. Tectonics, 43, e2023TC008066. <https://doi.org/10.1029/2023TC008066>
9. **Krzywiec P.**, Adamuszek M., Filbà L., Rowan M.G., Ferrer O., 2024, Salt-pillow formation during inversion of evaporite-filled half graben – insights from seismic data interpretation and analogue and numerical modelling. Journal of Structural Geology, 105148, <https://doi.org/10.1016/j.jsg.2024.105148>
10. Słonka Ł., Krajewski M., **Krzywiec P.**, 2025, Internal structure of the Upper Jurassic subsurface carbonate buildups of the northern Tethys shelf in southern Poland – integration of seismic forward modeling and outcrop analogs. Marine & Petroleum Geology, 177, <https://doi.org/10.1016/j.marpetgeo.2025.107367>

11. **Krzywiec P.**, Kufrasa M., Bubniak I., 2025, External Variscides in South-Eastern Poland and Western Ukraine, [in]: Linnemann, U., (ed.), *Geology of the Central European Variscides and its Avalonian-Cadomian precursors*, Springer Verlag (in press).

Other

member of Polish Geological Society (currently secretary of the Board, and vice-chair of Section on History of Geology), Polish Geophysical Society, European Geoscientist Union, American Association of Petroleum Geologists (past co-chair of History of Petroleum Geology Committee, co-chair of Visiting Geoscientist Program), Society of Exploration Geophysicists, International Society of Paleogeography (currently council member), History of Geology Group (currently member of the Steering Committee), INHIGEO, History of Earth Science Society

recipient of special award of AAPG President (2024)

past member and chairman of Scientific Council of Polish Geological Institute (i.e. Polish Geological Survey), Warsaw, Poland

member and vice-chairman of Scientific Council of Institute of Geological Sciences, Polish Academy of Sciences, Warsaw, Poland

member of Scientific Council of Institute of Geophysics, Polish Academy of Sciences, Warsaw, Poland

ad-hoc lecturer for the AAPG Visiting Geoscientist Program at numerous universities in Europe, USA and China

Member of editorial / advisory boards of *Geological Quarterly*, *Geologica Carpathica*

On-going scientific co-operation:

- University of Oxford, UK, Prof. J. Cartwright (seismic interpretation and modelling of Zechstein evaporites and magmatic intrusions; sedimentation along transform margin – offshore E Africa)
- University of Texas in Austin, USA, Prof. Brian Horton (broken foreland basins, role of flexural extension in evolution of foreland basins)
- University of Rio de Janeiro, Brazil, Prof. W. Mohriak (opening of central Atlantic, salt and shale tectonics)
- University of Sydney, Australia, Dr S. Boone (source-to-sink study of E Africa based on offshore regional seismics and onshore thermochron data)
- US Geological Survey, USA, Dr W. Mooney (comparative analysis of the Appalachians and Variscides)
- COST project SaltAges (<https://www.cost.eu/actions/CA23124/>; member of the management committee)

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Education

1996: BSc in Geosciences, Chengdu Institute of Technology, Chengdu, P. R. China

1999: MSc in Geology, Chengdu University of Technology, Chengdu, P. R. China

2002: PhD in Geology, Chengdu University of Technology, Chengdu, P. R. China

Employment history

2002-2003: Post-Doctoral Fellow at Universita' Politecnica delle Marche, Italy (collaboration with Prof. Dr. Massimo Sarti)

2003: Lecturer, Department of Earth Sciences, Nanjing University, Nanjing, P. R. China

2003-2008: Associated Professor, Department of Earth Sciences, Nanjing University, Nanjing, P. R. China

2008-2015: Professor, School of Earth Sciences and Engineering, Nanjing University, Nanjing, P. R. China

2010-2011: Visiting professor at the School of GeoSciences, The University of Edinburgh, UK (collaboration with Prof. Hugh D. Sinclair)

2016-present: National Distinguished Professor, Nanjing University, Nanjing, P. R. China

Research Interests

- Tectonic and sedimentation in orogenic areas
- Mesozoic-Palaeogene hyperthermal events and climate
- Continental Sediment Generation

- Sedimentary basin analysis

Publications

h-index / citations: 52 / 9339 (Google Scholar)

Guest Editor of special issues / sections of Journal of Earth Science, Geoscience Frontiers, Science China Earth Sciences, Cretaceous Research, SEPM Special Publication, Earth-Science Reviews, Sedimentary Geology and Earth Science Frontiers

recent papers (2021-2025):

1. Liang W., **Hu X.M.**, Garzanti E., Dong X., Chen F., 2025. Contrasting provenance budgets for suspended load and bedload of the Yarlung Tsangpo, Tibet: Lhasa block or Himalaya? *Geology* 53(4): 333–337.
2. Ma, A.L., **Hu, X.M.***, Chew, D., Liang, W.D., Wen, D.J., Deng, T., 2025. A latest Jurassic to Early Cretaceous syn-collisional trench sequence in central Tibet recorded the role of microcontinents in Lhasa–Qiangtang collision. *Tectonics* 44, e2024TC008535.
3. Wen, D.J., **Hu, X.M.***, Klemd, R., Wang, X.L., Ge, R.F., Ma, A.L., Chapman, T., Xue, W.W., Xu, Y.W., 2025. Extensive Early Cretaceous arc-like magmatic rocks in central Tibet manifest subduction rollback of the Neo-Tethyan ocean. *GSA Bulletin*, <https://doi.org/10.1130/B38080.1>.
4. Ma, A.L., **Hu, X.M.***, Garzanti, E., Xue, W.W., Schlagintweit, F., Xu, Y.W., Lai, W. 2024, Diachronous Cretaceous closure of the Bangong-Nujiang-Shyok Ocean (westernmost central Tibet). *Tectonics* 43, e2024TC008280.
5. Deng, T., **Hu, X.M.***, Chew, D., Wang, Q., Yu, J.h., Drakou, F. 2024. Sedimentological evidence for pre-Early Permian continental subduction in the Dabie orogen, central-east China. *Tectonics* 43, e2023TC007839. doi.org/10.1029/2023TC007839.
6. Sun G.Y., **Hu X.M.**, Garzanti E., BouDagher-Fadel M., Xu Y.W., Jiang J.X., Wolfgring E., Wang Y.S., Jiang S.J., 2023. Pre-Eocene Arabia-Eurasia collision: New constraints from the Zagros Mountains (Amiran Basin, Iran). *Geology*, 51: 941–946
7. Han Z., **Hu X.M.**, Newton R.J., He T.C., Mills B.J.W., Jenkyns H.C., Ruhl M., Jamieson R.A., 2023. Spatially heterogeneous seawater $\delta^{34}\text{S}$ and global cessation of Ca-sulfate burial during the Toarcian oceanic anoxic event. *Earth and Planetary Science Letters* 622, 118404.
8. Dong, X.L., **Hu, X.M.***, Garzanti, E., Liang, W.D., Li, G.W., Lai, W., Wang, C.S., Han, Z., Deng, T., Li, Z.C., 2023. The extraordinary Namche Barwa sediment factory in the Eastern Himalayan Syntaxis. *Basin Research*, 35(6): 2193-2216.
9. Ma, A.L., **Hu, X.M.***, Garzanti, E., Pullen, A., BouDagher-Fadel, M., Ji, X.K., Wang, J.G., Lai, W., Xue, W.W., 2023. Mid-Cretaceous exhumation of the Central Qiangtang Mountain Range metamorphic rocks as evidenced by the Abushan continental redbeds, *Tectonics* 42, e2022TC007520.
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Other

Feb. 2021 to Dec. 2025, UNESCO/IUGS IGCP 739, Project title: The Mesozoic-Palaeogene hyperthermal events: lessons for understanding the Anthropocene global warming. Leaders: **Xiumian Hu** (China), Ismail Yilmaz (Turkey), David Kemp (China), Micha Ruhl (Ireland), Santanu Banerjee (India) and Ying Cui (USA)

Feb. 2013 to Dec. 2017, UNESCO/IUGS IGCP 609, Project title: Climate-environmental deteriorations during greenhouse phases: Causes and consequences of short-term Cretaceous sea-level changes. Leaders : M. Wagreich (Austria), **Xiumian Hu** (China), J. J. Rahman (Bangladesh), S. Voigt (Germany), I. O. Yilmaz (Turkey), S. Zorina (Russia)

Feb. 2003 to Dec. 2006, UNESCO/IUGS IGCP 494 (Young Scientists Project). Project title: Dysoxic to oxic change in ocean sedimentation during middle Cretaceous: a study of the Tethyan realm. Leaders: **Xiumian Hu** (China), K. Bąk (Poland), J. Wendler (Germany), N. Tur (Russia)

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Since 2022, Editorial member, *Journal of Earth Sciences*

Since 2014, Editorial member, *Science China Earth Sciences*

Since 2015, *Earth Science Frontiers* (Chinese), Editorial board member

Since 2025, *Acta Sedimentologica Sinica* (Chinese), Acting editor

NSFC Royal Society Newton Advanced Fellowship, Mar 2017 - Mar 2020

National special support program for high-level personnel recruitment, Ten-thousand Talents Program, China, 2017

Youth science and technology innovation leader, Ministry of Science and Technology, China, 2016

The National Science Fund for Distinguished Young Scholars, NSFC, 2015

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