

Call for Papers: International Workshop on Critical Raw Materials and the Prospects for Structural Transformation in Central Asia

May 14-15, 2024 in Astana, Kazakhstan

Deadline for abstract: March 25, 2024.

The acceleration of technological competition among major powers and the worldwide trend towards decarbonization have created new pressures—and opportunities—for geographies endowed with minerals. As views regarding advanced technologies and new energy systems shape contemporary attitudes and policies, new patterns of international trade, investment, and finance have become consequential in the restructuring of supply chains of both critical raw materials (CRMs) and manufacturing. At the same time, growing distance between U.S. and China, has altered the logic of supply chains management—one whereby economic security takes primacy over principles of on time production and supply chain interdependence. In this context, new mineral producers including Central Asian countries are being drawn to their resources sector to respond to the growing demand from decarbonization and technological competition while also navigating potential geopolitical risks.

Our proposed international workshop aims to bring together theoretical and empirical papers that examine the new geopolitical contexts for structural transformation in Central Asia. The choice to examine this region is based on several intellectual rationales, namely:

- the need to generate and consolidate knowledge on the continuities and changes in Central Asian political economy, as well as the significance of the region in debates about agency in international order and alternative paradigms of economic development;
- (2) the need for focused scholarship in explaining the dynamics of state power, the role of foreign direct investment (FDI) and emerging state-market relations in Central Asia in relation to the international political economy (IPE) literature; and
- (3) the importance of an inter-disciplinary dialogue, drawing scholars from political economy, area studies, sociology, anthropology, and economic geography as well as Science and Engineering areas, in identifying research gaps and future research agenda with the aim of applying for an international grant and collective publication in the form of a special issue and/or edited collection in a major university press.

The international workshop sets out to answer the following key questions:







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- How do international factors, notably strategic competition, new patterns of trade and finance, as well as FDI flows in the supply chains of critical minerals and downstream sectors, influence the capacity of Central Asia to play a pivotal role in the energy transition and technological competition?
- In what ways do regional and domestic political economy factors—such as dynamics of state power, clan politics and political competition, histories of manufacturing capabilities, industrial policy and resource development, and other idiosyncratic variables—determine the agency of Central Asian states in shaping a distinctive response to the demand for CRMs?
- How do Central Asian resource-producing countries respond to the new demand for CRMs? Put differently, what policy choices and institutional designs have emerged to achieve the primary objective of mineral producers, namely the need to add value and move up in higher value-added activities in supply chains?
- How are critical minerals deployed in other relevant discussions, such as economic security, environmental governance, and other relevant development discourses?

Workshop Plan

The international workshop will take place on May 14-15, 2024 in Astana, Kazakhstan in the premises of Nazarbayev University Graduate School of Public Policy. The event is jointly organized by the ERC Starting Grant research programme *Green Industrial Policy in the Age of Rare Metals* (GRIP-ARM) under Grant No. 9590056, the Kazakhstan Science Fund JSC, Nazarbayev University, SDSN Kazakhstan and DSIT UK grant to Cavendish Laboratory and Cambridge Central Asia Forum, University of Cambridge, titled Capacity Building for Advanced Characterisation of Critical Minerals and Energy Materials

To participate in the workshop, please send a 500-word (maximum) abstract to grip-arm@iss.nl **by March 25, 2024.** We will send individual emails of acceptance/rejection by March 31, 2024. Full papers between 5,000-7,000 words or longer power point presentations are expected to be submitted on May 10, 2024. We will release the final programme three weeks before the conference. We will allocate a special session to discuss publication plans for 2024/2025. We would like to get revised papers for discussion to include in the special issue proposal by July 25, 2024.

Due to limited funding, we expect prospective participants to cover for their travel expenses to Kazakhstan. We will organize local logistical support for those who need help in the region.



About the convenors

Jewellord T. Nem Singh is the Principal Investigator of the ERC Starting Grant *Green Industrial Policy in the Age of Rare Metals: A Transregional Comparison of Growth Strategies in Rare Earths Mining* (GRIP-ARM). He is an Assistant Professor at the International Institute of Social Studies (ISS), The Netherlands. He holds a dual appointment as a Global Fellow at the Wilson Center Environmental Change and Security Program (ECSP), Washington DC and an Affiliate Research Fellow at the International Institute of Asian Studies (IIAS), The Netherlands. His most recent publications include *Business of the State: Why State Ownership Matters for Resource Governance* (Oxford University Press, 2024) and *The Politics of Designing and Negotiating Industrial Policy in the 21st Century* (CRC Press, Forthcoming).

Serik Orazgaliyev is an Associate Professor at the Graduate School of Public Policy, Nazarbayev University and a Co-Chair at Sustainable Development Solutions Network (SDSN) country chapter in Kazakhstan. He also holds an appointment as an Affiliated Research Fellow at Cambridge Central Asia Forum. In 2022 Serik Orazgaliyev was awarded a three-year research grant from the Ministry of Education and Science of Kazakhstan. Dr. Orazgaliyev's recently coauthored a paper *Sustainable Development Goals and Good Governance Nexus: Implementation Challenges in Central Asia* (published in Public Administration and Development).

Siddharth Saxena is Director of the Cambridge Central Asia Forum, Cambridge, Principal Research Associate (Professor Rank) at University of Cambridge. In Physics he works on physics of rare-earth materials, superconductivity and magnetism. He also works on knowledge systems, social and political development, institutional history of Central Asia & its neighbourhood. He is also a Vice-Rector for Research and Professor of Economic Development at British Management University Tashkent and Honorary Professor at Kazakh British Technical University in Almaty. He directed Centre for Materials and Micro-systems, Trento, Italy and the Centre for High Technology, Tashkent, Uzbekistan. He has conducted field based research in Uzbekistan, Kazakhstan, Kyrgyzstan, Tajikistan, China, Russia and Afghanistan. He has also spent research periods in Iran, Egypt, Azerbaijan, Turkmenistan and India. He has discovered four new superconductors. He was awarded the International Union of Pure and Applied Physics (IUPAP) Young Scientist Medal in 2006 and medals by Kazakh and Uzbek science and education ministries.



About GRIP-ARM project

GRIP-ARM is a five-year research programme (2021-2026) focused on drawing a trans-regional comparison to analyze both (1) resource-producing countries that deploy various industrial strategies to (re)shape world supply and production; and (2) resource-importing countries and manufacturing firms that seek to reduce supply vulnerability while also reducing socio-environmental costs of rare earth extraction. In particular, the research is interested in the evolving role of critical minerals in Kazakhstan in order to meet its (a) national technological innovation targets in the context of the on-going technological race and (2) to promote structural transformation through economic linkages between the mining industry and the broader economy.