

UNESCO Chairs Seminars

Transforming Knowledge for Africa's Future

Empowering African Science:

Enhancing Research and Collaboration through Remote Access and Networking

Date and time: Wednesday 13 December 2023, 14:00 to 15:30 (GMT+1, Paris Time) Languages: English and French Format: Zoom – <u>Click here to register</u>

Seminar description

Africa is one of UNESCO's two global priorities. The Operational Strategy for Priority Africa 2022-2029 (OSPA) has been developed based on consultations with Member States. This Operational Strategy aims at achieving the Sustainable Development Goals (SDGs) of the United Nations' Agenda 2030 and the African Union's Agenda 2063 "The Africa We Want", in UNESCO's fields of competence. From September to December 2023, the UNESCO Chairs Seminars have focused on key issues in Africa, under the theme "Transforming Knowledge for Africa's Future". The Seminars are also a contribution towards the African Union's Theme of the Year 2024, devoted to education. This Seminar on the topic of "Empowering African Science: Enhancing Research and Collaboration through Remote Access and Networking" is specifically dedicated to OSPA Flagship Programme 5: "Enhance Open Science, Strengthen Capacity Building in Basic and Applied Sciences and Scientific Research to Strengthen Innovation and technology development and use in ocean science, climate change resilience and water resources management in Africa".

In recent years, the international community has recognized the critical importance of fostering global scientific collaboration to tackle the world's most pressing challenges. However, access to cutting-edge research facilities, including laboratories, specialized equipment, and data sources, remains a significant barrier. This is a fundamental issue for scientists in Africa, that hinders their ability to contribute effectively to global scientific advancements. Despite these barriers, scientists and researchers in Africa have made significant contributions to various fields, even if their ability to conduct experiments, collect critical data, and engage in cutting-edge research is restricted. Moreover, financial constraints, geographical distances, and administrative barriers further compound the issue, creating multidimensional challenges for those eager to make meaningful scientific contributions.

Consequently, there are unrealized valuable research ideas, strangled innovation, and delayed potential solutions to some of the world's most pressing challenges – such as water scarcity, climate change, and sustainable development. The limited access to other research methodologies and technologies also contributes to a widening knowledge gap, preventing African researchers from engaging in interdisciplinary collaborations and staying at the forefront of their respective fields, whilst preventing them from having influence across the field.

This Seminar seeks to shed light on the limited access African scientists have to essential research infrastructure, and the transformative potential of a novel initiative aimed at providing remote facility access. Addressing this issue can help to foster cross-continental collaboration, empower researchers, and overcome barriers to scientific innovation. This innovative initiative aims to bridge the gap by



enabling scientists in Africa to remotely utilize research facilities that might otherwise be out of reach. By leveraging digital technologies, data-sharing platforms, and virtual collaboration tools, the initiative seeks to empower researchers to conduct experiments, access equipment, and collaborate with colleagues around the world – all from their home institutions. Such a groundbreaking approach has the potential to revolutionize scientific collaboration, democratize access to knowledge, and amplify the impact of African research on a global scale. This Seminar will also discuss the implementation details of the remote facilities initiatives, areas to be improved, partnerships and funding opportunities, as well as the potential for contributing to South-South cooperation.

Recognizing the urgency of addressing this issue, the Seminar will convene UNESCO Chairs, UNITWIN Networks, as well as other experts, thought leaders, and stakeholders from diverse fields, including science, engineering, science policy, water, and ocean science. Participants will delve into the complex challenges faced by African scientists, the transformative potential of remote facility access, and the strategies required to ensure the initiative's success and sustainability. This Seminar represents a call to action for all stakeholders invested in scientific progress, research equity, and global collaboration. By joining forces, sharing experiences, and collectively strategizing, a future where geographical barriers no longer limit the contributions of African scientists can begin to be realized. Through innovative solutions like remote facility access, researchers can be empowered to not only enrich their local communities but also contribute substantively to the international scientific community.

Objectives

- Raise awareness about the challenges African scientists face in accessing research facilities.
- Present the innovative initiative for remote facility access and its potential impact on scientific advancement in Africa.
- Foster collaboration among experts in science, engineering, science policy, and water.
- Identify key strategies and recommendations for successful implementation and sustainability of the initiative.





Provisional Agenda

Empowering African Science:	
Enhancing Research and Collaboration through Remote Access and Networking	
Wednesday, 13 December 2023, 14:00 – 15:30 (CET)	
Moderator: Mr Mohamed Elfarnawany , Director, Division of Priority Africa Coordination, Priority Africa and External Relations Sector, UNESCO	
14:00-14:10	Opening remarks
	H.E. Prof. Mohamed Belhocine, Commissioner for Education, Science
	Technology & Innovation of the African Union
	Mr Anthony Kwaku Ohemeng-Boamah, Assistant Director-General for
	Priority Africa and External Relations, UNESCO
14:10-14:30	Keynote Addresses
	Prof. Lise Korsten, President, African Academy of Sciences, South Africa
	 Prof. Osama Awadelkarim, UNESCO Chair on Building Innovation and
	Manufacturing Capacities through Advanced Technology Education, Penn
	State University, United States of America
14:30-15:05	Panel Discussion: Enhancing Scientific Collaboration in Africa
	Moderator: Ms Amal Kasry , Chief of Section of Basic Sciences, Research Innovation, and Engineering, Natural Sciences Sector, UNESCO
	Panelists:
	• Prof. Malik Maaza, UNESCO Chair in Nanosciences and Nanotechnology,
	University of South Africa, South Africa
	Prof. Claude Lecomte, Université de Lorraine, Nancy, France
	Ms Jansie Niehaus, Executive Director, South Africa National Science and
	Technology Forum, South Africa
	 Dr Erik Ziki, Université Félix Houphouët-Boigny, Côte d'Ivoire Ms Awa Bousso Dramé, Founder, CoastGIS, Senegal and Cabo Verde
	• Wis Awa Bousso Drame, Founder, Coastors, Senegal and Cabo Verde
15:05-15:25	Comments and Q&A
	All participants
15:25-15:30	Closing Remarks
	• Mr Shaofeng Hu, Director of the Division of Science Policies and Basic
	Sciences, Natural Sciences Sector, UNESCO
	Mr Keith Holmes, Programme Specialist, Future of Learning and
	Innovation Team, Education Sector, UNESCO