

African Light Source Opening Remarks

18 November 2024

It is my great honour to welcome you all to the University of Johannesburg (UJ) this morning. Throughout the annals of history Africa has been referred to as the dark continent. Joseph Conrad wrote of the heart of darkness. This painful stereotype has persisted and has come to represent all that is perceived as deficient on the continent. No more. Beyond the very on the nose use of darkness, this imagery misrepresented the continent with colonial-era connotations of ignorance and underdevelopment.

This significant gathering is dedicated to advancing the establishment of the African Light Source. This initiative represents illumination thus dispelling outdated narratives of Africa's supposed lack of development. Envisioned is a large-scale, multidisciplinary research infrastructure that holds the potential to transform the continent. It is a vision that shakes the very foundation of the dark continent. The astronaut Rakesh Sharma once said: “Yes, we have ruined the Earth and have done an exceptionally good job of it. Yes, we should look at sustainable development. But we cannot afford to do things sequentially, but parallelly and make sure that we do not repeat our mistakes.”

As we gather to discuss the transformative potential of an African Light Source, Sharma's words remind us of the urgency and responsibility we carry. Around the world, light source facilities have been catalysts for extraordinary achievements. They have driven massive capacity building, unlocked unparalleled innovation, fuelled economic growth, and equipped nations with the tools to address some of humanity's most pressing challenges. From breakthroughs in medicine and materials science to advancements in agriculture and energy, light sources have enabled discoveries that resonate across all sectors of society.

While the Earth now faces unprecedented challenges due to unsustainable practices, the pursuit of scientific advancements, like establishing a light source in Africa, must proceed alongside efforts toward sustainable development. By building this facility, we embrace the dual responsibility of driving innovation while ensuring we avoid past mistakes. This duality creates a foundation for both scientific progress and a more sustainable future for Africa and beyond. This is the very goal of the African Light Source Foundation (AfLS) and the proceedings of this conference. Some of the applications of light sources include drug discovery, disease research, materials science, and even palaeontology.

With Africa currently lacking its own light source, African researchers must travel abroad to use these facilities, facing distance and cost barriers. Establishing a light source in Africa would provide essential scientific infrastructure, enabling greater access and empowering African researchers and students to contribute to global advancements. It could be argued that an advanced light source in Africa is vital if African governments and civil society are to achieve the Sustainable Development Goals (SDGs). This is the key to a more equitable world.

An African Light Source would play a pivotal role in fostering a science renaissance on the continent, enhancing education, reversing brain drain, supporting industries, and driving research relevant to Africa's needs. Building such a facility would empower African nations, fostering regional collaboration and strengthening their global standing. This endeavour represents more than just an investment in infrastructure – it is an investment in Africa's future and in its people. Over the course of this conference, I have no doubt that you will engage in meaningful discussions, forge collaborations, and share ideas in this pursuit. This is a collective commitment to a more sustainable and equitable future for all.

I leave you with the words of Ban Ki-moon, who once said: “Sustainable development is the pathway to the future we want for all. It offers a framework to generate economic growth, achieve social justice, exercise environmental stewardship and strengthen governance.” May this insight into the impact of sustainable development provide you with inspiration as breakthroughs in Africa emerge as a source of light and hope. Thank you, and I wish you all an inspiring and productive conference.