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Editorial Note

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Editor-in-Chief
African Journal of Physics, Chemistry, and Medical Laboratory Science (AJPCMLS)

It is with great pride that we present the inaugural issue of the *African Journal of Physics, Chemistry, and Medical Laboratory Sciences (AJPCMLS)*. This edition is the realisation of our vision to establish a robust platform for African and international scientists to publish innovative research that addresses both the unique challenges of our continent and the broader global scientific agenda. The interdisciplinary scope of AJPCMLS, spanning the physical sciences, chemical sciences, and medical laboratory, exemplifies how these fields flourish not in isolation, but through the cross-pollination of ideas rooted in local realities and enriched by global perspectives. This issue's collection of papers reflects that very mission, showcasing a compelling range of research from across the African region that engages each of these disciplines with depth and relevance.

We begin with a forward-looking study: "*Solar Resource Assessment and Energy Production Prediction for a Large-Scale Ground-Mounted Solar PV Plant: A Case Study of Concession Energy Resources in Zimbabwe.*" This work evaluates solar irradiance and energy yield for a large-scale photovoltaic plant in Mazowe, Zimbabwe. The authors use satellite-derived and historical meteorological data to provide robust predictions for energy

output, informing sustainable energy planning and policy. This study demonstrates progress in applied physics and environmental chemistry, integrating computational tools in addressing Africa's energy challenges.

The second paper, titled "*Effect of Radiation Pressure and Triaxiality on Motion Around Libration Points in the Restricted Three-Body Problem*," takes us into the realm of astrophysics. This study models the motion of dust grains in a binary star system, analysing how radiation pressure and stellar triaxiality influence orbital stability. The research enhances our understanding of celestial mechanics and provides new insights into the long-term motion of celestial bodies, including exoplanets and satellites.

Next, we turn to a study that exemplifies the integration of traditional medicinal systems with modern laboratory testing: "*Kinkeliba and Mbor Mbor: Safe, Nutritional Herbal Teas of The Gambia, and Rich in Phytoconstituents.*" **Fatoumatta Sonko and co-workers** used laboratory methods to assess two popular Gambian herbal teas, Kinkeliba and Mbor mbor, for their phytochemical content and safety. Their findings show that these traditional teas are rich in beneficial flavonoids, alkaloids, and phenols, and are free from harmful heavy metals. The teas offer promising health benefits and exemplify the potential of indigenous plants in public health nutrition.

Concluding the issue is a vital contribution of clinical and public health importance from medical laboratory sciences by **Dzapasi** Vitalis and colleagues: "*Evaluation of Endothelial Activation and Inflammatory Markers in ART-Treated HIV Patients."* This study investigates cardiovascular risk among Zimbabwean patients on long-term antiretroviral therapy (ART). Through biomarker analysis of ICAM-1, VCAM-1, IL-1, and IL-6, the authors reveal that while ART reduces initial inflammation, prolonged use is associated with persistent endothelial dysfunction, which may lead to the development of cardiovascular disease. These findings highlight the need for integrated HIV and cardiovascular care strategies in regions where ART is widely used.

These articles illustrate the blend of theory and application that defines AJPCMLS, marking an important step for African science.

As we launch this inaugural issue, we extend our deepest gratitude to the authors for their outstanding contributions, to the reviewers for their critical insights, and to our editorial team for their dedication and valuable institutional support, which have been instrumental in bringing this journal to life.

AJPCMLS looks ahead to progressive future editions. We invite all those advancing scientific inquiry in the laboratory, the field, or through interdisciplinary collaboration to engage with AJPCMLS, share their work, and help shape future editions.

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