

EDITORIAL

Toxicology Digest is the official journal of the **West African Society of Toxicology (WASOT)**, a professional association of scientists and practitioners dedicated to the study of the adverse effects of chemical, physical, and biological agents on humans, animals, and the environment. The Society's mission is to promote the acquisition, advancement, and application of toxicological knowledge relevant to the West African sub-region and to facilitate the exchange of scientific information among researchers, educators, clinicians, regulators, policymakers, and other stakeholders through its publications and scientific activities.

As the flagship publication of WASOT, *Toxicology Digest* is committed to publishing high-quality manuscripts that advance knowledge in the toxicological sciences. The journal welcomes contributions spanning experimental, clinical, environmental, occupational, regulatory, and molecular toxicology, including studies on toxic agents, mechanisms of toxicity, toxicokinetics, toxicodynamics, biomarkers of exposure and effect, toxicological pathology, ecotoxicology, and human health risk assessment.

This special edition comprises nine peer-reviewed manuscripts, including eight papers selected from the 82 abstracts presented at the 13th International Conference of the West African Society of Toxicology (WASOT), held at the University of Calabar, Calabar, Cross River State, Nigeria, from 18–20 February 2026, under the theme "Strengthening Toxicological Resilience: Capacity Building, Innovation and Policy," together with one accepted review article that was not presented at the conference but was considered highly relevant to both the journal's scope and the theme of the special issue. Deliberately designed to foster interdisciplinary engagement, the conference attracted contributions not only from toxicologists but also from researchers in public health, biomedical sciences, clinical medicine, environmental sciences, pharmacology, and other allied disciplines. Consequently, while most of the papers published in this issue maintain a strong toxicological focus, others address complementary topics that support the conference theme by advancing knowledge in public health, disease prevention, environmental sustainability, innovation, and evidence-informed policy.

For this special edition, the Editorial Board invited authors whose abstracts were published in the Conference Book of Abstracts to submit full-length manuscripts for consideration. All submissions underwent the journal's rigorous peer-review process, and eight conference papers met the standards required for publication. The invited review article was subjected to the same peer-review process before acceptance. The Editorial Board anticipates that subsequent issues of *Toxicology Digest* will include additional papers from conference participants who further develop their conference abstracts into full-length manuscripts and submit them for consideration through the journal's peer-review process.

The nine papers published in this special edition collectively demonstrate the breadth of contemporary toxicological research and its intersections with public health, pharmacology, environmental sustainability, molecular biology, and health policy.

Among the contributions, **Daka et al.** investigated the *Effect of Slimming Teas on Lipid Profile and Antioxidant Status in High-Fat Diet-Induced Hyperlipidemic Female Albino*

Rats. Although the study primarily evaluates therapeutic efficacy through lipid metabolism and oxidative stress biomarkers, it also contributes to the growing body of evidence regarding the biological safety and health implications of widely consumed herbal products.

Ugor et al. examined the interactions between Coartem and antioxidant systems, with particular emphasis on biomarkers of liver injury and oxidative stress. Their findings address important questions relating to drug safety, oxidative damage, and experimental toxicology.

Ibewuike et al. presented a systematic review entitled *Risk Factors Associated with Common Pediatric Lower Respiratory Conditions*. Although principally rooted in clinical and public health epidemiology, the review aligns with the conference's emphasis on capacity building and evidence-informed policy for disease prevention and health promotion.

Okpashi et al. evaluated the pharmacological effects of *Corchorus olitorius* leaf extract against benign prostatic hyperplasia and employed GC-MS analysis to characterize its bioactive phytochemical constituents. While the study focuses primarily on therapeutic efficacy, it provides an important foundation for future toxicological and safety evaluations of medicinal plants.

One of the contributions most closely aligned with the journal's core mandate is the critical review by **Ibezim et al.**, *Hepatic and Renal Toxicities Linked to Herbal Remedies in West Africa*. The review comprehensively examines herbal toxicants, mechanisms of hepatic and renal injury, clinical manifestations, and the broader public health implications of herbal medicine use within the region, making it a valuable contribution to contemporary toxicological scholarship.

Efejene et al. explored *Metabolic-Immune Crosstalk as a Driver of Aging and Longevity: An Insight into Drosophila melanogaster*. By integrating concepts from metabolism, immunology, and ageing biology, the paper broadens scientific understanding of mechanisms that may ultimately influence toxicological susceptibility and resilience.

Stanley et al. investigated *Domestic Violence and Abuse in Pregnancy: Assessing Disclosure, Non-disclosure and Conflict Resolution Strategies in South-South Nigeria*. Although this study falls outside the traditional boundaries of toxicology, it reflects the conference's broader commitment to public health, health systems strengthening, and the social determinants of health.

Sobowale et al. evaluated the termiticidal activity of ethanol extracts of *Terminalia catappa* and *Terminalia ivorensis* stem bark. Their work contributes to the search for environmentally sustainable botanical pesticides and provides an important basis for future investigations into efficacy, environmental safety, and ecotoxicological implications.


Nwobi et al. critically reviewed the *Roles of Micronutrients Against Genetic Toxicity: Connecting Molecular Defense to Clinical Chemistry Applications*. Although this paper was not presented at the conference, it is by a WASOT member and represents a significant contribution to genetic and molecular toxicology. The paper synthesizes current evidence on the protective roles of micronutrients against DNA damage. Its discussion of oxidative

stress, DNA repair mechanisms, genome stability, validated biomarkers of genotoxicity, and the translation of these concepts into clinical chemistry underscores the growing importance of nutritional modulation in toxicological research, biomonitoring, and preventive health.

Finally, this special edition includes a systematic review by **Okorochoa et al.** on the *Influence and meaning of the Hospital Birth Environment on the Labour Experiences of Nulliparous Women*. This systematic review highlights the critical role that the birth environment plays in influencing the experiences and outcomes of nulliparous women during hospital-based labour.

The Editorial Board acknowledges that publication of this special edition took longer than originally anticipated owing to unforeseen technical challenges. We sincerely appreciate the patience, understanding, and continued support of our authors, reviewers, and readers throughout this period. Looking ahead, *Toxicology Digest* remains committed to the timely publication of high-quality review articles, original research papers, commentaries, short communications, and case reports across the diverse disciplines of toxicological science. We warmly invite submissions from researchers, practitioners, institutions, and professional societies throughout West Africa and the wider international scientific community.

Collectively, the papers presented in this special edition reflect both the breadth and the continuing evolution of toxicological science. While several contributions address the traditional domains of toxicology, others exemplify the interdisciplinary collaborations increasingly required to address complex environmental and public health challenges. It is our hope that this collection will stimulate further research, strengthen scientific partnerships, and contribute meaningfully to the advancement of toxicological science, innovation, public health, and evidence-based policy within West Africa and beyond.



Professor Ikechukwu Noel Emmanuel Onwurah
Editor-in-Chief, Toxicology Digest
West African Society of Toxicology (WASOT)

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