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CALL FOR THE SPECIAL ISSUE

Innovative Materials and Technologies for a Sustainable Future: Advancing Energy, Food Security, Safety, and Intelligent Systems.

The global pursuit of sustainability has increasingly brought to the forefront the need for innovative solutions that bridge the gap between technological advancement and environmental control. As we navigate the complexities of the 21st century, the role of advanced materials, energy-efficient technologies, and intelligent systems has never been more critical. These innovations are key to achieving the Sustainable Development Goals (SDGs), particularly in areas related to climate action, environmental protection, and the creation of sustainable cities. In the realm of advanced materials, there is a pressing need to develop and understand materials that not only enhance performance but also align with environmental and sustainability goals. This thematic area seeks contributions that explore how novel materials can be engineered and applied to mitigate climate change, reduce environmental impact, and foster the development of sustainable urban environments. This call for Review Papers invites scholars, researchers, and industry experts to contribute to the growing body of knowledge that supports sustainability objectives in terms of materials, life cycles, recyclability, and energy efficiency.

The integration of sensor technologies with energy and food systems represents another crucial area of focus. As energy demands increase and the transition to renewable sources accelerates, the development of advanced sensors becomes vital in ensuring efficient energy use, environmental monitoring, and sustainable agricultural practices. This call for papers seeks reviews that highlight recent advancements in sensor technologies and their applications across energy and food domains, from renewable energy generation to precision agriculture and food supply chain management. Contributions that explore the intersection of sensors with artificial intelligence and machine learning for optimized energy and food solutions are also welcome.

Finally, the safety and reliability of new energy vehicles and the broader application of green energy and intelligent systems remain paramount as we advance toward a sustainable future. We invite reviews that examine the latest safety technologies for electric and hybrid vehicles, emphasizing innovations that ensure both user safety and environmental sustainability. Additionally, papers that explore the synergies between green energy technologies and intelligent systems, particularly those that harness the powers of Artificial Intelligence and Machine Learning to enhance efficiency and sustainability, are of great interest.

Summarized Area of Interests:

1. **Advanced Materials for Sustainability:** Exploring innovations in materials science that contribute to climate action, environmental protection, sustainable agriculture, and the development of resilient food systems.

2. **Sensors, Food Security, and Energy Applications:** Investigating the role of advanced sensors in enhancing food production, monitoring environmental conditions, and optimizing energy use in agricultural and energy systems.
3. **Safety Technologies for New Energy Vehicles:** Addressing the latest advancements in safety technologies specific to electric and hybrid vehicles, focusing on reliability, performance, and their impact on sustainable transportation.
4. **Green Energy, Food Security, and Intelligent Systems:** Examining the integration of green energy technologies with intelligent systems, including AI and machine learning, to enhance sustainability, efficiency, and resilience in both energy and food production.

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Guidelines:

- Papers must be well written in Times New Roman, 12 font size, 1.5 line spacing, and a minimum 25 Pages with References on a standard Normal margin setting.
- References must not be less than 150 (APA 7th)
- Papers must be well-organized
- Reviews must be systematically presented
- Only high-quality papers will be considered.

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Please submit your manuscript before the submission deadline.

The submission deadline: 30th October 2025.

The acceptance deadline: 31st November 2025.

Publication of the special issue has now commenced. All accepted and copyedited papers will be published without delays.

NJTD General Submission Guidelines

Aim and Scope

The Nigerian Journal of Technological Development (NJTD) publishes high-quality articles focusing on all aspects of Engineering and Applied Sciences. All manuscripts are double blind peer-reviewed and if found suitable, published according to the subject matter, either as **full-length research articles** or **review papers**. Short Communications and Technical Notes are also invited. Our publications are scheduled for March, June, September and December every year. Henceforth, publications of issues will no longer be delayed but will be published as soon as the paper processing is completed.

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This should include the background to the study, a brief review of literature and clearly stated objectives. The last paragraph should delve into the contributions of the work and structure of the rest of the paper

II. THEORETICAL ANALYSIS

Mathematical principles or theories used should be included as appropriate.

III. MATERIALS AND METHODS/METHODOLOGY/EXPERIMENTAL PROCEDURE

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For example, **J. K. Odusote**: Conceptualization, Methodology, Software, Validation, Writing – original draft, Writing – review & editing. **M. F. Akorede**: Supervision, Writing – original draft, Writing – review & editing. **G. A. Olarinoye**: Writing – review & editing.

ACKNOWLEDGEMENT(S)

Acknowledgment of the individuals, institutions, or research granting bodies who provided help during the research should be collated in a separate section at the end of the article before the references. It should, therefore, not be included on the title page as a footnote to the title or otherwise. *Henceforth, acknowledgment must be provided on all accepted articles before publication.*

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Ogunlela, A. O.; M. Y. Kasali; C. J. Ejieji and I. E. Ahaneku. (2006). Hydrologic Characterization of the National Centre for Agricultural Mechanization (NCAM) Watershed. *Journal of Science and Technology Research*, 5 (3): 69-73.

Conference Papers

Akorede, M. F. and Hizam, H. (2009). Teaching power system analysis courses using MATPOWER. Paper presented at International Conference on Engineering Education (ICEED2009), Kuala Lumpur, Malaysia, 45-51, USA: IEEE.

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Authors are encouraged to download the article processing flowchart from our homepage. The document summarises the peer review process used by NJTD. Authors should note that this process may last up to three months on the average.

TABLE OF CONTENTS
Volume 22, No. 2 (Special Issue 001), May 2025

S/N	PAPER ID	PAPER TITLE	PAGES
1	3346	A Review of the Spark Plasma Sintering, Characterization, and Properties of Refractory Nitride-Reinforced Titanium-Based Composites J. O. Abe, O. M. Popoola, A. P. I. Popoola	1-25
2	3386	Surface Modified Coir and its Applications - A Review M. Ndagi, S. O. Yakubu, I. A. Tijani, I. K. Adegun, S. Abdulkareem	26-41