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The Executive Vice Chairman/Chief Executive
National Agency for Science and Engineering Infrastructure (NASENi)
Abuja.

Endorsement of Research Group's Grant Application – Development of High-Performance Sustainable Manganese-Based Electrodes for Lithium-Ion Batteries

Dear sir,

I am writing in my capacity as **Professor of Metallurgical and Materials Engineeringand Endorsing Supervisor**to strongly endorse the application submitted by the **Renewable and Sustainable Energy Research Group**for a research grant under **NASENi Research Commercialization Grants Programme (NRCGP).**The project proposal, titled **"Development of High-Performance Manganese-Based Electrodes for Lithium-Ion Batteries Using Sustainable Materials,"** aligns directly with one of NASENi's thematic focus area (Renewable Energy and Sustainability).

The project seeks to address one of the most urgent challenges in energy storage such as the need for cost-effective, sustainable, and high-performance lithium-ion batteries (LIBs) to support Nigeria's ambitions in renewable energy deployment, electric mobility, and local manufacturing. By leveraging manganese-based electrode systems which is abundant in Nigeriaand integrating sustainably sourced carbon materials, the group's work combines scientific innovation with national relevance.

Specifically, this research will deliver:

- **Improved LIB performance**, through electrodes with higher capacity, longer cycle life, and enhanced safety.
- **Sustainable material pathways**, reducing dependence on imported, expensive, or environmentally harmful raw materials.
- **Capacity building**, by training young Nigerian researchers and strengthening local expertise in advanced materials and electrochemistry.
- **Alignment with NASENi's strategic vision**, contributing to indigenous technology development for clean energy and industrial competitiveness.

The group has demonstrated capability and commitment in this field, evidenced by prior scholarly outputs, including a recent peer-reviewed international publication led by one of its members and a staff of your noble organization (Engr. Gideon Oyewole Babalola). With NASENi's support, the group is well-positioned to deliver outcomes that will not only advance scientific knowledge but also contribute to Nigeria's strategic priorities in renewable energy, technology transfer, and industrialization.

As their supervising academic lead, I can attest to the group's technical competence, dedication, and capacity to deliver high-quality results. I therefore endorse their grant application without reservation, strongly recommend it for **NRCGP** and stand fully committed to providing guidance and oversight to ensure its success.

Thank you for considering this request and for NASENi's continued commitment to advancing indigenous innovation in Nigeria.

Sincerely,

Engr. Prof. V.S. Aigbodion **FNMS, NRF-C3**