

BRIN Prioritizes Research Supporting Battery Technology

2022-06-29

The National Research and Innovation Agency's (BRIN's) Nanotechnology and Material Research Organization (ORNM) is focusing research on bolstering local resources' added value to support the development of battery technology for electric vehicles.

"We will focus on research to improve the added value of local natural resources, such as nickel, as battery materials through eco-friendly and inexpensive processes," ORNM Head Ratno Nuryadi noted.

In a statement posted on BRIN's website on Friday, he explained that electric vehicles require energy storage systems in the form of batteries to attain the desired level of performance.

As a result, battery technology research and development is very important.

The lithium-ion battery has very broad applications, especially for electric vehicles and energy storage, he said.

These applications require the batteries to be light in weight, small in size, and low in cost, as well as safe and reliable.

"The main technology from this battery includes material, manufacture, and battery management system. However, material technology has the most important role," Nuryadi noted.

Therefore, ORNM is also focusing on material research from upstream to downstream, which means starting from mining technology, precursor synthesis, and active materials, to the

recycling process.

Nuryadi also outlined a number of research topics on battery technology that have attracted the interest of researchers and the industry.

They include power specification, energy efficiency, charge rate, lifetime, operating environment, cost, recycling, and safety.

He said he expects the Battery Research Group of ORNM to focus on delving into battery core technology so that, in the near future, it can produce research that can improve the nation's technological independence.

BRIN has also opened the opportunity for battery research cooperation with universities, industry, and other research institutions at the national and international level on various platforms, including degree by research (DBR), postdoctoral, visiting researcher, and visiting professor programs.

Read the [original article](#) on ANTARA News.