ADVANCED MATERIALS FOR ENERGY AND HEALTH APPLICATION IN BATAN INDONESIA

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STRATEGIC PLANNING OF INDONESIA IN SCIENCE & TECHNOLOGY

Indonesia as one of the G20 members has shown its commitment on Science and Technology development, especially on the Innovative Research towards the industrial application. To bridge the gap, the Indonesian Government through the Ministry of Research and Technology since 2008 has launched an annual program of 100 Indonesian Innovators of the year. The government has also a plan to form a National Innovation System (SIN). As for the National Research Agenda, the priority programs are in Agriculture, Energy, Information Technology, Transportation, Defense, Health and Development of Advanced Materials.

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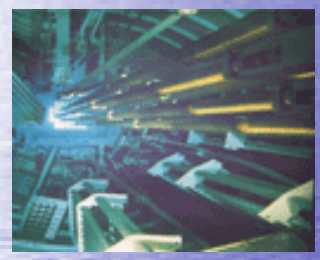
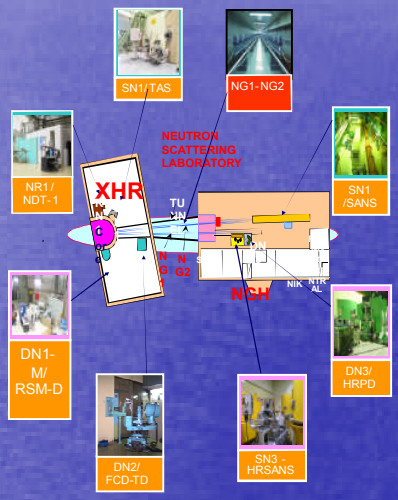
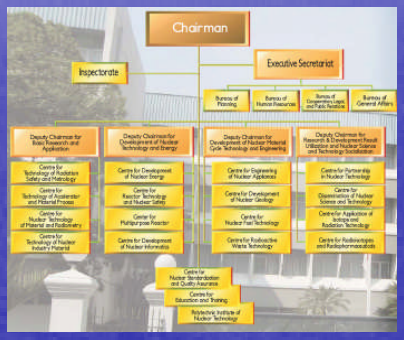






The main duties of BATAN are to conduct research, development and the beneficial applications of nuclear science and technology in accordance with the laws and regulations.

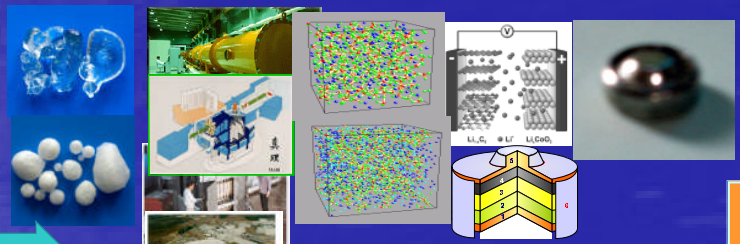
TECHNOLOGY CENTER FOR NUCLEAR INDUSTRY MATERIALS, BATAN

INDONESIAN INTERNATIONAL JOINT RESEARCH PROGRAM

The research on electrode and electrolyte materials for Lithium battery components, has generated wide spread interest in this system as the power source with a variety of applications, including RFID. The research has been funded by the International Joint Research Program (RUTI) from the Ministry Research and Technology. The program has brought out the Indonesian research activities into the International forum, which is the key for bridging the science and technology in developing country with the Asian-Europe community. Other international activities have been shown by promoting the science into the international joint experiments at the neutron world class laboratory, such as ISIS, UK; ANSTO, Australia; KEK and JPARC; Japan; BENSC, Germany, and many other laboratories/ universities worldwide.

Technology Center for Nuclear Industry Materials (PTBIN) is one of the centers of competences at BATAN for developing new materials for alternative energy and health.

The center is not only facilitated by different laboratories, equipped by different instruments for material characterizations (XRD, HRSEM/EDS, DTA/DSC, VSM, etc), but also has a neutron scattering laboratories.



DEVELOPMENT OF NANO MATERIALS FOR DIAGNOSTIC

The reseacrh covers the developent of MRI contrast agent based on iron oxide nano particle and separation system for HPV. Sofar, this nanoparticle has been pre-clinically tested for MRI contrast agent application at BATAN. This research has become one of the national priority programs.

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