

Report on 1st International Workshop on lithium Ion battery

The Electric Vehicle regulation (PP55/2019) was launched by Indonesia President Joko Widodo, and the topic of lithium ion battery has become a central issue along with national electric vehicle. It is important to know the current status of Battery research in Indonesia, as well as basic knowledge. Therefore Material Research Society of Indonesia (MRS-INA) has conducted the “1st International Workshop on lithium Ion battery Technology” in Sentul Bogor, October 8-9, 2019. The LIB workshop was held during the International Conference on Advanced Material Technology in conjunction with the International Conference of Multidisciplinary Research (ICAMT-ICMR 2019), attended by 46 participants from 21 various institutions, including industries (21 participants), R&D institutions (12 participants) and Universities (13 participants).

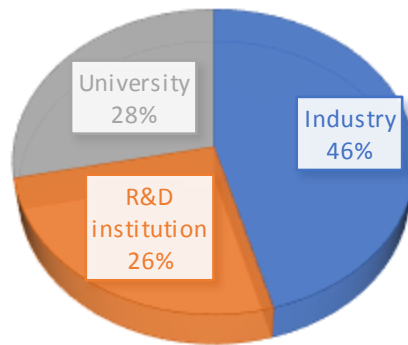


Figure: The opening of ICAMT-ICMR 2019 and the first LIB workshop at Aston Sentul, 8 October 2019.

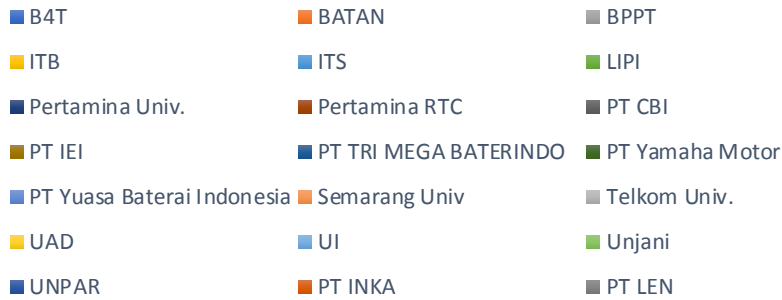


Figure: The Keynote Lectures for ICAMT-ICMR 2019 and LIB-Workshop

1st Int'l Workshop on LIB Technology Participants



Participants Institution

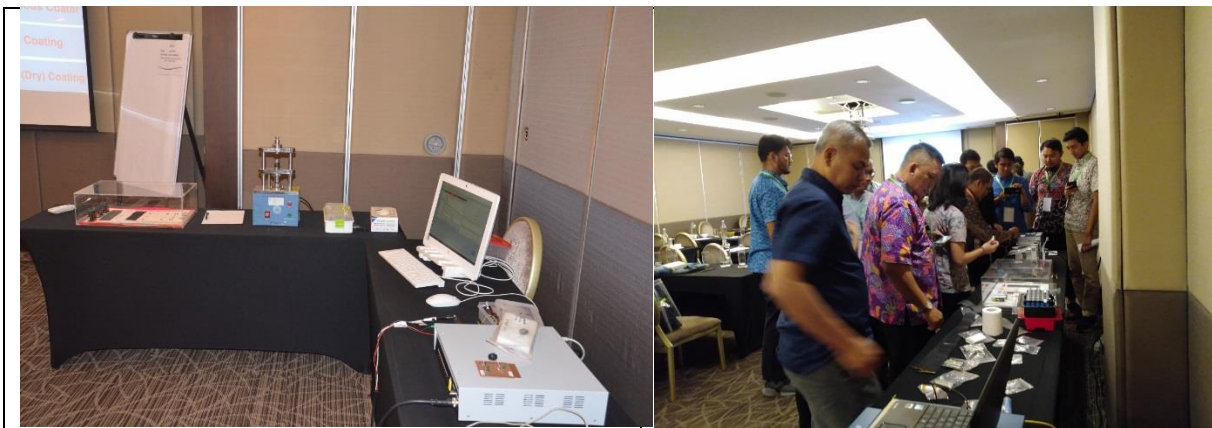


LIB workshop participants



The LIB workshop presentation by expert.

The national and international lecturers have attracted the participants during the 2 days workshop. National lecturers such as the president of the Indonesian Automotive Institute (Ir I Made Tangkas, MSi), executive director of the Mining and Minerals Industry Institute (MMII) research institution (Dr. Ratih Amri), Head of the Center for Materials and Technical Goods (B4T) (Budi Santoso, M .Sc.), and President MRS-INA who is also battery expert from BATAN (Prof. Dr. Evvy Kartini) have delivered inspiring lectures from materials to fabrication and production of LIB for Making Indonesia 4.0. The other lecturers, Dr. Agus Purwanto (UNS) and Dr. Choirul Hudaya (UI) have delivered technical information related to lithium ion battery production and application, respectively. The international lecturers, Dr. Alexey Glushenkov (Australia National University) and Prof. Alan Drew (Queen Mary University of London) have delivered interesting information related to their LIB research in Australia and UK, respectively. Prof. Alan Drew was also explaining the opportunities to make research cooperation.



Practicum material and equipments for batteries assembly and testing

The practical sessions were conducted during workshop and it was guided by scientists from BATAN and LIPI (Subhan M.Eng, Wagiyo Honggowiranto MT, Dr. Heri Jodi, and Agus Sudjatno A.Md). During this session, the participant could learn how to perform battery assembly and testing. The assembling technique of LIB in form of coin, pouch and cylinder were demonstrated. The battery testing practice was conducted by using electrochemical impedance, cyclic voltametry, and charge discharge equipments. The practical session received attention and appreciation from the participants for being very helpful in understanding the basic principles of lithium-ion batteries. The two days workshop was chaired by Dr. Sudaryanto from

BATAN, who always emphasize to the important of networking and knowledge sharing during the workshop.

This short workshop has become a place to exchange knowledge (knowledge sharing) of the latest and leading research related to lithium-ion battery technology. Some participant gave feedback that this workshop was very meaningfull and even some of them asked when the next workshop will be conducted. Hopely, this 1st international workshop on lithium ion battery technology became opening window for the desimination of knowledge about lithium ion battery in Indonesia.



Figure: MoU between MRS-INA and MMII, B4T, ANU and MTM, ITB

In addition to this event and workshop, Prof.Dr. Evvy Kartini, the President of MRS-INA, and on behalf the Indonesian battery consortium has launched a National-Battery Research Institute (N-BRI), towards the Battery Industry in Indonesia. The Memorandum of understanding (MoU) between MRS-INA and MMII; MRS-INA and B4T Ministry of Industry, MRS-INA and Battery Division of ANU, Australia; MRS-INA and Materials Research Institute, QMUL, UK; and also MRS-INA with the Mechanical Engineering Student Union (MTM) ITB, were signed during this event.

Reported by

Dr. Sudaryanto
Chair of 1st LIB Workshop

Approved by

Prof. Dr. Evvy Kartini
President MRS-INA