

CHAIR REPORT ACTIVITIES

Workshop on Active Learning in Optics and Photonics (ALOP) "Celebrating the International Year of Light 2015"

Puspiptek, Serpong, 23-27 March 2015

Organized by :



Sponsored by :



The Abdus Salam
International Centre
for Theoretical Physics



Supported by : **Pudak Scientific**



Prof. Dr. Evvy Kartini
National Nuclear Energy Agency (BATAN)

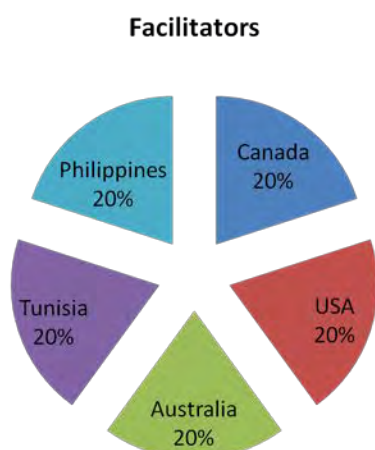
INDONESIA

Report ALOP INDONESIA 2015
23-27 March 2015

The ALOP INDONESIA 2015 workshop took place at the Auditorium – Building 71 of the National Nuclear Energy Agency (BATAN), Indonesia.

It was conducted in English by the facilitators: Alexander Mazzolini (Australia), David Sokoloff (USA), Vasudevan Lakshmarayan (Canada), Ivan Cullaba (Philippine), and Souad Lahmar (Tunisia). An English -edition manual of the ALOP has been distributed to all participants.

FACILITATORS



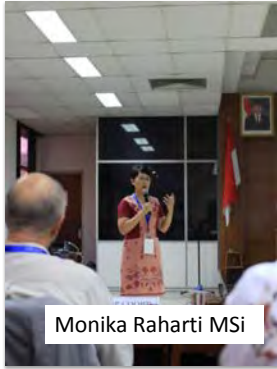
The opening ceremony has been chaired by Prof.Dr. Evvy Kartini, chair of Local organizer. It was officially opened by the Deputy Head of BATAN, Dr. Ferhat Azis and the Director of Center for Technology of Advanced Materials, BATAN, Drs. Gunawan. The representatives from the Ministry of Education, and the Indonesian Teacher's Association (PGRI), as well as the Director of Center for Young Scientist (CYS), Mrs. Monika Raharti attended the opening ceremony.



Prof. Evvy Kartini



Drs. Gunawan MSc.



Monika Raharti MSi



Dr. Ferhat Azis



OPENING CEREMONY

Following the opening ceremony, a Memorandum of Understanding (MoU) among all facilitators, logal organizers, host, and sponsors, was signed together, and witnessed by the Head of BATAN, Prof. Dr. Djarot S. Wisnubroto. The MoU is about the ALOP Indonesia 2015, and the future collaborations (see attachment).



Memorandum of Understanding (MoU)

Prof. Alex Mazzolini

Prof. Souad Lahmar

Prof. Vengu L

Prof. David Sokolof

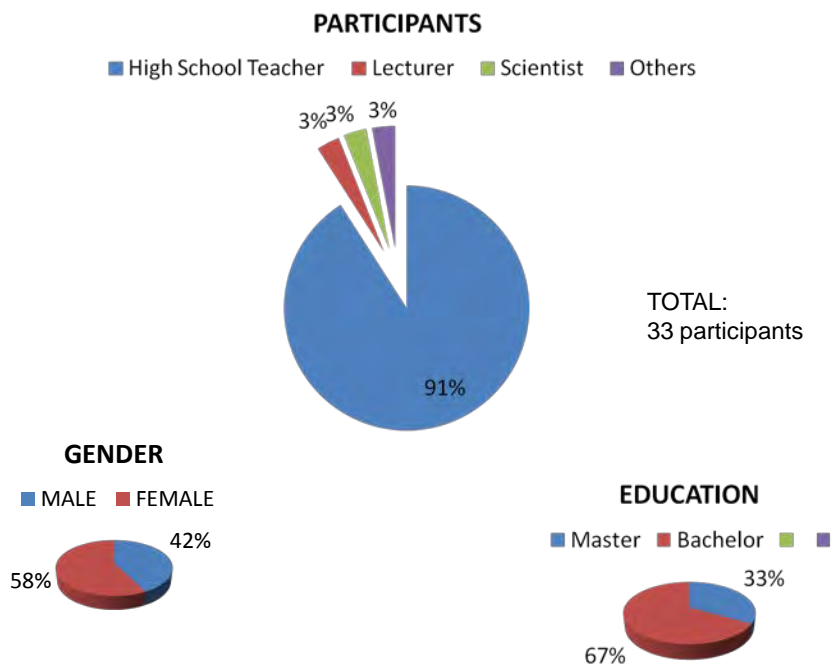
Dr. Ivan Culaba



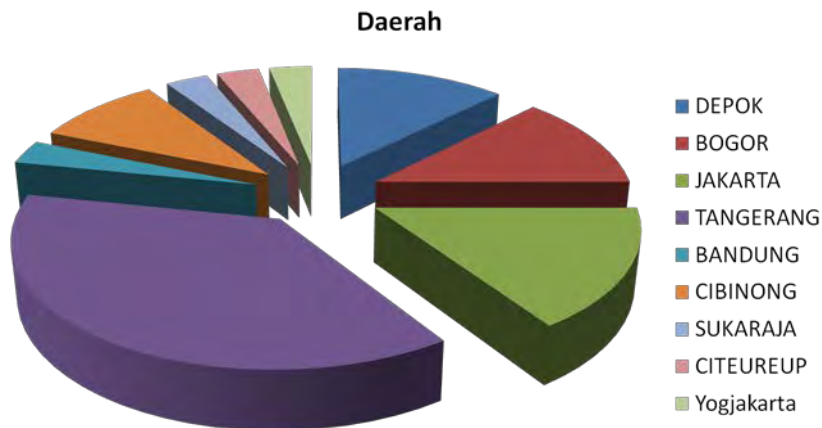
The press conference was also conducted after the ceremony, several journalists from various national news , interviewed the Head of BATAN, Prof.Dr. Djarot Wisnubroto, Prof.David Sokolof (Facilitator), Prof. Evvy Kartini (Chair ALOP Indonesia 2015) and Mrs.Monika Raharta (Local Organizer). Some of those news about ALOP was reported in several national newspaper (see attachment)



31 participants and 3 observers came from different universities, High Schools, and Institutes located in different cities in Indonesia, Jakarta, Yogyakarta, Bandung, Tangerang Selatan, Bogor, Depok, etc (shown in Diagram) - were involved in the workshop and were present at all ALOP modules from Monday 23 March, 2015 to Friday 27 March 2015. The gender distribution was 58% female and 42% male participants.



Area of Participants



Most of the participants have a Bachelor and a Master (~ MSc) obtained from Indonesian universities, no one from foreign country. Most of the participants 27, are science teachers selected by PGRI from reputed high schools in Indonesia. There are also scientist from BATAN, BPPT, and lecturers from Universities in Bandung. Observers from the Pudak scientific were also involved in the workshop.



The initial discussions revealed that most participants teach in conventional methods, and also in Indonesian language. The traditional lecture mode and limited of lab work are not attractive (absence of interest of teachers, absence of equipment and disconnection with environment). They join the ALOP workshop with some curiosity, and difficulty of understanding the English as first language. By helping of a translator, it was going well. The participants were encouraged to speak English and to express their understanding about the optic and photonics.

Along the workshop all the participants were present, very receptive of active learning ideas, actively involved in each activity and very enthusiastic. More discussions were held among the facilitators and participants. All the activities were documented. A meeting between the facilitators took place each day for comments of the modules the facilitator and the day workshop. The local organizer has provided the necessary equipments from local area. Each module was successful and all equipment well prepared locally, good quality, very appreciated by participants.



In addition to the ALOP workshop, an introduction on Nuclear research activities in BATAN was delivered by Prof.Dr. Evvy Kartini on Thursday 26 March 2015. The participants and facilitators have experienced to visit and to see directly the reactor core of the Research Reactor G.Sywabessy , located in Serpong. The advanced application of optics in neutron guide hall was also explained. The participants visited also the Integrated Battery Laboratory, BATAN, and learnt how to prepare battery components and how to assembly the coin, pouch and cylindrical cells. It should be

noted here, that during this laboratory tour, all the participants and facilitators wore the ALOP T-shirt, indicating that they were already blended into one big group, ALOP Indonesia 2015.



There was a workshop banquet, high standard and everyone (facilitators, participants and organisers) genuinely enjoyed it. The Banquet for all the ALOP participants, facilitators and committee was held in Sari Kuring Restaurant BSD. Some speeches were given by the committees, facilitators, and representative of participants. They were very enthusiasm, and warmth, and lots of happiness. It showed that ALOP Indonesia has merge into one group, though they came from various places and never seen each other before.



At the final discussion, we noted that they were very interested to be involved in the ALOP activities and hope to hold more ALOPS in the near future at the schools where the participants came. A distribution of a CD for photos of the workshop, list of participants, and a certificate have been done for each participants. The equipment of each module has been distributed for each schools based on the areas.



At the closing ceremony, the chair of Local Organizer noticed how much is the workshop ALOP is important in order to improve the education of the teacher in

Indonesia. It will increase also the competence of the teachers, besides opening their mindset, networking and also improving their capability on teaching by implementing the Active Learning Method. The director for CYS, has also proposed to continue this workshop in Indonesia, and to repeat this ALOP workshop each year insuring his logistic assistance at any time. It is expected that the participants should become a good facilitator.



Following this ceremony, a meeting between facilitators and the organizer took place. It concerned how to continue ALOP activities in the different Indonesian Schools and Universities, and how to interest their different institutions.



Workshop organization:

Hotel accommodation was done for facilitators at Santika Hotel BSD. The meals were very good and the food of excellent quality. The participants stayed at several Puspipstek Guest Houses, adequate places, where they shared one house together for 8 persons. The Guest House are located not far from the Workshop place, so that the participants could come on time. The bus or mini Van transported them every morning and evening. The meals were provided to all participants at the Guest House. Transport to and from hotel, university and airport was also very well handled.

The workshop – was very well organised: all the rooms for facilitators, workshop activities, organizers, and for the opening ceremony are in the same building, and very close to each other. The lunch box, and 2 coffee-breaks were provided during the workshop in the same area, so that the participants did not need to go to other places.

At the last day, Saturday 28, 2015, the facilitators were taken for the tour to visit the Beautiful Miniature of Indonesia (TMII), visited different ethnique house from each province, watched the IMAX, etc. The TMII located at the western part of Jakarta. The tour to Capital City Jakarta was done on Sunday 22, 2015. They visited National Museum and also National Museum in Jakarta.

In spite of everything, the workshop was successful with understanding of necessity to change the way of teaching science by implementing the Active Learning method, instead of Conventional or traditional methods. The teachers have to become the facilitators not only as the teachers. The Workshop ALOP Indonesia 2015, have brought out mutual benefits for all parties, and new networking on education in Indonesia. The government and teacher associations play important role to continue the ALOP workshop in home country. The contributions from ICTP, SPIE and UNESCO towards the workshop ALOP Indonesia 2015 are greatly acknowledged. The committees who have worked really hard on realizing the ALOP Indonesia 2015 are greatly thank for their dedication.

Serpong, 6 April 2015

Chair of ALOP Indonesia 2015



Prof. Dr. Evvy Kartini