

WORKSHOP REPORT

ACOMP Workshop on Radiation Dosimetry II -

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ACOMP Workshop on Radiation Dosimetry II was hosted by the Department of Biomedical Imaging, University of Malaya and the Division of Medical Physics, Institute of Physics Malaysia in association with the ACOMP (ASEAN College of Medical Physics).

This workshop aims to:

- Provide a basic understanding of physics of semiconductor and OSL dosimetry.
- Discuss the dosimetric considerations of using semiconductor dosimeters in brachytherapy and kV photon beams.
- Introduce advance semiconductor detectors for different radiation detection applications.
- Provide hands-on demonstration of selected solid state detectors.

This workshop was the second in the series of Radiation Dosimetry workshops, organized by our group, with the theme Solid State and Optically Stimulated Luminescence (OSL) Dosimetry: Physics and Applications.

The local organizing committee was headed by Dr. Jeannie Hsiu Ding Wong and Dr. Chai Hong Yeong with the support of the Medical Physics Unit, University of Malaya Medical Centre. A total of 38 participants from 6 countries joined the workshop. Amongst which, 25 participants attended the hands-on sessions in the afternoon.

The one-day workshop comprises of lectures in the morning and hands-on demonstration and practical sessions in the afternoon. The lectures were delivered by prominent speakers with wide experience in solid state and OSL dosimetry: Prof. Dr. Kwan Hoong Ng (University of Malaya, Malaysia), Dr. Marco Petasecca (University of Wollongong, Australia), Dr. Ikuo Kobayashi (Nagase Landauer Ltd., Japan), Dr. Jeannie Hsiu Ding Wong (University of Malaya, Malaysia) and Ms. Zulaikha Jamaluddin (University of Malaya Medical Centre, Malaysia). Dr. Marco Petasecca delivered two lectures on semiconductor dosimetry and advanced

dosimetry techniques. Professor Ng gave a lecture on a primer on radiation dosimetry while Dr. Wong and Miss Zulaikha each gave a lecture on the dosimetric considerations in kV beams and brachytherapy.

The highlights of the workshop the demonstration of the Magic Plate 512 (MP512), developed and prototyped by the Centre for Medical Radiation Physics (CMRP), University of Wollongong by Dr. Marco Petasecca. The MP512 was used to measure the dwell position of the Co-60 high dose rate (HDR) brachytherapy source in real time. This is followed by two parallel hands-on sessions of diode dosimetry and OSL dosimetry. The diode dosimetry session was led by Ms. Zulaikha Jamaluddin and Dr. Marco Petasecca while the OSL dosimetry session was led by Dr. Jeannie Wong and Dr. Ikuo Kobayashi. Figure 1 shows the group photo of the speakers and participants and Figure 2 shows the photos taken during the hands-on sessions.

The organizers have uploaded the workshop materials and group photos on following Google drive:

<https://drive.google.com/open?id=1IWckNOoKXF8nAhCSdlcd5TFKacPMUtFf>
Group Photo:



Figure 1: Group photo of the speakers and participants of the workshop.

Practical Session:



Figure 2: Photos taken during the hands-on sessions.