

Preface

The 4th International Workshop on Quantum Well Infrared Photodetectors (QWIP2006), was held in Kandy, Sri Lanka from June 18 to 24, 2006. The event followed the 3rd QWIP (2004) Workshop held at the Canadian Rockies Delta Lodge at Kananaskis from August 8 to 13, 2004. The next two venues, for the 2008 and 2010 QWIP workshops were selected as France and California, USA.

The development of the Quantum Well Infrared Photodetector (QWIP) technology over the last two decades has led to the realization of large-format, long-wavelength infrared thermal imaging systems, now commercially available through several manufacturers. As in the past three workshops, the QWIP2006 brought scientists, engineers, industrial collaborators, students, and users together to discuss recent advances in this field providing an international forum to present and discuss new progress in device physics, material growth, processing issues, focal plane array development and characterization, as well as commercialization and applications of the QWIP technology. The workshop had 60 registered participants from 15 countries and 45 oral presentations in 15 sessions under six categories. After a peer review, a total of 32 full length papers based on the presentations are included in this proceedings volume. Considering the high quality of the presentations, the wide range of topics covered, and the stimulating discussions involving technical issues and collaborations, the workshop can be categorized as a huge success. Thanks for this success go to the hard working and talented researchers who traveled halfway around the globe to present their results.

In order to provide opportunities for scientists and students from the south-east Asian region, three tutorials on

QWIP device physics technology/applications and future directions were conducted by Drs. K.K. Choi, H. Schneider and H.C. Liu, respectively. Another tutorial on solar-cell physics and detector similarities was presented by Dr. K. Tennakone. In addition, two panel discussions (one on future of QWIP technology and another on improving collaborations among south Asian and western scientists) were organized and were moderated by Drs. Gabby Sarusi and Tuley De Silva, respectively. GSU, NSF, JPL, AFOSR, ARL, EPIR Technologies in US and Institute of Fundamental Studies, and NSF of Sri Lanka, supported the workshop by providing financial and accommodation assistance. Jet Wings travels and tours, IFS and the Amaya Hills Hotel staff enthusiastically helped in the organizational matters. We extend our gratitude to all the presenters, authors, session chairs, panel members, reviewers, sponsors, and the Hotel/JetWing staff, for their contributions to make this event successful. Special thanks should go to GSU and IFS students who helped in organizing the workshop, especially Mr. Viraj Jayaweera who enthusiastically contributed to all aspects of this workshop.

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