"The 2nd ESA-NASA Working Meeting on Optoelectronics: Qualification of Technologies and Lessons Learned from Satellite LIDAR and Altimeter Missions"

21st and 22nd of June 2006

Einstein Hall
ESTEC/ESA
Noordwijk, The Netherlands

Program of presentations

WEDNESDAY 21 JUNE 2006

09:00 START OF THE DAY- Opening

Space Flight experience

Space Flight Laser Lessons Learned
D. Barry Coyle, NASA GSFC

LIDAR in the Hayabusa Mission
T. Mizuno, ISAS/JAXA

LIDAR Systems

Sub-system and System Level Testing and Calibration of Space Altimeters and LIDARS.
Haris Riris, NASA GSFC

CO2 LIDAR
Haris Riris, NASA GSFC

Instrument and Laser design

The AEOLUS Mission
Martin Endemann, ESA

11:10-11:30 COFFEE BREAK

ALADIN Engineering
Didier Morancais, ASTRIUM-Toulouse

Transmitter Laser Design for ALADIN
Martin Endemann/Alberto Cosentino, Galileo Avionica, Rome

Passively Q-switched Nd-YAG laser for Spaceborne Altimetry – Bepi Colombo (Mercury) Laser Altimeter
J. Neumann, Laser Zentrum Hannover

100mJ,1Hz Nd:YAG laser using laser altimeter (LALT) for SELENE lunar orbiter
Teiji Kase, NEC Corporation

13:10-14:10 LUNCH BREAK

The 24 million Kms Optical Link with the Mercury Laser Altimeter
D. Barry Coyle. NASA/GSFC

Contamination & Laser Induce Damage Issues

Work on Coatings
Wolfgang Riede, DLR

Aromatic hydrocarbons, light, the laser environment and broken glass: A proposed mechanism
John S. Canham, NASA GSFC/ Swales Aerospace

15:25-15:45 COFFEE BREAK

Contamination effects on lasers
Y.Lien, E. Reinhold, ESA-Optoelectronics

Property Variations of Laser Components under Vaccum Conditions concerning Spectral Shift and LIDT
M. Jupe, Lazer Zentrum Hannover

Laser Induced damage to the laser optics
E. Reinhold, Y. Lien, ESA-Optoelectronics

17:00 VISIT TO THE ESTEC TEST FACILITIES-Group 1

Dinner in Leiden

THURSDAY 22 JUNE 2006

09:00 START OF THE DAY -Opening

Laser diodes

Results of the Laser Diode Assessment program
Y. Durand, ESA-Earth Observation

808 nm High Power Diode Lasers for Long Term Stable Pump Modules
G. Erbet, FBH Berlin

New Laser Stack Generation with FAC for Applications in Space
E. Deichsel, Jenoptik Laserdiode GmbH

Qualification, Performance Testing and Characterization of Quasi-CW Laser Diode Arrays.
Mark Stephen, NASA GSFC

Lifetime Testing of Laser Diode Arrays
Byron Meadows, NASA/Langley

11:10-11:30 COFFEE BREAK

"QCW Stacked Arrays: new performances and reliability"
Andreas Kohl, Nuvonyx Europe

"Space Qualification of Laser Diodes"
Stephanie Minec-Dube, EADS-SODERN

Space Qualification of High Efficiency Laser Diodes
Duane Smith, Lockheed Martin Coherent Technologies

Truly hermetically sealed lasers for reliable long term space operation.
Thomas Schwander, Tesat-Spacecom

13:10-14:10 LUNCH BREAK

Light-weight, fibre coupled QCW diode laser pump module for the BepiColombo laser altimeter
M.Haag/T.Mattern, DILAS

Fiber Devices Qualification

NASA GSFC Current Activities in Fiber Assemblies for Space Systems
Melanie Ott, NASA GSFC

Fiber amplifier components space flight qualification study
Lee Theniel / Suzzanne Falvey, J&T Northrup Grumman

Qualification Tests and Test procedures

Qualification and Integration of the Laser Transmitter for the CALIPSO Aerosol Lidar Mission
Floyd Hovis, Fibertek

15:30 DISCUSSION

17:00 VISIT TO THE ESTEC TEST FACILITIES-Group-2

Dinner in Noordwijk