

RHET 2019 Meeting Agenda (Crowne Plaza - Melbourne FL)

Hosted by: RENESAS

Time	Monday, November 04, 2019
5:00 PM	Registration/Badge Pickup
6:00 PM	Welcome Reception
8:00 PM	End of Reception

Time	Tuesday, November 05, 2019
7:00 AM	Registration & Breakfast
8:00 AM	"Day 1 Welcoming Remarks" Jesse Mee (Air Force Research Lab)
8:05 AM	"Sponsor Overview" Josh Broline (Renesas)
	Government Activities <i>Chair: Jesse Mee (Air Force Research Laboratory)</i>
8:35 AM	"T&AM-MINSEC Program Update" Matt Kay (OSD)
8:50 AM	"NSWC Crane Programs and Plans" Matt Gadlage (CRANE)
9:05 AM	"AS&T's Enterprise & Foundational Technologies Division: Status and Overview" Lew Cohn - Greg Murphy (NRO)
9:20 AM	"Space Electronics Technology Program Overview" Ken Bole (Air Force Research Laboratory)
9:35 AM	"Government Radiation Hardened System on a Chip (GRADSoC)" Paul Melanson (DRAPER)
9:50 AM	AM BREAK
	Missions and Applications <i>Chair: Hung Nguyen (Sandia National Laboratories)</i>
10:20 AM	"Intelligence and the ways it influences electronics architectures" Jeff Mercier (Sandia)
10:40 AM	"Arctic Policy and Space Systems " Iris Ferguson (AF/A5)
11:00 AM	"Europa Mission Radiation Modeling " Paul Thelen (Sandia)
11:20 AM	"Cognition at the Edge: The Missing Joint All Domain C2 Link " James Meub (Sanida)
11:40 AM	Lunch (provided)
	Radiation Testing and Modeling <i>Chair: Hugh Barnaby (Arizona State University)</i>
12:55 PM	"Radiation Hardened Microelectronics R&D at Sandia National Laboratories" Nathan Nowlin (Sandia)
1:10 PM	"NASA Electronic Parts and Packaging Program" Peter Majewicz and Jonny Pelish (NASA)
1:25 PM	"TID Testing of NVIDIA Jetson Nano GPUs" Windy Slater (Air Force Research Laboratory)
1:40 PM	"Radiation and Reliability Characterization Chips (RAREChips) program for RHBD in advanced CMOS SOI and FinFET technologies" Marek Turowski (Alphacore)
1:55 PM	"SEE and TID test results for RadHard 32-bit RISC processor" Alonso Vera (Ideas Tek)
2:10 PM	"Multi-Scale Radiation Effects Modeling of COTS Linear Bipolar Circuits – the IMPACT Tool" Hugh Barnaby (Arizona State University)
2:25 PM	PM BREAK
	Radiation Hardened Electronic Parts and Products <i>Chair: Josh Broline (Renesas)</i>
2:55 PM	"Update on DDC's latest Memory products and Single Board Computers for Space" Elaine Gonsalves (Data Device Corporation)
3:10 PM	"Update on Apogee TaiRad™ IP and Products" Anton Quiroz (Apogee Semiconductor)
3:25 PM	"Efficiency Improvements for a 5 kW GaN-based DC-DC Converter for Spacecraft" Bruce Pilvelait (CREARE)
3:40 PM	"Update on VPT Components" Joe Benedetto (VPT Components)
3:55 PM	"Space Photonic Developments at Ultra Communications" Chuck Tabbert (Ultracomm)
4:10 PM	"Next Generation Radiation Hardened by Design Mixed Signal IP at 90nm and 12nm" Ken Potts (Silicon Technologies Inc)
4:25 PM	"Radiation Hardened Microelectronics Update: Storage and Computing Solutions for Next Generation Applications" Tony Jordan (Cobham)
4:40 PM	End of session
6:00 PM	Renesas Reception
8:00 PM	End Day 1

Time	Wednesday, November 06, 2019
7:00 AM	Registration & Breakfast
8:00 AM	"Day 2 Welcoming Remarks" Jesse Mee (Air Force Research Lab)
	Radiation Hardened Memory and Foundry Services <i>Chair: Ethan Johnson (Air Force Research Laboratory)</i>
8:05 AM	"Radiation Immune NAND&NOR Flash modules: the 3D PLUS design approach for Space Applications " Timothee Dargnies (3D Plus)
8:20 AM	"Future of Honeywell Rad Hard Microelectronics " Tom Romanko (Honeywell)
8:35 AM	"A radiation hard 512Mbit Serial NOR Flash for Space Applications" Helmut Puchner (Cypress)
8:50 AM	"TowerJazz Foundry Capabilities and new Technology Update" Michael Scott (Tower Jazz)
9:05 AM	"Demonstration of a Strategic Rad-Hard 90-nm Fully Depleted SOI Process" Pascale Gouker (MIT/LL)
9:20 AM	"SkyWater High-Reliability Offerings Update" Paul Chopelas (Skywater)
9:35 AM	"Breaking the Mold: Trustworthy Foundry Access Offshore via JSTF" Scott Jordan (JSTF)
9:50 AM	AM BREAK
	Radiation Hardened/Tolerant Processing <i>Chair: Tyler Lovelly (Air Force Research Laboratory)</i>
10:20 AM	"From 'Lab' to 'Fab': A Case-Study of Carbon Nanotubes " Max Shulaker (MIT)
10:35 AM	"Summary of Radiation Test Data of Several GPUs" Ian Troxel (Troxel Aerospace)
10:50 AM	"GSI Technology Gemini Advanced Processor and SRAM Updates and Next Steps" Paul Armijo (GSI)
11:05 AM	"SEAKR Space Processing Solutions" Richard Altstatt (SEAKR)
11:20 AM	"Heterogeneous GPU Architecture for Spacecraft Computing" John Schaf (Moog)
11:35 AM	"CFC-400 High Reliability SmallSat Computer" David Andaleon, Assi Friedman, Jeff Janicik (Innoflight)
11:50 AM	Lunch (provided)
1:05 PM	"Introduction" OSD
1:35 PM	"SRHEC Process" Jeffrey Johan (CRANE)
1:50 PM	"Program Needs Working Group (WG)" Brett Bedeaux (AFNWC), April White (SSP)
2:10 PM	"Technology and Development WG" Jonathan Ahlbin (MDA), Matthew Kay (CRANE)
2:30 PM	"Industrial Base Assessment (IBA)" David Emily
2:50 PM	"Parts Library" Jerry Braun (CRANE), STS
3:05 PM	PM BREAK
3:35 PM	"Workforce Development WG" Jonathan Pellish (NASA)
3:55 PM	"Test and Evaluation (T&E)" John Franco (DTRA), James Ross (CRANE)
4:15 PM	"Trust, Assurance, Nuclear Surety (TANS) WG" Matthew Sale (CRANE), Jeffrey Davis (NNSA)
4:35 PM	"Acquisition Activities WG" Donald Sather (GBSD)
4:55 PM	"Science & Technology (S&T) WG" Rachel Barnhill (NNSA), Kenneth Bole (AFRL)
5:15 PM	Meeting Wrap-up

Time	Thursday, November 07, 2019
9:00 AM	Tour - Cape Canaveral
1:00 PM	End Tour

Strategic Radiation Hardened
Electronics Council Workshop