



2010 INTERNATIONAL CONFERENCE ON COMPOUND SEMICONDUCTOR MANUFACTURING TECHNOLOGY

May 17th - 20st, 2010

Marriott – Waterfront, Portland, Oregon, USA

CALL FOR PAPERS

Come to the 25th CS MANTECH in May 2010!

Our focus is optimum manufacturing practices for all compound semiconductor (CS) device technologies - the practical “nuts and bolts” of CS device production including design, materials, fabrication, and test.

We welcome submissions about all CS technologies. **Students are particularly encouraged to submit abstracts.** The program includes practical *Technical Sessions* including *Invited Papers* presented by technologists from around the world on a variety of topics, an intensive multi-topic *Workshop*, and an *Exhibit* featuring leading equipment, supply, substrate, epitaxy, and process chemical vendors and special service providers. *Events* like the *Exhibits Reception*, the *International Reception*, the *Interactive Forum*, and informal *Rump Sessions* provide opportunities to network and develop business contacts. And in 2010, for the first time, the *ROCS Workshop* will be held at Mantech.

Manufacturing-Related Papers Solicited

Our mission is to foster the growth and success of the CS industry by encouraging the sharing of best manufacturing technologies and practices among peers in an open, informal environment. *Manufacturing technologies of interest include those for GaAs, InP, GaN and other nitrides, SiC, Diamond, Sb compounds, SiGe, and other related materials.* Papers addressing manufacturing challenges are sought in, but not limited to, the following subject areas:

MANUFACTURING

- Fab Optimization
- Foundry Operations
- Technology Transfers
- Cycle-Time Reduction
- Production Modeling
- Design Strategies
- Quality and Training
- Tool Selection
- Environmental Impact
- Yield & SPC

PROCESSING/ CONTROL

- Lithography
- Etch & Etch Stops
- Gate Formation
- Metrology
- Novel Control Techniques
- Backend and Backside
- Thin Films & Metallization
- Multi-Level Interconnects

RF DEVICE TECHNOLOGIES:

- MESFET, HFET, HEMT
- PHEMT, MHEMT
- Process Simplification
- Heterogeneous Integration

- HBT, PIN, MEMS
- Performance & Yield
- Device Tech Integration
- Integrated Passives

TEST & RELIABILITY

- High Volume/ Low Cost
- In-Process
- Test Structures
- On-Chip Self Test
- Failure Modes/ Analysis
- Fault Identification
- Reliability Testing
- ESD

OPTICAL DEVICES & CIRCUITS

- LEDs, VCSELS
- Lasers, OEICs
- Modulators & Detectors
- Waveguides
- Lighting Technologies
- Process Simplification
- Fabrication Control
- Process & Circuit Integration

EMERGING AND COMPETING TECHNOLOGIES

- Wide Bandgap
- Narrow Bandgap
- InP, SiGe, Strained Si
- Plasma Wave Devices
- Si CMOS, LDMOS
- New Technologies

MATERIALS

- Availability & Quality
- Standards
- Cost Reduction
- Recycling
- Epitaxy
- Metamorphic Material

PACKAGING

- High Frequency
- Bump and Flip Chip
- System in Package
- Hermeticity & Reliability
- Thermal Management
- Photonic Packaging
- 3-D Packaging & Pb-Free MSL

FUTURE

- Technology Roadmap
- Business Outlook
- “Killer” Applications
- New Paradigms

ABSTRACTS DUE NOVEMBER 6, 2009

Send a 1- or 2-page abstract in PDF or
WORD format to abstracts@csmantech.org
Please use U.S. fonts only.

Look for abstract guidelines at www.csmantech.com

Conference Chair

Steve Mahon

smahon@tqs.com

Technical Program Chair

Yohei Otoki

otoki@hitachi-cable.com

Registration Chair

Alex Smith

asmith@brewerscience.com

Exhibits Chair

Paul Cooke

pcooke@iqep.com

Publicity Chair

Nick Kolarich

nick_kolarich@kopin.com

University Liaison

Mariam Sedaka

mariam.sedaka@gmail.com

Abstracts should clearly state:

- The *Purpose* of the work.
- How CS *Manufacturing Technology* was advanced or how a competing technology relates to CS devices.
- What *Specific Results* were obtained? Supporting data, charts and pictures are requested.

All abstracts should include keywords to facilitate indexing for classification and search in our database. Papers describing related work performed in university or government centers should clearly describe the application to manufacturing. *Student Papers* should be clearly identified as such. An annual prize is given for the best student paper presented at the conference.

Note: Large files over 1 MB in size may not transmit successfully. Please use self-extracting or “zip” files to facilitate transmission of such large files.

Notice of paper acceptance will be e-mailed no later than **December 15, 2009**. Authors of accepted papers must submit a publication-ready extended abstract by **February 9, 2010**. The extended abstracts will be published in the MANTECH Conference Digest and will become the property of GaAs MANTECH, Inc. It is the author’s responsibility to obtain any required clearance prior to submission of both the abstract and the extended abstract.

Students and University researchers seeking financial assistance to attend the Conference should contact Scott Davis at student.aid@csmantech.org.



ABSTRACTS DUE NOVEMBER 6, 2009
Send a 1- or 2-page abstract in PDF or WORD format to abstracts@csmantech.org.
Please use U.S. fonts only.
Look for abstract guidelines at www.csmantech.org

Portland, Oregon

Portland, the City of Roses, is a great place to get away from your busy, stressful life. Besides the historic oldtown area, there are numerous galleries, museums, and a wide variety of parks and green areas. Plus the famous Willamette Valley wineries are only a short drive away. It's also good to know that Oregon has no sales tax, so Portland is a great place for shopping.

Don't miss this opportunity to visit Portland, and attend ManTech 2010!