CS MANTECH

1986-2026
40th Year Anniversary
Portland, OR

2026
International Conference on Compound Semiconductor Manufacturing Technology

May 18th – 21st, 2026
www.csmantech.org

Portland Marriott Downtown Waterfront
Portland, Oregon, USA

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CSMANTECH App is coming soon! Stay Tuned!

CONFERENCE AT A GLANCE

SUNDAY, May 17th

6:00 PM – 8:00 PM	**REGISTRATION** *Registration Desk (Lower Level I)*

MONDAY, May 18th

7:00 AM – 7:00 PM	**REGISTRATION** *Registration Desk (Lower Level I)*
7:00 AM – 8:00 AM	**BREAKFAST** *Salon A - C (Lower Level I)*
8:00 AM – 5:00 PM	**CS MANTECH WORKSHOP** *Salon E (Lower Level I)*
8:00 AM – 5:00 PM	**ROCS WORKSHOP** *Salon F (Lower Level I)*
12:20 PM – 1:20 PM	**LUNCHEON FOR WORK-SHOPS** *Location TBD*
6:00 PM – 9:00 PM	**EXHIBITOR RECEPTION** *Exhibits Hall (Lower Level II)*

TUESDAY, May 19th

7:00 AM – 6:00 PM	**REGISTRATION** *Registration Desk (Lower Level I)*
7:00 AM – 8:00 AM	**BREAKFAST** *Exhibits Hall (Lower Level II)*
8:00 AM – 5:00 PM	**EXHIBIT HOURS** *Exhibits Hall (Lower Level II)*
8:00 AM – 8:30 AM	**OPENING CEREMONIES** *`Salon E & F (Lower Level 1)*
8:30 AM – 10:00 AM	**SESSION 1: PLENARY IA** *Salon E & F (Lower Level 1)*
10:00 AM – 10:30 AM	**BREAK** *Location TBD*
10:30 AM – 12:00 PM	**SESSION 2: PLENARY IB** *Salon E & F (Lower Level 1)*
12:00 PM – 1:10 PM	**EXHIBITS LUNCH** *Exhibits Hall (Lower Level II)*

1:10 PM – 3:00 PM **SESSION 3A: GaN HEMT I**
Salon E (Lower Level 1)

1:10 PM – 3:00 PM **SESSION 3B: COMPOUND SEMICONDUCTOR APPLICATIONS**
Salon F (Lower Level 1)

3:00 PM – 3:30 PM **BREAK**
Exhibits Hall (Lower Level II)

3:30 PM – 5:10 PM **SESSION 4A: AlN SUBSTRATE, microLED INDUSTRY UPDATES, & MACHINE LEARNING IMPLEMENTATIONS**
Salon E (Lower Level 1)

3:30 PM – 5:10 PM **SESSION 4B: ADVANCED PACKAGING**
Salon F (Lower Level 1)

5:10 PM – 6:00 PM **STUDENT FORUM**
Pearl Room (Level II)

5:10 PM – 6:00 PM **EXHIBITOR FORUM**
Salons A – D (Lower Level I)

6:00 PM – 10:00 PM **INTERNATIONAL RECEPTION**
Location To Be Announced

WEDNESDAY, May 20th

7:30 AM – 12:00 PM **REGISTRATION**
Registration Desk (Lower Level I)

7:00 AM – 8:30 AM **BREAKFAST**
Exhibits Hall (Lower Level II)

8:00 AM – 11:00 AM **EXHIBIT HOURS**
Exhibits Hall (Lower Level II)

8:30 AM – 10:00 AM **SESSION 5: PLENARY II**
Salon E & F (Lower Level 1)

10:00 AM – 10:30 AM **BREAK**
Exhibits Hall (Lower Level II)

10:30 AM – 12:30 PM **SESSION 6A: GaN HEMT II**
Salon E (Lower Level I)

10:30 AM – 12:10 PM **SESSION 6B: RELIABILITY**
Salon F (Lower Level I)

12:10 PM – 1:10 PM **EXHIBITS LUNCH**

Exhibits Hall (Lower Level II)

12:10 PM – 1:10 PM **WoMANTECH Connect**
Salon A (Lower Level I)

1:10 PM – 3:00 PM **SESSION 7A: SPECIAL SESSION ON GaN FOUNDRIES**
Salon E (Lower Level 1)

1:10 PM – 3:00 PM **SESSION 7B: MANUFACTURING CHALLENGES FOR EMERGING TECHNOLOGIES**
Salon F (Lower Level I)

3:00 PM – 3:20 PM **BREAK**
Ballroom Foyer (Lower Level 1)

3:20 PM – 5:00 PM **SESSION 8A: SPECIAL SESSION ON GaN FOUNDRIES II**
Salon E (Lower Level I)

3:20 PM – 5:10 PM **SESSION 8B: WAFER PROCESSING**
Salon F (Lower Level I)

5:15 PM – 6:15 PM **GaN FOUNDRY PANEL DISCUSSION**
Mount Hood (Level II)

6:15 PM – 7:15 PM **GaN FOUNDRY NETWORKING**
Mount St. Helens (Level II)

THURSDAY, May 21st

7:30 AM – 10:00 AM **REGISTRATION**
Registration Desk (Lower Level I)

7:00 AM –8:15 AM **BREAKFAST**
Salon A - C (Lower Level I)

8:15 AM – 9:45 AM **SESSION 9: PLENARY III**
Salon E & F (Lower Level 1)

9:45 AM – 10:00 AM **BREAK**
Ballroom Foyer – Lower Level I

10:00 AM – 11:40 AM **SESSION 10A: GROWTH TECHNIQUES & EPITAXIAL AND MATERIAL CHARACTERIZATION**
Salon E (Lower Level I)

10:00 AM – 11:30 AM	**SESSION 10B: GaN MATERIALS AND DEVICES** *Salon F (Lower Level I)*
11:40 AM – 1:30 PM	**LUNCH ON OWN**
1:30 PM – 3:10 PM	**SESSION 11A: HETEROGENEOUS INTEGRATION & PROCESS CONTROL** *Salon E (Lower Level 1)*
1:30 PM – 3:10 PM	**SESSION 11B: POWER CONVERSION** *Salon F (Lower Level I)*
3:10 PM – 4:00 PM	**POSTER SESSION** *Mount St. Helens (Level II)*
4:00 PM – 4:30 PM	**CAPSTONE TALK** *Mount Hood (Level II)*
4:30 PM – 5:00 PM	**CONFERENCE CLOSING** *Mount Hood (Level II)*

MESSAGE FROM THE CONFERENCE CHAIR

On behalf of the 2026 Technical Program and Executive Committees, it is my honor to extend a warm welcome to you for the **40th Anniversary of the International Conference on Compound Semiconductor Manufacturing Technology (CS MANTECH)** in Portland, Oregon! Portland, the "City of Roses", has been our host city for 2 previous conferences, including our 2nd conference in 1987. Therefore, it is fitting that we have returned to this iconic city to celebrate 40 years of CS MANTECH!

Like Portland, CS MANTECH is a pioneer that started with humble beginnings. Our 1st conference, called GaAs MANTECH, launched in October 1986 in Grenelefe, Florida, as an adjunct to the GaAs IC Symposium with He Bong Kim leading as the founder and the 1st Conference Chair. It was established to address a gap in the industry for a forum to discuss topics on the manufacture of GaAs devices.

In the 40 years since its inception, CS MANTECH has broadened its scope beyond GaAs technologies, growing to become internationally recognized as the premier technical conference for compound semiconductor manufacturing. We have been steadfast in maintaining the core objective set forth from the 1st conference by He Bong Kim and Jim DiLorenzo (1st Technical Program Chair) in our mission to 1) Bring together professionals from industry, academia, and government organizations, and 2) Provide a forum to exchange and discuss new ideas that propel our industry forward.

This year's conference features plenary and technical presentations, industry exhibits, workshops, a special session.topic on GaN foundries and labs, and integral to CS MANTECH, the invaluable networking opportunities. You will be treated to over 80 presentations from invited and contributed talks covering CS processing & yield improvement, materials, test, reliability, and CS devices for RF, power, optoelectronics, photonics, and artificial intelligence. To celebrate our 40th anniversary, we will have retrospectives honoring the legacy of CS MANTECH and its role in shaping our industry as well as a look forward to the exciting future ahead in CS technology and applications.

CS MANTECH embodies the essence of my roots, born and raised in Hawai'i. CS MANTECH gives Aloha (kindness, respect, honor, joy, happiness, care, sense of community) to all attendees and is my extended 'Ohana (family). I express my heartfelt appreciation and gratitude and say "mahalo nui loa" (deepest thank you) to the volunteers who comprise the Executive and Technical Program committees. Without their dedication, commitment, and collective

efforts, along with the support from their companies, institutions, and organizations, CS MANTECH would not be possible.

I hope you will gain new insights and knowledge that will support your efforts to drive new CS advancements for the next decade as well as establish new connections and long-lasting friendships. You are a part of history through your participation in this year's 40th anniversary conference. Enjoy CS MANTECH 2026 and experience all that Portland has to offer during your visit!

E pili mau nā pōmaikaʻi me ʻoe (Best wishes)

Jansen Uyeda
Northrop Grumman
2026 CS MANTECH Conference Chair

2026 CONFERENCE SPONSORS

CS MANTECH is an independent not-for-profit organization whose mission is to promote technical discussion and scientific education in the compound semiconductor manufacturing industry. The continued success of the conference is enabled by donations from corporate sponsors. The 2026 CS MANTECH Conference Committee gratefully acknowledges the support from our sponsors.

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2025 CONFERENCE SPONSORS

We would again like to thank our 2025 sponsors!

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2026 CONFERENCE HIGHLIGHTS

Welcome to the 2026 Compound Semiconductor Manufacturing Technology (CS MANTECH) International Conference! This year marks the third time we are holding our conference in Portland, Oregon, a vibrant, and sometimes quirky, city known alternately as Stumptown. We are excited to be back in the City of Roses, home to many tech and business leaders, to continue the long CS MANTECH tradition of providing you with an exceptional technical and social networking experience. Our Executive and Technical Program Committees have done an outstanding job over the past year to solicit and organize a program that addresses the latest developments in CS manufacturing and technologies. Let me take a moment to describe what is in store for you at the 2026 CS MANTECH conference.

CS MANTECH 2026 kicks off with the **CS MANTECH Workshop** on **Monday, May 18th**. The theme for this year's workshop is "From Data to Decisions: Mastering Analytics for Compound Semiconductor Manufacturing," - A CS MANTECH Workshop on applied analytics, AI, and the next generation of smart manufacturing. Please see the CS MANTECH WORKSHIP section for additional details. In parallel, the **Reliability of Compound Semiconductors (ROCS) Workshop**, will be held to offer attendees a forum to present the latest results on CS reliability. A unique aspect of ROCS is the collaborative discussions on the latest in CS reliability and how to overcome barriers for wider technology adoption and application. After Monday's workshops, we kick-off the first social and networking event with the **Exhibitor Reception** at 6:00 PM in the Marriott Portland Downtown Waterfront exhibit space. This is your first opportunity to interact and network with other CS MANTECH attendees, including your customers, suppliers, and collaborators, all while enjoying a great selection of hors d'oeuvres and drinks.

The CS MANTECH technical conference starts on **Tuesday, May 19th**, beginning with the **Opening and Awards Ceremonies**, that will include the 2025 Best Paper awards, Sponsorship Recognition, and a Conference Overview. We will begin each day of the conference with a single-track Plenary session or sessions, followed by parallel track technical sessions. On Tuesday we will have two plenary sessions. The first will start with a **Fireside Chat** led by our conference **General Chair Jansen Uyeda** that will include mainstays of the conference **Marty Brophy, Steve Mahon, Yohei Otoki**, and more. The **first Plenary Session** of the day will conclude with a talk by Dr. David Meyers on "DARPA History with CS MANTECH, Vision, and Current Projects". Our **second Plenary Session** of the day features speakers **Jin Bains, CEO of Mini-Circuits** and **Dr. Shahriar Shahramian of Nokia**. Jin will speak on "The Evolving Landscape for Compound Semiconductor Devices: Mixed Technologies, Multi-Chip Modules &

Beyond" and Shahriar will speak on "Glass & Semiconductors: Industrialization of near-THz Communication Systems". Following the first plenary session, we will transition to parallel technical sessions on GaN HEMT, Compound Semiconductor Applications, Machine Learning for Process Control, and Advanced Packaging. These sessions are composed of both invited and regular and student contributed talks. Invited speakers featured during the first day of technical sessions represent leaders and technologists from **the Institute of Science Tokyo, Virginia Diodes, Crystal IS, the Yole Group, the University of Notre Dame, and Teledyne Scientific**. Lunch will be provided in the Exhibits Hall, offering attendees additional opportunities to connect with existing and new suppliers. Following Tuesday's technical sessions, we will hold the **Student Forum** to provide an opportunity for students to explore career opportunities through networking with members of the CS community from industry, academia, and government. Finally, the much-anticipated **CS MANTECH International Reception** will be held to close the first day of conference.

On **Wednesday, May 20th**, day two of the conference starts with a second Plenary session, featuring **Dr. Tamara Baksht, CEO of VisIC**, and **Dr. Victor Veliadis, Executive Director & CTO of PowerAmerica**. Tamara will speak on "How to design your power GaN: Key Principles and Common Pitfalls" and Dr. Parvais will speak on "Accelerating Commercialization of SiC Chips and Power Electronics". After the second plenary session, we will return to parallel technical sessions on GaN HEMT, Reliability, Manufacturing Challenges of Emerging Technologies, and Wafer Processing; featuring invited talks from the **Infineon Technologies Germany, the University of Polova, Polar Semiconductor, Texas Instruments, Northrop Grumman, and Georgia Tech**. For the second year in a row, we will extend the final day of the Industry Exhibits through lunch to provide another opportunity to connect with existing and new suppliers. CS MANTECH is also excited to offer our attendees with special sessions focused on **GaN Foundry** opportunities. These sessions will feature talks on the GaN Foundry capabilities of **Global Foundries, WIN Semiconductor, MACOM, Qorvo, NGC, BAE, Raytheon, HRL, GCS, UMS, MOSIS 2.0, ARFL, and UCSB**. The second day of conference events will conclude with a GaN Foundry Hub Panel session and a networking event.

On **Thursday, May 21st**, the final day of the conference, we will start with the final plenary session, featuring **Dr. Rodney Pelzel, CTO of IQE,** and **Dr. Charles Li, CEO of PlayNitride**. Rodney will be speaking on "The Age of the Photon" and Charles will be speaking on "Tantium MicroLED: Enabling Scalable, High-Efficiency Solutions for Emerging Application". Following the final plenary session of the conference, we will transition to paral-

lel-track technical sessions on Growth Techniques & Epitaxial and Material Characterization, GaN Materials and Devices, Heterogeneous Integration & Process Control, and Power Conversion. These sessions will feature invited speakers from **Mojo Vision, Stratacache, HRL, ams OSRAM International GmbH, Uviquity, the University of Bath, and Navitas Semiconductor**. There will be no lunch provided to provide attendees an opportunity to explore Portland, however, the conference will continue with a great lineup of technical talks in the afternoon. While I've highlighted our distinguished Plenary and Invited speakers for this year's program, we also have Regular and Student contributed papers and talks in all sessions. These contributions are from academia, government, and industry, and make up the foundation of our CS MANTECH conference. Like previous CS MANTECH conferences, these papers bring cutting-edge concepts that are often our first look at things that will change our industry for years to come. This extends to our **Poster Session**, which will end the technical portion of the conference, and is a great opportunity to interact with the authors to gain valuable insights and build new relationships.

We will wrap up the 2026 CS MANTECH Conference with a **Capstone Talk** from **Dr. Debabani Choudhury**, **the Founder and CEO of SeraTech-LLC**. Dr. Choudhury will provide a fascinating talk on "Compound Semiconductor Integrated Microelectronics in the Application-Oriented AI Era". This capstone talk will be followed by our Closing Ceremony, featuring award announcements for Best Poser, Conference Feedback Drawing, and Conference Contest.

We hope this year's conference will motivate you to return to your organizations with fresh ideas and fresh contacts to continue doing great work and excel in our industry. **On behalf of the 2026 Technical Program Committee, we welcome you to Portland and we are happy to have you join us for CS MANTECH 2026**!

Gerhard Schoenthal
Virginia Diodes, Inc.
Technical Program Committee Chair

2026 CS MANTECH WORKSHOP

Monday, May 18th, 2026
Portland Marriott Downtown Waterfront
Room: *Salon E (Lower Level I)*
8:00 a.m. – 5:00 p.m.

Workshop Theme: From Data to Decisions: Mastering Analytics for Compound Semiconductor Manufacturing
A CS MANTECH workshop on applied analytics, AI, and the next generation of smart manufacturing.

In the era of Industry 4.0, the ability to transform vast amounts of manufacturing data into actionable intelligence is no longer an advantage—it is a necessity. To deliver the next generation of compound semiconductor products with higher yield, greater reliability, and faster time-to-market, we must master the tools and techniques of modern data analytics. This year's workshop embarks on a journey from raw data to critical decisions, providing a comprehensive guide to the software, strategies, and future-forward concepts that are defining the smart factories of today and tomorrow.

Our day begins with a special joint session with the **ROCS (Reliability of Compound Semiconductors) Workshop**, focusing on **Data Analysis Techniques for CS Reliability**. This section features deep dives into industry-leading reliability software platforms. **Gergana Drandova (**from **Qorvo)** will present on reliability data analysis using Minitab statistical software, alongside expert perspectives from **Adi Dhora (**from **Reliasoft)** and representatives from **JMP**. Attendees will have a unique opportunity to compare these methodologies and learn nuances in life-test data analysis and statistical reliability forecasting essential for ensuring product robustness.

The journey continues with a focus on **Data Analysis Techniques for CS Manufacturing**. This section moves from reliability to the fab floor, with sessions dedicated to platforms used for everything from real-time process control to yield analysis. **Brad Hopper (**from **Spotfire)** will discuss case studies and advanced visual analytics, while **Abeer Singhal (**from **Sentient)** will present a talk on *Fab Analytics to Agentic AI: Enabling Autonomous Insight-to-Action.* Through these practical demonstrations and case studies, speakers will highlight how to leverage embedded AI and data science features to solve complex manufacturing challenges, equipping attendees with knowledge they can apply to their daily data analysis tasks.

We conclude the day with a forward-looking capstone session featuring **Kari Ross and Chandhana Padmanabhan from Databricks**. This final 60-minute talk will provide a high-level overview of the data analysis landscape for Industry 4.0 and 5.0, showcasing the "art of the possible." By focusing on cross-industry solutions and case studies, this

session will explore the architecture of the modern data stack and provide an exciting glimpse into the future of machine learning in semiconductor manufacturing.

2026 ROCS WORKSHOP

Monday, May 18th, 2026
Portland Marriott Downtown Waterfront
Room: *Salon F (Lower Level I)*
8:00 a.m. – 5:00 p.m.

The 40th annual Reliability of Compound Semiconductors (ROCS) Workshop will be held on the first day of the CS MANTECH conference, MAY 18, 2026. The objective of this workshop is to provide a forum for researchers, manufacturers, users, and all parties interested in compound semiconductor devices to discuss their most recent (and often late-breaking) findings related to reliability. These topics span such areas as failure mechanisms, thermal effects, radiation, accelerated life testing, and novel device problems, to name just a few.

This year we will hold a joint session with the CS MANTECH workshop, featuring tutorials on reliability data analysis from some of the major software vendors. This may be a useful introduction to reliability for the non-expert as well as providing some insight into more general data analysis. Also, this year will feature a collaboration with Transactions on Device and Material Reliability to publish a special edition consisting of a select number of well-received ROCS papers. A full day of Compound Semiconductor Reliability tutorials and presentations is being offered, along with a luncheon and two breaks. The workshop will conclude with a talk on machine learning and AI for process control with applications for reliability, followed by a lively discussion with all workshop attendees on how this can be used to advance reliability as well as its pitfalls! We look forward to your attendance!

CSMANTECH
2026 WoMANTECH Connect

Wednesday, May 20th, 2026
Portland Marriott Downtown Waterfront
Room: *Salon A (Lower Level I)*
12:10 p.m. – 1:10 p.m.

CS MANTECH invites you to a special breakfast event designed to foster a supportive environment for women to connect and network. The event aims to:

- **Build community** and mutual support.

- **Foster networking** and professional relationships.
- **Facilitate peer connections** through shared activities.
- **Promote collaboration** and idea sharing.
- **Enhance community spirit** by gathering together.
- **Support growth** by creating a space for women to help each other.

Join us to share, learn, and grow together, both personally and professionally. **Pick up your lunch in the Exhibits Hall**, bring it to Salon A, and enjoy connecting with others.

INDUSTRY EXHIBITS

The CS MANTECH Exhibition is the premiere annual venue for key CS equipment and material manufacturers and suppliers to showcase their products and technical services. This year we are excited to showcase over 60 companies. Building upon the conference technical focus on CS manufacturing and technology, the Exhibition is an excellent opportunity for participating companies and organizations to meet and interact with both existing and future clients and collaborators involved in today's state-of-the-art manufacturing and tomorrow's innovations. This unique opportunity brings researchers, engineers, managers, and the key decision makers who shape and guide the industry all together for face-to-face interactions. Attendees will gain excellent visibility to a wide range of CS-focused participants from around the world who are critical to ensuring your success in the CS community. You are sure to see major suppliers and collaborators and leverage this unique opportunity to efficiently meet with many of your current contacts as well as engage with new contacts all in one place.

The 2026 CS MANTECH Exhibits will be in the Exhibits Hall on Lower Level II (shown above), a short escalator ride from the technical sessions being held on Lower Level I. The Exhibits will kick off with the much-anticipated Exhibits Reception at 6:00 pm on Monday, May 19th. The Exhibits Reception will include food and drinks and is an excellent opportunity to catch up with friends, colleagues, suppliers, and fellow competitors. This is the first evening of the conference, providing a casual social environment to network and meet the attendees who contribute to the advancements and continued success of the CS industry.

The Exhibit Hall will open again Tuesday morning, May 19th, with breakfast at 7:00 am. Following the Plenary Session, the Exhibit Hall will be a focal point for attendees as the location for the morning and afternoon breaks, along with our buffet-style Exhibits Lunch. Attendees will have an opportunity to walk the Exhibits floor and talk to exhibitors throughout the day. The Exhibit Hall will open for a final time on Wednesday morning, May 20th, at 7:00 am with breakfast and will remain open through lunch provided in

the Exhibits Hall. This time provides an ideal opportunity for both conference attendees and participating Exhibitors to follow up on interest generated during the Exhibits show, exchange business cards, and finalize those last-minute agreements! Finally, at 1:30 pm the Exhibition closes. We will also host an Exhibitor Forum to provide an opportunity for participating companies to introduce new products, highlight company strengths, and introduce themselves in a short presentation. The forum will take place in Salons A - D.

Exhibitor Forum: Four parallel sessions, Tuesday, May 19th, 5:00pm – 5:50 pm, Salons A - D

We are very appreciative and thankful for all our CS MANTECH Exhibitors, who not only make our conference possible, but also make it exceptional! We know you will not only find this a very valuable return-on-investment, but a lot of fun, too!

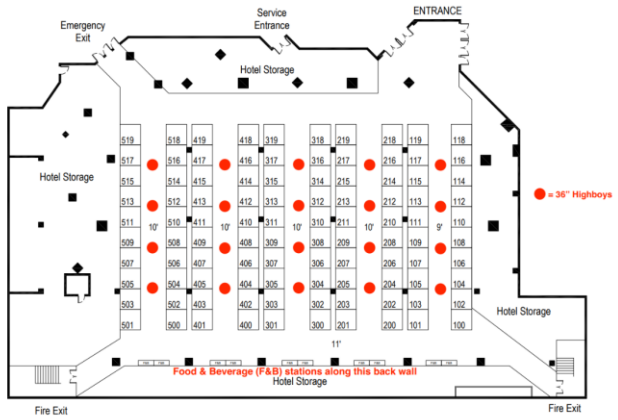


Exhibit Hall Layout for 2026 CS MANTECH

2026 Exhibitors

Exhibitor Name	Booth #
Accel-RF	205
Aixtron Inc	419/518
Annealsys-ECM/ECM-Annealsys	319
AXT	103
Beneq	318
C&D Semiconductor	211
Camtek USA, Inc.	313
Canon USA	110
ClassOne Technology	501
CLAWS Hub	206
Cohu, Inc.	113
CS CLEAN SOLUTIONS Inc	517
CSconnected	304/306

2025 BEST PAPERS AWARDS

On Tuesday morning, CS MANTECH will formally recognize the authors of the best paper and best student paper from the 2025 conference. Both awards are based on conference attendee online feedback and ratings. The Best Paper Award is named in honor of Dr. He Bong Kim, the founder of the International Conference on Compound Semiconductor Manufacturing Technology.

The He Bong Kim Award winner for the 2025 Conference is:

Optimized Resistor Layer Photolithography Scheme with Dose Compensation for High Resistance Uniformity of Reactively Sputtered TaN Thin Film
S. Y. Chang, T. Brown, R. Bryie, R. Lee, and N. Ebrahimi
Skyworks Solutions, Inc., Newbury Park, California, USA

The Best Student Paper for the 2025 Conference is:

Vertical GaN Trench MOSFETs with HfO2/Al2O3 Layered Gate Dielectric
E. Brusaterra, E. Bahat Treidel, P. Paul, I. Ostermay, F. Brunner, and O. Hilt
Ferdinand-Braun-Institut (FBH), Berlin, Germany

Congratulations to these award-winning teams for their excellent presentation and technical contribution to our field.

INTERNATIONAL RECEPTION

We are very excited to host the 2026 CS MANTECH International Reception (IR) on Tuesday, May 19 from 7-10 pm, at the Oregon Museum of Science and Industry! The museum is a short walk from Marriott Waterfront Conference Hotel. Attendees are invited to choose their own transportation to the reception, and buses will be offered for the ride back after dark for those who need it Dinner will be a buffet-style service set throughout Turbine Hall. Guests are welcome to enjoy the science exhibits, outdoor patio overlooking the river, and live music. In addition, Tours will be offered of the USS Blueback Submarine docked in the Willamette River beside the museum, as well as several

shows inside the Kendall Planetarium. Please join us for what is sure to be a very memorable evening of entertainment and networking!

One IR ticket is included in your registration. Additional tickets will be available for purchase (please see registration site for details).

CONFERENCE CLOSING RECEPTION

The Conference Closing Reception marks the culmination of the 2026 CS MANTECH experience. Following the technical program, the closing reception offers attendees a final opportunity to forge new connections, exchange insights, and celebrate the achievements of our community. It is a meaningful moment to reflect on the discussions, presentations, and collaborative activities that have enriched our understanding and will continue to advance our organizations and the compound semiconductor industry.

During the reception, we will announce the winners of the Best Poster Presentation, Conference Feedback Form Raffle, and Conference Contest.

We are also honored to have Dr. Debabani Choudhury as our Capstone Speaker for the Conference Closing on Thursday afternoon. Her talk, "Compound Semiconductor Integrated Microelectronics in the Application-Oriented AI Era," will offer forward-looking insights into technologies shaping our future.

Dr. Debabani Choudhury is the Founder and CEO of SeraTech-LLC, contributing to GHz-to-optical-Technologies and system innovations for the communication and sensing applications. She led the strategy and vision for GHz to subTHz research and advancements for Intelsystems and applications while serving as Senior Technologist and Research Director at Intel Research Labs. She formerly developed technology for space, defense, and automotive applications at Hughes Research/HRL Labs, Millitech, and NASA Jet Propulsion Laboratories (JPL). An IEEE fellow, Dr. Choudhury holds more than 100 patents and patent applications, as well as multiple publications. Her achievements have earned multiple honors, including Intel's Gordon Moore Awards, NASA recognitions, and the IEEE Solid State Society's JSSC Best paper award.

Dr. Choudhury holds an elected ADCOM seat for IEEE MTT-Society. She chairs and serves as member for several MTT-S ADCOM committees, plus four MTT-S technical committees (TCs). She served as the Chair of MTT-S Future Directions Committee and Chairs the MTT-S Broadening Participation Committee. She guest-edited multiple IEEE journals, like Proceedings of IEEE. Dr. Choudhury sat on the IEEE 5G-Initiative Committee with ComSoc. She launched MTT-S and ComSoc teamwork for 5G Summits at IEEE IMS2017 as chair. She co-chaired TPCs for IEEE IMS2021 and RWS2013. She also co-chaired the IEEE 5G-Summit TPCs in 2018 and 2019. She is the member of IEEE Antennas and Propagation AP-S technical committee and sits on two IEEE TAB EIE committees.

CS MANTECH Capstone Speaker, Dr. Debabani Choudhury

Abstract: With the evolution of sensing and communication network architectures in the AI era, energy efficient materials, devices, technologies and systems will play a major role. The progress in compound semiconductor devices combined with 3D heterogeneous integration technologies are defining the microelectronics future in the industry. This talk will summarize the advancements in semiconductor and microelectronics technologies with the future directions. The challenges and opportunities of the system-oriented compound semiconductor-based microelectronics in the Agentic AI era will also be discussed.

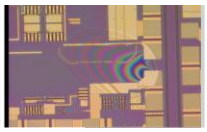
CONFERENCE CONTEST

CS MANTECH continues its tradition of bringing the compound semiconductor community together to share ideas, spark innovation, and celebrate the creativity that drives our industry forward.

As a fun throwback, this year's Conference Contest is the Ugly SEM & Tool Photo Challenge. We invite attendees to submit their most unusual, striking, or entertaining SEM images or tool photographs—anything that captures a surprising moment in the lab or tells a story about life in fabrication. Creativity counts—and so do captions! Witty, charming, or thoughtfully crafted captions can give the entry that extra boost and earn valuable bonus points. A link to a Microsoft form will be available for the photo submissions. Here are some standout examples from past submissions to spark ideas and get your creativity flowing!

Via Monster

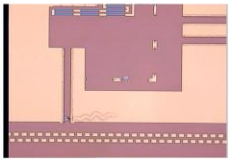
The Big Bad Wolf



Rainbow Via

Fab Flop or Great Art?

Now they're laughing at us!



Snake in the GaAs, Revisited

We also invite attendees to share their memorable experiences and key learnings throughout the conference. Daily prompts will be posted on the CS MANTECH CVENT app. To participate, respond to the prompt in a social media post (e.g., LinkedIn, X, Facebook, etc.) and submit the accompanying Microsoft form with a link to your post to be entered into the raffle. Participants may submit one completed form per day, earning up to four raffle entries over the course of the conference.

As in previous years, our conference will host a Feedback Form Raffle. Conference feedback on the technical program, venue, and overall conference experience is valuable to the CS MANTECH committees for structuring the future conferences and technical programs. Feedback also plays a key role in the award selection process for the Best Paper and Best Student Paper. Each submitted Feedback Form will be entered into a raffle for a prize.

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TECHNICAL PROGRAM

Monday, May 18th

6:00 PM **EXHIBITOR RECEPTION**

Tuesday, May 19th

CONFERENCE OPENING

7:00 AM **EXHIBITS BREAKFAST**

8:00 AM **Opening Ceremonies**
Jansen Uyeda, *Northrop Grumman*
Conference Chair

8:10 AM **2025 Conference Best Paper Awards**
Jansen Uyeda, *Northrop Grumman*
Conference Chair

8:15 AM **Technical Program Highlights**
Gerhard Schoenthal, *Virginia Diodes*
Technical Program Chair

SESSION 1: PLENARY IA
Chairs: Jansen Uyeda, *Northrop Grumman*
Thorsten Saeger, *Qorvo*

8:30 AM **1.1 *Fireside Chat***
Jansen Uyeda, *Northrop Grumman*
Marty Brophy, *Retired*
Steve Mahon, *Feldman Engineering*
Yohei Otoki, *Consultant*

9:15 AM *Plenary Presentation*
1.2 DARPA's Advancement of Compound Semiconductors
David J. Meyer[1], Sharon M. Woodruff[2], Tsu-Hsi Chang[3]
[1]*Defense Advanced Research Projects Agency, Arlington, VA, USA*
[2]*ECS Federal, Arlington, VA, USA*
[3]*HetInTec Corp., Rockville, MD, USA*

10:00 AM **BREAK**
Exhibit Hall (Lower Level II)

SESSION 2: PLENARY IB
Chairs: Gerhard Schoenthal, *Virginia Diodes*
Jansen Uyeda, *Northrop Grumman*

10:30 AM *Plenary Presentation*

2.1 The Evolving Landscape for Compound Semiconductor Devices: Mixed Technologies, Multi-Chip Modules & Beyond
Jin Bains
Mini-Circuits, Brooklyn, New York, USA

11:15 AM *Plenary Presentation*
2.2 Glass & Semiconductors: Industrialization of near-THz Communication Systems
Shahriar Shahramian, Michael Holyoak, Yves Baeyens
Nokia -Bell Labs, Murray Hill, NJ, USA

12:00 PM **EXHIBITS LUNCH**
Exhibit Hall (Lower Level II)

SESSION 3A: GaN HEMT I
Chairs: Mitsuhiro Nakamura, *Murata Manufacturing Company*
James Lundh, *U.S. Naval Research Laboratory*

1:10 PM *Invited Presentation*
3A.1 Thermally-Enhanced Pathways for High Power Density RF Devices
Heather Barton, Jamie Petrie, Kyoung Lee, Jia Guo, Zongyang Hu, Gordon Tracy, Mikhial Guggemos, Peter Goeller, Alexandre Niyonzima, Kelly Yi-Li Wu, Yiwen Song, Daniel Shoemaker, Anwarul Karim, Michael Shuette, Srabanti Chowdhury, Sukwon Choi, Yueying Liu, James Tweedie
MACOM, Durham, NC, USA

1:40 PM **3A.2 >800 °C Operation of Al-rich AlGaN channel HEMTs**
James Spencer Lundh[1], Brianna A. Klein[2], Andrew A. Allerman[2], Daniel J. Pennachio[1], Andrew J. Cantrell[3], Alfred Zhao[4], Harsh Yellai[4], GlenAsia Gonzalez[2], Eric Cruz[2], Tolen M. Nelson[5], Geoffrey M. Foster[6], Alan G. Jacobs[1], Andrew D. Koehler[1], Marko J. Tadjer[1], Giovanni Esteves[2], Troy Olsson[4], Andrew M. Armstrong[2], Karl D. Hobart[1], Michael A. Mastro[1]
[1]U.S. Naval Research Laboratory, Washington, DC, USA
[2]Sandia National Laboratories, Albuquerque, USA
[3]Naval Research Enterprise Intern, residing at U.S. Naval Research Laboratory
[4]University of Pennsylvania, Philadelphia, PA, USA
[5]National Research Council Postdoctoral Fellow, residing at U.S. Naval Research Laboratory

[6]*Amentum Services, Inc., residing at U.S. Naval Research Laboratory*

2:00 PM *Student Presentation*

3A.3 Improved GaN SLCFET Thermal Management with Polycrystalline Diamond Layer Coating

Pharyanshu Kachhawa[1], James W Pomeroy[1], Jeong-kyu Kim[2], Mohamadali Malakoutian[2], SrabantiChowdhury[2], Brian Novak[3], Robert S Howell[3], Shamima Afroz[3], Martin Kuball[1]
[1]*Center for Device Thermography and Reliability, University of Bristol, Bristol, United Kingdom*
[2]*Department of Electrical Engineering, Stanford University, Stanford, CA,USA*
[3]*Northrop Grumman Mission Systems, Linthicum, MD, USA*

2:20 PM *Student Presentation*

3A.4 Time resolved Raman thermography of GaN-on Diamond HEMTs

Leo Norman[1], James Pomeroy[1], Daniel Francis[2], Kornelius Tetzner[3], Oliver Hilt[3], Martin Kuball[1]
[1]*Center for Device Thermography and Reliability (CDTR), University of Bristol, Bristol, United Kingdom*
[2]*Empyreal, United Kingdom*
[3]*Ferdinand-Braun-Institut (FBH), Berlin, Germany*

2:40 PM **3A.5 Process Uniformity and Electrical Performance of 160 V GaN HEMTs at S-Band**

Burak Güneş[1,2], Erdem Aras[1,2], Gizem Tendürüs[1], Arda Eren[1,2], Mahmut Can Soydan[1,2], M. Cihan Çakır[1], Amir Ghobadi[1], Bayram Bütün[1], Ekmel Özbay[1,2]
[1]*Nanotechnology Research Center (NANOTAM), Bilkent University, Ankara, Turkey*
[2]*Electrical and Electronics Engineering Department, Bilkent University, Ankara, Turkey*

SESSION 3B: COMPOUND SEMICONDUCTOR APPLICATIONS

Chairs: Dwaraka Geerpuram, *Plasma-Therm*
Lena Luu, *GCS*

1:10 PM *Invited Presentation*

3B.1 Opening up THz using Compound Semiconductor Technology

Eric Bryerton
Virginia Diodes, Charlottesville, Virginia, USA

1:40 PM **3B.2 6-inch InP/GaAsSb Double Hetero-junction Bipolar Transistor with 0.3-µm-emitter for D-band Applications**
Lai-Hsiang Kuo, Li-Cheng Chang, Hsin-Jyun Lin, Bo-Yu Chao, Chien-Rong Yu, Yi-Chen Lu, Chia-Hao Chang, Min-Yan Lin, Ling-Huai Tseng, Chia-Ming Chang, Shou-Hsien Weng, Jung-Tao Chung, Hsi-Tsung Lin, Shu-Hsiao Tsai, Yu-Syuan Lin, Cheng-Kuo Lin
WIN Semiconductors Corporation, Taoyuan City, Taiwan

2:00 PM **3B.3 CMOS-Compatible 0.25 µm GaN-on-Si HEMT Technology for FR3 Application Achieving Pout=4.9 W/mm and PAE=40% at 10 GHz**
Qingyun Xie[1,2], Yuan Gao1[,2], Hsien-Shun Wu[1,2], Yi Heng Leong[1,2], Hanlin Xie[1,2], Hao-rui Luo[1,2], Hui Teng Tan[1,2], Zhan Jiang Quek[1,2], Wee Leng Ong[1,2], Lakshmi Kanta Bera[1,2], Navab Singh[1,2], and Geok Ing Ng[1,2,3]
*[1]National Semiconductor Translation and Innovation Centre for Gallium Nitride (NSTIC (GaN)), Agency for Science, Technology and Research (A*STAR), Singapore, Republic of Singapore*
*[2]Institute of Microelectronics (IME), Agency for Science, Technology and Research (A*STAR), Singapore, Republic of Singapore*
[3]School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore, Republic of Singapore

2:20 AM *Invited Presentation*
3B.4 Trends in Wide-Bandgap Semiconductors for Automotive Applications
Klaus Heyers, Jens Baringhaus
Robert Bosch GmbH, Reutlingen, Germany

3:00 PM **BREAK**
Exhibit Hall (Lower Level II)

SESSION 4A: AlN SUBSTRATE, microLED INDUSTRY UPDATES, & MACHINE LEARNING IMPLEMENTATIONS
Chairs: Andrew Carter, *Northrop Grumman*
Kevin Stevens*, IQE*

3:30PM *Invited Presentation*
4A.1 AlN Substrate Development History and Roadmap: Application for High Power Ultraviolet-C Light Emitting Diodes and Future Devices

J. Grandusky[1], K. Hogan[1], R. Bondokov[1], C. Carr[1], S. Matsumoto[1], G. Norbury[1], R. Randive[1], L. Facteau[1], P. Aigeldinger[1]
[1]Crystal IS, 70 Cohoes Avenue, Green Island, NY

4:00 PM *Invited Presentation*
4A.2 Status of the microLED industry: from displays to AI datacenters
Eric Virey, Raphael Mermet-Lyaudoz, Martin Vallo
Yole Group, Villeurbanne, France

4:30 PM *Student Presentation*
4A.3 Optical Emission Spectroscopy-Enhanced Physics-Informed Bayesian Optimization for Autonomous and Rapid Semiconductor Process Development
Shafayeth Jamil[1], Rei Shuen Ng[1], Chandan Ramakrishnaiah[2], Finn Burns[1], Kenny Huynh[3], Kendall Davis[3], Christine Lee[3], Shivakumar Bhaskaran[2], Rehan Kapadia[1,2,3]
[1]Electrical and Computer Engineering, University of Southern California, Los Angeles, CA, USA
[2]John O'Brien Nanofabrication Laboratory, University of Southern California, CA, USA
[3]MOSIS 2.0, Information Sciences Institute, University of Southern California, Marina Del Rey, CA, USA

4:50 PM **4A.4 Computationally Efficient Full Wafer Scale Mapping of Basal Plane Dislocations in SiC Using Machine Learning**
James C. Gallagher, Nadeemullah A. Mahadik, Robert E. Stahlbush, Karl D. Hobart, and Michael A. Mastro
Power and Advanced Materials Branch, U.S. Naval Research Laboratory, Washington, D.C., USA

SESSION 4B: ADVANCED PACKAGING
Chairs: Travis Abshere, *nLight*
John Carlson, *Uviquity*

3:30PM *Invited Presentation*
4B.1 Microelectronics for Next-Generation Wireless: Enabling Technologies for Low-power, Wideband, Multi-beam Lens Antenna Systems
Jonathan Chisum[1,2], Nick Estes[2], Nico Garcia[2], Himanshu Sharma[1], Josh Mathis[1]
[1]Dept. of Electrical Engineering, University of Notre Dame, Notre Dame, IN, USA
[2]Cheshir Industries, Los Lunas, NM, USA

4:00 PM *Invited Presentation*
4B.2 InP HBT Integrated Circuit Technologies for the Development of Advanced mm-Wave and THz Amplifiers and Sources
Zach Griffith, Miguel Urteaga, Petra Rowell, Lan Tran, Adam Young, Jon Hacker, Bobby Brar
Teledyne Scientific Company, Thousand Oaks, CA, USA

4:30 PM **4B.3 GaN Advanced Interconnect to Enable 3D Die Stacking Applications**
Chi-hing Choi, Zhihua Cai, Lily An, Noah Brous, Jia Gao, Shan Guan, Sean Hillyard, Mohammed Islam, Qidu Jiang, Ramesh Kasim, Yi Ram Kim, Michael Lube, Jiji Moon, Diane Nestande, Bang Nguyen, Kevin Perry, Ju-Ai Ruan, Ajay Bodade, Deep Dumka, Paul Schmid, Cathy Lee, Vivian Li
Qorvo, Richardson, TX, USA

4:50 PM *Student Presentation*
4B.4 Reliability Analysis of Micro-Transfer Printed GaN HEMTs from Commercially Available Engineered Substrates
Owen Meilander[1], Mona Ebrish[2]
[1]Department of Interdisciplinary Material Science, Vanderbilt University, Nashville, TN, USA
[2]Department of Electrical and Computer Engineering, Vanderbilt University, Nashville, TN, USA

5:10 PM **EXHIBITOR FORUM**
Salons A – D (Lower Level I)

5:10 PM **STUDENT FORUM**
Pearl Room (Level II)

6:00 PM **INTERNATIONAL RECEPTION**
Oregon Museum of Science and Industry

Wednesday, May 20th

7:00 AM **EXHIBITS BREAKFAST**
Exhibit Hall (Lower Level II)

SESSION 5: PLENARY II
Chairs: Dilip Risbud, *Renesas Electronics*
Martin Kuball, *University of Bristol*

8:30 AM *Plenary Presentation*
5.1 How to design your power GaN: Key Principles and Common Pitfalls
Tamara Baksht, Gregory Bunin, Roman Volkov, Lev Stessin, Yulia Roiter, Dana Veprinsky, Valery Veprinsky, Nisim Izhakbaev, Shahar Wagner, Mor Rozen, Dieter Liesabeths, Ilia Bunin, Kurt Smith, David Shapiro, Alessandro Incandela, Werner Ness, Mahsa Montazeri, Evgeny Rozanov, Alexnder Firtel, Ray Tsai, Gleb Vetakh, Massimo De Giorgio, Guy Levy
VisIC Technologies, Ness Ziona, Israel

9:15 AM *Plenary Presentation*
5.2 Accelerating Commercialization of SiC Chips and Power Electronics
Victor Veliadis
PowerAmerica, Raleigh, North Carolina, USA

10:00 AM **BREAK**
Exhibit Hall (Lower Level II)

SESSION 6A: GaN HEMT II
Chairs: Shigeki Yoshida, *Sumitomo Electric Industries*
Winston Parker, *Wolfspeed*

10:30 AM *Invited Presentation*
6A.1 High Performance GaN on Si Technology for 6G applications
Helmut Brech[1], Sudip Ghosh[1], Christian Schuberth[1], Dhruvin Pandya[1], John Twynam[1], Albert Birner[1], Peter Singer[2]
[1]Infineon Technologies AG, Regensburg, Germany
[2]Infineon Technologies, Villach, Austria

11:00 AM *Student Presentation*
6A.2 Experimental Evaluation of Polarization-Graded AlGaN/GaN HEMTs With Electric Field Management and Improved Breakdown Performance
Yu-En Jeng, Weifeng Wu, Sothio Suzue-Pan, Pengcheng Xu, Juncheng Xiong, Patrick Fay
Department of Electrical Engineering, University of Notre Dame, Notre Dame, IN, USA

11:20 AM **6A.3 Scaling Effects on Thermal, DC, and RF Performance of GaN HEMTs**
Biddut K. Sarker[1], Leonard A. Duncan[1], Dan

Denninghoff[2], Erdem Arkun[2], Kelson D. Chabak[3], Andrew J. Green[3], Ahmad E. Islam[3]
[1]KBR, Inc., Beavercreek, OH, USA
[2]HRL Laboratories, Malibu, CA, USA
[3]Air Force Research Laboratory, Sensors Directorate, Wright-Patterson AFB, Dayton, OH, USA

11:40 AM **6A.4 Deep Levels Analysis in Scaled GaN HEMTs: Evaluation Methods and Recent Results**
Enrico Zanoni, Francesco De Pieri, Andrea Carlotto, Samrat Roy Chowdhury, Manuel Fregolent, Isabella Rossetto, Carlo De Santi, Fabiana Rampazzo, Gaudenzio Meneghesso, Matteo Meneghini
Department of Information Engineering, University of Padova, Padova Italy

12:10 AM *Student Presentation*
6A.5 High-Temperature Passivation for Improved Reliability of AlGaN/GaN HEMTs
Ali Koyucuoglu, Serguei Chevtchenko, Matthias Schulz, Ina Ostermay, Oliver Hilt, Olaf Krueger
Ferdinand-Braun-Institut (FBH), Berlin, Germany

SESSION 6B: RELIABILITY
Chairs: Peter Ersland, *MACOM*
Zeina Abdallah, *University of Bristol*

10:30 AM *Invited Presentation*
6B.1 Integrating GaN into a Power Foundry: How BCD Infrastructure and Automotive Culture Accelerate GaN Scale-Up
Surya Iyer
Polar Semiconductor, Bloomington, MN, USA

11:00 AM **6B.2 Reliability Without Hermeticity by ALD Passivation of DC to 40 GHz GaN MMIC Technology**
Daniel E. Stasiw, Kyoung-Keun Lee, Chris Hardiman, Dan Etter, Alexandre Niyonzima, Jon Horton
MACOM Technology Solutions, Inc., Durham, NC, USA

11:20 AM **6B.3 Reliability Improvement of Parasitic Emitter Resistance in InP-based Hetero-junction Bipolar Transistors onto SiC Sub-strate Using Transferred-Substrate Tech-nique**

Yusuke Araki, Yuta Shiratori, Takuya Hoshi, Shuhei Arai, and Fumito Nakajima
Device Technology Labs., NTT, Inc., Atsugi, Kanagawa, Japan

11:40 AM *Invited Presentation*
6B.4 GaN reliability in power supply systems
Sandeep R. Bahl[1], Connor Owen[2], Bing Lu[2]
[1]High Voltage Power Business Unit, Texas Instruments, Santa Clara, CA, USA
[2]High Voltage Power Business Unit, Texas Instruments, Dallas, TX, USA

12:10 PM **EXHIBITS LUNCH**
Exhibit Hall (Lower Level II)

12:10 AM **WoMANTECH NETWORKING FORUM**
Salon A (Lower Level I)

SESSION 7A: SPECIAL SESSION ON GaN FOUNDRIES I
Chairs: Gerhard Schoenthal, *Virginia Diodes*
Dave Via, *MMEC*

1:10 PM **7A.0 Introduction**
Gerhard Schoenthal

1:15 PM **7A.1 Global Foundries**
Julio Costa

1:30 PM **7A.2 WIN Semiconductors**
Ivan Eliashevich, Chang-Hwang Hua

1:45 PM **7A.3 MACOM**
Michael Schuette

2:00 PM **7A.4 Qorvo**
Ted Jones

2:15 PM **7A.5 Northrop Grumman Corporation**
Matt Hicks

2:30 PM **7A.6 BAE**
David Brown

2:45 PM **7A.7 Raytheon**
Aamdna Kirchner

SESSION 7B: MANUFACTURING CHALLENGES OF EMERGING TECHNOLOGIES
Chairs: Justin Parke, *Northrop Grumman*
Heribert Zull, *ams OSRAM*

1:10 PM *Invited Presentation*

7B.1 SLCFET Technology: High Performance Wideband RF and mmW Switches and Amplifiers for Next Generation Multifunction Systems
Robert S. Howell, Matt Torpey, Brian Novak, Shamima Afroz, and Justin Parke
Northrop Grumman Corporation, Mission Systems Sector, Linthicum MD, USA

1:40 PM **7B.2 Critical Challenges for Manufacturing of Ultra-High Voltage SiC Power and Pulsed Power Devices**
Nadeemullah A. Mahadik[1], A. N. Imhof[2], J. C. Gallagher[1], T. M. Nelson[2], Y. Kim[3], M. Owen[3], W. Sung[4], A. Morgan[4], J. Lynch[4], S. Y. Jang[4], A. A. Agarwal[4], T. Kuhr[5], E. Balkas[5], R. L. Myers-Ward[1], M. Ghezellou[6], J. Ul-Hassan[6], A. D. Koehler[1], K. D. Hobart[1], M. A. Mastro[1], M. Hinojosa[7], A. Lelis[7], R. Green[7], H. K. O'Brien[7]
[n1]U.S. Naval Research Laboratory (NRL), Washington, DC, USA
[2]NRC Associate at NRL, Washington, DC, USA
[3]Defense Microelectronics Activity (DMEA), McClellan Park, CA, USA
[4]NoMIS Power, Albany, NY, USA
[5]Wolfspeed, Inc. Durham, NC, USA
[6]Linkoping University, Linkoping, Sweden
[7]Army Research Laboratory (ARL), Adelphi, MD, USA

2:00 PM **7B.3 Development of a Next-Generation InP HEMT for Space Applications**
Michael Eller, I. Smorchkova, H. Ma, F. Tuazon, M. Lange, A. Hoyer, D. Eng, M. Duffy, B. Poust, X. B. Mei,W. Yoshida, P. Marshall, F. Lian, W. R. Deal, M. Siddiqui, A. Oki
Northrop Grumman, Manhattan Beach CA USA

2:20 PM **7B.4 Packaging Process Effects on Ni-TiO_2-Ga_2O_3 Metal-Dielectric-Semiconductor Diodes**
Jeremiah C. Williams[1], Nolan S. Hendricks[2], Laura C. Davidson[1], Zachary M. Weber[3], Weisong Wang[1], Aaron M. Adams[1], Joshua J. Piel[2], Prescott E. Evans[4], Nicholas P. Sepelak[1], Biddut K. Sarker[1], Elizabeth Sowers[2], Ahmad E. Islam[2], and Andrew J. Green[2]
[1]KBR, Beavercreek Township, OH USA
[2]Air Force Research Laboratory, Sensors Directorate, Wright-Patterson AFB, OH, USA

[3]*The Ohio State University, Columbus, OH, USA*
[4]*Core4ce, Fairborn, OH 45324, USA*

2:40 PM *Student Presentation*
7B.5 Demonstration of high temperature stable gate stack for Ga_2O_3 MOSFET
Michael Harrington[1], Nicholas P. Sepelak[2], Biddut K. Sarker[2], Leonard Duncan[2], Stefan Nikodemski[2], Jean-Pierre Bega[2], Timothy Prusnick[2], Andrew Browning[2], Kyle J. Liddy[3], Weisong Wang[2], Kevin D. Leedy[3], Yan Zhuang[1], Andrew J. Green[3], and Ahmad E. Islam[3]
[1]*Wright State University, Department of Electrical Engineering, Dayton, OH, USA*
[2]*KBR, Beavercreek Township, OH, USA*
[3]*Air Force Research Laboratory, Sensors Directorate, Wright-Patterson AFB, OH, USA*

3:00 PM **BREAK**
Ballroom Foyer (Lower Level I)

SESSION 8A: SPECIAL SESSION ON GaN FOUNDRIES II
Chairs: Dave Via, *MMEC*
Nick Dellas, *Infineon Technologies*

3:30 PM **8A.1 HRL Laboratories**
Andrea Corrion

3:45 PM **8A.2 GCS**
Daniel Hou

4:00 PM **8A.3 UMS**
Valeria Digiacomo-Brunel

4:15 PM **8A.4 MOSIS 2.0**
Rehan Kapadia

4:30 PM **8A.5 Air Force Research Laboratory**
Kelson Chabak

4:45 PM **8A.6 UCSB**
Umesh Mishra

SESSION 8B: WAFER PROCESSING
Chairs: Marty Brophy, *Consultant*
Stephanie Chang, *Skyworks*
Raquel Jonathan, *Virginia Diodes*

3:20 PM *Invited Presentation*
8B.1 A New Nitride Semiconductor Era Facilitated by AlN Advances

Habib Ahmad, Sangho Lee, Minwoo Cho, and W. Alan Doolittle
Georgia Institute of Technology, School of Electrical and Computer Engineering, Atlanta, GA, USA

3:50 PM **8B.2 A Screen-Printed Thick Film Copper Pillar Process**
Kezia Cheng, Boris Dzyubenko, Michael Duval
Skyworks Solutions Inc., Woburn, MA, USA

4:10 PM *Student Presentation*
8B.3 Impact of H_3PO_4 treatment on turn-on voltage instability in Ga_2O_3 trench Schottky barrier diodes
Min-Yeong Kim[1], Aditya K. Bhat[1], Sai Charan Vanjari[1,2], Matthew D. Smith[1,2], Martin Kuball[1,2]
[1]Center for Device Thermography and Reliability, University of Bristol, Bristol, United Kingdom
[2]Innovation and Knowledge Centre REWIRE, Bristol, United Kingdom

4:30 PM **8B.4 Hybrid HSQ resist-mask lithography for ultra-low line edge roughness 150 mm InP DFB wafer scale up**
Tomas Peach, Sanna Makela, Angela Sobiesierski
Institute for Compound Semiconductors, School of Physics and Astronomy, Cardiff University, Cardiff, Wales, UK

4:50 PM **8B.5 Integrated TFR Heater Structure for Rapid Testing of Device Isolation over Temperature**
Peter J. Zampardi[1], Quinn Davenport[2], and Leonard Hayden[2]
[1]Qorvo Inc., Newbury Park, CA, USA
[2]Qorvo Inc., Hillsboro, OR, USA

5:15 PM **GaN Foundry Panel Discussion**
Mount Hood (Level II)
Moderator: TBD

6:15 PM **GaN Foundry Networking**
Mount St. Helens (Level II)

Thursday, May 21st

SESSION 9: PLENARY III
Chairs: Michael Krames, *Arkesso, LLC*
Steve Mahon, *Feldman Engineering*

8:20 AM *Plenary Presentation*
9.1 The Age of the Photon
Rodney Pelzel, Andrew Clark, Rytis Dargis, Mark Mattingley, Ben Stevens, Gareth Jones, Oleg Laboutin, Chen-Kai Kao, Hugues Marchand
IQE, Cardiff, Wales, United Kingdom

9:05 AM *Plenary Presentation*
9.2 Tantium MicroLED: Enabling Scalable, High-Efficiency Solutions for Emerging Application
Falcon Y. Liu, Kuan-Yung Liao, Ching-Liang Lin, Sheng-Yuan Sun, Yun-Liv Li
PlayNitride, Miaoli County, Taiwan

9:45 AM **BREAK**
Ballroom Foyer (Lower Level I)

SESSION 10A: GROWTH TECHNIQUES & EPITAXIAL AND MATERIAL CHARACTERIZATION
Chairs: Dennis Szymanski, IQE
Matt King, *MACOM*

10:00 AM *Invited Presentation*
10A.1 A wafers-in wafers-out Micro-LED Platform for AI
Michael Wiemer
Mojo Vision, Saratoga, California, USA

N
10:30 AM *Invited Presentation*
10A.2 Large Depth of Field Optical Lithography at 28 nm Technology Node for High Process Latitude Manufacturing
Arun Nagpal, Md. Ehsanul Karim, Robert Socha
Resona Semiconductor, San Carlos, CA, USA

11:00 AM **10A.3 Ultrahigh purity plasma-enhanced atomic layer deposition and electrical properties of epitaxial scandium nitride**
Gilbert Rayner, Sean Armstrong, Noel O'Toole
The Kurt J. Lesker Company, Jefferson Hills, Pennsylvania, USA

11:20 AM *Student Presentation*
10A.4 Electrical Characterization of Buffer-Free Ultra-Thin InN Grown on Si(001)
Pengcheng Xu[1], Sean Branagan[2], Md Mehedi Hasan Tanim[3], Yifu Guo[3], Samuel Clough[1], Everett Fraser[4], Paul Pinsukanjana[4], Amanda Wscieklica[2], Zetian Mi[3], Patrick Fay[1]

[1]*Department of Electrical Engineering, University of Notre Dame, Notre Dame, IN, USA*
[2]*Raith America Inc., Troy, NY, USA*
[3]*Department of Electrical Engineering and Computer Science, University of Michigan, Ann Arbor, MI, USA*
[4]*Intelligent Epitaxy Technology, Inc., Allen, TX, USA*

SESSION 10B: GaN MATERIALS AND DEVICES

Chairs: Nitin Kalra, *BAE Systems*
Yoga Saripalli, *Texas Instruments*

10:00 AM *Invited Presentation*
10B.1 Next-Gen, Millimeter Wave Phased Array Technology Enabled By 3D Heterogeneous Integration
Hasan Sharifi, Andrea Arias-Purdue, Avantika Sodhi, Clayton Tu, Daniel Kuzmenko, Joe Tai, Jonathan Lynch, Miguel Valencia, Tina Seeholzer, Gavin Chang, Robin Ying, Dmitry Veksler, Partia Naghibi, Ryan Quarfoth, Jamie Nuccitelli
HRL Laboratories, Malibu, California, USA

10:30 AM **10B.2 Enhancing RF Power and Efficiency through Trapping Mitigation in Buffer-Free QuanFINE GaN HEMT**
Anders Lundskog[1], Ding-Yuan Chen[1], L. Ben Hammou[2], F. Grandpierron[2], E. Carneiro[2], K. Ziouche[2], E. Okada[2], Jr-Tai Chen[1] and F. Medjdoub[2]
[1]*SweGaN AB, Linköping, Sweden*
[2]*CNRS-IEMN, Institut d'Electronique, de Microélectronique et de Nanotechnologie, Villeneuve d'Ascq, France*

10:50 AM *Student Presentation*
10B.3 High-Linearity and Low-Noise InAlGaN/GaN HEMTs on SiC with a Full AlGaN Buffer
Sheng-Kai Chen[1], Ming-Yuan Lee[2], Po-Tsung Tu[2], Po-Chun Yeh[2], Chang-Hong Shen[3], and Jen-Inn Chyi[1]
[1]*Department of Electrical Engineering, National Central University, Taoyuan, Taiwan,*
[2]*Electronic and Optoelectronic System Research Laboratories, Industrial Technology Research Institute, Hsinchu, Taiwan,*
[3]*Taiwan Semiconductor Research Institute, Hsinchu, Taiwan*

11:10 AM **10B.4 Vertical GaN Schottky barrier diodes on native (GaN) and non-native (Si) substrates with mesa edge termination and comparable critical electric field**

Mritunjay Kumar[1], Chengzhi Zhang[1], Khaled Ahmeda[2], Xiang Li[2], Martin Kuball[1], and Matthew D. Smith[1]
[1]Center for Device Thermography and Reliability, HH Wills Physics Laboratory, University of Bristol, Bristol, UK
[2]Dynex Semiconductor Ltd, Doddington Road, Lincoln, UK.

11:40 AM **LUNCH ON OWN**

SESSION 11A: HETEROGENEOUS INTEGRATION & PROCESS CONTROL
Chairs: Mark Miller, *MACOM*
Ina Ostermay, *Ferdinand Braun Institute*

1:30 PM *Invited Presentation*
11A.1 Enabling Heterogeneous Integration of Optoelectronics on CMOS Logic
Markus Maute
ams OSRAM International GmbH, Regensburg, Germany

2:00 PM *Invited Presentation*
11A.2 Heterogeneous Photonic Integrated Circuits for Compact Scalable Far-UVC Light Sources
Wei Jiang, John A. Carlson, Brent Fisher, Jim Carter, and Scott Burroughs
Uviquity Inc., Raleigh, NC, USA

2:30 PM **11A.3 Smart Photolithography Process Monitoring Scheme with Real-Time Fault Detection and Classification**
Stephanie Y. Chang, Tom Brown, Rainier Lee, Nercy Ebrahimi
Skyworks Solutions Inc., Newbury Park, California, USA

2:50 PM **11A.4 Adverse Effects of Ta Addition in Au Deposition and Their Solutions**
Yudai Inagaki[1], Taichi Ito[1], Yuichiro Shindo[1], Takanobu Yamazaki[1], Masatoshi Koyama[2], Koji Noguchi[1]
[1]Precious Metals Materials Division, Matsuda Sangyo Co., Ltd., Tokyo, Japan
[2]Nanomaterials Microdevices Research Center, Osaka Institute of Technology, Osaka, Japan

SESSION 11B: POWER CONVERSION
Chairs: Yohei Otoki, *Consultant*
Eric Stewart, *Northrop Grumman*

1:30 PM *Invited Presentation*

11B.1 Comparative Evaluation of Off-the-Shelf Operational Amplifiers at Cryogenic Temperatures using a 2 MHz Multivibrator

Hanwen Zhang, Xianwu Zeng, Jiawen Xi, Kai-Ping Liu, Xiaoze Pei
University of Bath, Bath, England, United Kingdom

2:00 PM *Invited Presentation*

11B.2 Invited Talk: Industry View on the status and challenges for UHV SiC Power Device Technologies

Siddharth Sundaresan
Navitas Semiconductor, Torrance, California, USA

2:30 PM *Student Presentation*

11B.3 Record R_{on}–BV Trade-Off and Scalable Heterogeneous Integration in Field-Plate-Free GaN-on-Sapphire HEMTs

A. Bidaud[1], A. Sefssafi[1], L. Ben Hammou[1], E. Okada[1], K. Ziouche[1], A. Paranjpe[2], and F. Medjdoub[1]
[1]CNRS–IEMN, Lille, France
[2]Prima Innotech LLC, Basking Ridge, NJ, USA

2:50 PM *Student Presentation*

11B.4 Reliability of Edge Termination Structures in 4H-SiC Power Devices under High Temperature Reverse Bias

Seungwan Jung[1], Gyuhyeok Kang[1], Jinwoo Park[2], Ogyun Seok[2]
[1]Pusan National University, Dept. Electrical and Electronic Engineering, Busan, Republic of Korea
[2]Pusan National University, School of Electrical and Electronic Engineering, Busan, Republic of Korea

SESSION 12: POSTER SESSION

Chairs: Michael Coco, *Veeco*
Shiva Rai, *Applied Materials*
Hsien-Chin Chiu, *Chang Gung University*
Wei Zhang, *AXT*
Hermann Stieglauer, *UMS*
Matt Weimer, *Forge Nano*
Greg Mills, *ANNEALSYS AXR*
Martin Huber, *NextGen Wafer Systems*

3:10 PM **12.1 Effect of Deposition Conditions in E-Beam Evaporation on Low-Resistance Ohmic Contact and Its Film Structure on GaAs Diodes and GaN HEMTs**

Pradeep Waduge
MACOM Technology, Durham, NC, USA

12.2 Development of deep facet dry etching of Indium Phosphide using SiCl4 and Ar inductively coupled plasma
Chin-Jung Chang, Yu-Ping Fang, Shih-Wei Yeh
WIN Semiconductor Company, Taoyuan City, Taiwan

12.3 Effect of Cationic Polymer Addition on the Tribological Performance of Electroplated Ag Coatings
Satoshi Takamatsu[1], Shoei Mizuhashi[1], Masatoshi Koyama[2], Yuichiro Shindo[1]
[1]Technical Development Division, Matsuda Sangyo Co., Ltd., Tokyo, Japan
[2]Nanomaterials Microdevices Research Center, Osaka Institute of Technology, Osaka, Japan

12.4 Electrical Characterization of $Al_xGa_{1-x}N$/GaN MIS-HEMT Structures with Mercury Probe Capacitance-Voltage (MCV) and Current-Voltage (MIV)
Robert J. Hillard[1], Mark Benjamin[1], John Byrnes[1], Chun Ye[1], Benjamin Vigh[2], and Attila Marton[2]
[1]Semilab Trade LLC, Billerica, MA, USA
[2]Semilab Prielle Kornélia, Budapest, Hungary

Student Presentation
12.5 Synergistic effects of sulfurization and nanoimprint on ZnO-based photodetectors incorporating an artificial-intelligence-driven ultraviolet and visible light waveform recognition
Ting-Heng Hsieh[1], Yi-Sheng Chen[2], Xian-Yu Chen[3], Chun-Yen Yang[1], Jyun-Jie Chen[2], Ming-Hsien Li[4],Ming-Yu Kuo[1], Song-Jeng Huang[3], Chun-Hung Lin[2], Hsiang Chen[1]
[1]National Chi Nan University, Puli, Taiwan, ROC
[2]National Cheng Kung University, Tainan, Taiwan, ROC
[3]National Taiwan University of Science and Technology, Taipei, Taiwan, ROC
[4]National Formosa University, Huwei, Taiwan, ROC

Student Presentation
12.6 PAG-Integrated Metal-Oxo Clusters for Sub-20 nm EUV Photoresists: Breaking the Sensitivity-LER Trade-off Through Localized Chemical Amplification

Edwin Maina
Maseeh College of Engineering and Computer Science, Portland State University, Portland, OR, USA

Student Presentation

12.7 Integrated One-Dimensional Pulse Signal Analysis and Two-Dimensional AI-Based Defect Recognition with Material Characterization and Protective Circuit Design for AlInGaP LED Degradation under Extreme Thermal Cycling

Chun-Yen Yang[1], Wei-Cheng Chen[2], Yu-Tzu Chou[2], Kun-Pu Lee[2], Ting-Heng Hsieh[2], Yung-Han Chang[2], Chia-Chi Chang[1], Shao-Ruei Yang[2], Wei-Han Hsiao[3], Hsin-Hung Chou4, Raymond Wang[7], Yaw-Wen Kuo[1], Jeih-Weih Hung[1], Chia-Feng Lin[5], Yung-Hui Li[6], and Hsiang Chen[2]
[1]Department of Electrical Engineering, National Chi Nan University, Nantou, Taiwan
[2]Department of Applied Materials and Optoelectronic Engineering, National Chi Nan University, Nantou, Taiwan
[3]Department of Electrical Engineering, Chang Gung University, Taoyuan, Taiwan
[4]Department of Computer Science & Information Engineering, National Chi Nan University, Nantou, Taiwan.
[5]Department of Materials Science and Engineering, National Chung Hsing University, Taichung, Taiwan.
[6]AI Research Center, Hon Hai Research Institute, Taipei, Taiwan.
[7]RayShine Photonic Corp., Taichung, Taiwan.

Student Presentation

12.8 Low Switching Loss 100V p-GaN Gate HEMT using Through-Si-Via (TSV) BEoL Process

Hsien-Chin Chiu[1,2], Chong-Rong Huang[1], Chia-Han Lin[1], Chia-Hao Yu[1], Hsuan-Ling Kao[1], Barry Lin[3], Chang-Ching Tu[4]
[1]Department of Electronics Engineering, Chang Gung University, Taoyuan, Taiwan
[2]Department of Radiation Oncology, Chang Gung Memorial Hospital, Taoyuan, Taiwan
[3]Wavetek Microelectronics Corporation, Hsinchu, Taiwan
[4]International College of Semiconductor Technology, National Yang Ming Chiao Tung University, Hsinchu, Taiwan

12.9 Electrical Method to Monitor the Etch Depth of Schottky Diodes in HBT Processes

Peter J. Zampardi[1], Michael Morgensen[2], and Quinn Davenport[3]
[1]*Qorvo Inc., Newbury Park, CA, USA*
[2]*Qorvo Inc., Greensboro, NC, USA*
[3]*Qorvo Inc., Hillsboro, OR, USA*

Student Presentation

12.10 Recessed Selective Area Growth of GaN-on-Ga_2O_3 Enabled by Ga-Flux Etching

Garrett R. Czajkowski[1], Frank P. Kelly[2,3], Kyekyoon (Kevin) Kim[1,2]
[1]*Department of Materials Science and Engineering, University of Illinois at Urbana-Champaign, Urbana, IL, USA*
[2]*Department of Electrical and Computer Engineering, University of Illinois at Urbana-Champaign, Urbana, IL, USA*
[3]*U.S. Naval Research Laboratory, Washington, D.C., USA*

12.11 Enhancing analytical accuracy of active epilayers in compound semiconductors by multi-ion species plasma-FIB and novel STEM techniques

Moaz Waqar[1], Lillyanne Landers[1], Jake Hammett[2], Jared Johnson[1]
[1]*Thermo Fisher Scientific, Hillsboro, OR, USA*
[2]*NXP Semiconductors Inc, Chandler, AZ, USA*

12.12 Additive vs Subtractive Processing of n-Ga_2O_3/p-GaN Diodes via MOCVD

Frank P. Kelly[1], Emma G. Rocco[2], Hannah N. Masten[2], Daniel J. Pennachio[2], Katie R. Gann[1], Michael A. Mastro[2]
[1]*U.S. Naval Research Laboratory, Washington, D.C., USA*
[2]*Electronics Science and Technology Division, U.S. Naval Research Laboratory, Washington, D.C., USA*

12.13 Break Technology and BSS Processing for SnB Singulation

Masakazu Takeda, Akira Mori, Jiang Zhu, Kenta Tamura, Elizabeth Hsieh
Mitsubishi Diamond Industrial Co., Ltd., Osaka, Japan

12.14 Machine Matching Methodology for Single-shot Lab to Lab Dry Etch Process Transfer

Fatt Foong[1], Brian Thibeault[1], Noah Dutra[1], Demis D. John[1], Vraj Mehalana[1],Chandan Ramakrishnaiah[2], Shivakumar Bhaskaran[2], Jacky Tseng[3], Shimin Huang[3], Michio

Aruga[3], Weldom Xie[3], Bokai Ma[3], Jeongho Ha[4], John Tamelier[4], Fubo Rao[4]
[1]UCSB Nanofabrication Facility, ECE Department, Santa Barbara, CA
[2]John O' Brien Nanofabrication Laboratory – Viterbi School of Engineering, University of Southern California., Los Angeles, CA
[3]PDF Solutions Inc., Santa Clara, CA
[4]UCSD Nano3 Research Facility, Qualcomm Institute, University of California, San Diego, CA

12.15 Precise determination of layer thickness, ternary composition and surface roughness by in-situ metrology during MOVPE of deep UV LED structures
Tim Kolbe[1], Kolja Haberland[2], Frank Bertram[3], Gordon Schmidt[3], Nasim Rezaei-Hartmann[2], Joachim Rest[2], Sylvia Hagedorn[1], Jürgen Christen[3], Markus Weyers[1]
[1]Ferdinand-Braun-Institut (FBH), Berlin, Germany
[2]LayTec AG, Berlin, Germany
[3]Otto-von-Guericke-Universität, Institut für Physik, Magdeburg, Germany

12.16 Reliable 2D Characterization of AlGaN Barrier Thickness and Composition of E-Mode GaN-on-Si HEMT Wafers for Yield Prediction
Johannes Zettler[1], Eugen Speiser[1], Daniel Seidlitz[1], Frank Brunner[2], and Markus Weyers[2]
[1]LayTec AG, Berlin, Germany
[2]Ferdinand-Braun-Institut (FBH), Berlin, Germany

12.17 Lock-in infrared thermography: advancements in the analysis of thermally conductive substrates and films
Ethan A. Scott
University of Virginia, Charlottesville, VA, USA

12.18 Reducing Wet Etch Variation through Automated Surfactant Dosing
Tashfin Hossain[1], Mark J. Miller[2], Les Roach[1], and Arif Zeeshan[1]
[1]Skyworks Solutions Inc., Woburn, MA, USA
[2]Formerly Skyworks Solutions Inc.

Student Presentation
12.19 Multimodal micro-spectroscopy study of red-green-blue InGaN quantum wells for efficient white lighting
Kimberly Nicholson[1], R. Alshammary[1], N. Zarrabi[2], S. Wood[2], Z. Zhou[3], S. Robertson[3],

T. Wang [1], N. Gunasekar[1]
[1]*School of Physics and Astronomy, Cardiff University, Cardiff, Wales, UK*
[2]*National Physical Laboratory (NPL), Middlesex, England, UK*
[3]*Loughborough Materials Characterisation Centre, Loughborough University, Loughborough, England, UK*

Student Presentation

12.20 Design Optimization for Carrier Injection and Optical Mode Profile in Mid-Infrared Transistor Injected-Quantum Cascade Lasers

Anik Mazumder[1], Robert B. Kaufman[1,2], Fu-Chen Hsiao[1,3], John M. Dallesasse[1]
[1]*University of Illinois at Urbana-Champaign, Department of Electrical and Computer Engineering, Urbana, IL, USA*
[2]*Currently at SpaceX, Redmond, WA, USA*
[3]*North Carolina State University, Department of Electrical and Computer Engineering, Raleigh, NC, USA*

12.21 Characterization of polycrystalline diamond grown on 4H-SiC via chemical vapor deposition

Marko J. Tadjer[1], N. Arnautov[2], T.I. Feygelson[1], D.J. Pennachio[1], J.S. Lundh[1], J.M. Woodward[1], J.R. Hajzus[1], J.B. Levine-Miles[1], E.A. Scott[3], P.E Hopkins[3,4,5], B.B. Pate[1], M. Pearson[2], B. Bolliger[6], K.D. Hobart[1]
[1]*US Naval Research Laboratory, Washington, DC, USA*
[2]*Element Six Technologies, Sheffield, England, UK*
[3]*Department of Mechanical and Aerospace Engineering, University of Virginia, Charlottesville, VA, USA*
[4]*Department of Materials Science and Engineering, University of Virginia, Charlottesville, VA, USA*
[5]*Department of Physics, University of Virginia, Charlottesville, VA, USA*
[6]*Element Six Technologies, Santa Clara, CA, USA*

CONFERENCE CLOSING

Chairs: Jansen Uyeda, *Northrop Grumman*
Gerhard Schoenthal, *Virginia Diodes*

4:00 PM **Capstone Talk: Compound Semiconductor Integrated Microelectronics in the Application-Oriented AI Era**

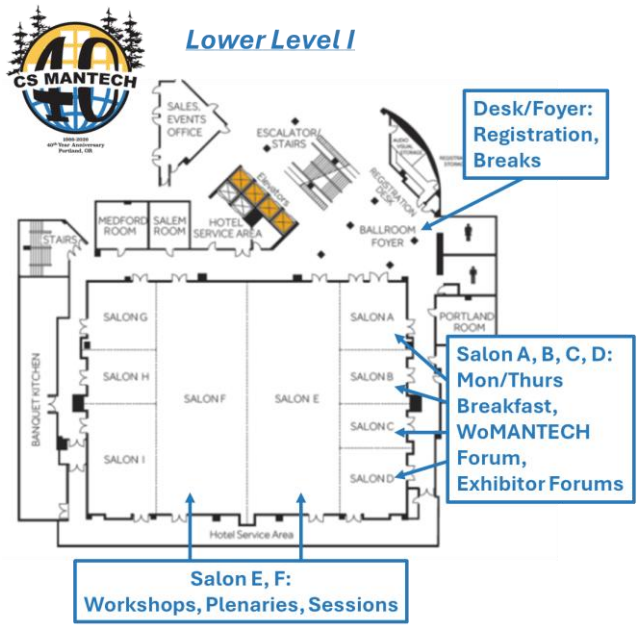
Debabani Choudhury
IEEE

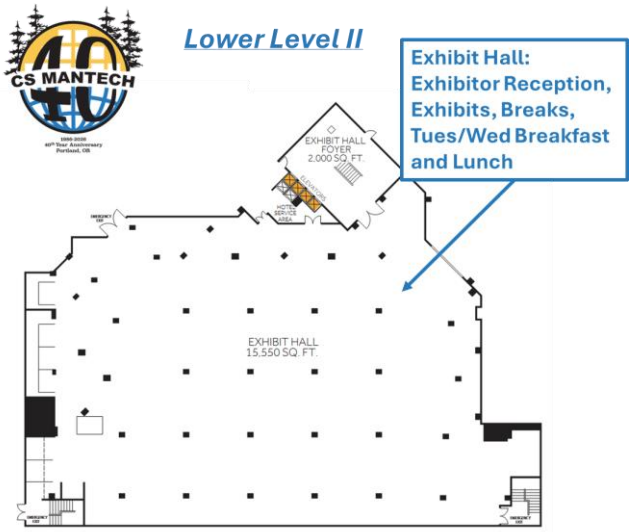
4:30 PM **Closing Reception**
Jansen Uyeda, *Northrop Grumman*
Conference Chair

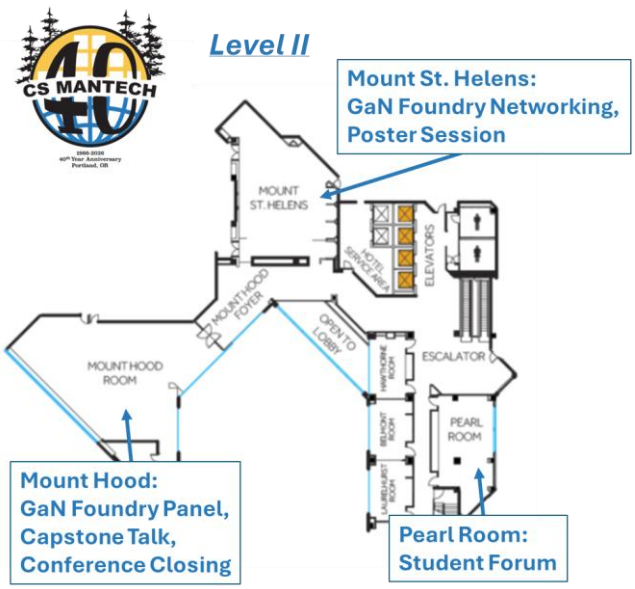
HOTEL INFORMATION

The 2026 CS MANTECH conference will be located at the Portland Marriott Downtown Waterfront from Monday, May 18th to Thursday, May 21st, 2026. The hotel is easily accessible from the Portland International Airport (PDX) which is about 13 miles or 20 to 30 minutes away. The deadline for hotel booking in order to receive the discounted conference rate is April 24, 2026.

The hotel offers self and valet parking for guests and visitors. EV charging is available nearby. There is a Hertz rental car desk at the hotel on the second floor that is open on weekdays. There is a complementary fitness center in the hotel on the third floor. The hotel floor plan is shown below.







FINANCIAL ASSISTANCE

CS MANTECH encourages presentations and participation by academic delegates. To support this participation, limited funding is available to support travel and conference attendance by student presenters. Requests will be considered on a first-come, first-served basis. Please contact the CS MANTECH University Liaison at student.aid@csmantech.org for details regarding the guidelines and requirements for applying for financial assistance.