

## ***Conferences And Trade Shows Addressing SiC & GaN Power Devices In 2019 And 2020***

With silicon power semiconductor technologies approaching maturity, the power electronics industry is now turning its attention to wide-bandgap semiconductors, particularly SiC and GaN power devices. This technology is now a major topic of discussion at all power electronics conferences as well as a subject garnering attention at various other semiconductor and electronics conferences. A sampling of the conferences where engineers can learn about the latest developments in SiC and GaN power semiconductors is presented here.

### ***March:***

#### [APEC](#)

Applied Power Electronics Conference and Exposition

March 17-21, 2019

Anaheim, CA

Notes: Discussions of SiC and GaN power devices permeate every aspect of APEC these days from the plenary session to the technical paper sessions to the industry sessions. There are even pre-conference tutorials discussing SiC and GaN devices. Plus there are numerous product displays and demos in the exhibit featuring SiC and GaN devices.

#### [CS International](#)

Connecting, informing and inspiring the compound semiconductor industry

March 25-27, 2019

Sheraton Brussels Airport Hotel

Brussels, Belgium

#### [GOMACTech Conference](#)

Government Microcircuit Applications & Critical Technology Conference

Technologies for Secure Spectrum Access from DC to Light

March 25-28, 2019

Albuquerque, New Mexico

#### [IRPS](#)

International Reliability Physics Symposium

Forum for reporting technological breakthroughs in the area of microelectronics reliability

March 31 - April 4, 2019

Hyatt Regency Monterey

Monterey, CA

Notes: Includes tutorials "SiC-SiC Power Devices: Overview, Defect Electronics, and Reliability," "Failure modes and mechanisms of GaN HEMTs for microwave and power applications," and workshops "GaN/GaN on Si" and "SiC".

**April:**

[CS Mantech Conference](#)

International Conference on Compound Semiconductor Manufacturing Technology

Colocated with ROCS JEDEC workshop (April 29) and CoInnovateCS (May 2 and 3<sup>rd</sup>)

April 29-May 2, 2019

Minneapolis, MN

**May:**

[PCIM Europe](#)

May 7-9, 2019

Nuremberg, Germany

Notes: Includes numerous talks on SiC and GaN power devices as well as related product displays and demos.

[SCAPE](#)

International Wide-Bandgap Power Electronics Applications Workshop

Previously known as ISiCPEAW and IWBGPEAW

May 12-14, 2019

Stockholm, Sweden

[ISPSD](#)

International Symposium on Power Semiconductor Devices and ICs

Shanghai Marriott Hotel Parkview

Shanghai, China

May 19-23, 2019

Notes: Includes short courses on "Device technology and application of SiC MOSFETs," "Full market validation of 600+V GaN power devices" and "Wide-bandgap power devices" plus tutorial on "Smart power devices and ICs of SiC and GaN" and other SiC- and GaN-related sessions.

[Compound Semiconductor Week](#)

Joint venue for International Symposium on Compound Semiconductors (ISCS) and the International Conference on Indium Phosphide and Related Materials (IPRM)

May 19-23, 2019

Nara, Japan

**June:**

[COMPEL](#)

IEEE Workshop on Control and Modeling for Power Electronics

June 17-20, 2019

The St. George Campus of the University of Toronto

Toronto, Canada

Notes: Workshop features plenary talk on “Magnetics in the GaN/SiC Power Electronics World” and a session on wide bandgap devices.

[ITEC](#)

IEEE Transportation Electrification Conference and Expo

Components, Systems, And Power Electronics—From Technology To Business And Public Policy

June 19-21, 2019

Suburban Collection Showplace

Novi, MI

Notes: Features a town hall panel on “Wide Bandgap Technology Trends, Manufacturing Innovations, and Commercialization,” a short course on “Applying Wide-bandgap Devices in EV Battery Chargers,” a tutorial on “A Practical Perspective on WBG Power Devices for Vehicle Electrification,” an industry panel on “BG Devices in Automotive Applications”.

[PCIM Asia](#)

June 26-28, 2019

Shanghai World Expo Exhibition and Conference Center

Shanghai (Pudong), China

**July:**

[ARPA-E](#)

Energy Innovation Summit

July 8-10, 2019

Denver, CO

Notes: Technology Showcase (the exhibition) includes companies and universities working on wide-bandgap semiconductor (SiC, GaN and diamond) materials, power devices and applications.

[NSREC](#)

IEEE Nuclear And Space Radiation Effects Conference

July 8-12, 2019

San Antonio Marriott Rivercenter

San Antonio, TX

Notes: Past conferences have included papers discussing radiation hardness of wide-bandgap devices. Exhibit has included one or more GaN power device suppliers.

**September:**

[EPE and ECCE Europe](#)

European Conference on Power Electronics and Applications and Energy Conversion Congress and Expo Europe

September 2-6, 2019

Magazzini del cotone Conference Centre

Genova, Italy

Features tutorials on "GaN Transistors as an Enabler of High-Performance Power Electronics" and "Prospects for Condition Monitoring Implementation in SiC Power MOSFETs;" industrial forum on "Wide Bandgap components: SiC: "From the high end niche to the main stream – cranking up the volume" and session on wide bandgap devices.

[ECCE](#)

IEEE Energy Conversion Congress & Expo

September 29 - October 3, 2019

Baltimore Convention Center

Baltimore, MD

Notes: There are talks on SiC and GaN power devices spread across the various conference sessions. For more about this conference see How2Power's special section on [ECCE](#).

**October:**

[WiPDA](#)

IEEE Workshop on Wide Bandgap Power Devices and Applications

October 29-31, 2019

The Stateview Hotel

Raleigh, NC

Notes: This workshop is described as a “a forum for device scientists, circuit designers, and application engineers from the IEEE Power Electronics and Electron Devices societies to share technology updates, research findings, development experience, and ideas for novel applications.”

**November:**

[BCICTS](#)

IEEE BiCMOS and Compound Semiconductor Integrated Circuits and Technology Symposium

November 3-6, 2019

Loews Vanderbilt Hotel

Nashville, TN

[Semicon Europa](#)

Semiconductors Drive Smart

Co-located with Productronica

November 12-15, 2019

Messe Munchen

Munich, Germany

**December:**

[IEDM](#)

IEEE International Electron Devices Meeting

December 7-11, 2019

Hilton San Francisco Union Square

San Francisco, CA

Notes: This conference is an established forum for reporting technological breakthroughs in the areas of semiconductor and electronic device technology, design, manufacturing, physics, and modeling. “Topics of interest include power devices (diodes, BJTs, FETs, superjunction devices, IGBTs, etc.), and materials (Si, diamond, SiC, GaAs, GaN, AlN, Ga2O3, etc.), manufacturing processes, device design, TCAD modeling, physics, and reliability.”

## Coming in 2020

[APEC](#)

Applied Power Electronics Conference and Exposition

March 15-19, 2020

Ernest N. Morial Convention Center

New Orleans, LA

[GOMACTech Conference](#)

Government Microcircuit Applications & Critical Technology Conference

Microelectronics for a New Decade: Global Competition and Near-Peer Challenges

March 17-18, 2020

Town and Country Resort and Convention Center

San Diego, CA

Notes: Call for papers includes "Power Electronics and Emerging Power Technologies".

[CIPS](#)

International Conference on Integrated Power Electronics

March 24-26, 2020

Berlin, Germany

[CS International](#)

Connecting, informing and inspiring the compound semiconductor industry

Co-located with PIC International and IoT International

March 31 - April 1, 2020

Sheraton Brussels Airport Hotel

Brussels, Belgium

[PCIM Europe](#)

May 5-7, 2020

Nuremberg, Germany

Notes: Includes numerous talks on SiC and GaN power devices as well as related product displays and demos.

[CS Mantech Conference](#)

International Conference on Compound Semiconductor Manufacturing Technology

Includes Reliability Of Compound Semiconductors (ROCS) Workshop

May 11-14, 2020

JW Marriott Tucson Starr Pass Resort & Spa

Tucson, AZ

[ISPSD](#)

International Symposium on Power Semiconductor Devices and ICs

Hofburg Palace

Vienna, Austria

May 17-21, 2020

Notes: Topics of interest include "GaN and other Compound Materials (GaN)" and "SiC and other Materials".

*Know of a conference or tradeshow in 2019 or 2020 addressing SiC and GaN power devices that is not listed here? Email the [editor](#) to tell How2Power about it.*

*For further reading, see How2Power's section on [Silicon Carbide and Gallium Nitride Power Technology](#). This section brings you news of SiC and GaN developments along with related design information, supplier data, book reviews, and more.*