Conferences And Trade Shows Addressing SiC & GaN Power Devices In 2015

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.

January:
DesignCon
Jan 27-30, 2015
Santa Clara, CA

Notes: When even a show about high-speed digital design has talks on GaN power devices you know that this topic is being discussed everywhere. See "DesignCon Explores Power Integrity Issues And Impact Of GaN Transistors."

February:
ARPA-E
Energy Innovation Summit
February 9-11, 2015
Washington, D.C.

Notes: Conference features session on Wide Band-gap Technologies: Changing People’s Lives Now and into the Future. Technology Showcase (the exhibition) includes vendors, universities and research labs working on SiC and GaN devices and applications.

March:
CS International
Connecting, informing and inspiring the compound semiconductor industry
March 11 and 12, 2015
Frankfurt, Germany

Notes: Includes sessions on power electronics with talks on SiC and GaN.
APEC
Applied Power Electronics Conference and Exposition
March 15-19, 2015
Charlotte, NC
Notes: Discussions of SiC and GaN power device permeate every aspect of APEC these days from the plenary session to the technical paper sessions to the industry sessions to the Tuesday night rap 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. For more on this subject as it relates to APEC 2015, see “Top Five Products And Demos Seen at APEC 2015” and “APEC Rap Session Ponders Progress, Prospects And Pitfalls For GaN Devices.”

GOMACTech Conference
Government Microcircuit Applications & Critical Technology Conference
Extending Security in an Insecure World
March 23-26, 2015
St. Louis, MO
Notes: Technical sessions included “SiC and GaN Power Electronics” and “Space Processing Systems.”

April:
CPES Conference
April 12-14, 2015
Virginia Tech.
Blacksburg, VA
Notes: Includes tutorials such as ”Is GaN a Game Changing Device,” and “Is SiC a Game Changer,” as well as two technical sessions on “Wide Bandgap Power Devices and Applications.”

IRPS
International Reliability Physics Symposium
April 19- 23, 2015
Monterey, CA

ECPE Workshop: ECPE SiC & GaN User Forum
Potential of Wide Bandgap Semiconductors in Power Electronic Applications
April 20-21, 2015
Coventry/Warwick, U.K.

May:

IWIPP

IEEE International Workshop on Integrated Power Packaging

May 3-6, 2015

Chicago, IL

Notes: Conference says "With the advent of wide bandgap (WBG) and silicon power semiconductor and compact power converter technologies, there is now a critical need to have a focused workshop on power packaging and system integration." Conference program includes many papers relating to GaN power devices and some relating to SiC power devices.

ISPSD

International Symposium on Power Semiconductor Devices and ICs

Kowloon Shangri-La, Hong Kong

May 10-14, 2015

Notes: This conference devotes extensive coverage to SiC and GaN topics. To read about last year’s conference, see "ISPSD 2014 Will Bring Together Authorities On Power Devices And ICs To Discuss Latest Developments In GaN, SiC And Silicon."

ROCS

Reliability Of Compound Semiconductors Workshop

Preceding the International Compound Semiconductor MANufacturing TECHnology Conference

May 18, 2015

Scottsdale, AZ

PCIM Europe

May 19-21, 2015

Nuremberg, Germany

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

**ECCE Asia**

International Conference on Power Electronics—ECCE Asia

June 1-5, 2015

Seoul, Korea

**PCIM Asia**

June 24-26, 2015

Shanghai, China

Notes: Includes multiple talks on SiC and GaN topics.

**iTEC**

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

June 14-17, 2015

Dearborn, MI

Notes: Includes short course, “Moving from Silicon—an introduction to GaN in Transportation Applications.”

**Compound Semiconductor Week**

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

June 28-July 2, 2015

Santa Barbara, Calif.

Notes: Includes a short course, “Power Electronics Beyond Silicon.” Among the topics for which papers are solicited are “high frequency, high power, digital, and mixed-signal electronics.”

**July:**

**COMPEL**

IEEE Workshop on Control and Modeling for Power Electronics

July 12-15, 2015

Vancouver, BC Canada

Notes: Last year’s conference included several papers that were obviously SiC or GaN related such as “High-Frequency Integrated Gate Drivers For Half-Bridge GaN Power Stage,” “Performance Analysis Of SiC MOSFET Based 3-Level ANPC Grid-Connected Inverter With Novel Modulation Scheme,” and “Design and Experimental Validation Of a Silicon Carbide 100kW Battery Charger Operating at 60 kHz,” plus others that are likely on topic.
NSREC
IEEE Nuclear And Space Radiation Effects Conference
July 13-17, 2015
Boston, Mass.
Notes: Includes some papers discussing radiation hardness of SiC and other wide bandgap devices including "Silicon Carbide Power Device Performance under Heavy-Ion Irradiation" and "Terrestrial Neutron Induced Failures in Commercial SiC Power MOSFETs at 27C and 150C."

September:
EPE and ECCE Europe
European Conference on Power Electronics and Applications
Sept 8-10, 2015
Geneva, Switzerland

ECCE
IEEE Energy Conversion Congress & Expo
September 20-24, 2015
Montreal, Quebec, Canada
Notes: There are talks on SiC and GaN power devices spread across the various conference sessions.

CICC
Custom Integrated Circuits Conference
Sept 28-30, 2015
San Jose, CA
Notes: This IC design conference does not offer much on SiC and GaN, except for the intriguing talk on “Progress and Future Challenges of Silicon Carbide Devices for Integrated Circuits.”
October:

**Semicon Europa**

Power Electronics Conference

October 7-8, 2015

Dresden, Germany

Notes: Features talks on SiC and GaN power semiconductors and various power electronics applications.

**CSICS**

IEEE Compound Semiconductor IC Symposium

October 11-14, 2015

Sheraton New Orleans Hotel,

New Orleans, LA

**IAS Annual Meeting**

Oct 18-22, 2015

Dallas, Texas

Notes: Includes a tutorial, “High Power Si & SiC Module Technology and Application Considerations.”

November:

**WIPDA**

IEEE Workshop on Wide Bandgap Power Devices and Applications

November 2-4, 2015

Blacksburg, Virginia

Notes: This workshop is described as a “forum for device scientists, circuit designers, and application engineers from the Power Electronics and Electron Devices Societies to share technology updates, research findings, development experience and potential applications.”
December:
IEDM
IEEE International Electron Devices Meeting
Dec 7-9, 2015
Hilton Washington
Washington, DC

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. Many of the talks concern SiC and GaN devices. To read about the SiC and GaN developments at the recent IEDM 2014, see “SiC, GaN And Si Power Semiconductors Received Special Attention At IEDM.”

Know of a conference or tradeshow in 2015 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 technology roadmaps.