

## Welcome to IEEE AUTOTESTCON 2019

**J. Max Cortner**

**IEEE Instrumentation and Measurement Society President**

**G**reetings and welcome to the Instrumentation and Measurement Magazine special edition on AUTOTESTCON. AUTOTESTCON 2019 will be held again at the Gaylord National Convention Center in the National Harbor, Maryland near Washington, DC. It is a great facility and a fitting location for a conference that uniquely attracts Instrumentation and Measurement researchers, practitioners, industry, and government agencies involved in automated test systems. The selected papers from AUTOTESTCON 2018 for this issue show the range of interesting and useful discussions which occur at the conference.



These papers give insight into test challenges like the testing of multi-gigabit serial busses. Another showcases a test system which uses acoustics instruments for fault detection. Whether it is new instrumentation, a new measurement technique, or a

unique application of measurement for the difficult problems posed by extraordinarily complex high reliability electronic systems, AUTOTESTCON will pique your interest.

The IEEE Instrumentation and Measurement Society has proudly partnered for years with the IEEE Aerospace and Electronic Systems Society (AESS) to sponsor AUTOTESTCON, and many of our members contribute to the organizing committee's work. Once again we are proud to sponsor student best paper awards and to make available student travel grants as we seek to encourage and reward the contributions of students to instrumentation and measurement. Students' participation strengthens their networks and exposes industry and government institutions to their research.

So it is natural that *Instrumentation and Measurement Magazine* should survey the conference content by printing some of the best of last year's papers. Please see our society website [ieee-ims.org](http://ieee-ims.org) for conference information and registration. While you are there, look through our other conference offerings. Enjoy this special issue and enjoy AUTOTESTCON 2019!

**Giuseppe (Joe) Fabrizio**

**IEEE Aerospace and Electronic Systems Society President**

**I**t is with great honor that I welcome our distinguished attendees to the 54<sup>th</sup> edition of IEEE AUTOTESTCON, the only conference focused entirely on automated testing and support for U.S. military systems. Our Society, along with co-sponsor the IEEE Instrumentation & Measurement Society, believe that effective maintenance and support of the military is essential. Military systems grow increasingly complex as technology advancements are incorporated, and an automated test environment is the only practical solution to keeping these systems functioning to help safeguard our communities.



The conference is again being held at the Gaylord National Convention Center in National Harbor, Maryland, near Washington, DC. This location allows for maximum participation of our government and military attendees and defense personnel, providing for an outstanding networking environment. The committee running the conference is committed to providing a first-rate experience for all attendees, with a top-quality technical program and a large number of government, military, and defense system exhibitors to enhance the attendee experience.

The IEEE AESS is proud to be a co-sponsor of IEEE AUTOTESTCON, a conference with a long and successful history. Please enjoy the conference!