Welcome to the 99th ARFTG Microwave Measurement Conference. The Automatic RF Techniques Group (ARFTG) is a technical organization interested in all aspects of RF and microwave test and measurement. Originally created as a users’ forum focused on the calibration and automation of early vector network analyzers, ARFTG has grown to encompass all aspects of microwave measurements from RF to Terahertz.

ARFTG’s core mission is education. ARFTG achieves this by hosting conferences, workshops and short courses covering a wide range of measurement topics. As well as by awarding fellowships and sponsorships to students. Additionally, ARFTG’s close association with the top vendors of measurement instrumentation ensures high-quality exhibits at its conferences. The extended breaks from conference technical sessions enable meaningful interactions to take place among colleagues, students, experts and vendors.

ARFTG sponsors two conferences each year. The fall/winter conference has recently been co-located with Radio & Wireless Week, while the spring/summer conference is co-located with the International Microwave Symposium. The 2022 spring/summer conference will be a single-day event on Friday, June 24. The theme of this 99th ARFTG Microwave Measurement Conference is “From Fundamental to Cutting-Edge Microwave Measurement Techniques to Support 6G and Beyond.” Conference topics will cover mmWave over-the-air (OTA) and MIMO characterization, modulated waveform measurements, on-wafer techniques up to terahertz frequencies, techniques for connector-less environments; as well as many other subjects including RF/digital mixed-signal measurement and calibration, nonlinear/large-signal measurement and modeling techniques, traceability in calibrations and measurement uncertainty, material properties characterization and applications and advances in vector network analysis.

Oral technical sessions are presented in a single-track format. Extended breaks combine an exhibition and interactive forum, which provides networking opportunities with vendors and colleagues, whether researcher or practitioner. The conference is preceded by the Nonlinear Network Vector Analyzer Users’ Forum and the On-Wafer Users’ Forum, both held on Thursday, June 23.

Additionally, ARFTG is co-sponsoring two full-day workshops on Monday, WMK: “On-Wafer mmWave Measurements” and WML: “Measurement and Modeling of Trapping, Thermal Effects and Reliability of GaN
HEMT Microwave PA Technology.”

On Thursday morning, ARFTG is co-sponsoring panel session PL7: “Modern Phased Arrays and OTA Testing: A Design or a Measurement Challenge?” and focus session Th1F: “Efficient Characterization and Test of Phased Array Antenna Systems: Is It Really a Nightmare?”

Finally, ARFTG is co-sponsoring a technical session that morning, Th2A: “Measurement and Instrumentation Techniques for Evolving Standards in Future Technologies.”

ARFTG also offers student sponsorship and fellowship programs. The sponsorship program gives financial aid to students presenting at an ARFTG conference, and the fellowship program provides financial assistance in support of research.

If you have an interest in measurements from 1 kHz to 1 THz and beyond, be sure to add the 99th ARFTG Conference to your plans in Denver this June. You will find our atmosphere to be informal and friendly. For further details regarding the conference as well as the student sponsorship and fellowship programs, visit the ARFTG website.