GENE YOUNGERMAN
TECHNICAL DIRECTOR

CREDENTIALS

- *S.B., Chemistry, Massachusetts Institute of Technology, 1977*
- *M.S., Inorganic Chemistry, University of California at San Diego, 1981*
- *Ph.D., Inorganic Chemistry, University of California at San Diego, 1986*
- *Qualified Stack Test Individual; Groups I, II, III, IV*

PROFESSIONAL *EXPERIENCE*

- ***2022-Present:** ALL4, Kimberton, PA – Technical Director, Emissions Measurement*
- ***1986-2021:** AECOM (and legacy companies, URS, Radian International, Radian Corporation), Austin, Texas, Senior Project Scientist, Team Leader, Emissions Quality Officer*

TECHNICAL *EXPERTISE*

- ✓ *Routine Source Testing for Regulatory Compliance*
- ✓ *Instrumental Methods for Emissions Testing, including CEMs, GC, FTIR*
- ✓ *Unusual Source Testing Methods, including volatiles, semi-volatiles, aldehydes and ketones, metals, hexavalent chromium*
- ✓ *Emissions and Process Stream Characterization*
- ✓ *Interpretation of analysis of emissions samples*
- ✓ *Quality systems around emissions testing, including calibration, equipment management, glassware preparation, reporting and data handling*
- ✓ *Test Plan, Protocol and Quality Assurance Project Plan Preparation*
- ✓ *Report preparation, including data processing, calculation, and presentation*
- ✓ *Quality assessment including sampling activities, analytical activities, and detailed documentation.*

PROFESSIONAL *OVERVIEW*

Dr. Eugene (Gene) Youngerman has more than 35 years of experience in source and emissions measurement, covering a wide variety of industries, sources, processes, and clients. He's worked for industry and government, on the most complex and demanding emissions tests. Over the years, Dr. Youngerman has performed virtually every method, from simple particulate matter testing to sorbent-based volatiles measurements to the instrumental methods. While having never been a laboratory analyst, Dr Youngerman's background Ph.D. has allowed him to understand laboratory analysis at a very fundamental and sophisticated level and has provided a great deal of value in ensuring that there is a tight fit between process operation, permit and regulatory oversight, sample collection, and analytical results.

During his career, Dr. Youngerman developed and implemented a quality system for source and emissions testing that is very highly regarded. This system meets the quality standards of both the ASTM specification for Air Emission Testing Bodies and for requirements of the Louisiana Environmental Laboratory Accreditation Program. He managed this program and implemented it nationally.

Dr. Youngerman has excellent relationships with the senior technical staffs at laboratories that analyze these types of samples, as well as with the senior technical personnel at EPA. These relationships and familiarities form the basis of a network of unparalleled technical resources for implementation of measurement of flowing gas streams.