



Gas Turbine Combustion Specialist

APG-Neuros is a market leader in turbomachinery technologies for wastewater treatment applications. Our success is based on our technical competency, cutting edge technologies, reliability and high quality products that meets, and exceeds, our clients requirements.

To that end, we are seeking a combustion specialist with analytical and experimental combustion knowledge to design and validate low emission gaseous fuel combustors for land-based gas turbine engines. Reporting to the Turbomachinery Product Development Executive, the candidate's job responsibilities may include:

- Designing robust multi-stage combustors for low emissions of NOx and particulate matter with a reasonably uniform gas temperature pattern throughout the combustor, low pressure loss, low acoustic pressure levels, high combustion efficiency and flame stability characteristics over a wide operational envelope.
- Designing nozzles and selecting suitable ignition systems.
- Working with the resident aerodynamicists to analyze the cooling air flow, fuel nozzles, swirlers, combustion chamber and the combustor-turbine interface.
- Interpreting the analytical results and test data to provide critical assessment of concepts, models, and approaches for improved design, engine uprates, troubleshooting, reduced emissions requirements, and expanded operating ranges.
- Overseeing the manufacturing, qualification, transition-to-production, and production support of the gas turbine combustion systems.

Applicants for this position:

- Must have a strong fundamental understanding of gas turbine combustion and reacting flows to carry out the projects from conceptual design through prototype and field testing.
- Must have direct gas turbine combustor design experience, not a CFD analyst.
- Must have a Ph.D. in Mechanical or Aerospace engineering with a specialization in gas turbine combustion, or a research-based Master's degree with more than 3 year's experience in relevant gas turbine combustor design experience.
- The ideal candidate will be a practical engineer with demonstrated experience in designing gas turbine combustion chambers for a range of gaseous fuel.

The candidate will also have the following skills and competencies:

- Advanced knowledge of diffusion flames and lean premixed combustion, thermodynamics, mixing, and gas turbines.
- Strong fundamental understanding of combustion systems in gas turbines.
- Relevant experience in R&D of gas turbine combustors.
- Good hands-on experimental background and practical engineering judgement.
- Proficiency in the use of combustion design tools.
- Experience in implementation of ignition systems.
- Excellent communication and writing skills.

A competitive compensation and benefit package, including the relocation assistance, life/health/dental insurance and vacation, is offered, and, salary commensurate with education and experience. APG-Neuros, located in Blainville, 15 km east of Mirabel airport, is an equal opportunity employer.

Applicants must submit their curriculum vitae to the HR Manager, Ms. Mona Hammoud, at mhammoud@apg-neuros.com