



The MolecuSpec line of sensors leverages Raman spectroscopy to quickly provide highly specific information that can be used to identify and quantify multiple chemical compounds simultaneously.



**Multiple Targets** 

Replaces multiple sensors with one



Autonomous

User-friendly operation and low maintenance



In-Situ

Continuous real-time chemical information and process visibility



### Custom Data Processing

Customized algorithms to streamline your application

# **MolecuSpec Family of Products**

## MolecuSpec™

The standard temperature MolecuSpec provides realtime process analysis of multiple chemicals, and autonomous function, in one versatile unit.

# MolecuSpec<sup>™</sup> 900

The high-temperature MolecuSpec 900 provides realtime process monitoring and analysis capability of multiple chemical compounds at industry leading temperatures of up to 900°C.



continued...

Phone: 303-516-9075 Email: info@sporian.com





# **MolecuSpec™ Product Use Cases**



#### R&D

- Process characterization
- High-temperature materials research
- Catalytic mechanisms/poisoning
- Nano materials



# Glass Manufacturing & Processing

- Glass production process
- Ion exchange baths



#### **Metal Making & Processing**

- Process QA/QC
- Molten salt heat treating contaminants
- Molten salt dip braze processes
- Emissions



#### **Fossil Energy**

- Fuel gas composition
- Closed cycle working fluids
- Fugitive emissions characterization
- Carbon capture



#### Oil & Gas

- Hydrogen/gas blends
- Fuel gas composition
- Monitoring of cracking/refining
- Petrochemical processes



#### Chemical Processing & Manufacturing

- Process control
- Polymer synthesis/conversion
- Extraction/infiltration
- Waste processing



#### **Concentrating Solar Power**

- Thermal storage/transfer fluids
- sCO2/Closed cycle working fluids
- Molten salt stability and corrosios



#### **Nuclear Energy**

- Thermal storage/transfer fluids
- sCO2/Closed cycle working fluids
- Molten salt stability and corrosion

# Sporian Microsystems, Inc.

515 Courtney Way, Suite B Lafayette, CO 80026 Phone: 303-516-9075 Email: info@sporian.com Website: sporian.com

## MolecuSpec.com