
AMD Innovative Gas Sensing Nanotechnologies Receive Recognition

2022-01-23

Advanced Material Development Ltd. is pleased to announce that it has won an important InnovateUK “Analysis 4 Innovators” grant to work on validating its next generation novel nanomaterial-based gas sensors. AMD is working with the National Physical Laboratory (NPL) on the development and testing of devices using advanced testing equipment, and measurement and analysis experience.

The monitoring of gaseous pollutants in the environment is of great importance for maintaining air quality and quality of life. Nitrogen oxides and ammonia are commonly generated pollutants from both urban and agricultural sources and can cause significant health effects if not monitored and controlled effectively. Limited networks of remote monitoring equipment are in place across the [UK](#) for this purpose.

The next generation of air quality monitors will rely on low power sensing elements which can be connected remotely in more locations to support more detailed and localised emissions monitoring. This three-month project seeks to validate novel nanomaterial-based sensors which AMD has recently developed utilising its functionalised nanomaterials. One of the key challenges is creating sensors which are sensitive and selective enough to the pollution levels involved. Through the careful use of functionalised materials and complex signal analysis, AMD will be able to validate these novel sensor systems.

Through the support of the [National Physical Laboratory](#) and through a collaboration with Dr Nick Martin - a Principal Research Scientist and Science Area Leader of the AirQuality and Aerosol Metrology (AQAM) Group and InnovateUK’s Analysis4 Innovators programme, the use of specialist exposure chamber facilities can be used to carefully test sensors under controlled conditions.

Read the [original article](#) on Advanced Material Development (AMD).