





Dr David Griffith

Principal Consultant



Dr David Griffith is the principal of Griffspec Pty Ltd consultancy and Senior Professor of Chemistry at the University of Wollongong, Australia.

His research career in atmospheric chemistry over more than 40 years focussed on the development and applications of novel optical and spectroscopic methods for atmospheric trace gas analysis. With his research group at the University of Wollongong he developed a high precision multi-species greenhouse and other trace gas analyser based on Fourier Transform infrared spectroscopy which is now manufactured, marketed and supported by Ecotech as the SpectronusTM Trace gas analyser.

The Spectronus[™] is made under licence and in partnership with the University of Wollongong and supported by Ecotech and Griffspec Pty Ltd.











About Spectronus™

Trace Greenhouse Gas and Isotope Analyser Simultaneous and real-time measurements of N_2O , CH_4 , CO, CO_2 (including $\delta^{13}C$ and $\delta^{18}O$)

The concept for the Spectronus[™] the first multispecies greenhouse and other atmospheric trace gas and isotope analyser based on FTIR spectroscopy – was conceived by Dr David Griffith, students and colleagues at the University of Wollongong, Australia in the early-1990s. By 2003, Dr Griffith had designed and created the prototype and was receiving requests for the instrument from a variety of environmental research facilities.

In 2010, after designing and building more than a dozen units, Dr Griffith began looking for a more sustainable way to produce and support the analyser while continuing to focus on his academic research. In particular, he sought an Australian company with a similar set of values and a strong ethical commitment to environmental research.

In 2011, Dr Griffith and the University of Wollongong commenced their partnership with Ecotech, with a five-year licence to

manufacture and market the analyser under the name Spectronus[™]. A renewed licence was granted in 2016 and in the same year, Dr Griffith formed a consultancy company, Griffspec Pty Ltd, to give Spectronus[™] customers additional support and technical expertise above and beyond that already provided by Ecotech. Although semi-retired, Dr Griffith remains in his role as Senior Professor of Chemistry at the University of Wollongong, Australia in a part-time capacity.

Championed by Ecotech, the Spectronus[™] has continued to evolve and be upgraded with expert guidance and input from Dr Griffith. Improved hardware and software changes by Ecotech mean that the instrument is now more precise and accurate with a powerful user interface.

Spectronus[™] has been adopted by research scientists, universities and government-funded agencies around the world for its precision and holistic approach, marking a paradigm shift in the way that greenhouse and trace gases are analysed both in the field and in the laboratory.