



Dr Shaun Fitzgerald FREng

Visiting Professor

Dr Shaun Fitzgerald FREng is the co-founder and Chief Executive Officer at Breathing Buildings, a company that developed from his extensive research into natural ventilation. Dr Fitzgerald has been a Royal Academy of Engineering Visiting Professor in Sustainable Buildings at the University of Cambridge since January 2015.



ROYAL
ACADEMY OF
ENGINEERING

“Being a Visiting Professor has helped me bring industry- and university-based engineering closer together, with each party being enhanced by the endeavour.”

CAREER

Dr Fitzgerald’s early research was in geothermal reservoir engineering, looking at how this could be developed as an alternative energy source. His interests in energy and sustainability are a common thread in a career that developed to encompass roles in both industry and academia.

Since 2000, Dr Fitzgerald’s research has focused on energy reduction through understanding and developing natural ventilation solutions for buildings. The field has particularly important implications given the scale of energy consumption relating to the mechanical ventilation of buildings in the developed world.

Breathing Buildings was co-founded by Dr Fitzgerald in 2006 to develop and commercialise his research in natural ventilation. Since the company started he has been responsible for the development of technology, recruitment of key team members, raising finance for the company, marketing, and ongoing research collaboration with university students.

Dr Fitzgerald applied for a Visiting Professorship as he saw it as an opportunity to spend more time teaching and interacting with students while using his experiences in industry to inform their learning.

IMPACT

Dr Fitzgerald works in collaboration with Professor Campbell Middleton in the University of Cambridge’s Department of Engineering to

plan teaching sessions that incorporate practical insights and enhance the curriculum, specifically in the coverage of the theory of natural ventilation.

As a Visiting Professor, Dr Fitzgerald teaches and supervises fourth-year undergraduate students. He hopes to inspire the next generation.

“I am passionate about getting intelligent engineering students to apply their knowledge into the field of engineering to develop their careers, so that they can have the maximum impact on changing the world,” Dr Fitzgerald explains. “Furthermore, the engineering profession needs these students. I have had so much fun in my career doing amazing things, I want to encourage others to do so too.”

PROFESSIONAL DEVELOPMENT

Close collaboration between industry and academia is critical for the engineering profession and Dr Fitzgerald is keen to use his Visiting Professorship to strengthen the links between Breathing Buildings and the University of Cambridge beyond the award.

VISITING PROFESSORSHIPS

Royal Academy of Engineering Visiting Professors are an industry-into-academia initiative that aims to use the experience of senior industry practitioners to enhance student learning, as well as the employability and skills of UK engineering graduates.