



Sustainable Innovation 2025
Sustainable Innovation in Products, Services and Business Models
Past, Present and
25th International Conference
October 2025



Dr. Nick Inoue, CEO and Co-founder, GroundWaves Ltd, UK

Dr. Nick Inoue is CEO and co-founder of GroundWaves Ltd, where he is driving innovation at the intersection of music haptics, sustainable design and advanced manufacturing. GroundWaves has created the world's first haptic shoes, footwear that lets people *feel* music through finely tuned vibrations delivered by patented haptic actuators. By translating sound into tactile feedback, the shoes create an immersive, full body listening experience that enhances live and recorded music, with wider potential in accessibility and wellbeing.

Sustainability is one of GroundWaves' core pillars. The shoes are fully 3D printed, modular for repair and reuse, and feature the world's first recycled neodymium magnet haptic actuator — setting new standards for sustainable product innovation in wearable technology.

A serial inventor, Nick has pursued haptic research and development since 2008 and holds a portfolio of world-leading patents in haptic systems and actuators. His background includes a PhD in Laser Fusion Energy target production, conducted in collaboration with the Central Laser Facility (CLF), and a BEng in Electrical and Electronic Engineering, both from Cardiff University. His expertise spans music haptics, sustainable design and manufacture, 3D printed footwear, and laser fusion energy.

Nick's work has been recognised internationally. He received the *Futurist Award* at the 2024 Electra Awards from *Electronics Weekly* and has secured competitive research and innovation funding including the 2022 MyWorld grant from Digital Catapult and InnovateUK's 2023 Creative Catalyst award. His achievements were recently profiled in an InnovateUK case study <u>link</u>