



Sound Bounce launch the world's first smart material hearing protection

Irish based start-up launches new sound absorbing hearing protection to reduce growing noise related hearing damage

In the modern world noise is everywhere – we work, live, and socialise in noisy environments.

Protecting people from noise is a global health necessity, with 50% of hearing damage being preventable according to the World Health Organisation.

“Most of our environments do not have constant sound levels, instead having levels that vary. Different functions are required of noise absorption technologies in such settings, and this is a major engineering challenge. That’s where Sound Bounce comes in.” - said Eimear O’Carroll, Co founder and Chief Technical Officer of Restored Hearing.

Sound Bounce is responsive hearing protection – giving the variable noise limiting of noise-cancelling technology, without any of the electronics. Sound Bounce benefits the user by limiting levels of exposure to potentially harmful noise. Employees and employers have a vested interest in protecting hearing in the workplace and for years have dealt with inferior products.

Sound Bounce is a smart material insert that is fitted into a set of earmuffs, 800% more absorbent than foam, the technology actively reacts to different noise environments.

The material works like this; when noise levels reach high frequencies the material changes form to absorb these sounds. When in low levels of sound the material lets in desirable sounds, like having a conversation with others with the added benefit of not having to remove your hearing protection. If a sudden loud blast occurred Sound Bounce reacts instinctively to block out these dangerous sounds. This technology was developed to help reduce hearing loss caused by noise damage which has been rising as noise pollution becomes a global health issue.

“Sound Bounce uses patented materials technology to engineer a proportional response to the sound environment. This means that Sound Bounce can be tailored to be particularly reactive at certain frequencies. In addition to this it remains relatively passive at low volumes, when environmental noise reaches high volumes the material is highly absorbent.” - said Rhona Togher Co founder and Chief Executive Officer of Restored Hearing.

It has been independently verified to absorb sound 8 times more effectively than foam. Sound Bounce will block out harmful noise while the harmful noise is present and then returns to a non-active state when this noise dissipates. It is effective, lightweight, adaptable, durable, responsive and inexpensive. It can be used in situations spanning from hearing protection to sound proofing.

In November 2016, Sound Bounce will launch their first Kickstarter campaign with a fundraising goal of €15,000. The aim of the campaign is to have their earmuffs CE marked and to begin their first bulk order of Sound Bounce hearing protection. The mission of the company is always to prevent avoidable hearing damage. Looking at innovative new materials and technologies so that we can help save the worlds hearing. We needed funding to secure a bulk order of our product and to pay for our CE testing and marking.

This new hearing protection, Sound Bounce can be ordered now on [Kickstarter](#)

About the Restored Hearing team

Sound Bounce was inspired from the founders first venture 'Sound Relief' launched in 2009, a sound therapy that aims to reduce the severity tinnitus, a chronic ringing in the ears that is most commonly associated with noise induced hearing damage. Through this work they saw the prevalence of variable noise environments, and the inability of current solutions to deal with them. Foam earmuffs cannot respond to changing noise levels, and electronic noise cancelling technology remains expensive. Through research and development of advanced materials Sound Bounce was created. This cutting-edge design and new acoustic absorbing material grew from a passion to save the worlds hearing and inform people of how they can take simple steps to keep their ears and hearing safe for life.

Founding Team

Rhona Togher (Co-founder and CEO)

Rhona a Sligo native manages all aspects of Restored Hearing from finance to product development. Having studied physics at University College Dublin, Rhona uses her technical training to create innovative products, bringing both a strategic and a detail orientated approach simultaneously. Rhona is also our global ambassador for changing the way the world hears; being invited to speak the world over highlighting the need for action against harmful noise.

Eimear O' Carroll (Co-Founder and CTO)

Eimear also a Sligo native is the other half of the company. She heads up product creation and the IP building team. Eimear focuses on the commercialisation of our technology. She builds strategic global partnerships with market leaders and innovators which is a key driver of adoption for Restored Hearing's technologies. Eimear also studied physics to masters level, at the University of Edinburgh.

Contact

Clare Tarleton
Dublin, Ireland

clare@restoredhearing.com
info@soundbounce.co