

# **Atomic Architects**





### Abstract

Our main outreach vehicle is the Atomic Architects exhibit. Our exhibit aims to demonstrate what a 2D crystal is, how it is made and what the future potential applications are.

# **Exhibit Description**

The team is made up of academic staff, Post-Docs, PhD students and admin support staff. The team show and assist visitors in exfoliating their own layer of atoms from a bulk crystal sample which they can then see under a microscope or on a large TV screen; they use large bubbles to demonstrate the concept of thin film interference; they use a large interactive model of 2 layers of crystals to explain Moiré patterns, crystal geometry and unique properties of the 2D crystals and have an example of a 2D crystal LED to provide visitors with an example of the potential future applications and usefulness of the crystals.



#### **Elements of the Exhibit**



## The Atomic Architects Exhibit has been presented at the following events:

- Royal Society Summer Science Exhibition, London 2018 (11,000 visitors)
- Scottish Science Advisory Council Launch Event, Edinburgh 2019 (150 guests)
- Local Beaver Scouts visit, Edinburgh 2019 (40 beaver scouts & leaders)
- Emerging Technologies: The Future of Engineering Exhibition, Edinburgh 2019 (500 delegates)
- Explorathon at the Scottish Parliament Exhibition, Edinburgh 2019 (150 guests)
- Heriot-Watt University Open Day, Edinburgh 2019 (1000 potential students)
- Explorathon at the Edinburgh Botanical Gardens, Edinburgh 2019 (700 visitors)
- Quantum City at the Royal Institution, London 2019 (350 visitors)