



Lichfield Science & Engineering Society

LICHFIELD **GARRICK**
Theatre & Studio

CHAIRMAN

Mike Beeson

PATRON

Mr Ian Dudson CBE
HM Lord Lieutenant of Staffordshire

PRESIDENT

Professor Carolyn Roberts
FRGS, FIEnvSc, FCIWEM, CEnv, CWEM

8:00 pm on Thursday, 2nd December 2021
In the Main House of the LichfieldGarrick

THE RSS Sir David Attenborough

Dr Sophie Fielding
British Antarctic Survey

The polar regions are sensitive to climate change, and places like the Arctic are warming faster than anywhere else on Earth. Understanding what is happening in our polar oceans is critical for understanding major aspects of climate change such as the carbon cycle: where is the carbon stored and what will happen in the future? The new UK polar research vessel the "RRS Sir David Attenborough" represents a significant UK investment in environmental science capability. In this talk I will introduce the ship and its state-of-the-art facilities. From why a 40m giant piston corer is required, to complete clean science sampling from winch to laboratory and advanced underwater acoustic visualisation systems.

Sophie Fielding is a biological oceanographer based at the British



Antarctic Survey, with a focus on active acoustic techniques to resolve the marine ecosystem and address issues around food security and climate effects on carbon cycles. As the SDA science capability coordinator at BAS she is involved with the science capability specification of the SDA and will lead its acoustics and first science trials.

(SDAscience@bas.ac.uk).

For further information, please see our website at www.LSES.org.uk
Students and Members Free.

Visitors £7.00. Tickets are not issued in advance, please pay at the door.
This lecture is expected to finish by 10.00 pm.