Citation for the 2019 RAS Jackson-Gwilt Medal: Professor Anna Scaife

The 2019 Jackson-Gwilt Medal is awarded to Professor Anna Scaife.

Professor Anna Scaife is a world leader in imaging and an expert in building, commissioning and calibrating radio instrumentation, playing a significant role in helping deliver the scientific capability of the new generation of large radio telescopes.

Until the end of 2018 Prof. Scaife was Principal Investigator for the LOFAR Magnetism Key Science Project, and is on the Builders' List for her contribution to the early commissioning of the LOFAR telescope (a pathfinder instrument for SKA). She performed a comprehensive statistical analysis of a set of bright standard radio sources, which establishes a new flux scale optimised for facilities such as LOFAR and SKA. This work has become the gold standard for flux calibration and now underpins all low-frequency radio observing.

Until 2016, Prof. Scaife led the Imaging Pipeline work package as part of the SKA Science Data Processor (SDP) Consortium to design the algorithms required for ingesting, calibrating, editing and imaging data to produce science ready data products for distribution to astronomers around the world. Prof. Scaife now leads the work package on computer requirements as part of the Horizon2020 funded AENEAS project to develop a design for the European SKA Regional Data Centre, which will be a vital resource to enable the community to take advantage of the scientific potential of SKA.

For these reasons, Professor Anna Scaife is awarded the Jackson-Gwilt Medal.