



Scientific Committee on Antarctic Research


SCAR Medal for Excellence in Antarctic Research 2022

Elisabeth Sikes

Prof Elisabeth Sikes' considerable influence on Antarctic and Southern Ocean science derives from a series of ground-breaking publications, improving our knowledge of the Southern Ocean's control on global climate in the late Quaternary. Her work has been innovative on multiple fronts, most notably for sea surface temperature (SST) estimations, identifying glacial deep ocean CO₂ sequestration in the Southern Ocean, and clarifying the relationship between changes in Southern Ocean circulation and atmospheric CO₂ levels during ice ages. Her work has provided critical information about Southern Ocean frontal movements, Southern Westerly Winds shifts, and Southern Ocean SST in the last glaciation, to improve our understanding of the Southern Ocean's influence on climate change.

Prof Sikes' contributions to Southern Ocean / Antarctic science spans her involvement in the science communities in three countries (Australia, New Zealand and the United States). An active expeditioner, she has participated in 16 oceanographic voyages, seven in the Southern Ocean. She mounted three successful, major coring expeditions to the Southern Ocean and led two as chief scientist.

Prof Sikes actively serves the Antarctic / Southern Ocean scientific community: Since 2017, she has served as a member of the SCAR Southern Ocean Region Panel (SORP: co-sponsored by CLIC & CLIVAR) and currently serves as SORP co-chair (since 2019).


Dr Yeadong Kim
SCAR President

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