



SPE Queensland Science Contest Bursary

The Society of Petroleum Engineers QLD Section is a volunteer professional organisation that aims to collect, disseminate, and exchange technical knowledge for the energy industry and related technologies. The world's energy demands continue to grow and these need to be met in a safe, environmentally responsible, and sustainable manner. We are committed to encouraging students to pursue career pathways in STEM subjects, the energy industry, and working towards a sustainable future with our Career Guidance and Student Development committee and active student chapters at UQ and QUT.

More information can be found at: www.spe-qld.org, www.spe.org, www.energy4me.org, www.spe.org/en/gaia/

Award: Up to \$500 (may be shared amongst participants)

Criteria: Projects that demonstrate any aspect of scientific principles in the exploration, development, and production of energy resources, as well as applications of related technologies. Projects related to sustainability and energy transition are also included.

Category Eligibility: poster presentation, communicating science, classified collections, mathematical investigations, scientific investigation, environmental action, engineering & technology projects.

Open to all divisions



Project Ideas:

Energy Sources – explore different energy sources (oil and gas & renewables – hydrogen, geothermal, hydro, solar, wind, etc), benefits and trade-offs, what is the power output of different fuel sources, why a range of sources may be required, challenges and transition time to change between sources; what are some consumer goods made from petroleum products, can alternatives be used

Sustainability – explore future fuels and how these can assist the energy transition, explore different sources of methane emissions and strategies for reducing them, energy efficiency – how its measured and ways to improve losses

Geology – what influences rock characteristics/properties, mineralogy, where are they found; what makes a good reservoir

Seismology & seismic technology – acoustics, vibrations, new technologies and reducing footprint

Measurement systems – different types of measurement technologies (meters/gauges/etc) used in resource evaluation/development, extraction/production, their resolution/benefits/limitations

Reservoir behaviour/flow through porous media – fluid characteristics (composition, density, viscosity), phase behaviour (solid/liquid/gas at various pressures and temperatures), what impacts how much fluid can be stored, what impacts how quickly fluids flow through various media (pipes with different sizes/materials, filters with different particle sizes, etc), how can this be improved

