

## Geodome Ltd; Cost effective rocket propellant tanks

### Project Summary

A partnership between Geodome and Kingston University aims to investigate the design aspects of a lightweight propellant tank that can ultimately be developed for use in a small satellite launcher. The propellant tank is being designed for a cryogenic oxidiser and in particular for liquid oxygen.

Through developing a new stiffening grid, the tank can be made from metal, which has more appropriate thermal expansion properties for a launch vehicle. A demonstration tank will be designed, built, tested and evaluated for its potential in a sounding rocket technology test and for future scale up to a small launch vehicle.

The project supports the National Space Technology Strategy Access to Space theme by aiding the development of low cost launch vehicles, to meet the growing market demand for small payload/satellite launchers.

