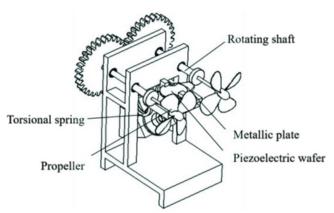
# Misc

## Research papers



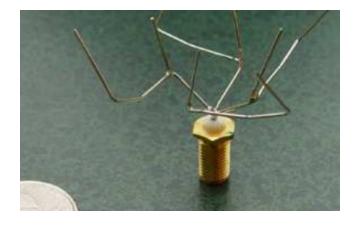
#### **Turbine**

Ultrasonic motor is an actuator driven by ultrasonic vibration, which has the characteristics of low electromagnetic interference, low noise, light weight and compact structure

### Toroidal propeller

Toroid propellers are significantly quieter, and are more efficient than traditional propellers both in air and water.





### Antenna built using GAs

Building efficient design of antenna for communication of data using evolutionary algorithm

## Other usecases and sensors

- Direct Drive PMSM motors combined with B-series propellers--63% effective
- Inline Thrusters: Lian 130e thruster -- highly efficient
- MAIN THRUSTER: 300-W nominal power thruster (a Seaeye SI-MCT01-B)
- LATERAL THRUSTER: Seabotix BTD150
- Water Conductivity Sensor, Attitude and heading reference system, inclinometer, GPS & Compass
- GEOMAR AUV ANTON (Girona 500)