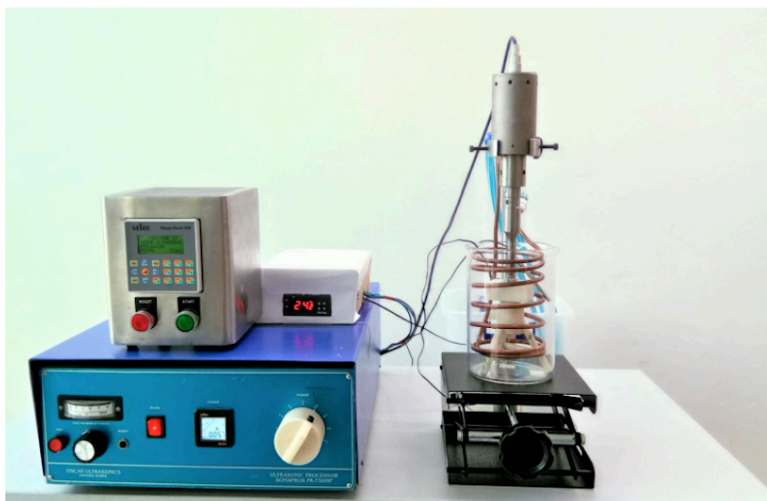


OSCAR Ultrasonic Processor



Contact Details:

Room No. 102

Student coordinator: Himanshu Markanday

Email: 2018mez0004@iitrpr.ac.in

Faculty in charge: Dr. Samir Chandra Roy

DRF staff coordinator: me.drf@iitrpr.ac.in

Technical specifications (in brief)

Make and model: OSCAR, SONAPROS PR-750MP

Power: 750 W

Output frequency: 20 kHz

Horn tip diameter: 12 mm

Processing Capacity: Upto 750 ml

Pulse ON/OFF time: 4 sec/4 sec

Processing time: 10 min

Application of the equipment/machine

The equipment is chemical mixing, homogenization, deagglomeration, particle size reduction, etc. It can also be used for doing cavitation-erosion testing on soft materials (according to modified ASTM G32 method).

Limitations of the equipment/machine

- The working amplitude is limited to 30 μm .
- Working temperature is limited to 50 $^{\circ}\text{C}$.

Consumables/sample preparation of the machine

For cavitation-erosion testing, the specimen surface should be flat and polished. The user has to bring the replaceable tip as well. The tip specification will be provided on request.