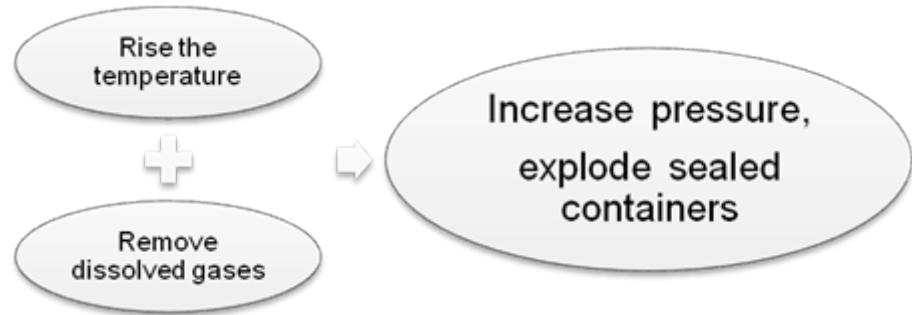


Sonicator (ultrasound)

Sonicator

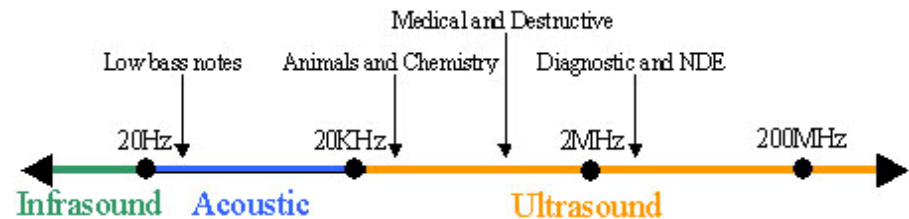
- Use sound energy to agitate samples
- Speed dissolution
- Rise the temperature
- Remove dissolved gases



- Think about your experiments and label it well for the next users
- Wear safety eye glass and gloves all the time
- Wear lab coat when necessary

Ultrasound

- Above the upper limit of human hearing
- Long, high intensity ultrasound
- Disturbance in tissue



- Try to avoid long high intensity exposure to ultrasound...

Vapor in open area

- Leak from oven or sonicator
- Evaporated from the balance when weighing samples
- From the dip coating instruments and left-over uncapped beakers
- Oxygen from the plasma cleaner

- Toxic by vapor inhalation
- Corrosive on contact
- Flammable
- Heat rising from the oven

Fuel	Ethanol	Acetone	Diethyl ether	Methanol	Paraffin oil	Toluene	Carbon disulfide
Flash point	12.8° C (55° F)	-17° C (1° F)	-45° C (-49° F)	11° C (52° F)	38–72° C (100–162° F)	4° C (39.2° F)	-30° C (-22° F)
Autoignition Temperature	365° C (689° F)	465° C (869° F)	170° C (338° F)	464° C (867° F)	220° C (428° F)	480° C (832° F)	90° C (194° F)

- Use the fumehood or glove box when necessary
- Seal the container properly or empty it asap
- Label it and warn people around when using evaporated solvents