

Bubble pressure tensiometer

A bubble pressure tensiometer is an instrument for determining the [dynamic surface tension](#) using the measurement of the maximum pressure inside of the bubble growing at the tip of a capillary immersed into the liquid. When a bubble grows initially at the tip of a capillary, the radius of curvature decreases up to a hemisphere, and then increases again. Thus, the maximum value is obtained when the bubble has the completely hemispherical shape whose radius is exactly identical to the radius of the capillary. When reaching the maximum pressure, the pressure of the bubble decreases and the radius of the bubble increases until the bubble is detached from the end of a capillary and a new cycle begins with a new bubble formation.

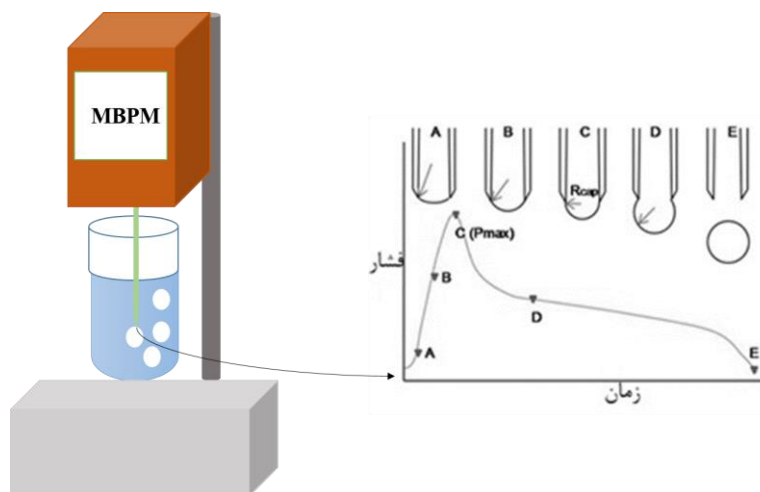
Bubble pressure tensiometer is widely used in quality control, research and development for characterization of solutions.

Features

- Precise measurement of :
 - Bubble dead time
 - Bubble life time
- Surface tensions measurement
- temperature monitoring

Application

- Optimization of spray, painting, printing and coating processes
- Development of washing and cleaning processes
- Surfactants analysis
- foam and emulsions
- Ceramic Processes
- Textile
- Oil refineries
- Pharmaceuticals
- Electronics
- Food industry



Specification	
Range of surface tension	10 to 100 mN/m
Resolution	0.5 mN/m
Minimum volume test liquid	1 ml
Temperature operating range	-10 to 40 °C
Weight	2 kg
Calibration	Based on D 3825 standard