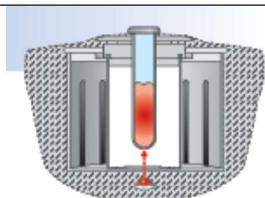


## CEM DISCOVER

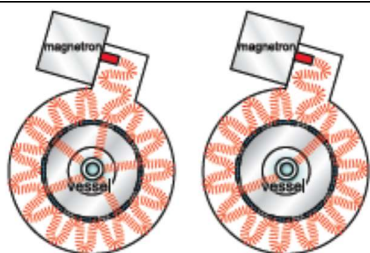


The Labmate features:

- Access to reaction temperatures up to 300 °C and 300 psi
- Fiber Optic Temperature Control inside the reaction vessel
- Volume-Independent Temperature Sensor, the floor mounted, infrared temperature sensor enables Discover to accurately measure temperature in volumes from 0.2 to 75 mL.



- Self-Tuning Single-Mode Cavity - automatically adjusts power output based on the polar and ionic properties of the reaction solution.



- Integrated electromagnetic stirring
- 10-mL vessels for research and 80-mL vessels for scale up
- The easiest cavity access for cleaning and use
- Gas Addition Perform microwave reactions with gaseous reagents.



- CoolMate  
Use the power of microwaves to accelerate reactions even at temperatures as low as -80 °C



Advantages:

- Perform reactions 10-1000 times faster than conventional heating  
Microwave heating allows students to complete purification and analysis in the same lab period.
- Achieve greater yields and increased purities  
Microwave energy transfers to the reactants rapidly, giving side reactions a low opportunity to form and resulting in greater yields of the target product.
- Implement green chemistry principles  
Microwave reactions use less solvent than conventional reactions, and in some chemistries, less hazardous solvents or even water may be used and still produce great results.