

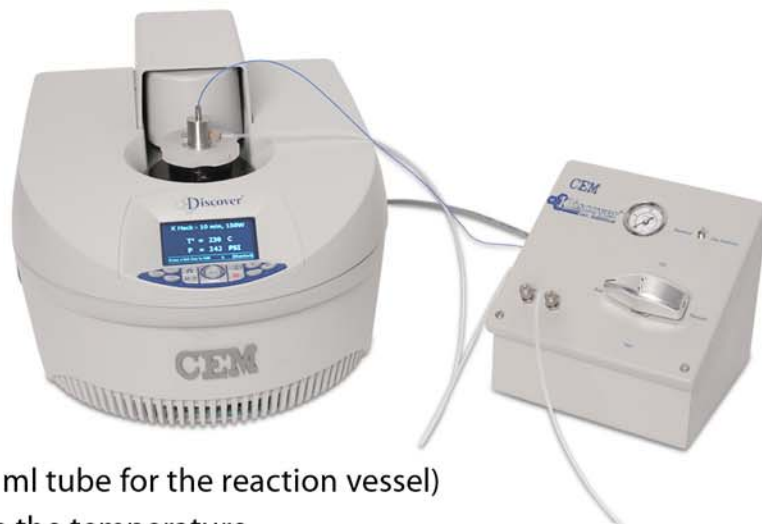
# New!

## Perform microwave-enhanced hydrogenations in less than **10 minutes!**

### Gas Addition Accessory

for CEM Discover® Microwave Synthesis Systems

Now you can experience the benefits of using microwave energy for your reactions that require gaseous reagents. The new Gas Addition Accessory for the Discover line of Focused Microwave Synthesis Systems allows the addition of gaseous reagents to reaction mixtures for a variety of applications including hydrogenations, carbonylations, and hydroformylations.



- Working volume 2-7ml (uses standard 10 ml tube for the reaction vessel)
- Incorporates fiber optic probe to measure the temperature
- Allows gas addition, vacuum purge, and venting in addition to currently available ability to measure pressure during the reaction
- Operating limits up to 200 psi and 200 °C
- Offers a fine degree of control over the amount of gas used
- Compatible with the entire Discover line of modular microwave synthesis systems
- Easy upgrade for current Discover users

Microwave-enhanced synthesis offers advantages including rate and yield enhancements. In addition, many chemistries requiring gaseous reagents can be driven to completion using only moderate temperatures and pressures.<sup>1</sup> Hydrogenation conditions of 10 minutes and 50 psi (3.4 Bar) are all that are required for quantitative conversion to the desired product.

<sup>1</sup>Vanier, Grace S. *Simple and Efficient Microwave-Assisted Hydrogenation Reactions at Moderate Temperature and Pressure* **SYNLETT** (1), **2007**, pp 0131-0135.

# CEM

*Microwave-Enhanced Science*