

What is claimed is:

1. A device for centering a temperature measurement device inside a reactor tube that will be filled with catalyst, comprising multiple inflatable bladders
5 mechanically and fluidically attached to a centering ring.
2. The device of claim 1, wherein the multiple inflatable bladders comprise three inflatable bladders.
- 10 3. The device of claim 1, wherein the pressurized gas conduit is fluidically attached to a compressed gas source.
4. The device of claim 1, wherein the multiple inflatable bladders are configured to center the centering ring within reactor tube when inflated.
- 15 5. The device of claim 1, wherein when inflated, the multiple inflatable bladders are configured to comprise multiple open regions through which catalyst passes through.
- 20 6. A device for centering a temperature measurement device inside a reactor tube that will be filled with catalyst, comprising:
 - a centering ring with an interior and an exterior, configured to accommodate a temperature measurement device and a pressurized gas conduit in the interior,
 - 25 • multiple inflatable bladders mechanically and fluidically attached to the exterior of the centering ring,
 - the pressurized gas conduit fluidically attached to the centering ring such that a flow of pressurized gas exiting the pressurized gas conduit passes through a gas passage into the multiple inflatable bladders.
- 30 7. The device of claim 6, wherein the multiple inflatable bladders comprise three inflatable bladders.

8. The device of claim 6, wherein the pressurized gas conduit is fluidically attached to a compressed nitrogen source.
9. The device of claim 6, wherein the pressurized gas conduit is fluidically
5 attached to a compressed air source.
10. The device of claim 6, wherein the multiple inflatable bladders are configured to center the centering ring within a reactor tube when inflated.
- 10 11. The device of claim 6, wherein when inflated, the multiple inflatable bladders are configured to comprise multiple open regions through which catalyst passes through.
12. The device of claim 6, wherein the temperature measurement device
15 comprises a distal end, and the distal end is attached to a distal end mesh disk.