What is claimed is:

1. A method of installing a temperature measuring device inside a reactor tube while filling the tube with catalyst, comprising:

a) inserting a positioning system, comprising a single inflatable bladder connected at a central location to a centering ring, into a reactor tube, the reactor tube comprising a distal end and a proximal end,

b) attaching the temperature measurement device to a distal end mesh disk,

c) inserting the centering ring around the temperature measurement device,

d) locating the positioning system at a first predetermined distance from the distal end,

e) inflating the single inflatable bladder, thereby centering the centering ring and the temperature measurement device within the SMR tube, and

f) introducing catalyst into the SMR tube, thereby enclosing the temperature measurement device in catalyst.

2. The method of claim 1, wherein the catalyst is introduced into the SMR tube with a catalyst sock.

3. The method of claim 1, further comprising:

a) deflating the single inflatable bladder and relocating the positioning system a second predetermined distance toward the proximal end, and

b) repeating steps b) – f) until the SMR tube is filled as required.

4. The method of claim 1, wherein the temperature measurement device is a thermocouple.

5. The method of claim 1, wherein the temperature measurement device is a strand of multiple thermocouple sensors.

6. The method of claim 1, wherein the single inflatable bladder is inflated using pressurized nitrogen.

7. The method of claim 1, wherein the single inflatable bladder is inflated using pressurized air.

8. The method of claim 1, wherein the reactor catalyst tube is vibrated during or after step e).

9. The method of claim 1, wherein the first predetermined distance is less than about 5 feet.

10. The method of claim 1, wherein the first predetermined distance is about 1 foot.

11. The method of claim 1, wherein the second predetermined distance is less than about 5 feet.

12. The method of claim 1, wherein the second predetermined distance is about 1 foot.