G2 Assembly (Placing the thermocouple):

- **A** MgO + spinel octahedron
- **B** Outer sleeve
- **C** Graphite furnace sleeve
- **D** MgO ring
- **E** Graphite end-sleeve (#1 of 2)
- **F** Zirconia end-sleeve (plain)
- **G** 4-hole alumina
- **H** TZM ring (slotted)
- **I** Mullite tube (1 of 4)

(Thermocouple wire)

The red circles refer to parts made in-house.
G2 Assembly (Loading the sample):

1. Graphite end-sleeve (#1 of 2)
2. Sample configuration (see page 4)
3. MgO cap
4. Graphite end-sleeve (#2 of 2)
5. Zirconia end-sleeve (plain)
6. MgO cap (plain)
7. MgO plug

Diagram:
- Mullite tube (1 of 4)
- MgO + spinel octahedron
- Alumina sliver
- Graphite furnace sleeve
- Thermocouple wire
- Outer sleeve
- Zirconia end-sleeve (slotted)
- TZM ring (plain)
- TZM ring (slotted)
- 4-hole alumina
G2 assembly (Final configuration):

- Zirconia sample + capsule
- Mullite tubing
- 4-hole alumina
- Alumina sliver
- Graphite furnace
- MgO + spinel octahedron
- MgO ring
- MgO cap
- MgO sleeve
- Outer sleeve
- Zirconia end-sleeve (slotted)
- TZM ring (slotted)
- TZM ring (plain)
- MgO plug
- Sample configuration
G2 assembly: sample configurations.

1. Metal capsule
   - Sample
   - MgO sleeve
   - MgO ring
   - MgO

2a. (Metal capsule, 3.5 mm OD, 3.2 mm length)

2b. MgO cup and plug (proposed)
   - Sample
   - MgO plug
   - MgO cup

2c. BN cup and cap
   - Sample
   - BN cap
   - MgO

2d. MgO cup and plug
   - Sample
   - MgO plug
   - MgO cup