Planetary Ball Mill – PM400
The PM400 has four grinding stations capable of grinding up to 8 samples at a max speed of 400rpm. The PM 400 has the following adjustable grinding parameters: grinding time, speed, interval, directional reversal and pause time. The ESRL is equipped with 8 agate grinding vessels (80ml) and 2 complete sets of agate grinding balls (ø36mm and ø20mm).

Samples
The Planetary Ball Mill is designed to grind and mix, soft, medium hard and extremely hard, brittle and fibrous materials, wet or dry, quickly and with high reproducibility. Samples that carry the risk of explosion or fire are prohibited.

Only geological materials (excluding ore samples), are permitted for grinding in the ESRL at present. Sample material must have a hardness <7mohs. The sample volume per grinding vessel is between 10 – 35ml with a feed size of up to <4mm depending on the material. Samples may need to be pre-milled/crushed before arriving to the ESRL depending on the material (crushing and grinding facilities in TCD may be available by special request).

Output
Fine, homogenised, powdered material (grain size dependent on the material and grinding parameters chosen).