

Titanium is a hard metal with a relatively low density. Titanium and its compounds have a wide range of uses. Titanium can be extracted by the electrolysis of titanium (IV) oxide,  $\text{TiO}_2$ , dissolved in molten calcium chloride.

The molten electrolyte contains the titanium ions,  $\text{Ti}^{4+}$ .

At which electrode is titanium deposited?  
(cathode or anode)