A dental teaching hospital in Wales has become the first in the UK to find a way of making crowns and bridges using titanium.

Up till now, dental work had to involve gold because it was thought that porcelain couldn’t bond with any other metals.

However the dental teaching hospital in Heath, Cardiff has found a way to bond porcelain to titanium. The discovery will help to reduce the hospital’s spending on gold and also benefit patients because the implants will be lighter.

Roger Maggs, the senior chief production manager at the dental hospital, said: ‘People have tried for years to bond porcelain to titanium but it has never worked; it has always fractured during the cooling process.

We have managed to get around this problem and have been able to bond porcelain to titanium to use in implants for patients.’

The dental hospital currently spends up to £30,000 a year on gold. Staff at the hospital hope to develop the technique for the production of crowns and bridges, but it could also be used in the production of dentures for patients with missing teeth.

Titanium breakthrough for the Welsh

More NHS dentists for Cheshire

The diploma course in dental implantology is already taking on students for the new course being run next year.

The diploma course in dental implantology is run by Perio-Implant Europe Ltd and the 15 modules are taught by a range of experts including Dr Apollonius Allen, Dr Andre Saadoun, Dr Roger Levin, Dr Pascal Valentini and founder Dr Nadeem Zafar.

The course which runs from 24 April 2009 to 15 February 2010, also features an advanced bone grafting course. For more information call 01276 469600.