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Analytical results for four brooches from The Defences,
Gloucester

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The four brooches were analysed qualitatively by energy dispersive X-ray fluorescence.

The Polden Hill brooch (No 1 in the draft report) was a leaded bronze as are most brooches of this general type.

The trumpet brooch (No 2) and the trumpet derivative (No 3) were also leaded bronzes. A wide range of alloys are used for trumpet brooches so this result is not unexpected. The broad type covers a number of variants but as yet there is insufficient data to allow typical alloys to be assigned to each of these variants.

The final brooch (No 4) was a disc brooch of a well known type with the red and blue enamel fields separated by a hexagonal band of reserved metal that was tinned. The metal edge of the brooch had been decorated with an applied beaded border of which only traces survived. What remained was lead-tin solder which would originally have filled and attached a repousse metal foil, most probably of silver. No trace of silver survived but the presence and shape of the solder indicate that this brooch was originally decorated with more than just enamel. The bulk metal was leaded bronze which is the common alloy used for this type of brooch.