## **Improving Gemstones**

Modern gemstones are improved in a variety of ways, some considered legitimate, some fraudulent, some somewhere in between. Such techniques go back to classical antiquity. It would be interesting to try to reproduce period examples. For instance:

## **Heat Treatment of Gemstones**

Al-Tifaschi, writing in the early 13<sup>th</sup> c., describes in some detail heat treating ruby to improve it. Low quality ruby rough is readily available and not very expensive, so it should be possible to experiment with what he describes and see the effect.

I am told that carnelian in the past was much redder, closer in appearance to garnet, than what we get as carnelian. I am also told that it can be, and long has been, heat treated. I have not yet found a period description of how.

I expect that between Pliny, al-Tifaschi, and other sources one could find sufficient information on heat treatment of other stones to be worth experimenting with.

## **Foiling Gemstones**

Another technique that goes back to antiquity, being described by Pliny, is making colored foils to back stones with, thus improving their color. Cellini gives fairly detailed instructions. Someone should try it.

## **Dying Gemstones**

Pliny mentions it, and it's commonly done today. I don't know of period descriptions of how to do it, beyond Pliny's, but they probably exist.