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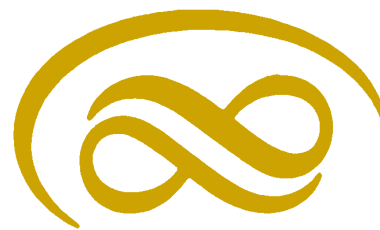
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## QUALITY ASSURANCE IN MANUFACTURING

### CONTENTS

#### Editor's Comment

- 1 Nickel release tests - How well do they work?**  
*G. Raykhtsaum and D.P. Argarwal*
- 2 Effects of water quality and temperature on investment casting powders**  
*R. Carter*
- 3 Assaying of gold jewellery - Choice of technique**  
*C.W. Corti*
- 4 BV Schmuck + Uhren calls for harmonisation for products made of precious metals**  
*A. Schneider*
- 5 Book review: Jewelry Manufacturer's Encyclopedia by P. Romanoff**
- 6 8th International Technology Symposium, Vicenza**
- 7 Index of Articles appearing in Gold Technology, Nos 1- 32, 1990 - 2001**

#### The EU Nickel Directive and testing for nickel release

The EU Nickel Directive has had a major influence on the use of white gold in jewellery and we have published articles in recent issues on some of the newly developed white gold alloys that meet the requirements of the new legislation. The Directive is based on a standard testing procedure for the measurement of nickel release. This gives many of us cause for concern. How reliable and consistent is this test? The fact that an "adjustment" factor of 0.1 was deemed necessary (see article by Rushforth in *Gold Technology* No. 28, Summer 2000) made me question the test procedure's validity.

My concern was justified because the first article in this issue by Leach and Garner has actually looked at the test procedure for a range of gold alloys and pure nickel. This work was presented at the recent Santa Fe Symposium in the USA. I found it so topical that I asked the authors for permission to publish a modified version in this issue. Judge for yourself. Do you have confidence in the test procedure? The motto about building a house on firm foundations is not true in this instance. The foundations are shaky here. We need to examine this test and come up with a better one!

#### This issue

Besides the article on *nickel release testing*, we feature two papers that also stem from the Santa Fe Symposia (which demonstrates what an important source of the latest technology this excellent Symposium is). The second article is by a young talented researcher from a major investment powder producer who examines the *influence of water quality and temperature on investment performance*. All investment (lost wax) casters will find this interesting and of practical use. It may explain some of their casting problems!

This is followed by my updated *review of assaying techniques*. I wrote this article in response to the many enquiries that I receive on the topic of assaying techniques. I hope you find it useful and informative!

In *Gold Technology* No 27, we published an article on Hallmarking systems in an international context and one on the Italian industry's view of the European situation and harmonisation. To demonstrate our fairness and to stimulate open discussion, I include an article on the position of the German jewellery industry relating to European harmonisation which I received late last year. I know this is an issue discussed within CIBJO. I, too, have views on this, as given in *Gold Technology* No 29. The consumer's interest should prevail over the convenience of the producer!

I also include a *book review* and an *index of articles* published to date in *Gold Technology* since it commenced publication in 1990. This should help you to locate articles on specific topics. Many of the recent ones can be found on our web site and we can supply photocopies of earlier ones on request, many also in Italian as well as English.

Chris Corti

Chris Corti  
Editor