

Trick
or
Treat!

Penetrant Professor

from Met-L-Chek



BLACK LIGHT, WHITE LIGHT

Good, reliable, fluorescent penetrant inspection depends upon many conditions being optimized. One of these is the lighting in the inspection booth, a subject which is frequently misunderstood. Good inspection lighting depends upon having the proper intensity of UV-A light, and a minimum intensity of white light. There are some very compelling technical reasons for this, and there are many "old wives' tales" about how to correct improper conditions, very few of which actually work. Proper inspection booth lighting will be the subject of a technical presentation by Patrick Dubosc at the Fall ASNT meeting. Patrick works for the Babb company, in Paris, and Babb distributes Met-L-Chek penetrants in France. Patrick has delivered a number of presentations on this subject in the past, and is one of the most knowledgeable people on this subject. If at all possible, we urge you to attend this presentation. Patrick will be pleased to answer any questions on the subject, or to talk privately

with you about it. The Fall meeting of ASNT will be held in Indianapolis, Indiana, from November 14th through November 16th, and Patrick's talk will be on Tuesday afternoon, November 15th.

INTENSITY LEVELS

Blacklight (UV-A) and visible light "calibrations" are usually done on a daily basis. Measuring the UV-A lamp intensity and the visible light intensity in an inspection booth should be done carefully, making sure that the measurements are done in the same way, and in the same environment each time. The UV-A measurement is made at a distance of 15" from the blacklight filter, and at the "hot spot" of the UV-A, and should be in the range of 1000-1500 $\mu\text{w}/\text{cm}^2$. The visible light measurement can either be made at the same location, or can be measured in the darkened booth at the inspection area. The intensity should be less than 2 foot-candles. Measurements can be made with the Spectronics® DSE-2000A system, which consists of the DSE-100X digital

radiometer, the DIX-365A UV sensor, and the DIX-555A visible light sensor. For ease of measurement, Spectronics® also makes the VF-100 "spec stik". The lamp fits on one end, and the sensor on the other, and the correct distance is assured. Any or all of this equipment is available from Met-L-Chek. If you are interested, please contact Met-L-Chek for additional information.

SPRAY APPLICATIONS

We sometimes get inquiries from customers who are interested in buying certain products in aerosol spray cans which are not ordinarily available in this kind of container.



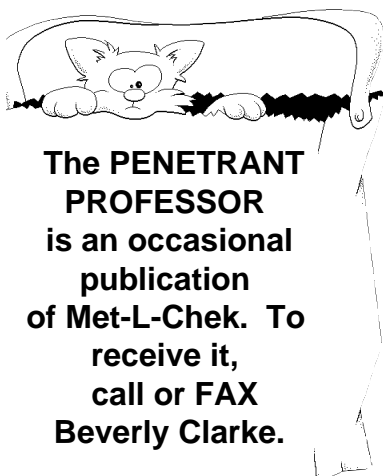
SPOTLIGHT MELODIE



These products can range from hydrophilic emulsifier to level four fluorescent penetrants. The product is always one for which there is not sufficient commercial market to merit having it available in aerosol form. There is a relatively easy solution to this problem, for those who need these products in a form which can be sprayed, and which is portable. There are a variety of commercially available containers which are pressurized with compressed air. These containers are available with a variety of spray tips, and in sizes from the size of a conventional aerosol can to one quart. The container may be used with almost any liquid which is not too viscous, and can be taken to any location in the field and used the same as an aerosol can. The only product which will not work well in this application is non-aqueous developer. This type of developer must be applied in a thin, even, and smooth coat, and the compressed air sprayers cannot duplicate the coating which an aerosol can provides. However, there should be almost no incentive to try to spray the non-aqueous developer from one of these containers, since the developer is readily available in conventional aerosol cans. If you are interested in containers powered by compressed air, contact us for sources. We will be happy to assist you.

Melodie handles many things at Met-L-Chek. She is our Human Resources Department and Accounting Department combined, and it is Melodie who takes a prepared text and then composes *The PENETRANT PROFESSOR*, illustrating it along the way. You may meet her if you visit Met-L-Chek, and you may talk to her if there is a question about your account. Melodie is bright, exuberant, and fun to talk to, and her interest in animals almost always comes through. Much of her spare time is spent finding appreciative homes for homeless dogs, and much of the rest of it is spent tending a garden which has some 800 varieties of plants and trees. If you receive our Holiday greeting card, it is Melodie who is with the German Shepherd.

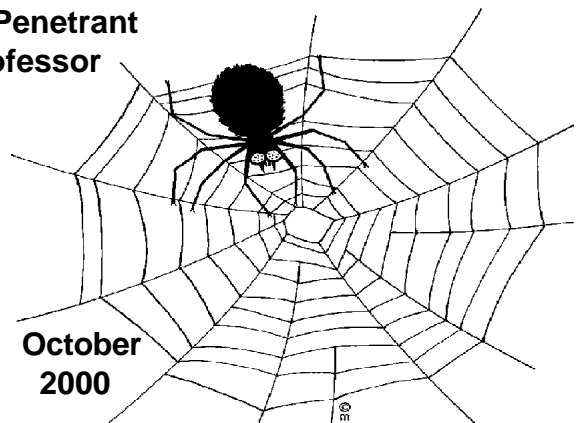
Melodie's photo appears above, together with a beaming Norman Hyam (on the right), who we wrote about last issue. The photo was taken during one of Norman's visits to California, and at a warm and convivial dinner at a California beach restaurant. The other person in the photo is Melodie's husband Bill.



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