



# ASTEE

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June 2014

## Message from the President

The ASTEE reception held last February in Seattle, WA during the AAFS meeting was a memorable one. We should all thank our sponsors who make events like these possible (Foster & Freeman, Gateway Analytical, Leica Microsystems, Inc., McCrone Research Institute, and especially CRAIC, Inc., who sponsored the AAFS reception). It was an honor for me to be able to present the 2013 Edmond Locard Award for Excellence in Trace Evidence to Skip Palenik at that event. I have looked up to Skip since the beginning of my career at the McCrone Research Institute in Chicago. My impression of Skip is that he has always been, and continues to be,

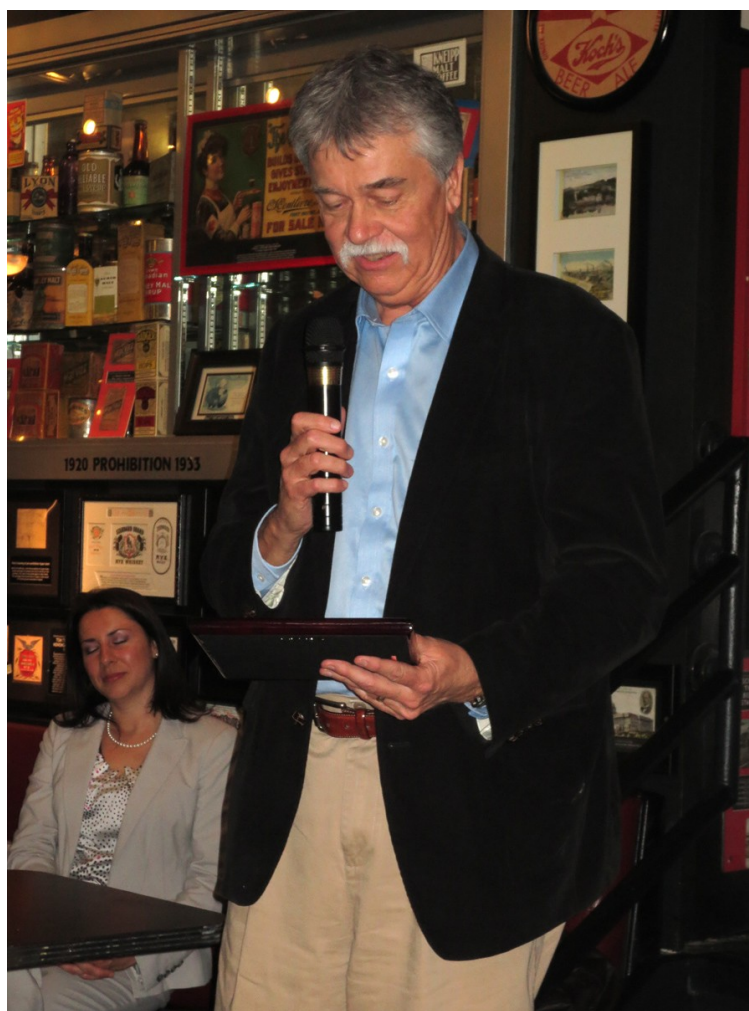


focused on three things: acquiring new scientific knowledge, applying his knowledge to solve complex scientific problems, and sharing what he has learned with others. Some people seem to be motivated by higher salaries, some by earning impressive titles, and other people seem to care greatly about being recognized by colleagues in their field. I get the sense that for Skip, all of these things are secondary to the science. I do not mean to criticize these other motivations; they are all very natural human desires. Who wouldn't want fame, fortune and power? I simply think it is admirable when someone puts so much time and energy into their career without these common motivating factors. I expect the reason he is able to do so is that he truly loves his work. For those who do not know Skip, his interest in science and microscopy began at a very early age. His childhood was spent identifying the insect pests that had infested his mother's plants, examining particles in the dust from the household vacuum cleaner, and turning all the flames in the house a bright orange

## Message from the President

color after a day of measuring refractive index values with a sodium vapor lamp. His parents never did figure out what was wrong with their stove; nor did the repairman that they called from the gas company. The flames were back to their usual blue color the next day... His passion for science has not diminished over the years. He once told me that his idea of a perfect Saturday night was to curl up in front of a fire with a good book on microchemistry. Most of us got into the field of trace evidence because the science intrigued us. Like Skip, we were curious about the things in our environment, and found science to be a fulfilling means of answering our questions. I encourage all of us to follow Skip's example and maintain that scientific curiosity throughout our entire careers. If we can, the field of trace evidence will be better for it. One good opportunity to continue our scientific education will be the joint MAFS/ASTEE meeting coming up in October, with numerous trace evidence workshops already scheduled. If you have not done so yet, I would encourage you to check out the meeting website at <http://www.mafs.net/meeting>. I will be there hoping to learn as much as I can from the exceptional scientists in attendance, many of whom, I hope, will be ASTEE members.

Andy Bowen  
ASTEE President



Congratulations from the membership of ASTEE to Skip Palenik on receiving the 2013 Edmond Locard Award for Excellence in Trace Evidence .

## ASTEE at a Glance

Dear Fellow ASTEE Members,



The first few months of the year have flown by, and the summer is finally upon us. The beginning of the year has been a busy one, and there is also much more to plan for. ASTEE held a networking dinner reception in Seattle, WA during the 65<sup>th</sup> Annual Scientific Meeting of the AAFS. The reception was generously sponsored by CRAIC, Inc., and was attended by approximately 50 ASTEE members. It was an excellent opportunity for members to make new connections in the field and to catch up with colleagues from across the nation. We were fortunate enough to have Skip Palenik, recipient of the 2013 ASTEE Edmond Locard Award for Excellence

in Trace Evidence, and Kiersten LaPorte, recipient of the 2013 ASTEE Scholarship Award, present to be honored by their peers (notably, Ms. LaPorte recently accepted a position with the Texas Department of Public Safety as a trace evidence examiner). Representatives from Foster & Freeman were able to attend, and our other generous sponsors, Gateway Analytical, Leica Microsystems, Inc., and the McCrone Research Institute were with us in spirit. We would not be able to host these types of events if it were not for our sponsors, so thank you very much. Thank you also to Jeff Dake and Andy Bowen for helping to plan the event. Pete Diaczuk, the official ASTEE event photographer, was gracious enough to document the event for us (see photos on page 4).

If you missed the reception in February, do not fear. You will have another opportunity to mingle with fellow trace evidence examiners during the joint MAFS/ASTEE meeting this coming October 6-10 in Minnesota. The meeting is being planned almost entirely by MAFS, although many of the volunteers are also ASTEE members (Kristen Olsson, Susan Gross, and Sarah Walbridge-Jones, among others). The primary role of ASTEE at this juncture is to try to encourage participation by our members. We will also be hosting a networking event during the meeting. With the cancellation of last year's Trace Evidence Symposium and its uncertain future, there is currently no professional meeting dedicated solely to trace evidence. We are trying to create the next best thing by partnering with MAFS (which has always had a strong trace evidence program) to provide a meeting of great value to our members. This can only happen, however, if trace evidence examiners participate. There are already nine trace evidence workshops on the schedule (six of which will be taught by ASTEE members), with another evening workshop very likely to be offered. If ASTEE members attend the meeting in large numbers, and contribute to the program, it should be an extremely valuable event for those who are able to make it. The call for papers/posters is out now. I know that training funds are limited, but ASTEE may be able to help fund some travel (keep an eye out for an email with details), so please consider attending this meeting if it is a possibility. Find out more at <http://www.mafs.net/meeting>.

*(Cont. on Page 6)*

A few more photos from this year's ASTEE reception at AAFS in Seattle...



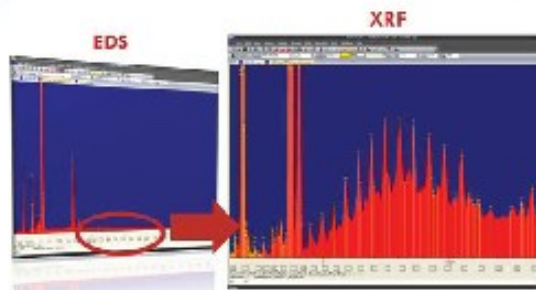


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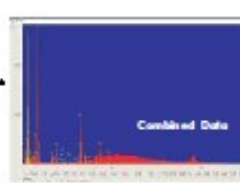
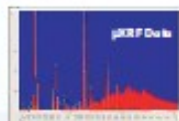
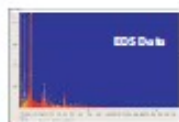


XRF gives parts per million detection  
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Analysis &  
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## ASTEE at a Glance

### ***2013 ASTEE Awards Recipients and 2014 Awards Update***

It is with great pleasure that we announce (albeit a bit belated) the very deserving winners of the 2013 ASTEE Awards. Skip Palenik is the recipient of the 2013 Edmond Locard Award for Excellence in Trace Evidence. The award was a surprise to Skip, who was presented the award at the AAFS reception in February. His son, Chris, and his wife, Peggy, conspired to change his flight and get him to the reception in order to be honored in person. Skip was nominated by Vinny Desiderio, who was kind enough to read his nomination letter at the AAFS reception to those in attendance. Upon receiving the award, Skip stated that he was “speechless”. He then proceeded to give a lengthy, eloquent, and inspired speech on the value of trace evidence and its place in forensic science.

The winner of the 2013 ASTEE Scholarship Award is Kiersten LaPorte. She was also present at the AAFS reception in Seattle and was honored in person. Ms. LaPorte was highly recommended by her references, has demonstrated excellent aptitude in the classroom, and wrote a touching essay describing events in her life that inspired her to pursue a career in forensic science. We hope that Ms. LaPorte made some good contacts during the reception that will help her as she embarks on a career in trace evidence.

ASTEE is happy to announce a new award, the ASTEE Research Award. One of the stated objectives of ASTEE is to “stimulate research and the development of new and/or improved scientific techniques for forensic trace applications.” The new award will help us meet this objective by providing \$500 to a deserving member to help offset costs associated with research.

We have all had colleagues in our lives who have helped shape our careers and who have taught us a tremendous amount, or given us much of their personal time to help our professional development. Don't forget to nominate the trace evidence mentor in your life for the 2014 Edmond Locard Award for Excellence (see page 17).

Many ASTEE members either teach trace evidence courses at a university or know someone else who does. Please help us spread the word about the ASTEE Scholarship Award, which has increased in value to \$500. If you or a colleague knows of a strong university student who has an interest in trace evidence, please encourage them to apply. More information can be found on pages 14-16.

### ***JASTEE Update***

As usual, our journal is always looking for high quality submissions. Advantages of publishing your research in JASTEE include rigorous peer review by experienced trace evidence examiners, having a paper in an open access publication, the ability to include color figures at no additional cost, and the warm, fuzzy feeling you get whenever you contribute something to ASTEE (or is that just me)? Please contact Robyn Weimer with questions or to submit a manuscript – [Robyn.Weimer@dfs.virginia.gov](mailto:Robyn.Weimer@dfs.virginia.gov).

(Cont. on Page 7)

## **ASTEER at a Glance**

### ***2014 ASTEE Training Workshop***

Last month ASTEE sponsored its second workshop on cordage examination in Maine. The workshop was free to ASTEE members in attendance, and eight ASTEE members made the trip to benefit from the training opportunity. One non-member also attended the workshop. The student reviews were all very positive, and we hope to have photos in the next newsletter.

As mentioned in the last newsletter, ASTEE sponsored a workshop on tape examination last year in Kansas City, MO. I would like to thank Jenny Smith and Will Randle who generously volunteered their own time to teach this workshop, with no compensation. Their willingness to share their knowledge and experience to benefit others, even at a cost to themselves, is a great example for the rest of us in the field. With such limited training funds available to most laboratories, this free training is the only way some ASTEE members can take workshops. We have some photographs of the lucky students on page 11.

### ***Communications Committee Notes***

The Communications Committee has expanded to include two new members, Mat Wyatt and Daniel Mabel. You've probably received a few messages from them over the past few months. They have both been enthusiastic about taking on new roles for the committee and will continue to improve the quality and variety of information that gets out to our members. The committee is also looking for another member, so if you are interested, please send an e-mail to [asteetrace@gmail.com](mailto:asteetrace@gmail.com).

Jeff Dake

Communications Chair

**Congratulations to**  
**Skip Palenik**  
**on his receipt of the**  
**2013**  
**Edmond Locard Award for Excellence in**  
**Trace Evidence**



**Congratulations to**  
**Kiersten LaPorte**  
**on her receipt of the**  
**2013**  
**ASTEE Scholarship Award**



# Buried in Casework?



At Gateway Analytical, we understand that sometimes keeping up with the never ending backlog of casework analysis can leave you feeling a bit overwhelmed. Luckily, Gateway forensic scientists have over 15 years of experience in traditional and specialized evidence analysis. No matter what type of forensic support you need from trace evidence analysis to criminal case review, Gateway can provide fast, legally defensible results to help ease casework demands.

## Visit us at the IACP 121<sup>st</sup> Annual Conference and Exposition

To learn more about our services please visit our booth or attend our poster session titled: "The Evolution of Gunshot Residue Analysis and the Accompanying Progress in Result Interpretation."

*Gateway Analytical is a ASCLD/LAB-International accredited and ISO 9001:2008 certified laboratory.*



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[info@gatewayanalytical.com](mailto:info@gatewayanalytical.com)  
[www.gatewayanalytical.com](http://www.gatewayanalytical.com)

## ASTEE Tape Workshop in 2013





## 2013 Professional Development Award Winner on McCrone Experience

In 2013, I was awarded the Professional Development Award from ASTEE. I had applied for the award in order to attend McCrone's Microscopy of Explosives class, but due to lack of interest, McCrone ended up canceling the class. Because the class was going to be canceled, I was asked if I'd like to attend the Microchemical Methods class instead. Because part of my job is analyzing chemical unknowns, I felt that the Microchemical Methods class would be very useful for me.

The class is one of McCrone's general microscopy courses and was attended by students from a wide variety of professions, including a university chemistry professor, a food scientist, and myself, who represented forensic science. This is a class on performing chemical analyses on very small quantities of material. It consisted of some lecture and several practical exercises. It covered metals, organics, and inorganics, including both anions and cations. Methods included microcrystal tests, spot tests, and general microscopical tests, like refractive index and conoscopy. Some of these were methods I was familiar with, courtesy of my existing training in controlled substance and trace analysis. Here we were using these same techniques in a different manner than what my previous training had entailed, though, so I was given a broader understanding of the usefulness of these microscopic methods.

Part of my job is examining unknown chemicals. If I have evidence which does not appear to be similar to something I have analyzed before, I need to have as many tools as possible to approach this. Instruments are useful, but no single instrument will be useful for every type of chemical. Evidence may need extensive preparation to be analyzed by certain instruments, such as derivitization or purification. If the same compounds can be analyzed with a simple microcrystal or spot test, or even screened using these techniques, it can save a lot of time. And frequently time is of the essence with casework. This class taught me a variety of techniques which will be helpful in my approaching chemical unknowns, as well as in my training for explosives.

One exercise focused on testing the different components of black powder gunpowder. First we separated the water soluble components from the insoluble components. Then we did a test for the presence of sulfur, and determined the oxidizer by identifying the cation and anion. While the exercise did not include confirming the presence of carbon, this was addressed during the lecture. This showed us how black powder can be identified by microscopy alone, with very simple techniques. These techniques for identifying black powder gunpowder could prove useful in the forensic setting in explosion or firearms cases.

I came to forensic science from a purely chemistry background, so I had little experience with microscopy before I started working in forensic science. I also had little appreciation for what one could do with microscopy other than the limited microcrystal techniques used in controlled substances analysis. I came away from this class excited about the prospect of incorporating microscopy more into my approach to my casework.

I feel that it is an excellent class and would recommend it to colleagues performing chemical analyses. I hope that other Trace Evidence Examiners have the opportunity to take it in the future, because I do believe it is valuable training. Despite this class not being the one I had originally applied for, I believe that it did provide me with invaluable training, and skills which will be helpful not only in my explosives training but my other trace and chemistry casework, as well.

*Christina L. Henry, Criminalist III, Santa Clara County Crime Lab*



## **American Society of Trace Evidence Examiners Scholarship Award**

**Criteria:** This scholarship of \$500 is to be presented to a student who has demonstrated academic excellence in the field of Forensic Science, with an emphasis in Trace Evidence.

**Eligibility Requirements:** Applicants must be currently enrolled as an undergraduate or graduate student in a Forensic Science or related science program with plans on pursuing work in the Trace Evidence field. Applicants must demonstrate excellence in his/her academic program.

**Application Requirements:** Applicants will submit an essay of no more than 1000 words in which they detail their personal goals in regard to Trace Evidence, their achievements, and why they feel they should be considered for this award. Applicants will provide an official school transcript which must include semester grades for the most recent completed semester. Applicants will submit a letter of recommendation from a professor in the applicant's curriculum accompanied by the Scholarship Recommendation form. Applicants will submit a completed Scholarship Applicant form.

All required materials must be received no later than midnight on July 31, 2014. Applicants may e-mail all materials except the official school transcript. The school transcript must be an original mailed by the school or the applicant. Scans or photocopies will not be accepted.

Interested candidates should submit all required materials to:

**Michelle Palmer**  
Virginia Department of Forensic Science  
6600 Northside High School Road  
Roanoke, VA 24019  
[Michelle.Palmer@dfs.virginia.gov](mailto:Michelle.Palmer@dfs.virginia.gov)

If you have any questions, please contact Michelle Palmer at (540) 283-5937 or via e-mail.



## American Society of Trace Evidence Examiners Scholarship Applicant Form

Name: \_\_\_\_\_

School Residence Address:

\_\_\_\_\_

Home Address:

\_\_\_\_\_

School Phone Number: \_\_\_\_\_ Home Phone Number: \_\_\_\_\_

Alternate Phone Number: \_\_\_\_\_

College attended: \_\_\_\_\_

Degree program: \_\_\_\_\_

Current Year: \_\_\_\_\_

Please indicate which address and phone number is the best one for contacting you.

Application Requirements:

- Scholarship Applicant Form
- Scholarship Recommendation Form
- Official School Transcript, including grades for the most recent completed semester (mailed)
- Essay detailing personal goals with regards to Trace Evidence, achievements, and reasons for award consideration (limit 1000 words)

Interested candidates should submit all required materials to:

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Roanoke, VA 24019  
[Michelle.Palmer@dfs.virginia.gov](mailto:Michelle.Palmer@dfs.virginia.gov)  
(540) 283-5937



## American Society of Trace Evidence Examiners Scholarship Recommendation Form

Candidate Name: \_\_\_\_\_

Affiliation to Candidate: \_\_\_\_\_

Professor Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Title of Recommender: \_\_\_\_\_

College/Institution: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Number: \_\_\_\_\_

Please include the following information when submitting the recommendation for the candidate: Candidate's knowledge of the subject matter, ability to work with others, communication skills, reliability, attitude, integrity, motivation, maturity, and how relevant the candidate's course of study is to the field of Trace Evidence. Please feel free to add any additional information regarding this candidate that you feel would be helpful.

Please mail, e-mail or have the candidate submit this form and the letter of recommendation to:

Michelle Palmer  
Virginia Department of Forensic Science  
6600 Northside High School Road  
Roanoke, VA 24019  
[Michelle.Palmer@dfs.virginia.gov](mailto:Michelle.Palmer@dfs.virginia.gov)



## The Edmond Locard Award for Excellence in Trace Evidence

**Criteria:** This award is to be presented to an individual who has demonstrated excellence in the field of Trace Evidence. This award will be determined by nomination. Nominee must be a member of ASTEE and have a minimum of ten years in Trace Evidence. Nominee will have made a major contribution to the field of Trace Evidence. This could include teaching or training, presented or published research, or innovations in techniques, methods or instrumentation in the Trace Evidence field.

Give a summary of the nominee's background and the reason(s) for the nomination:  
(Attach additional sheets if necessary)

Submitted by:

Address:

Work Phone: (      )

All nominations must be received by the Awards Committee for review no later than midnight on July 31, 2014. The recommendations of the Awards Committee will then be forwarded to the ASTEE Board of Directors, who will determine the final choice for the award recipient.

Please mail or e-mail nomination to:

Michelle Palmer  
Virginia Department of Forensic Science  
6600 Northside High School Road  
Roanoke, VA 24019  
[Michelle.Palmer@dfs.virginia.gov](mailto:Michelle.Palmer@dfs.virginia.gov)

If you have any questions, please contact Michelle Palmer at (540) 283-5937

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*Executive Secretary*

Dear ASTEE member,

Please remit the sum of \$20.00 to ASTEE in payment of your membership dues for the 2014 calendar year by March 31, 2014. Please add a \$5.00 late fee for payment received after March 31, 2014. U.S. members remit checks and non-U.S. members remit International Money Orders payable to ASTEE.

Please send your payment to :

**Scott Maye—ASTEE Treasurer**  
**Virginia Department of Forensic Science**  
**700 North 5th Street**  
**Richmond, Virginia 23219**

If you prefer to use our online option, you can pay through the **asteetrace@gmail.com** account on PayPal. If you choose this option, please email a copy of this form to [scott.maye@dfs.virginia.gov](mailto:scott.maye@dfs.virginia.gov) or fax the form to 804-786-6305 once your payment is submitted.

Please complete the following information and mail with your payment:

Name \_\_\_\_\_

Membership # \_\_\_\_\_

Title \_\_\_\_\_

Address \_\_\_\_\_

Phone # \_\_\_\_\_ Fax # \_\_\_\_\_

Email \_\_\_\_\_

☐

Please check if any of the above information has changed

☐

Please check if you prefer **not** to have your contact information published in the ASTEE membership directory

If you have any inquires concerning your membership dues, please contact Scott Maye at [scott.maye@dfs.virginia.gov](mailto:scott.maye@dfs.virginia.gov) or 804-588-4168.



[WWW.ASTEETRACE.ORG](http://WWW.ASTEETRACE.ORG)