ASTEE

American Society of Trace Evidence Examiners

January 2013

Message from the New President

Dear Fellow ASTEE Members,

I am very honored to assume the role of President of ASTEE. I hope to build upon the excellent work that Vincent Desiderio and Chris Taylor have done to develop the organization. We are now in our fourth year, have over 300 members and held our first election in the fall. Corporate support and sponsors have helped to establish a good financial foundation for the organization.

I have been a member from the beginning and it is remarkable to see the changes and accomplishments of ASTEE in our first three years. I especially want to thank our outgoing board members, our Past-President, Chris Taylor, our Treasurer, Sandy Parent and our Membership Chair, Amy Michaud. All of three were among the nine founding members of ASTEE and their vision and hard work in their roles on the board cannot be understated.

I also want to thank all those who have served on ASTEE committees and the JASTEE editorial board and especially those who have submitted articles for publication in JASTEE. Due to my new role as President, I will be stepping down from my role as Journal Editor and Robyn Weimer will be assuming that role. I'm sure she will continue to improve the journal, probably at a much greater clip than I was capable of doing. I greatly appreciate Robyn stepping up to the plate.

I believe that ASTEE provides an excellent value to our members and am committed to increase benefits to our members during my term. These benefits include:

- A peer-reviewed scientific journal focused on the trace evidence discipline.
- Our forthcoming redesigned website which we believe will evolve to become a valuable resource to our members.
- Training opportunities. In 2012, ASTEE offered a cordage analysis workshop and in 2013 we are offering a post-mortem hair examination workshop, both free of charge to our members. In conjunction with the McCrone Research Institute, we are also offering a scholarship to one ASTEE member for free tuition to any 2013 McRI course offering.
- In 2013 we are introducing members-only message groups in hair examination, paint examination, glass analysis, fiber analysis and miscellaneous trace evidence to facilitate the exchange of information among our membership.
- Networking opportunities. In 2012, ASTEE hosted social events at both the AAFS meeting in Atlanta and the Inter-Micro meeting in Chicago. In 2013, we are planning to host events at the AAFS meeting in Washington D.C. and (assuming it gets funded) the NIJ Trace Evidence Symposium.

I hope that you will continue to support ASTEE in our evolution by participating in these events and functions. Trace evidence is the most varied and thus the most interesting of the forensic disciplines. Our responsibility to fully understand and master the wide ranging and ever changing disciplines that encompass trace evidence is a difficult task that we face head on each day. It is my hope that ASTEE provides our membership tools that make these challenges a little more manageable.

Best regards,
Christopher Bommarito, ASTEE President

Message from the Outgoing President

ASTEE Membership,

I want to let everyone know I am proud to have served as your president for 2012. In this last year ASTEE continued to grow both in membership and financially. In 2012 our social and membership drive events were a success and an ASTEE co-sponsored training event was a milestone for future training to benefit our membership. By the looks of our elections there is an interest in being active and desire to seek leadership roles in developing ASTEE's future. Your next president, Chris Bommarito, will have a strong team and foundation to build upon. I am confident he will lead ASTEE to great things next year.

As several of you may be aware the Trace Evidence Symposium has been on again and off again and the latest is that it is on again and scheduled for 2013. Several hurdles have been thrown at it such as the turmoil in the federal government on conference attendance and continuing fiscal issues. To assure the Trace Evidence community, the National Institute of Justice and its associates are strong supporters of Trace Evidence. If and when the symposium is to take place ASTEE will assist in notifying the trace evidence community. ASTEE and I are committed to partnering where we can to see how we can support this event. The one area I will also promise to continue to work on is the website and members only area which has been more of a challenge this year than I thought. If President Bommarito desires me to stay on the board as the ex-facto president I will continue to work on the transition of the website to a contracting company to manage our needs.

I want to thank Vinny Desiderio for his guidance and the board of directors and supporting committee leads for putting up with my long meetings, flurry of emails from time-to-time, and ideas to move ASTEE forward. I want to thank our sponsors both past and those that joined us this last year. It is always great to work with wonderful people, and I sincerely mean that, and your support of ASTEE allows for the success of not only the society, the field of trace evidence, but also the networking and continuing education of our members. Finally, I want to thank our members for continuing to support and believe in trace evidence and trace material analysis. Dedicated and active members are the foundation of any organization whether it's your place of employment or a society such as ours. Trace Evidence is alive and well with an increasing and stronger presence in forensic science and I believe this is in large part due to what the American Society of Trace Evidence Examiners has done in just its first three years.

Sincere Regards,

Chris E. Taylor, Outgoing President, ASTEE

ASTEE at a Glance

Hello ASTEE Members,

It is a nice time to reflect upon all that was accomplished in 2012, and to make our resolutions for what we hope to achieve in 2013. I hope that all of your New Year's resolutions include finding time to contribute to ASTEE and continue to grow and improve this important organization. The past year saw a lot accomplished under the leadership of Chris Taylor, who presided over two very successful social events at the AAFS meeting in Atlanta and Inter-Micro in Chicago. This past year also marked a milestone for ASTEE, as the first ASTEE-sponsored training opportunity was provided with free registration to ASTEE members. The class photo for this course can be found on page 7.

Several important awards were presented by ASTEE in 2012, including the Edmond Locard Award for Excellence in Trace Evidence, given to Thom Hopen, and a special award recognizing Vinny Desiderio for the critical role he played in founding ASTEE and leading it through its first few years. In addition to these very deserving individuals, we should not forget all of the time and effort put in by the ASTEE board of directors, who are all worthy of our gratitude. Of course ASTEE depended heavily on its generous sponsors, CRAIC Technologies, Gateway Analytical, IXRF, and Foster + Freeman, who made so many of our events possible. While it is nice to reflect on all that was accomplished last year, we will barely have time to catch our breath as 2013 looks to be a busy year with much work to be done. Already we are excited to announce that McCrone Research Institute, Mettler-Toledo and Leica have agreed to sponsor our organization in 2013, which should greatly strengthen ASTEE going forward.

ASTEE Social Event in February during AAFS Annual Meeting

As most of you who regularly check your email know, ASTEE will be holding a reception on Tuesday February 19th (during the AAFS meeting) at the National Museum of Crime and Punishment which is located at 575 7th St. NW in Washington, DC. The event will begin with a museum tour from 6pm-7pm and then a reception from 7-9pm in which heavy appetizers and refreshments will be served. The event is free to all ASTEE members. Guests who are not ASTEE members will be charged a $40 fee (payment via check or PayPal must be received by ASTEE on or before Friday, February 15).

The museum is very close to the Gallery Place Chinatown station of the DC metro system so getting there from the Marriott Wardman Park Hotel is easy! Many thanks to CRAIC Technologies for providing extra funding to allow us to host the event at such an appropriate venue for our group!! Join us for what proves to be a fun evening of social networking with trace people from around the globe! Space is limited so please RSVP to Cassandra Burke (cburke@baltimorecountymd.gov) ASAP if you would like to attend. We will not be able to add anyone to the event at the last minute at this particular venue, so please do not wait until you are in Washington to try to RSVP.

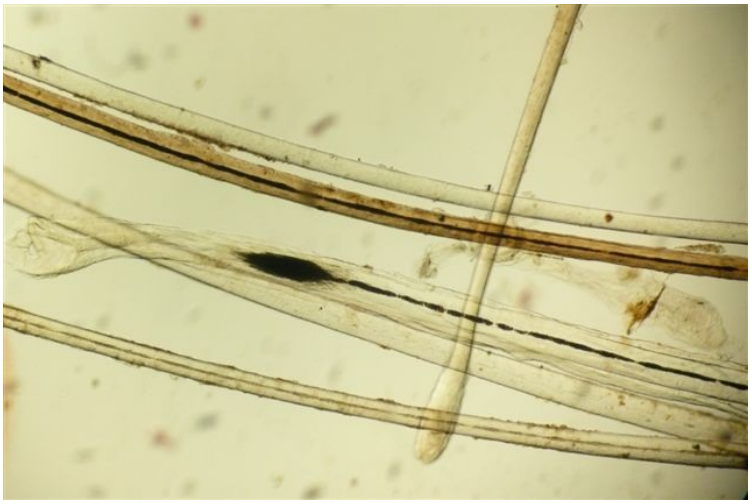
If you would like to check out the link to the museum, please go to: http://www.crimemuseum.org/.

(Cont. on Page 5)

ASTEE at a Glance *(Cont. From Page 3)*

ASTEE Training Event in February 2013

In addition to the social event that will coincide with the AAFS Annual meeting in Washington, D.C., ASTEE will be offering its second training opportunity that week. A workshop on the microscopic identification of postmortem root banding of hairs will be held at the Smithsonian Institution on Tuesday February 19, 2013. This workshop will include lectures from forensic hair examiners and hands on microscopy sessions. For further information or if you are interested in attending, please contact the education committee chair Sandra Koch at Sandra.koch@ic.fbi.gov.



ASTEE Elections 2012

It is with great pleasure that we announce the 2013 ASTEE Board of Directors:

President: Chris Bommarito
President-Elect: Andrew Bowen
Treasurer: Scott Maye
Secretary: Sandy Koch
Executive Secretary: Melissa Balogh
Director: Cassandra Burke
Director: Jenny Smith
Director: Larry Wayne

As always, the board will be looking for motivated individuals to help move the organization forward. If you have any ideas on how ASTEE can serve the trace community better or you would like to get involved, please be sure to let any one of the individuals listed above know. For those of you interested, detailed election results can be found on page 6.

(*Cont. on Page 6)*

ASTEE at a Glance *(Cont. From Page 5)*

ASTEE Elections 2012

Office of President-Elect

Andy Bowen	205 (98.6%)
Write-in	3 (1.4%)

WRITE-INS

Cheryl Lozen	1 (0.5%)
Jeff Dake	1 (0.5%)
Mark Ahonen	1 (0.5%)

Office of Treasurer

M. Scott Maye	210 (99.5%)
Write-in	1 (0.5%)

WRITE-INS

Sandy Parent	1 (0.5%)

Office of Director

J. Graham Rankin	22 (10.6%)
Katherine Igowsky	68 (32.7%)
Larry Wayne	82 (39.4%)
Sandra Hartsock	36 (17.3%)
Write-in	0 (0.0%)

JASTEE Update

Now that Chris Bommarito will be taking on all of the responsibilities associated with being President of ASTEE, he is passing the JASTEE Editor torch to a very capable Robyn Weimer. As with most journals, JASTEE is always on the lookout for high quality contributions. If you have been sitting on a great idea for a paper, or if you presented at one of the past few trace evidence symposia but have never written up your paper for publication, now is the time to act. Everyone benefits when these papers are published and shared with the broader community. We have big plans for JASTEE, but we cannot do it alone, so get writing, and contact Robyn if you have any questions at Robyn.Weimer@dfs.virginia.gov.

(*Cont. on Page 7)*

ASTEE at a Glance *(Cont. From Page 6)*

ASTEE 2013 Awards

It is that time of year again, so we are looking for deserving individuals to be nominated for the Edmond Locard Award for Excellence in Trace Evidence, as well as for our $250 ASTEE Scholarship. If there is someone you know who has had a large impact on you and others in the trace evidence field by sharing their time, knowledge, and expertise, please consider nominating them for the Locard Award. See page 17 for details of the award. If you know of a student who has excelled in their studies and who is an aspiring trace evidence examiner, please consider nominating them for the scholarship award. Details are on page 16.

ASTEE Website

Big changes are coming to the ASTEE website in the near future. Chris Taylor has put quite a bit of effort into the website in the recent past, and his hard work will finally be revealed when the revamped www.astreetrace.org goes live. We realize that the website has not met its potential recently, but the new arrangement we have should change that. We anticipate that our website content will become a very useful resource for members and non-members alike, so please check our website often in the near future to see all of the progress and provide us with feedback if you have something to suggest.

Cordage Workshop September 2012

ASTEE sponsored its first training workshop that was offered free to ASTEE members this past September. The inaugural class photo is shown here. It is our intent to continue to offer similar opportunities to ASTEE members in the coming years.

(*Cont. on Page 8)*

ASTEE at a Glance *(Cont. From Page 7)*

ASTEE 2013 Committees

For the past several years many people have been working behind the scenes to further the cause of ASTEE on the various committees that have been put together to run much of the day to day business of the organization. We thought it would be good to share the names of all of the committee members with the rest of the membership. The names are below, with an asterix denoting the chair of each committee.

Audit:
Andy Bowen*
Meggan King
Jenny Smith

Awards:
Michelle Palmer*
Darrell Hall
Chad Schennum
Robyn Weimer

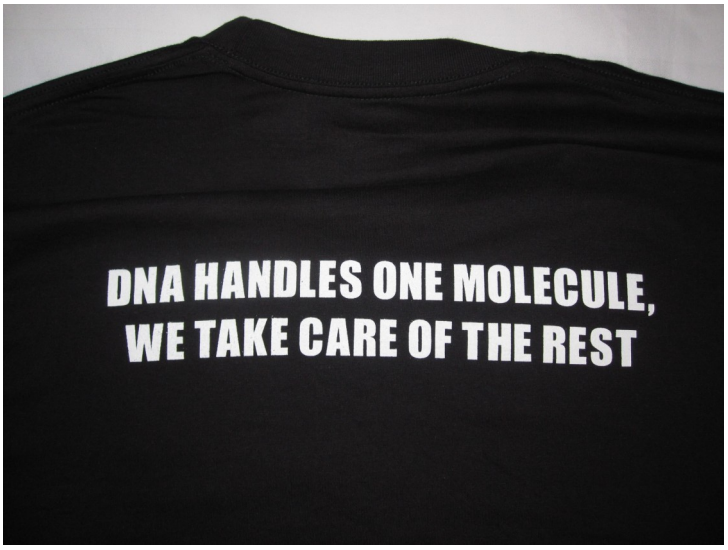
Bylaws:
Chris Taylor*
Rhonda Banks
Cassandra Burke
Kim Mooney

Communications:
Jeff Dake*
Jenny Smith

Education:
Sandra Koch*
Jeremy Morris
Sarah Walbridge-Jones

Membership:
Larry Wayne*
Lisa Schwenk

Nominating:
Melissa Balogh*
Vincent Desiderio
David Green
Glenn Schubert
Chris Taylor



Some Thoughts on the Locard Exchange Principle
Andy Bowen

The opinions below are solely those of Andy Bowen, and do not reflect the views of ASTEE .

When I was first introduced to trace evidence in graduate school, I was learned about the Locard Exchange Principle. I recently dug up my notes, and the handout I have from my introduction to forensic science class shows Edmond Locard's famous photograph in front of a bookshelf, with the following text "The Locard Exchange Principle: Objects or entities that come into contact with one another will mutually exchange some matter." My personal notes next to this slide include "the basis of trace evidence". I have since encountered this principle innumerable times, both in forensic science-related textbooks and in peer-reviewed articles in scientific journals. I grabbed a few books off of the shelf in my office, and the first three that included the Locard Exchange Principle had the following phrases:

"The *Locard exchange principle*, as it is now usually called, states that any time there is contact between two surfaces, there will be a mutual exchange of matter across the contact boundary." (De Forest et al. 1983)

"Locard's Exchange Principle states that any time two or more surfaces come in contact with each other, there is a mutual exchange of trace matter between the two surfaces." (Ladd & Lee 2005)

"One of the most important principles in forensic science, the exchange principle, was first formulated by Edmond Locard in 1928. This principle states that whenever two objects come into contact, there is always a transfer of material. In some cases, the amount of material transferred may be so small as not to be detectable or identifiable by available instrumentation. Also, the rate of loss of some material after transfer may be so great as to preclude detection a short time subsequent to transfer. The important point, however, is that a transfer of material invariably occurs." (Gaudette 1988)

I trust that all of this is quite familiar to the readers of this newsletter, who have undoubtedly encountered similar versions throughout their careers. I am writing this editorial because, at some point, these and many other variations of this principle began to bother me. I believe this happened shortly after the release of the NAS report, at a time when the science behind many traditional forensic disciplines was being challenged. Prior to detailing my concerns with the Locard Exchange Principle as written in the above examples, I think it would be useful to briefly discuss some of the history surrounding the Locard Exchange Principle.

Those ASTEE members who were fortunate enough to attend the Inter-Micro 2012 conference were treated to an excellent and detailed presentation on the history behind this principle by Dr. Patrick Buzzini of West Virginia University (Buzzini 2012). A decent treatment can also be found in a book by Dr. Kenneth Pye (2007), who spends several pages addressing the subject. The majority of the publications I have encountered that refer to the Locard Exchange Principle cite his 1928 article in Police Journal, or his series of three articles in the American Journal of Police Science in 1930. I must admit that I have not read the former, although Pye and Buzzini both suggest that there is no wording in the article that closely resembles "every contact leaves a trace". The latter three articles primarily discuss the various types of particles that can be encountered in dust samples and their value in forensic investigations. Nowhere in these three articles is there any statement similar to "every contact leaves a trace". The closest thing that I found in the 1930 articles is the following passage "…one is astonished that it has been necessary to wait until this late day for so simple an idea to be applied as the collecting, in the dust of garments, of the evidence of the objects rubbed against, and the contacts which a suspected person may have undergone. For the microscopic debris that cover our clothes and bodies are the mute witnesses, sure and faithful, of all our

movements and of all our encounters". These publications articulated an extremely important concept, namely that tiny particles (now called trace evidence) could be examined and used to provide evidence of prior contact between people, places, and objects. This is indeed the basis for modern trace evidence, and Edmond Locard rightfully deserves credit for his important contribution. I agree wholeheartedly with the writings of Locard. However, it seems to me that the contributions of Locard are not accurately conveyed by the Locard Exchange Principle as written in many contemporary forensic science textbooks and articles.

It is my opinion that trace evidence examiners (and indeed all forensic scientists) should be careful about how they phrase this principle when in a professional setting. The statement: "whenever two objects come into contact there is a mutual exchange of material" seems to me to be a precarious one. Absolute statements like this are dangerous for a very simple reason: it takes only one counterexample to render the statement false. An absolute statement like this should be made only if overwhelming evidence exists that it is true. What scientific evidence do we have that there is ALWAYS a mutual exchange of material when two items come into contact? Have any studies been conducted test this hypothesis? It seems to me likely that in some types of contact, any exchange of material that takes place is likely to go in only one direction, and is therefore not a mutual exchange. I would expect this whenever a hard, non-reactive solid comes into contact with a soft, reactive material. A knife being dipped into mustard would be one such example (I owe this example to Dr. David Stoney). I can also envision scenarios in which no exchange is likely to take place. If two solid crystalline materials, both with high hardness values (such as diamond and corundum), are brought into contact, I would personally expect no exchange of material whatsoever to take place. I have no evidence to support my hypothesis, but I expect that anyone who disagrees with me has as little evidence as I do to support their position. Since neither position is well-supported by evidence (at least that I know of), I would suggest caution in the phrasing used by people with either opinion.

I suspect that a little bit of insecurity about the absolute nature of the statement led to some of the qualifiers we occasionally find attached to the exchange principle, such as in the Gaudette chapter cited above. Specifically, he writes: "In some cases, the amount of material transferred may be so small as not to be detectable or identifiable by available instrumentation… The important point, however, is that a transfer of material invariably occurs." A qualifying statement like this may provide a simple explanation for a lack of transfer evidence in a specific case, to a defense attorney, for example, but it does not appear to me to be based on any scientific evidence. What evidence could possibly exist that undetected transfers in fact took place? They are by their very nature undetected, and therefore proof of their existence is lacking. I would argue that when no evidence of a transfer is detected after two items come into contact, we do not know if any transfer took place. It is possible that there was a transfer that we cannot detect, or it is possible that there was no transfer. We have no way of distinguishing between these two alternate hypotheses without further experimentation.

I am not alone in expressing some reservations about a literal interpretation of this principle. Dr. Kenneth Pye writes the following in his textbook on forensic geology: "the 'contact exchange principle' attributed to Locard is best regarded as a theoretical construct rather than a practical reality. There are many instances where contact takes place between two objects, but there is either no transfer of material between the two, or the traces are far too indistinct or short-lived to be of practical use in forensic examination…" I have also had personal communications with a number of trace evidence examiners who feel the same way.

If in fact the Locard Exchange Principle as written at the outset of this editorial is false, would it be a blow to the field of trace evidence, given that this principle is often described as the basis for our field? I personally do not think it would have any impact whatsoever. If anything, I would argue that the fact that some types of contact do not result in transferred material would make it even more significant when evidence of such transfer is detected (this might be evidence of a forceful contact, for example). In any given case being examined, what matters is that there is the possibility for a transfer of material to have occurred in that specific case, and that we have the ability

as trace evidence examiners to detect, recover, examine, and interpret the significance of this material. We have overwhelming scientific evidence to support this claim for a wide variety of common types of evidence. Transfer and persistence studies abound in the forensic science literature, including specific articles related to transfer, persistence, and detection of hairs, fibers, glass, soil, and more (Brewster 1985; Gaudette & Tessarolo 1987; Grieve & Biermann 1997; Hicks et al. 1996; Pounds & Smalldon 1975a; Pounds & Smalldon 1975b; Roux et al. 1996). These articles demonstrate that when two items come into contact, small particles and fibers can be transferred between them, and sometimes the transfer goes in both directions. These studies further demonstrate that these transferred materials can persist, often for significant periods of time, and that the methods of the forensic scientist enable the detection, recovery, and analysis of these transferred materials in favorable circumstances. This is a solid scientific foundation based on peer-reviewed scientific research, and it is more than sufficient to explain the significance of trace evidence recovered in any particular case.

I would argue that the published literature strongly supports the following version of the exchange principle (or some variation thereof): when two items come into contact, it is possible that materials will be exchanged between the items. In some cases we can detect evidence of this exchange of materials, providing support for the hypothesis that contact did take place. Perhaps most forensic scientists already think of Locard's principle this way, and I am unusual in interpreting the principle in a literal manner. If this is the case, perhaps we should all start writing what we mean more precisely in the new, post-NAS Report world to avoid any unnecessary criticisms by scientists and non-scientists outside our field (and to avoid confusing people like myself). For those of you who believe in a literal interpretation of Locard's principle as stated in my first paragraph, then I would suggest the publications currently being cited as references for this principle are insufficient by themselves. The statement that every contact involves a mutual exchange of materials requires more evidence to support it than several articles from 1928-1930 that do not even make this claim. Perhaps there is some evidence to support this hypothesis in the literature of other disciplines (physics, material science, etc.). If so, we would all be better off if these references could be widely distributed within our community and cited as evidence of this principle. If no such evidence exists, I think we are left with two options. The first would be to embark on research designed to test the exchange principle and (presuming it is true) become the source to be cited for all future articles claiming that every contact leaves a trace. Or, absent new research, we can settle for a more cautious statement similar to the one at the top of this paragraph (one that is already well-supported by existing evidence, at least in my opinion).

Please don't get me wrong - I don't advocate changing the motto of ASTEE to "some contacts leave a trace". We can cut ourselves some slack when we use language colloquially, and I am quite fond of the ASTEE logo just the way it is. However, when providing testimony in a court of law, writing materials destined for publication, or giving presentations at professional meetings, we should be very precise in our choice of language, and strive to ensure that every statement we make is well supported by scientific evidence.

Whether you agree with my opinions or not, I hope that I have made you think a little bit more about Locard's Exchange Principle, since it is often invoked as the foundation of trace evidence. It is probably fair to argue that I am being a little bit picky (it is one of my faults). However, this is not a random sentence I plucked from an obscure article; it is found in the introductory paragraph of countless books, chapters and articles on trace evidence, and often described as the foundation of our discipline. I hope we can all at least agree that it is important that the things we say and the things we write are factually correct, especially things that we assert to be at the heart of our discipline. If this is in fact important, then we need to choose our words carefully to ensure that what we say and write can stand up to scientific scrutiny. If any reader has a comment or criticism to share, please feel free to send me a letter to the editor (andybowenva@hotmail.com). I have already had some spirited debates on this topic with colleagues whom I greatly respect, so I expect some differences of opinion to exist. If they do, I will be happy to include any such letters in the next newsletter, along with a response if appropriate.

References

Brewster, F. et al. (1985) The retention of glass particles on woven fabrics. Journal of Forensic Sciences 30(3): 798-805.

Buzzini, P. (2012) Role of Edmond Locard in the History of Forensic Science: "Every Contact Leaves a Trace" Dissected. Presented at Inter-Micro Conference in Chicago, IL on July 11, 2012.

De Forest, P.R. et al. (1983) Forensic Science: An Introduction to Criminalistics. McGraw-Hill, Inc.: New York, NY.

Gaudette, B.D. (1988) The Forensic Aspects of Textile Fiber Examination. In Saferstein, R. (Ed.) **Forensic Science Handbook Volume II**. Prentice Hall: Englewood, NJ.

Gaudette, B.D. and Tessarolo, A.A. (1987) Secondary transfer of human scalp hair. Journal of Forensic Sciences 32 (5): 1241-1253.

Grieve, M.C. and Biermann, T.W. (1997) Wool fibres – transfer to vinyl and leather vehicle seats and some observations on their secondary transfer. Science & Justice 37: 31-38.

Hicks, T. et al. (1996) Transfer and persistence of glass fragments on garments. Science & Justice 36: 101-107.

Ladd, C. and Lee, H.C. (2005) The Use of Biological and Botanical Evidence in Criminal Investigations. In Coyle, H.M. (Ed.) **Forensic Botany: Principles and Applications to Criminal Casework**. CRC Press: Boca Raton, FL.

Locard, E. (1928) Dust and its analysis. An aid to criminal investigation. Police Journal 1: 177-192.

Locard, E. (1930a) The analysis of dust traces. Part I. American Journal of Police Science 1: 276-298.

Locard, E. (1930b) The analysis of dust traces. Second Part. American Journal of Police Science 401-418.

Locard, E. (1930c) The analysis of dust traces. Part III (Conclusion). American Journal of Police Science 1: 496-514.

Pounds, C.A. and Smalldon, K.W. (1975a) The transfer of fibres between clothing materials during simulated contacts and their persistence during wear. Part I – Fibre transfer. Journal of the Forensic Science Society 15: 17-27.

Pounds, C.A. and Smalldon, K.W. (1975b) The transfer of fibres between clothing materials during simulated contacts and their persistence during wear. Part II – Fibre persistence. Journal of the Forensic Science Society 15: 29-37.

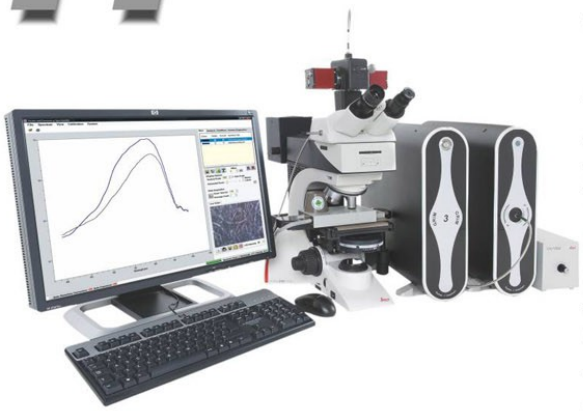
Pye, K. (2007) **Geological and Soil Evidence: Forensic Applications**. CRC Press: Boca Raton, FL.

Roux, C. et al. (1996) Fiber transfer experiments onto car seats. Science & Justice 36: 143-151.

ffTA

Modular trace evidence analysis system

- Fluorescence Imaging
- Raman spectroscopy
- GRIM® Glass RI measurement
- Image processing
- UV Micro-spectroscopy



A new concept from Foster + Freeman...

The ffTA is a powerful and flexible multifunctional system that provides the crime laboratory with a range of analytical facilities using a single microscope and PC.

Built around the Leica DM2500 laboratory microscope the modular design of the ffTA allows the end user to build an instrument that meets their own specific laboratory requirements with the option of retro-fitting new modules to expand the system's capabilities when required.

The multi-functional ffTA can be seen to improve laboratory efficiency while at the same time providing an economical resource designed to match your laboratorys requirements.

ecco

Laser Induced Breakdown Spectrometer

Versatile Foster + Freeman ECCO adds LIBS to the forensic examiner's arsenal.

ECCO is a new turnkey system from Foster + Freeman designed to give elemental analysis of trace evidence such as glass, metals, paint, fibres, tapes, minerals and fillers, etc. as well as rapid screening of GSR by laser induced breakdown spectroscopy (LIBS).

LIBS is a relatively new technique for elemental analysis which offers significant advantages in speed, sensitivity and cost effectiveness over other processes such as XRF, SEM, and mass spectroscopy.

Elemental comparisons with ECCO are fast and simple to perform, require minimal sample preparation and give immediate read out of the major, minor and trace elements down to concentrations of low parts per million.

- Automatic identification of elements
- Casework and research modes of operation
- Dedicated software for routine analysis

US Sales Office: Foster + Freeman USA Inc. 46030 Manekin Plaza, Suite 170, Sterling, VA 20166 USA ☎ 888 445 5048 usoffice@fosterfreeman.com

Call for Papers
INTER/MICRO 2013

July 15–19 at McCrone Research Institute in Chicago

McCrone Research Institute is hosting the 65th annual Inter/Micro at its facility in Chicago. Since 1948, participants of this conference have offered informative research presentations in all aspects of microscopy, methods and materials. Many attendees believe that Inter/Micro is the best meeting due to the quality of the multidisciplinary technical talks, the experts in all areas of microscopy who attend, and the event's friendly atmosphere.

Trace Evidence • Criminalistics
Forensic Microscopy

McCrone Research Institute cordially invites you to participate in Inter/Micro 2013 by giving a presentation of your research paper.

Other subjects include:
Micro-analytical methods: SEM-EDS, TEM, FTIR, Raman • Microscopes: confocal, fluorescence, scanning, polarizing, etc. • Photomicrography and digital imaging • Environmental, hazardous dusts, aerobiology • Pharmaceuticals • White powder and bioterrorism threats • Industrial microscopy, crystallography, mineralogy • Art conservation and authentication • Microscopy education • Geographical sourcing • Microscopy tricks of the trade • Microscopy education • Historical topics • Resources, books, atlases, databases

Presentations will be held at McCrone Research Institute, 9 a.m.–5 p.m. on July 15–17.

Deadline to submit titles and abstracts: April 15, 2013.

Sponsorship and Exhibitor Opportunities

Inter/Micro attracts influential scientists who look to exhibitors as sources of information on equipment, techniques and supplies.

There are several events available for sponsorship at Inter/Micro 2013, including a wine and cheese reception, social hours and coffee breaks. An option for an exhibitor booth is also available.

Complete exhibition information is available in the Inter/Micro 2013 section at www.mcri.org or by contacting Julie Antia at internicro@mcri.org.

Speakers receive a $75 registration discount!

For abstract guidelines, registration and hotel information, visit the Inter/Micro 2013 section at www.mcri.org, or contact us at 312-842-7100 or internicro@mcri.org.

American Society of Trace Evidence Examiners Scholarship Award

Criteria: This scholarship of $250 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 March 31, 2013. 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

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

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 March 31, 2013. 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

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

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:

Michelle Palmer
Virginia Department of Forensic Science
6600 Northside High School Road
Roanoke, VA 24019
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

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

Dear ASTEE member,

Please remit the sum of $20.00 to ASTEE in payment of your membership dues for the 2013 calendar year by March 31, 2013. Please add a $5.00 late fee for payment received after March 31, 2013. 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 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 or 804-588-4168.

WWW.ASTEETRACE.ORG