

# Under the Microscope

Vol. 2, No. 1 Newsletter of IADE Spring 2016

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Annapolis, MD



## ADHERING TO STANDARDS Editorial



In 1997 a group of private and government document examiners established the Scientific Working Group for Document Examiners known as SWGDOC. For the first two years the group was known as the Technical Working Group for Questioned Documents. It was renamed in 1999 and reorganized in 2001. SWGDOC published their standards through the American Society for Testing and Materials International known as ASTM. Many private examiners including myself joined this Questioned Document Committee. In 2012 SWGDOC withdrew from ASTM and shut down the Questioned Document Committee. This occurred after a complaint was filed based upon the Standard for Minimum Training Requirements for Forensic Document Examiners since it served a special interest group. SWGDOC now publishes the Standards which can be found at [www.swgdoc.org](http://www.swgdoc.org). The Training Standards need to be broadened.

### Standard for Minimum Training Requirements for Forensic Document Examiners

This standard provides minimum requirements and procedures that should be used for the fundamental training of forensic document examiners (SWGDOC Standard for Scope of Work of Forensic Document Examiners). The training program shall be the equivalent of a minimum of 24 months full-time training under the supervision of a principal trainer.

Modern methods of communication have changed the way that we interact with our world. This is most obvious in the education field where some college students are taking all of their classes via the Internet without ever having to enter a classroom. The degrees administered to the students have the same value as degrees from colleges where all of the students actually attend classes.

However, there are many document examiners who adhere to the requirement for document examiners to spend "a minimum of 24 months full-time training under the supervision of a principle trainer." What is their program? According to sworn testimony given by document examiners who took two-year training programs, their training consists of reading books in the field, watching document examiners examine documents and then they are given cases that come into the laboratory and they are told to examine them and give opinions which are then discussed with their mentors. They also participate in mock trials. They work on the cases that come into their laboratory. It takes two years to cover all of the various types of cases. From their testimony, it is obvious that there is no standard training program. Each person's training is different.

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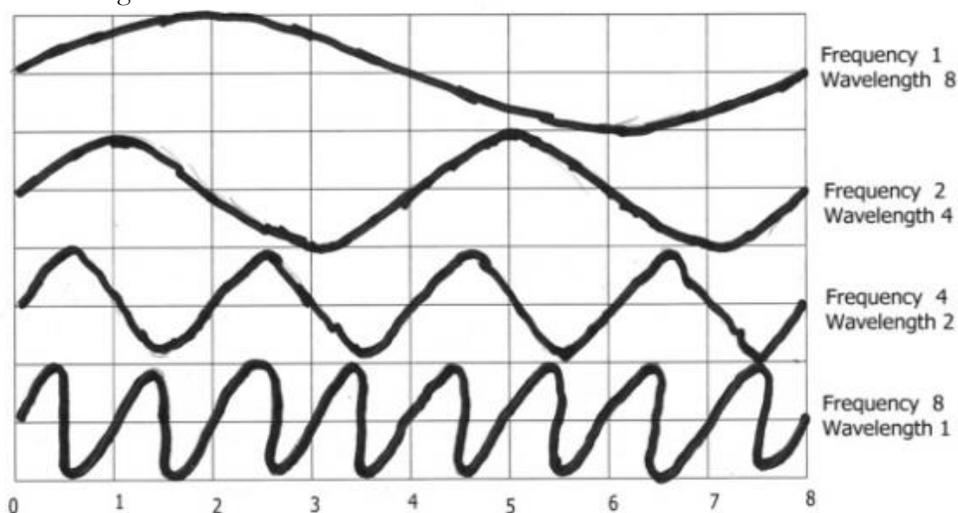
# HIGH TECH SOLUTIONS

## Which End is UP? IR or UV

By William Koppenhaver

I am still getting questions from examiners trying to understand why IR light is BELOW the Visible Light Spectrum and not above it. After all, isn't 1000 nm above 400 nm which is the wavelength of UV light? The answer is NO!! A wavelength of 400 nm is actually ABOVE a wavelength of 1000 nm. To understand why, follow along with the two exhibits as they explain that "Wavelength" is an "INVERSE" measurement system.

That is a numbering system where as the frequency of light increases the numerical value and wavelengths decreases. Think of a seesaw. As one end goes up the other end has to go down. Now think of light frequency as going from a low of "1" to a maximum of "8". As the frequency increases the Wavelength (one complete cycle) decreases from "8" to "1". See the first figure.



Conventionally Numbered data is shown with increasing values shown toward the Top or Right of the starting point (See numbers along bottom of graph). The measurements of "Frequency" and "Wavelength" are the inverse of each other. That is as Frequency increases the Wavelength Decreases in numerical value. See the relationship between Frequency and wavelength on this chart. The Frequency of light is not used as the measurement because of the step from  $10^{14}$  to  $10^{15}$  Hz in the middle of the visible spectrum that would cause unnecessary confusion in the duplication of values. To avoid this problem "Wave Lengths" are used. This creates the problem of having the higher values 700 nm on the left (bottom or left) and the lower values of 400 nm on the right (top or right). See the vertical picture of the Electromagnetic Spectrum. To correct for this backwards numbering most textbook illustrations swap the ends of the spectrum so that the Wavelengths are in normal numerical order. This leads the viewer with an erroneous impression that the IR frequencies are to the (right or above) the visible spectrum when they are actually to the (left or below) the visible spectrum in terms of frequency. See the horizontal illustration that shows the light spectrum swapped with the higher frequencies on the left and the lower frequencies on the right. Since the inverse of frequency is Wavelength this puts the lower wavelength values on the left and the higher wavelength values on the right in a normal numerical progression. Stated as simply as possible in terms of FREQUENCY IR is BELOW Visible light. In Terms of WAVELEGTH IR is ABOVE Visible light. The unit of measurement (Frequency or Wavelength) must be defined before Above or Below has any relevant meaning.

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# *The Book Shelf*



## ***Scientific Examination Of Questioned Documents***

By Ordway Hilton

As Reviewed By  
Bruce Redding, CFDE

The Scientific Examination of Questioned Documents was written to be a guide to all aspects of a questioned document for attorneys, investigators, forensic document examiners, field investigators, trial attorneys and anyone else interested in the scientific examination of questioned documents. The book addresses both civil law practice as well as criminal cases.

Ordway Hilton addresses the scientific aspects of questioned documents, the methodology, instruments used such as the camera and various kinds of microscopes and magnifying glasses, probability of accidental coincidence, nonidentity of source, fundamental differences and/or similarities, and natural variation. He also discusses the document examiner's opinion, that is, the summary of the examiner's conclusion. The opinion must be clear, convincing and understandable to the trier of fact or a jury to be acceptable in court. In chapter one, "Basis of Effective Court Presentation", Hilton states that document examiners are generally required to give testimony regarding their opinion.

Hilton writes about the various types of documents that may be examined, such as handwritten, typewritten, altered documents, pictures, and other reproductions like currency, art work, contracts, leases, wills, and many other types of documents with problems.

The forensic examiner is exposed to materials used, alterations, damaged documents, accidental markings, and Foreign Traces. There are chapters in the book discussing comparisons with known material, handwriting identification, signature identification, and forgery, including hand lettering and numerals.

There are extensive sections committed to typewriter identification, manufacture, typeface, irregularities, alignment, and other differences attributable to various typewriters made in the late nineteen and early twentieth century. Mr. Hilton addresses other mechanical devices like check writers and mechanical impression machines.

This book serves as a wonderful reference book for machines made prior to 1982 and before modern day computers with their advanced ability to copy a digitalized image and make it look authentic.

Unfortunately, The Scientific Examination of Questioned Documents, printed in 1982 with a 2<sup>nd</sup> edition printing in 1984 and a revised addition in 1993, is now out of print.



## ***Membership***

### **2016 Information**

(February 1, 2016 through January 31, 2017)

Application Fee \$25.00

Dues \$90.00 Individual  
(Annual – Prorated)

Lab \$90.00 First Individual  
\$45.00 Additional Individuals

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Deadline for next issue

May 18, 2016



The International Association of Document Examiners (IADE) was incorporated on January 7, 2015 in Maryland. Kathie Koppenhaver is the resident agent and President of the organization. Sylvia Kessler is Vice President, Marcy Word is Secretary, and William Smith is Treasurer.

# Q & A

**LAST MONTH'S ANSWER:** No, it is my best professional judgment based upon the application of the principles of handwriting identification utilized in this case.

OR

It is my professional opinion based on my experience and training.

**THIS MONTH'S QUESTION . . .**

**As an expert witness are you engaged to provide expert insight and opinions to support your client's case during testimony?**

Answer will be in the next issue.

If you would like to submit an answer, contact the editor.

See page 3.

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A structured class covering all the types of problems encountered by a document examiner makes more sense and is more practical for private examiners. Standards need to be set for the content of training.

There is always more than one way to learn any subject. The key word is *learning*. There are many different methods of teaching, but they are only effective if the students learn from the methods used. Modern structured distance learning courses are effective for learning how to make determinations about documents.

All document examiners need training from knowledgeable sources. While it is possible to establish a business as a document examiner without training, it is not practical and not fair to the public. I recommend that all document examiners get some formal training from reliable sources.

Currently there are several courses available. This includes, Reed Hayes course and my course. Also, the University of Baltimore has established a one-year full-time certificate program for document examiners and East Tennessee University offers a postgraduate course in document examination. Hopefully, additional opportunities for training will arise.

*Kathie*

## PROFESSIONAL IMAGE WORKSHOP

I completed the *Professional Image Workshop* held in Orlando, Florida. It was exceptional, valuable, and a powerful event.

This class was so important. I needed to know everything that was in this class. Kathie covered all the bases from what to take to court, the importance of a pretrial conference, the practicality of the court book, secrets to remain calm while on the stand, the best way to answer certain questions under cross examination, and many important topics.

One important topic for me was the improvement of my CV. The CV is your life story in this forensic examination work, and my CV was not ready to be published to attorneys. Now it is so much better, it makes me look better.

Kathie is the consummate teacher. Her wisdom and talent in teaching what is needed in this business is amazing. I feel so much more confident now. It pays to be sure that I now know how to move about the courtroom and testify on the stand. I can move forward now and go out and do the best job possible.

Bill's teaching was important as well. The technical aspect is a mystery to me and he helped me in several ways, mostly in how to use the microscope.

Bob Baier, was amazing during mock trial. He really had me going. He had me under fire, but it's better from him than an actual opposing attorney! I did learn important techniques and I appreciate that very much.

I hope, the *Professional Image Workshop* continues. Everyone can gain knowledge from it and improve the quality of their work.

I wish them all the best,  
**Jan Raney**



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# THE IMPORTANCE OF ERRORS AND OMISSIONS INSURANCE

By William B. Smith, CFDE

Many document examiners fail to see the importance of Errors and Omissions Insurance until they receive the paperwork announcing that they are being sued. While it is known that expert witness testimony is almost always immune from suit for defamation, negligence, and the like from adverse parties<sup>1</sup>. There are cases where the attorney you worked with could bring a negligence claim against you if the case settled unfavorably against the attorney's client resulting in financial loss.<sup>2</sup>

Also, you are not immune from criminal perjury liability, professional disciplinary actions, or sanctions from your professional association<sup>1</sup>. The costs involved in protecting you and your business could very well be a financial disaster. There are not many of us that could survive such a financial attack on ourselves or our businesses. This is where Errors and Omissions Insurance (E&O), also known as Professional Liability Insurance, can make the difference between survival and bankruptcy. While suits against us are rare, it only takes one to wipe out years of work and financial stability. Having E&O Insurance with adequate policy limits is an essential part of the business.

**What is E&O Insurance?** This insurance protects us if a client alleges that you were professionally negligent or failed to perform professional duties, or in the case of the failure of your work to perform as promised.<sup>3</sup> The E&O policy will take care of judgments, attorney fees, court costs and settlements up to the limit of the policy that might otherwise bankrupt a company or individual. Even if the allegations are found to be groundless, it is still very expensive to provide a defense against a suit. E&O Insurance will help protect you in these circumstances.<sup>4</sup>

Remember that E&O Insurance coverage is not covered in a Commercial General Liability Insurance policy. It does not cover you for errors, contract disputes, or any Professional Liability Issues. Not having E&O Insurance is taking a serious risk, like a doctor not having Malpractice Insurance.<sup>3</sup>

**Who needs E&O Insurance?** If you provide a service to a client for a fee, then you have E&O exposure.

**Why do I need E&O Insurance?** We are all human and we make mistakes. No one is perfect. Mistakes can be made even with the best operational practices in place and they would not be covered in a General Liability Insurance Policy. Even if you are not at fault, litigation is time consuming and expensive.<sup>5</sup>

**When do I buy E&O Insurance?** Preferably before you need it.

**Where do I find E&O Insurance?** Most insurance companies provide this type of insurance. In addition to suitable limits, make sure that you have an adequate retroactive date of the policy. This will cover your report/testimony from prior years. The farther back your retroactive policy date is, the more coverage you will have should an event from several years ago be brought as a suit against you.<sup>4</sup> Claims made before the retroactive date would not be covered.

Your insurance agent will be of help when reviewing the provisions of the E&O policy. Remember that there is no industry standard E&O policy. Each insurance company has their own provisions for their policy as it would apply to your business so be sure to review the policy in detail with your agent. Some companies include the defense expenses within the limit of liability. Some exclude punitive damages. Make sure you read the provisions of the policy very carefully and completely understand the limits of the policy. Make sure that the amount of liability limits are sufficient. Costs of policies vary from company to company.

**What can I do?** To help mitigate claims against you, here are some steps that you can take. Have a written contract that includes:

- The scope of the services to be provided, the retainer amount, what the fees will be and the time needed to do the case.
- What occurs if client fails to pay promptly.
- What the client's counsel needs to do when the qualifications or methodology (Daubert/Frye) of the

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document examiner are challenged in an attempt to limit or disqualify the document examiner from testifying.

- Have quality control procedures in place and use them.
- Communicate throughout the case and keep the expectations realistic.<sup>1</sup>

Also, the letter of opinion or expert report is a critical part of the success of the expert. It should be written as a clear, understandable, and defensive statement:

- Identifies the legal question early in the report.
- Attributes information to sources.
- Sufficiently describes the basis for one's reasoning and conclusions.
- Writes in an impartial tone rather than an advocacy based one.
- Avoids unnecessary technical language.

The report gives all the necessary information; what you did, how you did it, how you interpreted your findings, and the reasons for your conclusions which you are prepared to provide in testimony.<sup>1</sup>

The more comfortable you can make the underwriter of the policies and procedures within your business, the more likely they are to give you a competitive price on your policy and provide the coverage needed.<sup>4</sup>

*Website References:*

1. [www.testifyingtraining.com/expert-witness-liability/](http://www.testifyingtraining.com/expert-witness-liability/)
2. [www.leglmalpracticecenter.com/expert-witness-malpractice-insurance.html](http://www.leglmalpracticecenter.com/expert-witness-malpractice-insurance.html)
3. [www.brunswickcompanies.com/pl-expert-witness-errors-omissions-insurance.html](http://www.brunswickcompanies.com/pl-expert-witness-errors-omissions-insurance.html)
4. [www.nationwide.com/business-errors-and-omissions-insurance.jsp](http://www.nationwide.com/business-errors-and-omissions-insurance.jsp)
5. [www.insurancejournal.com/magazines/features/2004/07/19/44745.htm](http://www.insurancejournal.com/magazines/features/2004/07/19/44745.htm)

## HANDWRITING ENCYCLOPEDIA

By Katherine M. Koppenhaver, CFDE

The Handwriting Encyclopedia needs your entries. I have prepared the first entry. It took me about an hour to research the topic and prepare the entry. I was surprised to learn the meaning of the term as I thought it referred to penmanship systems that used abc letters, but I was wrong. I am attaching the file so that you can see how the entries should be written. Please send your completed entries to Warren Spencer at ([warren\\_spencer@yahoo.com](mailto:warren_spencer@yahoo.com)). If you need my assistance on completing your entry, send it to me and I will help you. Your entry needs to contain a definition of the word and an illustration.

Encyclopedia Entry:

### **Abecedary**

Noun: Pertaining to the alphabet, listed in alphabetical order, from the first four letters of the alphabet. The alphabet written out as in a penmanship book. It may also refer to an inscription consisting of letters of an alphabet carved on a wall. An abecedary was typically found in churches and monasteries. They were believed to be medieval teaching aids for the illiterate.

Earliest reference: The Psalms of the Old Testament where each stanza began with successive letters of the Hebrew Alphabet.

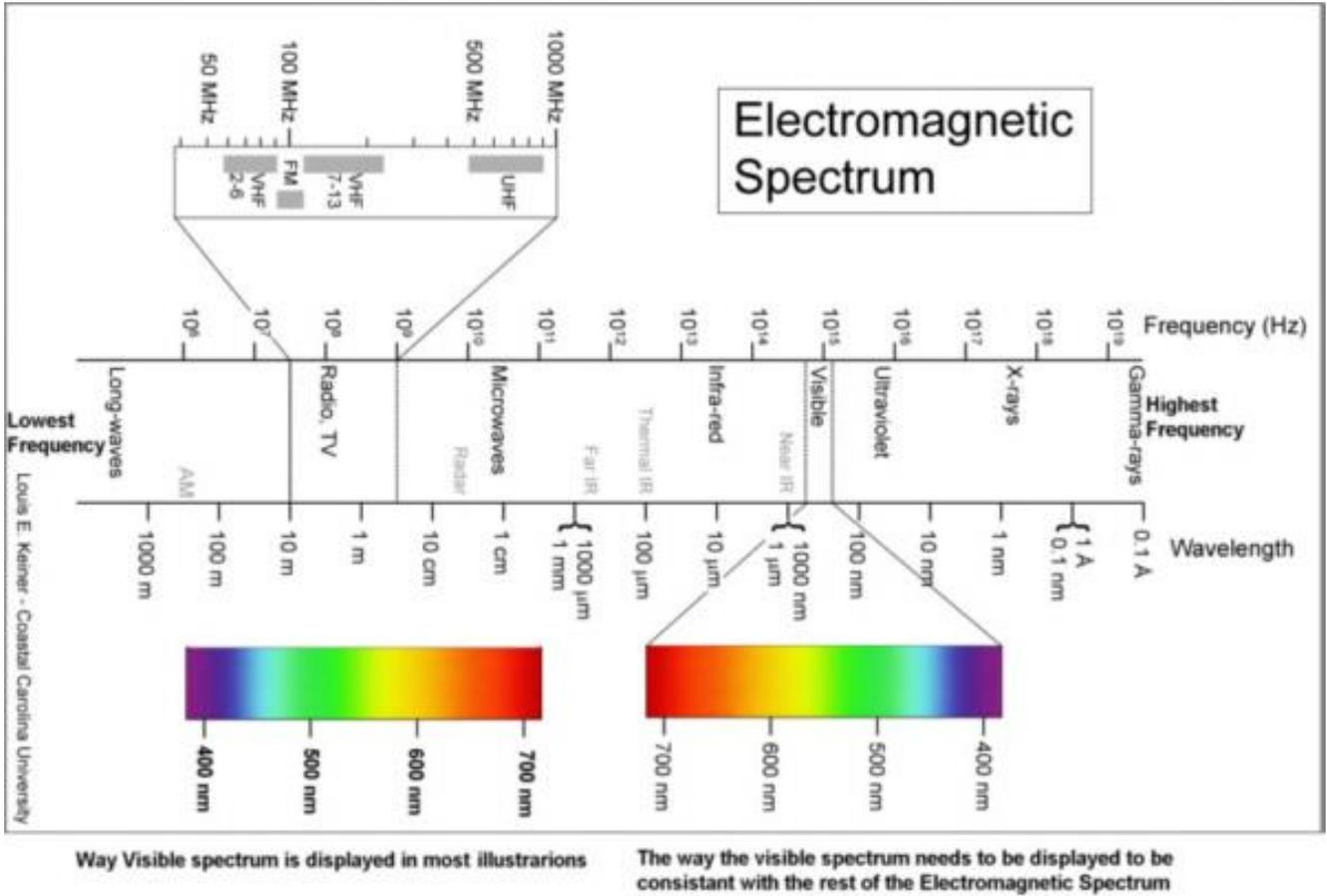
ABCDEFGHIJKLMNOPQRSTUVWXYZ

Related Words:

**Abecedarian** is one that teaches or learns the alphabet or the fundamental information about any subject.

**Abecedarium** refers to an inscription consisting of the letters of the alphabet in alphabetical order.

**Abecedarius** writing occurs when each section starts with the letters of the alphabet in order. An example would be a poem where each sentence begins successive letters of the alphabet.

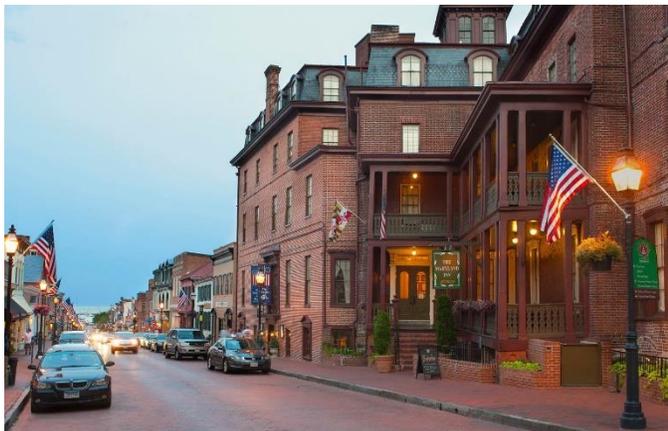


## 2016 Annual Interactive Seminar and Workshop

Due to the fact that 2016 is an election year, we found it necessary to move our seminar to another location. The Board chose to move the seminar to Annapolis, Maryland.

Annapolis, the capital city of Maryland, is a quaint old-fashioned city of colonial charm with brick streets and houses that date back to the beginning of our country 350 years ago. St. John's College was founded in 1696. The city was named after Princess Ann of Denmark and Norway who became the Queen of Great Britain in 1702. Annapolis was incorporated as a city in 1708.

Annapolis served as the seat of the Continental Congress in 1783–84 and was the site of the 1786 Annapolis Convention that called for the Constitutional Convention held the following year. Annapolis became the temporary capital of the United States after the signing of the Treaty of Paris in 1783. The United States Naval Academy was founded in 1845 and is located there.



Annapolis is located where the mouth of the Severn River meets the Chesapeake Bay. Annapolis is a sailing and boating capital. Eclectic shops abound. A large variety of restaurants offer all types of food. Maryland is the home of the blue crab and many delicious crab dishes are also available. Annapolis combines the culture of the early settlers with modern conveniences. Everything is within walking distance. Because there is so much to see and do, consider coming early or staying after the seminar to enjoy some of the offerings of this quaint city.