Registration Form—Optics, Lighting and Visibility Course

68508 Lincoln NE

TELEPHONE:

Association of Technical

student for Midwest

per

\$945.00

Fee:

COMPANY/AGENCY:

ADDRESS

student for

per

\$995.00

Accient Investigators members

CITY:

of Technical **Association** non-Midwest Mail this registration form with check made payable to

member

Accient Investigators

13879 Rue Charlot Lane

C

McCordsville, IN 46055-9104

Lincoln Police Department

NOTE— Tuition must be paid in full in order to reserve

Lancaster County Sheriff's Office

ACTAR Credits

This course will be submitted to ACTAR for consideration for continuing education units. The list of accredited accident reconstructionists in attendance will be submitted to ACTAR at no additional cost to the student.

COURSE DETAILS

The course will consist of three 8-hour days with a lunch

Rain or fog will not impede that work unless lightning or

Class will start on Monday and Wednesday at 8:30 a.m.

and end at 5:00 p.m. Lunch break from noon to 1:00 p.m. On Wednesday, class will start at noon and end at

Certificates will be provided at the end of the class.

Fee covers course materials on digital media, coffee,

break snacks and certificate. Meals and lodging ac-

CANCELLATION POLICY

Please notify us if you need to cancel by Oct. 1, 2022 and we will refund your entire fee. You may enroll a

substitute at any time before the course starts. Cancel-

lations received after that date and no-shows will pay a

The course will be limited to no more than 30 students unless specific permission is given prior to Oct. 1, 2021

The course will not be taught if less than 15 students enroll. All enrollment fees will then be refunded.

commodations are the students' responsibility.

break and two coffee breaks (mid-morning and mid-

afternoon). The second day will consist of an afternoon/evening session (to do field work in the dark.)

other dangerous conditions are present.

about 10:00 p.m.

fee of \$100.00.



Optics, Lighting, and Visibility for the Forensic Investigator

Instructor James S. Sobek, P.E.



Clearly Visible Presentations, LLC



October 10-12, 2022 Lincoln, NE 68508 Sponsored by Lancaster County Sheriff's Office & Lincoln Police Department





Contact: Jim Sobek, P.E.

Clearly Visible Presentations, LLC 317-966-7316 ClearlyVisPres@aol.com

or

Amy Lesan, ACTAR 2319 **Lancaster County Sheriff's Office** ALesan@Lancaster.NE.gov

COURSE TOPICS

- The Physics of Light
- Photometry (principles and units)
- Basic Optics: Reflection, Transmission, & Absorption
- The Human Vision System
- Headlight Performance & SAE Standard J1383
- Atmospheric Influences
- The Object
- Shadows
- Filters and Polarizers
- Retro-reflective Materials
- Fluorescence
- Digital Photography & Videography
- Sun Angle, Glare and Why Moonlight Doesn't Matter
- Night work, a.k.a. "Playing in Traffic in the Dark"





Low Beam High Beam COURSE BENEFITS

- Learn how the human vision system works
- Learn how to use a light meter to measuring illuminance and luminance.
- Understand headlights and their performance limits
- Recognize how viewpoint may change visibility
- Understand how to photograph the scene at night

WHO SHOULD ATTEND?

- Crash investigators and reconstructionists
- Crime scene investigators/photographers
- Physicists/engineers/other professionals

PRE-REQUISITES

Students are expected to be familiar with standard accident investigation procedures. Accident reconstruction experience will be helpful but is not required.

A familiarity with photography and camera technology will be helpful, but again is not required.

Power for laptop computers will be available. Students are encouraged to bring cameras, tripods, light meters, etc.

LODGING: Take I-80 East to Exit 403, 27th Street where there are several hotels.



Or, the Downtown/Haymarket area has good night life and is withing walking distance to bars and good restaurants.

INSTRUCTOR BIOGRAPHY



Mr. Sobek is a physicist and forensic engineer at Wolf Technical Services, Inc. in Indianapolis, Indiana. He holds a degree in Physics from Thiel College in Greenville, PA and has additional training at UCLA and Purdue University. He is a member

of the Illuminating Engineering Society of North America and is licensed as a Professional Engineer in Indiana. Since April 1988, he has participated in several thousand accident analyses involving lighting and visibility issues and has testified in several hundred cases in United States and Canadian courts.

Prior to joining Wolf, Mr. Sobek worked for 20 years as a Research Physicist and Electrical Engineer at the Naval Avionics Center, Indianapolis, developing missile guidance systems. He is a co-patent holder on DSMAC, the precision electro-optical guidance system currently used on the Navy's Tomahawk cruise missile.

In 2007, after being asked several times by Law Enforcement officers whether he could teach a course in lighting and photography, Mr. Sobek decided that there was an unfulfilled need and a potential market. In August 2007, he started Clearly Visible Presentations with a mission to teach the science and technology of optics, lighting, visibility and digital photography to the forensic investigation community.