

# Registration Form—Optics, Lighting, & Visibility Course

In Association with Wolf Technical Services, Inc.

NAME: \_\_\_\_\_ TELEPHONE: \_\_\_\_\_

COMPANY/AGENCY: \_\_\_\_\_ EMAIL: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_

**Fee: \$510.00 per student**

MAKE CHECKS PAYABLE TO :

Clearly Visible Presentations, LLC

13879 Rue Charlot Lane, McCordsville, IN 46055

**NOTE**— Tuition must be paid in full in order to reserve a spot in the course.

Credit Cards Accepted: Call 317-336-0902



## COURSE DETAILS

The course will consist of four and one-half days with a lunch break and two coffee breaks (mid-morning and mid-afternoon). The second day will have a delayed start and have an evening session to do some field work in the low light conditions. Rain, fog or snow will not impede that work unless lightning is present.

Day three will have an optional nighttime practical that will allow students to expand upon the field work exercise and complete a project that is specific to their work.

Class will start at 8:30 a.m. on Monday and will end by early afternoon on Friday. Students are expected to attend all of the classroom sessions and at least one nighttime exercise.

Certificates of completion and class roster provided.

The fee covers the classroom sessions and all of the handouts and materials. Meals and snacks are the student's responsibility.

## CANCELLATION POLICY

If you cannot attend, please notify us by May 18, 2012 and we will refund your fee. Cancellations received after this date and no-shows will pay a fee of \$100.00. You may enroll a substitute at any time before the course starts.

The course will be limited to no more than 30 students unless specific permission is obtained prior to May 18, 2012. The course will not be taught if less than 15 students enroll. All enrollment fees will then be refunded.

## ACTAR Credits



This course will be submitted to ACTAR for consideration of continuing education units. The list of attending ACTAR members will be submitted to ACTAR at no additional cost to the student.

# Optics, Lighting and Visibility for the Forensic Investigator

Presented by

*Clearly Visible Presentations, LLC*

Instructors:

**James S. Sobek, P.E.  
Kevin Johnson, A.C.T.A.R.**



Low Beam

High Beam

## June 4-8, 2012

presented at the offices of  
**Wolf Technical Services, Inc.**  
9855 Crosspoint Blvd, Suite 126  
Indianapolis, IN

Contact : Jim Sobek

Clearly Visible Presentations, LLC

317-336-0902

ClearlyVisPres@aol.com

[www.ClearlyVisiblePresentations.com](http://www.ClearlyVisiblePresentations.com)

Or

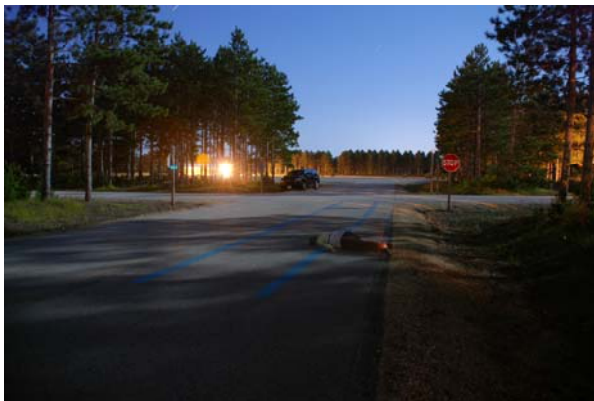
Amy Wortman, Wolf Technical Services, Inc.

317-842-6075

AWortman@WolfTechnical.com

## COURSE TOPICS

- ... The Physics of Light
- ... Photometry (principles and units)
- ... Basic Optics: Reflection, Transmission, & Absorption
- ... The Human Vision System
- ... Light Sources (Including sun/moon) and influences
- ... Atmospheric/Weather Influences
- ... The Object (reflectance, color, motion, context, etc.)
- ... Retro-reflective Materials
- ... Principles and Optics of Headlights
- ... Photography & Videography
- ... Documenting a scene at night
- ... Low-Light Photography
- ... Forensic Photography review



**Pedestrian strike, clear skies, 1/4 moon.  
Learn how to photograph this.**

## WHO SHOULD ATTEND?

- ... Crash investigators and reconstructionists (Engineers, Officers, and others)
- ... Crime scene investigators
- ... Crime scene photographers

## 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.

Students are requested to bring a digital SLR camera, flash, tripod, and remote shutter release. Bring any additional equipment that may be used in the field in which more experience is needed. Power for laptop computers will be available.

## LODGING (all within 1/2 mile)

Staybridge Suites	888-299-2208
Holiday Inn Express	877-863-4780
Indigo Inn	317-558-4100
Hilton Garden Inn	317-577-5900
AmericInn Northeast	317-578-9000
Ramada Northeast	317-558-4100

## DIRECTIONS

From Chicago, take I-65 south to I-895 East and then onto I-69 North at Exit 37.

From Louisville, take I-65 north to I-465 east. Exit onto I-69 at Exit 37

From Dayton, OH, take I-70 west to I-465 North. Exit onto I-69 at Exit 37.

Take I-69 NB to Exit 3.(96th Street) Turn west into far right lane and turn right (north) onto Hague Road. Take second right at Crosspoint Blvd. Left onto Southpoint Blvd and immediate right into Wolf Technical lot.

## INSTRUCTOR BIOGRAPHIES



**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 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 over 100 cases in United States and Canadian courts. He has developed mathematical models of train headlamp performance and other lighting models which have been accepted in courtroom testimony.

Prior to joining Wolf, he 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 guidance system currently used on the Navy's Tomahawk cruise missile.

**Mr. Johnson** was awarded a B.S. degree in Biochemistry from University of Missouri-Columbia and holds accreditation as an Accident Reconstructionist by the Accreditation Commission for Traffic Accident Reconstruction (#883).



For over 20 years, Mr. Johnson has worked crashes and performed forensic investigations. After 10 years with the Columbia, Missouri Police Department, he came to Wolf Technical Services as a reconstructionist. He stepped down as the Director of Forensic Engineering Services in 2011 and formed Crash Consulting Services, LLC. Mr. Johnson has testified in over 100 cases and often speaks on visibility issues, data recorders and forensic photography, and is a member of the Illuminating Engineering Society of North America.