

Creating Effective Professional Development Activities

2018 ATE Principal Investigators Conference

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Why Professional Development?

Improving Job
Performance

Knowledge
Enhancement

Skill Based
Training

Continuing
Education

Professional Development Key Questions

What is the purpose of the activity?

Who is your audience?

How do you inform and recruit participants?

What do participants need to know?

How do you engage participants?

How do you know if the activity was effective?

What are the finishing touches to professional development?

What is Professional Development?

Technical/Vocational Skill Enhancement

Computer, Mechanical, Welding, Culinary, etc.

Certifications/Authorizations

AWS, NIMS, ETA, LIA, OSHA, Coaching, Officiating, ServeSafe, etc.

Licensure/Re-Licensure

Electrical, Health, Insurance, Plumbing, HVAC, Human Resources, etc.

Teaching/Learning Strategies

Pedagogy, Activities, Technology, Learning Styles, etc.

Professional Development Examples

Workshops

Courses

Conferences

Seminars

Institutes

Symposiums

Summits

Meetings or
Webinars

Presentations

Advertising Professional Development

Newsletters

E-mail Contacts

Websites

Social Media

Flyers/Posters

Exhibits at Events

Mainstream
Media

Catalogs/Tabloids

Word of Mouth

LASER MATERIAL PROCESSING WORKSHOP



June 10-14, 2019 • 8am-4pm • ADVANCED TECHNOLOGY CENTER






- Laser Material Processing
 - A. Background
 - B. Concepts
- Industry Presentations
 - A. Industry Representatives
- Laser & Optics Technology
 - A. Establishing a Course
- Hands-On Training
 - A. Laser Welding
 - B. Laser Marking
 - C. Laser Cutting
- Tours
 - A. Local Companies
 - B. IHCC/MPEC Laboratory
 - C. Demonstrations

Photonics is the science and technology of light generation, control, and detection. Some say the 21st century will depend on photonics as much as the 20th century depended on electronics.

This Laser Material Processing workshop will include an introduction to light & lasers, laser safety, and laser applications. In addition, there will be ample time to do several hands-on laser material processing labs.

Attendees will have the opportunity to hear about the utilization of lasers in their every day operation from several industry representatives. Time will be provided to consider establishing a Laser & Optics Technology course along with options for developing and conducting labs.

Tours of local companies will be highlighted.

WORKSHOP AGENDA

Photonics Overview
Laser Safety & Applications
Laboratory Activities

Registration is FREE and travel expenses will be reimbursed



This workshop is made possible through funding from NSF grantDUE #1400561



525 Grandview Ave • Ottumwa, IA
641.683.5312

Register at www.midwestphotonics.org or contact GPEA for recertification.

Lasers in Manufacturing Symposium 2017




Lasers

In Manufacturing Symposium

Precision & Flexibility for Advanced Manufacturing

Featuring:
Prevalent & Emerging Ultrafast Applications
by Bill Holtkamp, IHCC Alumni and Sales Manager for TRUMPF, Inc.

Thursday, October 5, 2017

Indian Hills Community College
Advanced Technology Center
525 Grandview Avenue
Ottumwa, Iowa 52501
Symposium will be held at the RHEC building on the East end of campus.

Introduction:
Please join IHCC & TRUMPF for the complimentary Lasers in Manufacturing Symposium including supplier table tops and live demos.

Technical Symposium Agenda

9:00 AM	Registration & Tabletop Exhibits
9:30 AM	Welcome <i>Dr. Marlene Sprouse, President & Chief Academic Officer, IHCC</i>
9:45 AM	Laser Sources and Their Industrial Applications <i>Michael Shay, Laser Instructor, IHCC</i>
10:15 AM	CO₂ Lasers are Still Relevant <i>Bernie Koch, President, Minnesota Section of the Optical Society of America And Manufacturing Technology Specialist, 3M</i>
10:45 AM	Assimilation of Laser Welding: Resistance is Futile <i>David Hawilla, Manager - Product & Project Management, TRUMPF Inc.</i>
11:15 AM	Networking, Tabletops & Student Ask the Expert
12:00 PM	Lunch <i>Compliments of the Midwest Photonics Education Center and the National Science Foundation</i>
12:45 PM	Advanced Laser Applications in the Job Shop <i>Tom Shaw, Founder, Superior Joining Technologies</i>
1:15 PM	Unexpected Synergy: 3D Metal Printing & Conventional Manufacturing <i>Franciska Maschowski, Task Lead - Additive Manufacturing, TRUMPF Inc.</i>
1:45 PM	Break
2:15 PM	Troubleshooting Laser Systems in Medical Device Manufacturing <i>Joseph Hendrickson, Sr. Manufacturing Engineer, Medtronic</i>
2:45 PM	Prevalent & Emerging Ultrafast Applications <i>Bill Holtkamp, Sales Manager - Semi-Construction/ Consumer Electronics, TRUMPF Inc.</i>
3:30 PM	Tour of IHCC Lab & Live Demo
4:00 PM	Adjourn

RSVP

To attend the Lasers in Manufacturing Technical Symposium, please RSVP with your NAME, COMPANY, and CONTACT INFORMATION by September 29th to halley.brehm@us.trumpf.com

For more information on IHCC, visit www.indianhills.edu

For more information on TRUMPF lasers, visit www.us.trumpf.com, or contact the TRUMPF Laser Technology Center: 4711 Clipper Street • Plymouth Township, MI 48170 • (734) 454-7242 • ceem@us.trumpf.com.

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Evaluating Professional Development

Perception Forms

- Presenter Knowledge
- Presentation Skills
- Venue

Value

- Knowledge
- Skills
- New Contacts

Outcomes

- Testing
- Certification
- License
- Network Building

Professional Development Keys to Success

Start on time

End on time

Provide value
to participants

Serve food
(if possible)

Professional Development Finishing Touches

Certificate of Completion

Participant Pictures

Good Food

Grad Credit or CEUs

CERTIFICATE OF COMPLETION

This certificate is awarded to

[Redacted Name]

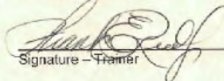
In recognition of successfully completing the 50 Contact Hour course Co-Sponsored by Indian Hills Community College and OP-TEC National Center for Optics and Photonics Education

"LASER SYSTEMS AND APPLICATIONS II"

The above student is awarded 5.0 CEUs

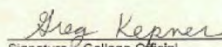
Section/Class # 17/YR*VOC*1289*501

On December 8, 2016


Signature - Trainer

04/18/2017
Date




Signature - College Official

04/18/2017
Date



Laser Material Processing Workshop Participants Visiting a Company



Laser Material Processing Workshop 2018



Questions?

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- Disclaimer: Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.