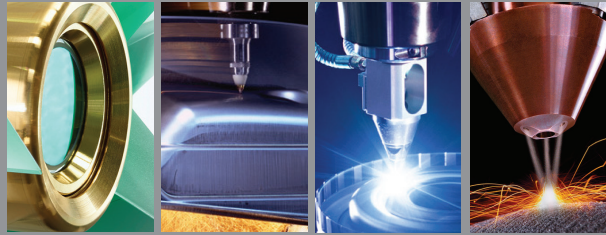


# Lasers

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

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### RSVP

To attend the Lasers in Manufacturing Technical Symposium, please RSVP with your **NAME, COMPANY, and CONTACT INFORMATION** by September 29th to: [haley.brehm@us.trumpf.com](mailto:haley.brehm@us.trumpf.com)  
For more information on IHCC, visit [www.indianhills.edu](http://www.indianhills.edu)

For more information on TRUMPF lasers, visit [www.us.trumpf.com](http://www.us.trumpf.com), or contact the TRUMPF Laser Technology Center:  
47711 Clipper Street • Plymouth Township, MI 48170 • (734) 454-7242 • [oeminfo@us.trumpf.com](mailto:oeminfo@us.trumpf.com).