# Welcome to Milwaukee!



On behalf of Milwaukee Area Technical College, it is my pleasure to welcome you to the 2010 National Coalition of Advanced Technology Centers Fall Conference.

"Making Technology Effective: A
Snapshot of the Future" provides the opportunity
to look ahead, particularly in the areas of emerging and transfer technologies and workforce career
pathways. I appreciate NCATC's mission of advocating and promoting the use of technology applications that enhance economic and workforce development programs and services. I am confident that
the topics discussed at this year's conference will
help bring this mission to life.

We are proud to host members of NCATC at our Center for Energy Conservation and Advanced Manufacturing (ECAM). This facility was designed to help address the competitive challenges facing manufacturers in the greater Milwaukee area. It is no coincidence that many of the topics you will be discussing during the three-day conference relate to these same issues.

I hope you enjoy your stay in the Milwaukee area and your visit to our Oak Creek campus, home to ECAM.

Sincerely,

Dr. Michael L. Burke, President Milwaukee Area Technical College

## **NCATC Board of Directors**

### President:

Scott Murakami, Honolulu Community College (HI)

### **Treasurer:**

Jack Roach, Southeastern Institute of Manufacturing and Technology/Florence Darlington Technical College (SC) **Secretary:** 

Hank Wade, Lawson State Community College (AL)

Immediate Past President:

Will Johnson, Great Plains Technology Center (OK) **President-Elect:** 

Debbie Davidson, Gateway Technical College (WI)

Jose Anaya, El Camino College (CA)

Hope Cotner, Center for Occupational Research and Development (TX)

Sandra Everett, Lorain County Community College (OH) Annette Parker, Kentucky Community and Technical College System (KY)

Gerald Sexton, Danville Community College (VA)

Executive Director: J. Craig McAtee (OH)

# **NCATC Regional Coordinators**

**Northeast:** Kelly Osmer, Northern Essex Community

College (MA)

Southeast: Sid Valentine, West Virginia Community and

Technical College System (WV)

**Central:** Don Robison, St. Louis Community College (MO)

Midwest: James Retka, Northland Community and

Technical College (MN)

Northwest: Fred Haynes, Linn-Benton Community

College (OR)

**Pacific:** Norma Alvarado, North Orange County

Community College District (CA)



# **2010 NCATC Fall Conference**

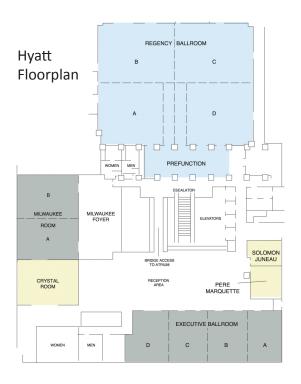
# Schedule at a Glance

# Wednesday, October 6 (All Events at the Hyatt Regency)

7:30 a.m. – 9:00 a.m.	Morning Refreshments
7:30 a.m. – 5:30 p.m.	Registration
9:15 a.m. – 11:00 a.m.	Morning Workshops
10:00 a.m. – 6:00 p.m.	Strategic Partner Alliance Exhibits
11:30 a.m. – 12:45 p.m.	Opening General Session and Lunch
1:00 p.m. – 2:30 p.m.	Afternoon Workshops
2:45 p.m. – 4:00 p.m.	Regional Roundtables and Strategic
	Partner Alliance Meeting
4:00 p.m. – 6:00 p.m.	Strategic Partner Exhibit Showcase
6:00 p.m. – 7:00 p.m.	Welcome Reception

# Thursday, October 7 (All Events at the Hyatt Regency)

8:00 a.m. – 8:45 a.m.	Breakfast
8:45 a.m. – 9:30 a.m	NCATC Business Meeting and Elections
9:00 a.m. – 4:00 p.m.	Strategic Partner Alliance Exhibits
9:45 a.m. – 10:45 a.m.	Concurrent Session 1
11:00 a.m. – 12:00 p.m.	Concurrent Session 2
12:30 p.m. – 1:30 p.m.	General Session and Lunch
2:00 p.m. – 3:00 p.m.	Concurrent Session 3
3:15 p.m. – 4:15 p.m.	Concurrent Session 4
6:00 p.m. – 6:30 p.m.	Reception
6:30 p.m. – 8:00 p.m.	Dinner/Keynote Speaker



# Friday, October 8 (All Events at Milwaukee Area Technical College and Industry Sites)

7:30 a.m. – 8:00 a.m.	Transportation from Hyatt to
	Milwaukee Area Technical College
7:30 a.m. – 8:50 a.m.	Continental Breakfast at
	Milwaukee Area Technical College
8:50 a.m. – 9:45 a.m.	Milwaukee Area Technical College Welcome and Presentation
10:00 a.m. – 11:00 a.m.	Milwaukee Area Technical College
	Advanced Technology Center Tours
11:15 a.m. – 12:30 p.m.	Buffet Lunch
12:30 p.m.	Load Buses for Industry Tours
12:45 p.m. – 2:15 p.m.	Industry Tours
2:30 p.m.	Depart Tours and Return to Hyatt

# Wednesday, October 6

7:30 a.m. – 5:30 p.m. Coat Check **Registration Open** 

7:30 – 9:00 a.m. *Atrium* 

**Morning Refreshments** 

10:00 a.m. – 6:00 p.m. Atrium **Strategic Partner Alliance Exhibits Open** 

9:15 - 11:00 a.m.

**Morning Workshops:** 

Executive A

Six Counties, Nine Partners and One State Line:

**Regional Economic Development** 

Three lead partners in a recent \$5.9 million U.S. EDA grant to the University of Wisconsin-Whitewater share how their project was strategically constructed to build a regional cluster of higher education institutions, business, and non-profit resources for entrepreneurial and business development. Project components include the promotion of technology applications that enhance regional economic development programs and services through the use of advanced prototyping labs, industry intellectual property, global business resources, market diversification, and business incubation facilities. This grant award is innovative for the U.S. EDA because it's the first award to a regional partnership that also crosses state lines. Session content will focus on regional cluster development, collaborative strategies, and tracking and reporting of project impact.

**Presenters:** Dan Cataldi, EIGERLab; Denise Ehlen, University of Wisconsin-Whitewater; Therese Fellner, Gateway Technical College; Gail Towers MacAskill, WI Dept. of Commerce

Executive B

Results of the Weld-Ed National State of the Welding Industry Report

The National Weld-Ed Center recently completed a two-year study of the welding industry, its need for new and replacement workers, and the ability to meet those needs through the talent development pipeline. The effort was driven by a national skill panel of welding industry leaders, executive leadership of the American Welding Society, AACC, NIST, and others, which commissioned a number of reports that have culminated in the recent release of the National State of the Welding Industry Report. Presenter Bob Visdos authored the report and facilitated the skill panel effort. He will share findings and strategies to address the need for more than 210,000 replacement workers in the five key welding occupations between now and 2019.

Presenter: Robert Visdos, Workforce Institute, LLC

Executive C

**Using NCATC's Member Services** 

Join fellow NCATC members as they discuss their experience in using NCATC's Member Assistance Program and Grant Evaluation Services. NCATC's services can help your college reach its goals while keeping focus on the uniqueness of each college and the community it serves.

**Panelists:** Ken Patton, RapidTech; Sid Valentine, West Virginia Community and Technical College System; Don Robison, St. Louis Community College

# Wednesday, October 6

11:30 a.m. – 12:45 p.m. Regency C/D

## **Opening General Session and Lunch:**

**Strategic Optimization of Advanced Technology Centers** 

Keynote Speaker: Jeff Roepsch, Life Cycle Program Manager—North America, Johnson Controls

Mr. Roepsch, in his role as North American Manager of Lifecycle Programs at Johnson Controls, will present his work on assisting colleges and

Johnson Controls



universities in North America to meet their obligations in connection with the American College University Presidents' Climate Commitment (ACUPCC) in the most effective and cost-efficient manner. He will concentrate on how Advanced Technology Centers can be effective leaders nationwide in the energy arena.

1:00 - 2:30 p.m.

## **Afternoon Workshops:**

Executive A

# Designing and Building Green: The Key to a Successful High-Performance ATC Facility

The success of your Advanced Technology Center can be jumpstarted by proper planning. This presentation is based on lessons learned during the planning, construction, and operation of the Southeastern Institute of Manufacturing and Technology, with additional input from a LEED-credentialed architect on sustainability issues.

**Presenters:** Jack Roach, Southeastern Institute of Manufacturing and Technology; Hank Wade, Lawson State Community College

Executive B

## Harley's Road to E-Learning

This workshop will focus on three main ingredients of the how, what, and where Harley-Davidson has focused on continually training their technical workforce. It will begin with a brief overview of Harley's workforce history moving into the current state of training, both internal and external. There will be several facets reviewed with the participants including, but not limited to the methods, audiences, programs, and keeping up with technology. Other key sections of the workshop will review the future state of technical training at Harley along with partnership models with community and technical colleges and workforce development boards.

**Presenter:** Al Salentine, Harley-Davidson

Executive C

### **Writing Successful Grants**

At this session you will hear from colleagues who have successfully secured state and federal grants including National Science Foundation (both planning grants and Advanced Technological Education project awards), Department of Energy, and Department of Labor grants. Learn what makes evaluators take a second look at a proposal.

\*\*Moderator: Norma Alvarado, North Orange County Community College District Panelists: Annette Parker, Kentucky Community and Technical College System; Jose Anaya, El Camino College; Joe Jacobsen, Milwaukee Area Technical College

# Wednesday, October 6

2:45 – 4:00 p.m. Regional Roundtables and Strategic Partner Alliance Meeting:

Crystal Room Strategic Partner Alliance Members

**Executive A** Northeast Region:

CT, DE, ME, MD, MA, NH, NJ, NY, OH, PA, RI, VT

Executive B Southeast Region:

AL, FL, GA, KY, MS, NC, SC, TN, VA, WV

**Executive C** Midwest Region:

IL, IN, IA, MI, MN, NE, ND, SD, WI

**Executive D** Central Region:

AR, CO, KS, LA, MO, NM, OK, TX

Milwaukee A Pacific Region:

CA, HI

Milwaukee B Southwest/Northwest Region:

AK, AZ, ID, MT, NV, OR, UT, WA, WY

4:00 – 6:00 p.m.

**Atrium** 

**Strategic Partner Alliance Exhibit Showcase** 

6:00 – 7:00 p.m. Welcome Reception

**Atrium** Sponsored by Lab-Volt

lab-Volt®



8:00 – 9:30 a.m. Regency C/D **Breakfast/NCATC Business Meeting and Elections** 

Educational Partnerships from a Small Business Perspective

Keynote Speaker: Terry Iverson, President, Iverson & Co.

Mr. Iverson will discuss relationships as a small business owner to the machine tool industry in the United States. He will concentrate on Iverson's relationship to Milwaukee Area Technical College and demonstrate how the ECAM center remains current in the international environment.



9:00 a.m. – 4:00 p.m. *Atrium*  **Strategic Partner Alliance Exhibits Open** 

9:45 - 10:45 a.m.

**Concurrent Session 1:** 

Executive A

**TechED** with Teeth

Get students interested in technical education and manufacturing careers with the BotsIQ Program (BattleBots). This presentation will provide an overview of the BotsIQ program along with its application and benefits for technical colleges, industry partners, and secondary education. This is a must-see presentation if you are looking for a program that exemplifies STEM education.

**Presenters:** Tim Mehring and Joe Rintelman, Germantown High School; John Puhl, J.P. Pattern, Inc.; Pat Yunke, Milwaukee Area Technical College/BotsIQ Wisconsin

Executive B

Wind Turbines and Energy —Training At Madisonville Community College

Madisonville Community College will be installing four small, grid-connected, turbines on its campus to train students in its Advanced Integrated Industrial Technology program. In the United States, it is projected that until 2020 the growth of wind energy will be at least 15% per year. This translates to an increased need for qualified technicians to operate and maintain wind turbines. This presentation will discuss the basics of wind energy and turbines, and Madisonville's approach to training students.

Presenters: Janardan Rohatqi, Jake Hildebrant, David Alsip, Madisonville Comm. College

Executive C

Don't Gamble with the Fed's Money! Stack the Odds in Favor of Sustainability!

This very interactive workshop takes place in "Casino ATC." Attendees get to play Black Jack and participate in unraveling the journey to some best practices and ideas to sustain federally funded programs. You will leave with ideas, tools, and assorted bits and pieces all packaged on a personal flash drive. Join us as we share strategies, tools and techniques on how to stack the odds in favor of successful sustainability!

**Presenters:** John Calver and Gary Randall, Thomas Nelson Community College; Amy Mueller-Seal, Suffolk County Community College

Executive D

Leveraging FIPSE Funds to Develop New Adult Transitions Program Strategies

Lorain County Community College along with workforce and education partners in the county has developed a unique approach to enable adults transitioning from one career to another to be highly successful. This session will outline LCCC's efforts using support from FIPSE, WIA, and other leveraged funds to implement a program designed to prepare adult learners for middle-skill careers in high-growth areas. First-year results of their FIPSE project reveal a 94% student retention rate as a result of counseling, academic advising, and supportive services offered through the project.

Presenters: Robert Visdos, Worforce Inst.; Marcia Jones, Lorain County Community College

### 11:00 a.m. - 12 noon

### **Concurrent Session 2:**

#### Executive A

Community and Economic Development: Strategies to Keep Your ATC Engaged Advanced Technology Centers continue to serve as regional catalysts for community and economic development. Ensuring that the culture of your ATC remains connected to key assets within and beyond your community is critical to ongoing success. This session will detail specific strategies implemented to engage diverse elements of the community and promote partnerships while planning the nation's newest ATC at Gulf Coast Community College. A "roundtable dialog" will follow, giving all a chance to share effective practices. *Presenter: Steve Dunnivant, Gulf Coast Community College* 

#### Executive B

## MATC Solar Farm - Emerging Photovoltaic Technology

Milwaukee Area Technical College is committed to maintaining a skilled workforce through education, training, and research in sustainable and renewable energy resources. This presentation will highlight the college's collaborative efforts to work with other colleges and businesses to design, develop, and implement a solar energy powered farm which will help increase an understanding of the role that photovoltaic energy has in our country's future.

**Presenters:** David Turner, William Hodgkinson, Thomas Hearly, and Thomas Kennedy, Milwaukee Area Technical College

#### Executive C

# NSF-ATE National Center: Weld-Ed Impact, Success Stories and Partnerships

This session will showcase the efforts of the American Welding Society and Weld-Ed National Center including the products and tools that have been produced thus far, as well as those that are planned in the future for distribution by the Weld-Ed Center through its center network.

Presenters: Monica Pfarr and Ramona Anand, Weld-Ed/Lorain County Community College

#### Executive D

# **Engaging Rural Regions' Youth in Developing Manufacturing Technical Trade Skills**

Rural industry is having more and more difficulty engaging youth in getting a good technical trade skills background and then applying them to industry in the area. By developing a partnership between education, industry, and workforce and economic development agencies, we can help stem the drain to urban areas. The first step is to educate high school youth in what is available for them in the region, then form an alliance and easy-to-maintain communication system with other stakeholders.

**Presenters:** Philip Everhart, Patrick O'Hara, Northeast Wisconsin Technical College

### 12:30 – 1:30 p.m. Regency C/D

### **Lunch and Conference Address:**

A Regional Perspective on National Workforce Board Activities

Keynote Speaker: Donald Sykes, President/CEO,

Milwaukee Workforce Investment Board

MILWAUKEE ACE

WORKFORMENT BOARD. INC.

Mr. Sykes will address Workforce Investment Act funding for local workforce investment boards and a new training program being designed in Milwaukee county for local manufacturers. He'll offer a regional/local perspective on national WIB activities.

### 2:00 - 3:00 p.m.

### **Concurrent Session 3:**

#### Executive A

### Strategies for Recruiting Underrepresented Populations into STEM Fields

The National Science Foundation funded a special research project, "Proven Practices in Recruiting Women into STEM Fields." This research project gathered information that would assist in the identification of successful practices and strategies used by NSF-funded centers and projects to recruit women into STEM fields. The presenters will share how they implemented several of these strategies and worked with community-based organizations and parent groups to recruit underrepresented populations. They will also report outcomes and lessons learned.

**Presenters:** Mel Cossette and Frank Cox, MatEd National Resource Center

#### Executive B

# Using 3D Virtual Reality Modeling to Build Real-time Immersive City Environments

There have been dramatic advances in the use of Virtual Reality models of existing cities to gauge the impact of proposed development, model past and future environments, and visualize the unseen infrastructure. Milwaukee Area Technical College students and faculty in conjunction with Discovery World are creating such a tool to be used by architects, city planners, and other visionaries. A live demonstration of "Virtual Milwaukee" will take place with Q & A to follow.

**Presenters:** Steve Burleson and James MacDonald, Milwaukee Area Technical College

### Executive C

# Fostering Industry Partnerships Through Third-Party Certification Development

Gateway Technical College entered into a unique national private/public partnership with the goal of advancing the skill level of automotive technicians and applied the successful model to aviation, energy, and transportation. Currently more than 40 colleges across the nation have adopted the model. Learn how your institution can be part of this important industry-driven initiative.

**Presenters:** Deborah Davidson, Gateway Technical College; Roger Tadajewski, NC3-National Coalition of Certification Centers and Business Educational Partnerships Group

### Executive D

## A Skills-Based Curriculum for Green Energy Technologies

As renewable energy technologies continue to mature, a new workforce is needed to plan, install, and service the devices, such as solar photovoltaic systems, solar thermal systems, and utility grade wind turbines. This session will cover the core skill sets required for these technologies, and specific skill sets needed to prepare a workforce to serve the emerging solar and wind energy sectors.

**Presenter:** David Dahline, Amatrol, Inc.

### 3:15 - 4:15 p.m.

### **Concurrent Session 4:**

#### Executive A

### **MSSC High School Initiative**

Milwaukee Area Technical College's MSSC pilot program for high schools is funded by four different entities. The purpose of the initiative is to serve as a national program model to be used by high school students, colleges, and manufacturing companies in pursuing careers in the manufacturing sector. Students who successfully complete an MSSC module will receive one (1) advanced standing credit to enter college-level programs at MATC.

**Presenters:** Candice Zielinski, James Macke, and Dorothy Walker, Milwaukee Area Technical College

#### Executive B

### **Advanced Water Technology in the 21st Century**

This session will focus on the program articulation and partnership between MATC's AAS program in environmental health and water quality and Concordia University's baccalaureate degree in environmental studies. The presenters will also discuss Concordia's new Center for Environmental Stewardship, including its research on freshwater issues, focus on sustainability, and service to both the education and business community.

Presenters: Bruce Bessert, Concordia Univ. Wisc.; Joe Jacobsen, Milwaukee Area Tech. College

#### Executive C

# Model Collaboration Between a Technical Community College and a Major University

This presentation will provide attendees with a model of collaboration between a technical community college and a university. Information will be shared on how and why it was established and the potential benefits to both institutions. Handouts and time for discussion will be provided.

**Presenters:** Ken Patton and Ed Tackett, Saddleback College; Goran Matijasevic, University of California-Irvine

### Executive D

## **PaCT, Pathway to Construction Careers**

This recently funded project is supported by the U.S. Dept. of Ed. Fund for the Improvement of Postsecondary Education (FIPSE) program. The project focus is contextual teaching and learning strategies to increase academic and language skills of dislocated workers. Participants will learn skills in house framing, blueprint reading, masonry, and green construction technologies along with academic and linguistic studies. The project creates an opportunity for disadvantaged individuals to upgrade skills and begin a pathway into a construction career. Project staff will share curriculum development, project design, partnership support, and curriculum.

Presenters: Michael Benner and Mona Schroeder-Beers, Milwaukee Area Technical College

### 6:00 - 8:00 p.m.

### **Reception and Dinner**

Reception: 6:00 – 6:30 Atrium Using MSSC Certification to Meet Federal Training Funding Requirements Keynote Speaker: Leo Reddy, Chairman and CEO,

Dinner: 6:30 – 8:00 *Regency C/D* 

## **Manufacturing Skill Standards Council**

Given the federal requirements linking national certification to funding from DoED and DoL, all ATCs have an interest in MSSC's nationally portable, industry-recognized certifications. Federally recognized in 1998, the MSSC has fortified its position as the leader in training, testing, and certifying the industry-wide core technical skills of the front-line industrial workforce.



# Friday, October 8

7:30 – 8:00 a.m. Transportation from Hyatt to Milwaukee Area Technical College Hyatt Lobby

7:30 – 8:50 a.m. Continental Breakfast at Milwaukee Area Technical College

8:50 – 9:45 a.m. Milwaukee Area Technical College Presentation:

**Welcome and Opening Remarks** 

Dr. Michael L. Burke, President, Milwaukee Area Technical College

The History and Current Affairs of MATC's Center for Energy Conservation and

**Advanced Manufacturing (ECAM)** 

John Stilp, Vice President; Dorothy Walker, Associate Dean;

Joseph Jacobsen, Associate Dean

10:00 – 11:00 a.m. Milwaukee Area Technical College Advanced Technology Center Tours:

Participants will be divided into tour groups. Each group will see all three ATC focus areas, including: 1) Energy, 2) Manufacturing, and 3) HVAC.

11:15 a.m. - 12:30 p.m. Buffet Lunch

12:30 p.m. Load Buses for Industry Tours

**12:45 – 2:15 p.m. Industry Tours:** 







2:30 p.m. Depart Tours and Return to Hyatt



# Special Thanks to the 2010 Fall Conference Planning Team at Milwaukee Area Technical College:

- John Stilp, Vice President
- Dorothy Walker, Associate Dean
- Brenda Vento, Manager, College Events
- Caryn Dohring, Administrative Assistant
- **Dr. Joseph Jacobsen**, Associate Dean
- David Turner, Dean, Technology & Applied Sciences
- Duane Schultz, Director, Workforce & Economic Development
- Lori Hains, Administrative Assistant
- Nicholas Triscari, Apprenticeship Coordinator