December 2012

Dear Colleague,

It’s hard to believe we’re so close to the end of 2012, but rest assured this has been a very successful year for the Robert C. Byrd Center Institute for Advanced Flexible Manufacturing. More importantly, many of our clients and customers have had a great year as well.

Several new initiatives are underway as part of RCBI’s role in the National Additive Manufacturing Innovation Institute (NAMII). We know as good as the past year has been, 2013 will be even better!

All of us at RCBI wish all of you a safe and happy holiday season!

www.rcbi.org

An Okuma MU-500-VA Machining Center is
NAMII and the future of Additive Manufacturing

Next year’s 3-D printers feature big things - Really big things

Four ways 3-D printers could change the world

RCBI Locations

Huntington ***
Charleston ***
Bridgeport ***
Rocket Center

New machining technology now available at RCBI Charleston

In a continuing effort to provide ready access to the latest manufacturing technology, RCBI has installed a new advanced machining capability at the RCBI Charleston Advanced Manufacturing Technology Center.

An Okuma MU-500-VA-L Machining Center is now available for both leased use and technical training. It delivers process-intensive machining and high-speed, high-accuracy cutting through the combination of 5-axis multitask machining with a turning function. The fast and powerful trunnion mounting table allows simultaneous 5-axis machining and one-chuck multi-sided machining of complex shapes.

The technology is ideal for mold and die shops as well as the production of highly complex aerospace components.

For more information or to schedule leased use, phone 304.720.7738 or 800.469.RCBI (7224).

Teachers invited to free workshop on wonderful world of composites

It’s difficult to find a 21st Century industry that isn’t touched by the rapidly growing use of composite materials. Composites technology is particularly booming in the aviation and aerospace industries where light weight, high strength composites are used to reduce weight and improve the efficiency of aircraft and spacecraft.

This flourishing composites industry promises to create a whole new generation of the kind of good jobs and start-up businesses that are needed in West Virginia. With that in mind, the Robert C. Byrd Institute for Advanced Flexible Manufacturing (RCBI) has initiated an outreach...
Jan. 31
CNC Intro to Machining, Operation and Programming - Level One MT 280
RCBI Charleston

Feb. 5
Introduction to Additive Manufacturing
RCBI Charleston

Feb. 7
Precision Measurement
RCBI Huntington

Feb. 11
Industrial Sales Program
Online

Feb. 11
Introduction to Robotics
Online

Feb. 12
Compressed Air Systems
RCBI Charleston

Feb. 13
Geometric Dimensioning & Tolerancing Fundamentals
RCBI Huntington

Feb. 18
Precision Measurement
RCBI Rocket Center

Feb. 21
Basic Metallurgy for Welders
Washington State Community College
Marietta, Ohio

March 5
Introduction to Additive Manufacturing
RCBI Huntington

March 12
Introduction to Additive Manufacturing
RCBI Huntington

For more information about any of these courses or to register, Call 800.469.RCBI (7224) or e-mail register@rcbi.org

campaign aimed at sparking interest in our youth and encouraging them to discover the exciting new opportunities composites offer them.

Teachers from across the state are invited to attend a free workshop, Composite Technology in the Classroom Museum in a Box, on Saturday, March 9, 2013, from 10 a.m. to 4 p.m. at the RCBI Bridgeport Advanced Manufacturing Technology Center. There they will tour West Virginia’s own National Composite Center of Excellence and receive training from NASA on introducing composite technology in the classroom. A limited number of travel stipends are available.

The Museum in a Box program brings the physical sciences of flight to students in grades K-12. It provides exciting hands-on/minds-on lessons to inspire future scientists, mathematicians and engineers. The lessons are tied to all national science and math standards and will engage students in essential STEM (science, technology, engineering and mathematics) topics.

For more information and to register call 800-469-RCBI (7224) or sign up on-line at www.rcbi.org/compositeclassroom.

NAMII seeks applied research project proposals

The National Additive Manufacturing Innovation Institute (NAMII) has announced its initial request for proposals from NAMII members for applied research projects. Any organization that is partnered with a NAMII member is eligible to apply as long as the NAMII member submits the proposal.

The Robert C. Byrd Institute for Advanced Flexible Manufacturing is a NAMII member and one of its five core partners.

The RFP includes three technical topic areas: Materials Understanding and Performance, Qualification and Certification, and Process Capability and Characterization/Process Control. More information about each topic area and the related requirements is available at http://namii.org/rfp-scope/.

Notice of intent to respond to the RFP is requested by Dec. 21, and proposals are due by 5 p.m. Jan. 31, 2013. Review of proposals will begin in mid-February, and project selection is anticipated by March 1. Projects should commence by March 18.

NAMII announced the request for proposals on Nov. 27 in Orlando, Fla. at the Defense Manufacturing Conference.
Weber named to NAMII Board

Charlotte Weber, Director and CEO of the Robert C. Byrd Institute for Advanced Flexible Manufacturing (RCBI), has been named to the Governance Board of the National Additive Manufacturing Innovation Institute (NAMII). The members of the Governance Board are responsible for charting the future course of NAMII, which links industry, academia, federal agencies and states in a broad-based partnership designed to jumpstart additive manufacturing innovation and foster economic growth.

"RCBI is a key player in this partnership because our Advanced Manufacturing Technology Centers provide the newly expanded TechBelt region’s manufacturers - small and large - with a unique set of offerings of shared manufacturing equipment availability, additive manufacturing expertise and innovative 3D design technology," Weber said.

"With our Design Works labs and our Advanced Composites Technology & Production Center, RCBI is a valuable resource for the region’s business and industry to access affordable design and production options in additive manufacturing technology."

The NAMII partnership will receive $30 million in federal funds. With a 50/50 match from its partners, the project will have a total budget of $60 million.

RCBI adds design engineer

Ronald T. Cabacar has joined the Robert C. Byrd Institute for Advanced Flexible Manufacturing (RCBI) as a Design Engineer. Cabacar has more than nine years of experience in the manufacturing industry. He worked at McSweeney’s Inc. as Engineering supervisor for more than four years and worked at Omron Philippines under Social
Business Group as a Manufacturing Engineer and Tooling department manager for five years. He has also worked in other industries, including construction, ship building and transportation. He earned his bachelor’s degree in Mechanical Engineering from The University of the East, Philippines, and a Master’s degree in Business Education from Strayer University in Alexandria, Va. He has a Six Sigma Green belt Certification from Commonwealth University Center of Corporate Education.

“These are exciting times at RCBI as we break new ground in Additive and Composite Manufacturing, and other innovative technologies,” said Charlotte Weber, RCBI director and CEO. “We anticipate that Ron Cabacar’s background in mechanical manufacturing, product development and quality initiatives will complement RCBI’s current mechanical and production engineering activities and be a real asset to us in our efforts.”

Cabacar is a member of the Society of Manufacturing Engineers (SME) and a senior member of the Philippine Society of Mechanical Engineers.

**RCBI offers auditor/lead auditor training in January**

A course covering “Auditor/Lead Auditor Training Program - Practical Auditing of Quality Management Systems against the ISO 9000: 2000 Series” is scheduled Jan. 28 through Feb. 1 at RCBI Huntington.

The five-day course begins each day at 8:30 a.m. and dismisses Monday through Wednesday at 7:30 p.m., Thursday at 6:30 p.m. and Friday at 1:30 p.m. It meets training requirements for individuals who seek registration as Quality Management System Auditors with the International Register of Certificated Auditors (IRCA), the world’s original and largest international auditor certification body.

Seating is limited and early registration is recommended. To register or request more details, call 800.469.RCBI (7224).

Thank you for your time and your support of RCBI. As always, please let us know if there’s anything we can do to assist you or your
What RCBI Does

The Robert C. Byrd Institute for Advanced Manufacturing (RCBI) encourages job creation, economic development, innovation and entrepreneurship by supporting manufacturing companies of all sizes. We offer cutting-edge equipment use and specialized training for everyone from sole proprietors to Fortune 500 companies.

Simply put, our goal is to use our Advanced Manufacturing Technology Centers across West Virginia to provide the resources that individuals and companies need to create, sustain and expand their businesses. In addition to providing leased use of cutting-edge equipment, workforce development programs and customized training, RCBI assists companies in networking and procurement, particularly with federal contracts.

The technologies available at RCBI Advanced Manufacturing Technology Centers in Huntington, Charleston, Bridgeport and Rocket Center are among the best in the world, providing companies in the Mid-Atlantic region services that would not otherwise be readily available to them. In particular RCBI offers Additive Manufacturing (AM) through its Design Works labs, and is a national Center of Excellence for composite materials providing support to NASA engineers as well as first-tier DoD suppliers in West Virginia. These activities help ensure that RCBI fulfills its mission of developing a quality, just-in-time supplier base for the Department of Defense (DoD) as well as other agencies and the commercial sector.