

DRAFT

Members Present: Larry Burkholder, Deere & Company; Barry Butler, University of Iowa; Dave Corbin, Vermeer Corporation; Ron Cox, Center for Industrial Research & Service, Iowa State University; Jerry Duncan, Deere & Company; Larry Ehlinger, Pella Corporation; Jack Harris, Rockwell Collins, Inc; Brad Keheler, Deere & Company; Mark Lorenzo, Iowa Department of Economic Development; Sam McCord, MCG BioComposites; and, Elliott Smith, Iowa Business Council.

Members Excused: Jason Andringa, Vermeer Corporation; Mohammed Fahmy, University of Northern Iowa; Dave Gardner, HNI Corporation; Larry Grubisich, Des Moines Area Community College; Bill Kackley, HNI Corporation; Balaji Narasimhan, Iowa State University; Bob Nelson, Vermeer Corporation; and, Dave Roederer, Iowa Chamber Alliance.

Call to Order, Introductions

Advanced Manufacturing Research & Collaboration Cluster (AMRCC) Board Chair Dave Corbin called this meeting of the AMRCC Board of Directors to order at 10:03 a.m. Mr. Corbin and host Jack Harris welcomed attendees to Rockwell Collins.

Review of AMRCC's Status

Elliott Smith briefly reviewed draft documents from 1999 that set forth a proposed by-laws and an operations plan for AMRCC. He doesn't believe that either of these documents was ever formally adopted by the AMRCC board, and suggested adopting them as is or using them as a foundation to develop new by-laws and an operations plan for the organization moving forward. Mr. Smith also noted that the documents refer to AMRCC as both a 501(c)(3) and (c)(6) entity. However, he has found no documentation from the Internal Revenue Service evidencing the establishment of either status.

Previous AMRCC work groups --- Biomass, Joint Product Development, & Workshops & Seminars ---all went dormant approximately two years ago, and another initiative re: rapid prototyping concluded its efforts 5-6 years ago. The new Alternative Materials & Energy Resources (AM&ER) Work Group, chaired by Sam McCord, held its initial meeting in May and appears to be gaining momentum re: members and initiatives. The Iowa - Virtual Reality Education Pathways (I-VREP) group, chaired by Jack Harris, was launched late in 2008 and has experienced enormous popularity among Iowa high schools.

New Initiatives/Work Groups

Jack Harris provided a **brief overview of AMRCC's history**, stating that the original vision was to stimulate growth in Iowa's manufacturing sector by creating a collaborative environment to address in a timely manner topics and issues regarding competitiveness, e.g., applied research, state of the art/practice technologies and processes sharing. AMRCC today consists of AM&ER and I-VREP as the active work groups.

Sam McCord updated the board on **AM&ER**, which is the new and revised effort at work previously attempted by AMRCC's Biomass Work Group (BWG). BWG went dormant in the spring of 2007 due to lack of attendance and overall interest, as well as an unclear mission. The group was reformed this year to focus on an expanded, diverse industry and academic audience. Three meetings have been held to

MINUTES
AMRCC Board of Directors
August 14, 2009
Rockwell Collins, Cedar Rapids

2

DRAFT

date, with work focused on a new mission and goals. The AM&ER Work Group has developed "Who We Are" and "Objective" statements:

AM&ER "Who We Are" Statement:

A collaborative consortium sponsored by the Iowa Business Council to incorporate academic and industrial innovation utilizing bio-based materials and renewable energy resources in products and their applications

AM&ER "Objective":

To make Iowa the recognized leader in bio-based materials and alternative energies; to advance the development, commercialization, and application of these materials; and, to promote education, government relations, and business development.

The **AM&ER Working Group** has established **three goals for the upcoming year:**

1. Establish and promote relationships with state and local government entities.
2. Facilitate commercialization opportunities.
3. Promote collaboration between Member organizations.

Jerry Duncan asked why the group chose to focus on state and local government entities, as opposed to federal government entities. Mr. McCord said that, previously, the Biomass Working Group lost its focus when attempting to address issues on both the state and federal levels. This time around, AM&ER hopes to get grounded in state issues in Iowa first before moving on to any federal work.

Jack Harris gave a short presentation on the **Iowa - Virtual Reality Education Pathways (I-VREP)** program. He informed the group that the Iowa Department of Education is very excited about partnering with business in I-VREP. Through the use of donated computer-assisted design (CAD) equipment, I-VREP introduces students (grades 9-12), parents, teachers, counselors, and school administrators to virtual reality (VR) and actualization technology, industrial applications, career pathways, and industry mentors. A curriculum is created to engage students in the fields of math, science, and engineering. Currently eight high schools, primarily around central and east-central Iowa, are participating in I-VREP. The interest it has stimulated in students is very strong. In some instances, kids who were previously at-risk academically are now interested in engineering careers. **I-VREP has several goals:**

- Increase interest and skills in math and science
- Improve retention of math and science concepts
- Enhance preparation for advanced education
- Align educational concepts with real world applications
- Reinforce opportunities in STEM careers (engineering and manufacturing)
- Triple the number of Iowa high school graduates pursuing STEM education by 2020

Jerry Duncan proposed hosting a conference for Iowa middle and high school principals/IT/science teachers to learn more about the I-VREP initiative. The event could include discussion on curricula, technology, and teacher preparation. **Ron Cox** suggested making the conference larger, bringing together all virtual reality/engineering oriented programs.

Mark Laurenzo suggested coordinating a "spring break" conference on virtual reality. **Barry Butler** mentioned that Project Lead the Way may serve as a good model re: teacher prep and curriculum development. He noted that sustainability and scalability will be issues moving forward.

Expanded Role of AMRCC

Mark Laurenzo discussed the newly proposed **Iowa Innovation Council (IIC)**. He noted the study done by the **Battelle Institute** in 2004-2005 which identified three target industries for Iowa: advanced manufacturing, information technologies, and biosciences. Following the release of the report, the Iowa Department of Economic Development (IDED) brought industry leaders together to implement the study's recommendations. Over the past few years the three industry groups worked separately on issues within their respective areas. IDED now seeks to bring the three groups together as one entity, the Iowa Innovation Council. The IIC vision is to increase Iowa's innovation and entrepreneurial capacity, to foster economic growth, and to speed the transition of Iowa to a new knowledge-based economy.

Mr. Laurenzo noted that a predecessor to IIC, the **Iowa Advanced Manufacturing Council**, has been dissolved, with its responsibilities being transitioned to AMRCC. He invited AMRCC to join the IIC, bringing the best and brightest of the advanced manufacturing industry together to help formulate direction, policy, and programs for IDED. Mr. Laurenzo said the Technology Commercialization Committee will remain in tact, performing due diligence and providing recommendations for grant/funding proposals submitted to the Department. **Dave Corbin** asked what happened to the economic development strategies that flowed from the Battelle Studies. Mr. Laurenzo noted that various refinements are occurring to existing economic development programs, some of which are 20 years old.

Elliott Smith asked what the specific role of AMRCC would be within the IIC. Mr. Laurenzo said IIC would like issue and programming input from the advanced manufacturing sector. The objective will be to create a strategic growth plan for the state based on advanced manufacturing and technology driven business issues and activities. How AMRCC chooses to participate in the IIC is up to its board.

IIC will provide information and recommendations to the Governor, Legislature, and IDED. Its **membership** will be appointed by the Governor and approved by the Senate. AMRCC can suggest names to the Governor's Office for nomination.

It's likely that the IIC will be involved with selecting **the next Chief Technology Advisor in Iowa**, who is currently Ted Crosbie of Monsanto. Mr. Laurenzo encouraged AMRCC members to also submit nominations to Governor Culver for this position, as well.

AMRCC Next Steps

AMRCC leaders will review companies formally involved with the Iowa Advanced Manufacturing Council and seek out their participation in AMRCC. The AMRCC board will also seek out nominations for Iowa Innovation Council representatives and working groups. **Mark Laurenzo** will send out a description of the type of individuals wanted for the IIC and other working groups.

Jerry Duncan (Deere) and **Jack Harris** (Rockwell) will explore hosting an Iowa Virtual Reality conference, developing a proposal for review. A limit to the number of attendees at the conference was suggested (for cost reasons), with registrations accepted on a first come, first serve basis.

The next meeting of AM&ER will on August 19, 2009, in West Des Moines at Innovative Injection Technologies.

Dave Corbin stated that a review of the AMRCC by-laws and operation plan will need to occur at the next meeting. The board decided to hold a conference call at 2:00 p.m. on Monday, September 14, 2009.

DRAFT

Prior to the conference call, board members will also review the CIRAS by-law template and begin prep-work on these documents.

ADJOURNMENT

There being no further business to come before the AMRCC Board, Dave Corbin moved to adjourn at 1:03 p.m. Motion carried unanimously. A tour of Rockwell Collins Simulation Lab and Synthetic Vision Lab followed the board meeting.

Respectfully submitted,
Elliott Smith

September 9, 2009

Upcoming Meetings

- AMRCC Conference Call Monday, September 14, 2009 2:00 p.m.