

2005 SOUTHERN BIOPRODUCTS CONFERENCE



MISSISSIPPI BIOMASS COUNCIL BIO BRIEF

The 2005 Southern Bioproducts Conference was held at the Holiday Inn-Jackson North in Jackson, Mississippi from March 22 – 23, 2005. It was one of the most successful events hosted by the Mississippi Biomass Council and numerous other sponsors. The conference was attended by over 130 individuals that included university researchers, private industry personnel, state and federal representatives, and students. A total of 40 presentations were given at the conference, with speakers coming from 12 states, Washington D.C., and Canada.

The conference began with the General Session on the afternoon of March 22 and brought special attention to new developments in federal bio-programs as well as opportunities for Mississippi agribusinesses and farmers and financing renewable energy projects. The opening of the general session was addressed by the Honorable *Harvey Johnson, Mayor, City of Jackson*. Speakers from the United States Department of Energy and the Chicago based Environmental Law and Policy Center were also featured in the general session. Conference participants had an opportunity to network with other professionals, immediately following the general session, at the **Networking Reception**.

The program continued to focus on products produced from biomass materials and biomass based renewable energy and fuels such as ethanol and biodiesel. Concurrent **Technical Sessions** scheduled for March 23 focused on (1) *Feedstock Management*, (2) *Bio-Fuels*, (3) *Alternative Chemicals*, (4) *Polymers*, (5) *Bio-Power*, and (6) *Other Bio-Products*. The speakers represented a cross section of industry, universities, consultants, and nationally

recognized institutions such as the National Renewable Energy Laboratory and the Clean Fuels Development Coalition.

The keynote speakers for the afternoon luncheon were Dr. Lester Spell, Commissioner, Mississippi Department of Agriculture and Commerce and Mr. Robert Firevoid, National Program Leader, United States Department of Agriculture. Track chairs, who had the responsibility for arranging the speakers, were also recognized at the luncheon. The six track chairs were Dr. Liam Leightley, Mr. Sumesh Arora, Dr. Todd French, Dr. Robert Lochhead, Mr. Robert Harris, and Mr. Phil Badger respectively.

A new feature this year was the student poster competition which awarded \$900 in cash prizes for college students. The objective of this contest was to encourage greater participation by students and to educate future leaders who



are aware of the potential of biomass to generate home-grown energy and utilize our natural resources more efficiently. Student registration was absolutely free of charge. The three prize winners were: third place winner, Prashanth R. Buchireddy (Mississippi State

University), second place winner, Jennifer Ntoni (Jackson State University) and first place winner, Prashanth K. Karra (Mississippi State University).

The conference was sponsored by the Mississippi Biomass Council, Alcorn State University Small Farm Development Center, Mississippi State University Industrial Outreach Service, United States Department of Energy, Mississippi Farm Bureau, Weyerhaeuser, Electric Power Association of Mississippi, Mississippi Development Authority – Energy Division and the Mississippi Technology Alliance. Conference advertisers included Argus Analytical, Inc., Mississippi Technology Alliance, and Synterprise Global Consulting.

The Council's Board approved the selection of officers for the 2005-2006 term. Duane Motsenbocker will serve as interim President and Treasurer, Sumesh Arora will continue to serve as the Vice President and Elizabeth Myles will also continue to serve in role of the secretary of the Council. Planning for the 2006 Southern Bioproducts Conference is already underway and it will be held in Philadelphia, Mississippi in early April. Stay tuned for more details on this conference. For more information about the Biomass Council or the next year's conference please contact:

Sumesh Arora at 601-960-3610 or sarora@technologyalliance.ms

Inside this issue:

MISSISSIPPI TECHNOLOGY ALLIANCE STRATEGIC BIOMASS INITIATIVE	2
POSITIVE RESPONSE FROM RENEWABLE ENERGY/ENERGY EFFICIENCY IMPROVEMENT GRANTS IN MISSISSIPPI	3
A-1 PALLET COMPANY	4
MS FAST: PROMOTING HIGH-TECH SMALL BUSINESSES IN MISSISSIPPI	5
PLATTS BIODIESEL INVESTOR CONFERENCE	6

MISSISSIPPI TECHNOLOGY ALLIANCE STRATEGIC BIOMASS INITIATIVE

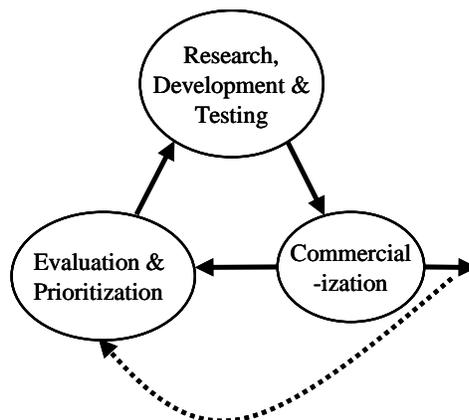
Under a state-funded pilot program begun three years ago, the Mississippi Technology Alliance (MTA) had been charged with the task of coordinating the work of governmental groups, universities, and the private sector to focus on alternative energy resources and technologies. This project was known as the “Mississippi Alternative Energy Enterprise” and was concluded in late 2004. MTA is now building upon this experience and utilizing funds granted by the United States Department of Energy (DOE) to leverage the considerable on-going biomass research and projects within the state to establish the **Strategic Biomass Initiative**.

The vision for the Strategic Biomass Initiative is to foster viable commercial enterprises based on Mississippi’s natural biomass resources and further develop near-term technologies through university based applied R&D. The goals of this newly formed initiative are:

- Strengthen and focus applicable research and development in biomass primarily among university researchers.
- Apply this research in targeted biomass commercialization opportunities, and
- Accelerate the commercialization and deployment of suitable biomass technologies.

MTA will form a major partnership with Mississippi-based universities. The university partnerships will focus first on leveraging research previously supported, at least in part, by federal funds, while later stages will focus on pushing suitable technologies from the research lab to the pilot stage and to full commercialization based on market demand. Although these opportunities for commercialization are planned to

follow previous R&D efforts, specific opportunities for commercialization will be pursued as they are encountered at all stages of the project. Most importantly, research will be focused on overcoming



specific hurdles to commercialization and overcoming market hurdles even after commercialization. The basic loop of the Initiative’s approach to biomass commercialization is shown below and also highlights the need for post-commercialization evaluation and R&D.

The three main tasks of the **Strategic Biomass Initiative** are 1) Examine biomass-to-energy conversion technologies and their application to existing and potential biomass resources in Mississippi and the Southeast, 2) Establish technical partnerships with university personnel to further R&D targeted toward crucial “break-through” biomass areas, and 3) Partner with suitable private-sector companies and state entities to further the commercialization and deployment of near-term suitable technologies.

In order to accomplish the tasks of the **Strategic Biomass Initiative**, an Advisory Board consisting of individuals from various types of agencies across the state is being formed to provide high level feedback on the types of projects and technologies which should be considered. MTA will also lead a project

evaluation team made up of university researchers and technology transfer personnel as well as private-sector personnel experienced in commercialization of new technologies and entrepreneurial ventures. The project evaluation team will screen, investigate, and recommend university and private-sector projects and companies that are most likely to make break-through technological advances through prototyping or on-site development.

MTA will seek research and commercialization projects through a competitive request for proposal (RFP) process. The RFP is expected to be released in the early fall of 2005, with project selection to be completed within a few weeks of that date. All projects will be subject to federal environmental guidelines and funds matching requirements. The total value of the **Strategic Biomass Initiative** is \$4.28 million with \$2.97 million coming from federal sources and \$1.31 million provided by research and commercialization partners including universities and private and state entities.

For additional information, please contact Sumesh Arora, Director of Strategic Biomass Initiative at 601-960-3610 or sarora@technologyalliance.ms. You may also visit the Mississippi Technology Alliance website at www.technologyalliance.ms.

Mississippi Technology Alliance (MTA) is a 501(c)3 non-profit organization with the mission to champion science and technology-based economic development, with the end goal being wealth creation in Mississippi.

POSITIVE RESPONSE FROM RENEWABLE ENERGY/ ENERGY EFFICIENCY IMPROVEMENT GRANTS IN MS

In 2003 and 2004 forty-four grantees in Mississippi received over \$1.7 million in grant funds for Renewable Energy and Energy Efficiency Improvement Grants through the USDA/Rural Development 9006 program. These grants were used by poultry producers to install energy saving improvements to their operations. Examples of improvements are solid sidewalls, vent boxes/doors, tunnel fans, more efficient brooders, insulation, roof coatings, cool cells, etc. Other entities used renewable energy grant funds to install wood burning kilns and large solar systems to their operations.

Approximately 31 of these projects have now been completed. These grantees have already begun to experience energy savings and increases in production because of these improvements. Many of the grantees have stated that they immediately began to see energy savings after the improvements were completed and expect even greater savings during the winter months because of the reduced reliance on gas. With the recent increase in energy cost, it appears that the grant program came at just the right time. Some grantees have even stated that they would have been unable to complete the improvements without the grants that were provided by Rural Development.

Rural Development is again administering the 9006 Renewable

Energy/Energy Efficiency Grant Program for 2005. Workshops were held throughout the state during the month of May to inform potential applicants about the program and the procedures to submit applications. The deadline to receive applications for the grant program was June 27, 2005. The Rural Development office in Mississippi received 40 applications with grant request totaling over \$1.7 million. Applications are reviewed for completeness, eligibility determination and technical feasibility and compete nationally for funding. Mississippi ranks third nationwide in the number of grant applications received for the 2005 fiscal year funding cycle.

There has been \$22.8 million allocated for this program this year. However, \$11.4 million of this amount is set aside for the implementation of the Renewable Energy/Energy Efficiency Improvement Guaranteed Loan Program until August 31, 2005. Participation has steadily increased nationally for the grant program and the selection for funding has become much more competitive. Applications are selected for funding based on scoring criteria that includes several categories. The projected funding announcement date for fiscal year 2005 is September 1, 2005. We again hope Mississippi can take its lion's share of the grant allocation.

In addition, on July 18, 2005, USDA/Rural Development pub-

lished regulations in the Federal Register for the Renewable Energy/ Energy Efficiency Guaranteed Loan Program. Applicants must be approved and funds obligated for this program by August 31, 2005. Any funds not obligated under this program by August 31, 2005 will be reallocated to the competitive grant program as of that date.

Applicants must apply for the guaranteed loan through a lender. Rural Development can guarantee up to 50% of the total eligible project cost. Although poultry producers have received the majority of the benefits of the Renewable Energy/Energy Efficiency Improvements program in Mississippi, all agriculture producers and rural small businesses are encouraged to review the Rural Development Instruction 4280-B and determine if you may qualify for funding for renewable energy and/or energy efficiency improvements for your operations.

For further information about this program, you may contact the Rural Business-Cooperative Service Division of Rural Development at 601-965-5457 or you may visit our website at:

www.rurdev.usda.gov/rbs.

A-1 PALLET COMPANY

A-1 Pallet Company, Inc., was established in 1991 for the initial purpose of recycling wooden pallets. From the beginning, A-1 Pallet strived to be an environmentally-friendly company. Our credo is to divert pallets that would ordinarily be taken to the landfill and recycle or remanufacture those pallets.

The pallet recycling industry helps to solve the growing solid-waste problem by annually diverting 250 million wooden pallets from area landfills, thus saving more than 30 million trees.

The energy required to repair a used pallet is nominal compared to the higher energy consumption required to recycle aluminum, plastic, or paper.

Recycled pallets normally sell for 60% less than a new pallet, whereas recycled aluminum and plastic containers sell for about the same as new containers.

In addition, recycled paper is generally more expensive than paper manufactured from new pulp. By annually reducing the number of harvested trees, the pallet industry has a positive effect on our atmosphere. A healthy 50-year-old tree will scrub 120 times as much carbon dioxide out of the atmosphere as a 10-year-old tree. A-1 Pallet Company takes great pleasure in knowing that it is doing its part by

recycling 300,000 pallets and saving more than 50,000 trees annually.

A-1 Pallet Company's trade area encompasses Metro Jackson and all of the industrial parks extending north to Grenada, west to Vicksburg, east to Meridian, and south to Hattiesburg. We currently help more than 100 customers recycle their pallets. A-1 Pallet has immediate plans to expand further and serve additional recycling needs by crushing the undesirable pallets into fuel pallets and fire logs.

A-1 Pallet Company operates, by choice, from three sites in the heart of downtown Jackson, the capital of Mississippi. One of the three locations is within the Farish Street Historical District on the site of the city's oldest manufacturing facility, known for a century as the Old Cotton Gin Mill.

Our employees constitute a racially-diverse workforce of historically under-employed men and women who live in downtown Jackson.

A-1 Pallet Company is owned and operated by Charlotte and Carl Monte Reeves who have been recognized, along with A-1 Pallet, with the following honors and awards:

2004 - Keep Mississippi Beautiful - Business Recycling Award

2003-Mississippi Fast 40 Award Fastest Growing Private Companies

2003-Top Three of Fifty Leading Business Women in Mississippi (Charlotte Reeves)

2002-Governors Small Business Achievement Award (Mississippi Quality Award)

2001-Mississippi Business Expo Small Business Award

During the 14 years of its existence, A-1 Pallet Company has grown into a regional, multi-million dollar recycling success story by providing an environmentally-friendly product, by helping to preserve our limited energy resources, by reducing the demand made upon our landfills, by providing employment to residents of Jackson, and by helping our customers save money and beautify their businesses.

For further information about A-1Pallet Company, Inc., you may contact:

Carl Monte Reeves

601-352-0586

a1palletcoms@aol.com

MS FAST: PROMOTING HIGH-TECH SMALL BUSINESSES

The Mississippi - Federal and State Technology Partnership program (MS-FAST) was established in 2001 to assist Mississippi's small high-tech firms to better compete in the SBIR (Small Business Innovation Research) and STTR (Small Business Technology Transfer) programs. SBIR and STTR are two competitively awarded, highly specialized forms of federal funding for small firms (less than 500 employees) to perform cutting-edge R&D that addresses the nation's (government and industry) most critical scientific and engineering needs. These needs span the technology spectrum -- from aviation and agriculture to medicine and manufacturing. Annually over \$2 billion are awarded to small businesses by the 11 federal agencies participating in the programs.

Lead by the University of Southern Mississippi working with its Mississippi Research Consortium members (Jackson State University, Mississippi State University, University of Mississippi and the University of Mississippi Medical Center), and supported in part by the Mississippi Technology Alliance, MS-FAST provides assistance to companies in (1) identifying federal agency R&D needs that map to the company's R&D commercialization goals; (2) identifying faculty expertise and university lab resources that may support under subcontract the company's SBIR/STTR efforts; (3) providing Phase 1 and 2 proposal development assistance; and (4) the identification of university developed intellectual property that might serve as the basis of a proposal. MS-FAST also awards "Phase 0" fund-

ing support which provide up to \$3,000.00 to help cover the company's cost in developing a Phase 1 proposal to the federal agency.

The next MS-FAST Phase 0 solicitation opens August 1st, 2005 with proposals due August 31st, 2005. It is anticipated that five Phase 0 awards will be made. For a copy of the solicitation as well as instructions on how to prepare the 3 page Phase 0 proposal, interested individuals may e-mail their request to Joe Graben, MS-FAST Director at:

jgraben@ssc.nasa.gov

In 2001 Mississippi companies were awarded approximately \$1.2 million in federal SBIR/STTR Phase 1 and 2 contracts and grants. Since MS-FAST's inception in late 2001, with funding assistance provided by the U.S. Small Business Administration and the Mississippi Technology Alliance, the award amounts have grown to over \$5.6 million in 2003 and 19 SBIR/STTR Phase 1 awards to Mississippi firms in 2004.

Additional information on the federal SBIR/STTR programs, including solicitation announcements and links to the federal agencies' SBIR/STTR home pages may be found at: <http://www.sbirworld.com>

Written by:

Joe Graben, Director

MS-FAST

228-688-2280

Biomass Council Scholarship



The board members of the Mississippi Biomass Council have approved a scholarship program for college level students who are interested in pursuing undergraduate studies that relate to biomass science, technology, economics or policy issues.

The scholarship will constitute a one time cash award of \$1000 payable over two semesters and will require an essay from the students in addition to GPA requirements and letters of recommendation. Students must be enrolled at a Mississippi university, college or a community college and must have completed one semester.

The deadline for submitting applications will be in early February 2006 and the scholarship will be awarded at the 2006 Southern BioProducts Conference in April. For additional details about the scholarship program, please contact Brent Bailey at 601-977-4248 or the Biomass Council website at www.ms-biomass.org.

PLATTS BIODIESEL INVESTOR CONFERENCE



Platts Bio-diesel Investor Confer-

ence will be held November 3-4, 2005 in Chicago, IL. It will provide insight on the business outlook and strategies for investment. The conference combines keynote presentations and high-level panel discussions. Topics will include:

- Market outlook for diesel and biodiesel in North America.
- Perspectives from the major investors and producers.

- Risk factors and how to mitigate risk.
- Analysis of the market for alternative fuelstocks.
- Emerging new federal and state incentives and mandates for biofuels including biodiesel.
- New plant finance: who is investing and how the financing is arranged.
- Plant construction: siting, access to market and supply.
- Reaching market equilibrium: is the market seeing

oversupply or insufficient supply?

Outstanding support for the Bio-diesel Conference has been provided by Mississippi Biomass Council and the Mississippi Technology Alliance in addition to the other supporters.

To register or for more information, please call 866-355-2930 (781-860-6100 outside the US), email registration@platts.com or visit us online at www.events.platts.com

Mississippi Biomass Council

Box 9642

Mississippi State, Mississippi 39762

Phone: 662-325-3192

Email: infomsbiomass@email.com

Board of Directors

Brent Bailey, Mississippi Farm Bureau Federation

Jim Evans, University of Southern Mississippi

Tim Mood, Electric Power Associations of Mississippi

Duane Motsenbocker, Mississippi State University

Monte Reeves, A-1 Pallet Company, Inc.

Walter Ward, Community Recycling

Byron Wilson, Chair, Chico Creek Farms

Officers:

Duane Motsenbocker, President & Interim Treasurer

Sumesh Arora, Vice President

Elizabeth Myles, Secretary

We're on the Web!

www.ms-biomass.org

This newsletter is published by Alcorn State University Small Farm Development Center for the Mississippi Biomass Council.

Printing of newsletter have been provide by the United States Department of Energy Grant# DE-PS26-04NT42068-10

No part of this newsletter should be copied or reproduced without the written consent of the Mississippi Biomass Council.

