

ACRECISES The newsletter of the Clemson University Animal Co-Products Research and Education Center

Volume 1, Number 1 September, 2007

Welcome to the inaugural edition of the "ACREC News." This newsletter is designed to keep you informed of the latest information concerning the Clemson University Animal Co-Products Research and Education Center (ACREC). This newsletter will be distributed electronically. We welcome your comments/questions about any of the projects. We also would like to use this venue to request suggestions on future research topics. Through this forum we hope to bring industry, government, and academia together to work on topics of great importance to the rendering industry. Please send e-mail comments to Annel Greene at agreene@clemson.edu.

Unfortunately, we have only a partial e-mail address list of the Fats and Proteins Research Foundation (FPRF) membership and those involved in the rendering industry. Therefore, we ask your help in gathering the e-mail addresses of all members of FPRF and anyone else involved in the animal co-products industry so we may distribute this newsletter to the entire group. Please e-mail contact information to Ms. Andrea Kesler at akesler@clemson.edu.

We are very pleased to welcome Mr. Doug Smith of Baker Commodities, Inc. to the ACREC Research Committee. We thank Mr. Fred Wellons for his dedicated service to the committee and wish him the very best in his new endeavors.

We also are very pleased to welcome Ms. Andrea Kesler in the newlv created Administrative Assistant position for ACREC. Ms. Kesler has worked on campus for nearly 20 years including in the Animal & Veterinary Sciences department and the Library. We thank Dr. Doris Helms and the other Clemson University administrators for creating and funding this position. Ms. Kesler's phone number is 864~656~1757 and FAX is 864~656~ 5162. Her e~mail address akesler@clemson.edu.



ACREC/FPRF Agreement Timeline

YEAR 1	YEAR 2	YEAR 3
July August September October November December January February March April May	July August September October November January February March April May	July August September October November January February March Aprii May





At the Spring 2007 ACREC Research Committee and Governing Board meetings, the committee reviewed 11 research project proposals submitted in response to the spring request for proposals. Nine research projects were chosen for funding effective July 1, 2007. The projects selected are as follows:

Biodiesel Synthesis from Animal Fats Using Solid Catalysts: High Temperature Reaction by Dr. James G. Goodwin, Jr.

Biodegradable Polymer Blends and Composites from Proteins Produced by Animal Co-Product Industry by Dr. Igor Luzinov

Separation and Evaluation of Supramammary Lymph Node Proteins by Dr. Thomas R. Scott

Environmental, Economic, and Energetic Costs and Benefits of Biodiesel and Glycerin Based Chemicals Derived from Rendered Animal Fats by Dr. David Bruce

Improving the Nutritional Value of Tallow as a Feed Ingredient for Dairy Cattle by Dr. Thomas Jenkins

Extrusion and Molding of Animal Co-product-based Proteins for Geostructural Applications by Dr. Amod A. Ogale

DAF Sludge: Exploratory Study of Potential Value-Added Uses by Dr. Annel K. Greene & John Harden

Antimicrobial Properties of Bovine Mammary Gland Extracts by Dr. Paul L. Dawson

Developing Novel Bioactive MBM Products for Potential Aquaculture and Pet Food Market by Dr. Feng Chen

Project progress reports from the first year projects are due at the end of September. In upcoming issues of the ACREC News, we will bring you project updates on those projects.

Events

ACREC Research Committee Meeting Tuesday, September 25, 2007 8:30 am – 11:30 am ACREC Conference Room

Room D-236 Poole Agricultural Center Clemson University

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ACREC Governing Board Meeting Tuesday, September 25, 2007 1:15 pm – 5:00 pm ACREC Conference Room

Room D-236 Poole Agricultural Center Clemson University



Animal Co-Products Research & Education Center (ACREC)

248 Poole Agricultural Center Clemson University
Clemson, SC 29634-0328
Phone: 864.656.1757
FAX: 864.656.5162

www.clemson.edu/acrec

For further information, contact Dr. Annel K Greene, Center Director at 864-565-1757 or acrec-l@clemson.edu

ACREC Research Committee ~ Fall 2007

Dr. Annel K. Greene, Chair Mr. David Kirstein, Vice-Chair Dr. Sergio Nates, Secretary Mr. Gerald "JJ" Smith Dr. James G. Goodwin, Jr. Mr. Doug Smith

ACREC Governing Board – Fall 2007

Dr. John W. Kelly, Chair
Dr. Sergio Nates, Vice-Chair
Dr. Doris Helms, Treasurer
Dr. Alan R. Sams
Mr. Kevin Kuhni
Mr. Gerald "JJ" Smith
Mr. John Dupps
Dr. James G. Goodwin, Jr.
Dr. Annel K. Greene

First try at making a golf tee from blood! Dr. Igor Luzinov and his team have been successful in creating new biodegradable plastics from animal co-products. Now the team is working to improve structural properties of the plastics as well as demonstrate potential uses. The prototype shown below is a preliminary version of a golf tee. According to Dr. Luzinov, his team is working "to make them more mechanically robust." Other potential uses for the plastics could include flower pots, mulch holding nails, and any application where a biodegradable plastic is desired. Imagine a golf tee that, if lost or discarded, will degrade into beneficial fertilizer!

