



Volume 8 Number 2

March 19, 1990

Editor's Corner

The ballots for the election of officers and executive committee members of the Seafood Products Technology Group is found towards the end of this newsletter and must be returned to Bob Collette by May 1, 1990. We thank Donn Ward, Mike Moody, Roy Martin, and Bob for their service on the nominations committee.

Steve Otwell indicates that the Tropical and Subtropical Fisheries Technological Conference this year will again be joint with the Atlantic Fisheries Technological Conference and will be in Orlando, Florida on Dec. 2 thru 5th. For those into advanced planning, I would like to announce that the following year the Atlantic Fisheries Technological Conference will be in Ithaca, NY on August 18-21. We are looking forward to greeting all of our visitors.

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IFT SEAFOOD PRODUCTS TECHNOLOGY GROUP

Chairman: George Flick, VPI, Food Science, Blacksburg, VA 24061.
703-231-6965.

Chairman-Elect: Mike Moody, LSU

Immediate Past Chairman: William Davidson, General Mills

Secretary/Treasurer: Steve Otwell, U FL

Newsletter Editor: Joe M. Regenstein, 112 Rice Hall, Cornell
University, Ithaca, NY 14853-5601. 607-255-2109. Home Fax:
607-257-2871.

Executive Committee Members:

Class of 1990: Norman Haard (U CA-Davis), Chong Lee (U RI),
and Maurice Marshall (U FL).

Class of 1991: Nina Burt (Singleton), Jim Daniels (Mrs.
Pauls), and Roy Martin (NFI).

Steve also wants to let folks know that the Proceedings of the 14th Annual Tropical and Subtropical Fisheries Technological Conference will be available in June 1990 for \$10. Send requests to Steve at ~~467 Food Science Building, Univ. FL, Gainesville, FL 32611.~~

The Federation of Animal Societies of Food Animal Sciences (FASFAS) is now a functioning organization. Four scientific societies have joined as full members: American Dairy Science Association, Poultry Science Association, American Meat Science Association, and the American Society of Animal Science. Their goals for 1989 include developing a Congressional Fellow program, a list of scientists to be a rapid response team, and to focus on previously published animal agriculture research priorities. Other possible areas include animal welfare issues; diet and health as affected by food animal products; and food safety.

The five key functions of the Federation are:

1. Foster interrelationships among societies of animal and food sciences so as to collectively enhance their individual science and educational missions.
 2. Surface issues that have significant regional, national and international impact on animal agriculture and the food sciences, and create forums for their debate and action plans for their resolution.
 3. Forward consensus opinions and recommendations on critical issues, concerns, and action needed to appropriate governmental agencies, agricultural industry organizations, foundations, industrial companies and institutions.
 4. Recommend individuals, in animal and food sciences, to serve on advisory committees and as resource individuals for government, industry or consumer organizations.
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5. Communicate the role and needs of food animal agriculture to the general public.

I strongly believe that the seafood research community must at least be an affiliate member of this organization. Given the lack of another appropriate U.S. fishery organization, I will be proposing to the executive committee of the SPTG that we consider joining as an affiliate organization. As a part of IFT, I believe that affiliate membership will allow us to actively participate in FASFAS discussion without the same degree of commitment at this time as full membership. It would also, presumably, simplify acceptance by IFT. Dues for affiliate members have not been set, but it will probably be less than \$2.00 per SPTG member per year.

Joe M. Regenstein

Chairman's Letter (adapted)

I have greatly enjoyed serving as Chairman of the Seafood Products Technology Group during the past seven months. The Group has been most active and I thought you should become aware of our recent initiatives. During the Spring of 1989 when Bill Davidson was Chairman, the Group submitted a proposal to Dr. Dick Greenberg, IFT OSPA Director, to present an OSPA conference on Seafood Safety. The proposal was accepted and the program will be presented in Washington, D.C. during April, 1990. The program will not duplicate the seafood safety initiative currently being conducted by the National Academy of Sciences. Group members assisting in developing the safety program include: Donn Ward, former Group Chairman; Mike Moody, incoming Group Chairman; Robert Gravani, Microbiology Division; and Dave Attaway, National Sea Grant College Program. The Proceedings of the conference will be distributed to appropriate legislators and regulatory agencies. (Editor's Note: We will, hopefully, have a report in the Fall issue.)

(Editor's Note: The following is being provided for information purposes.)

A companion program, Critical Issues in Seafood Technology will be presented in Williamsburg, VA at the end of the SINA/NBCIA-NSA meeting. This program is being developed by Roy Martin, Group Executive Committee member, with the assistance of Donn Ward, Mike Moody, and Dave Attaway. (Editor's note: Again we hope to have a report in the fall.)

Both of the meetings are intended to complement each other so that the total short and long range needs of the fish and shellfish industry will be identified. Activities are currently in progress to have a representative from both the U.S. Senate and House of Representatives at the Williamsburg meeting.

During January, 1990, a meeting was held in the National Sea Grant College Program Office with: Bob Wildman (Director of the National Sea Grant Program); Dave Attaway; Mike Moody; Donn Ward; and Roy Martin. The purpose of the meeting was to discuss the possibility of developing a national Sea Grant initiative on seafood technology within the National Sea Grant program. It was agreed that the proceedings of the two previously discussed programs will be presented to Congress, one by IFT and the other by Roy Martin, and that a special appropriation to the Sea Grant program will be solicited for seafood technology. This program will be directed somewhat differently from customary Sea Grant funding in that a selected Committee will identify the funding priorities and a request for proposals will be developed. All proposals will be reviewed to ensure relevance to the identified needs. It is also envisioned that the program will have major industry representation in the planning and proposal review process and that grants will be made to both academic and industrial applicants.

I am appreciative of the IFT OSPA Office; National Sea Grant College Program; National Fisheries Institute; and the Council of Sea Grant Directors for their outstanding support and enthusiasm in helping us develop a vision to the future with an accompanying strategy.

On February 6th, I was informed that the symposium on water use, seafood processing waste, and by-product recovery was accepted by the Annual Meeting Program Committee. As you realize, the topic for the symposium was selected from the survey conducted during Bill Davidson's term in office. The program will be presented on Sunday morning:

1. Dr. William Branch, LSU: Critical Issues Related to Ground Water Use.
2. Dr. James A. Daniels, Campbell Soup (Mrs. Paul's): Product Production Based on Resource Use and Waste Generation.
3. Dr. J. Peter Clark, Epstein Process Engineering: In-Plant Resource and Waste Conservation Practices.
4. Dr. Gregory D. Boardman, VPI: Problems Related to Solid and Liquid Waste Management-Food Science and Technology Aspects.
5. Dr. Irwin Kugelman, Lehigh: Traditional and Alternative Solid and Liquid Waste Management Systems-Engineering Aspects.
6. Dr. Dietrich Knorr, Berlin Univ. of Tech.: Recovery and Utilization of Processing By-Products.

George Flick

Fish Waste: Resource Recovery Workshop
December 6, 1989

This one day workshop in Bedford, MA, was sponsored by the New England Fisheries Development Association to highlight work currently being done on waste management. Don Fraser of Canadian Fishery Consultants (CFC) from Halifax opened the meeting with a discussion of some activities in Europe. They are still generally producing fish meal using lower temperatures for better quality, good pollution control systems and waste heat recovery systems. Sopapeche in France is making a hydrolysate that is 90% protein (screened to remove the bones) and get up to \$1500/ton for it. Denmark is paying for raw materials on the basis of TVN (must be <30 mg/100g for top price). They are doing some silage work for fur bearing animals while Norway is also using silage for aquaculture. Krupp of Germany has developed a new process using electronic cooking (high voltage).

Will Brinton of Woods End Research Lab in Mt. Vernon, ME discussed composting in terms of bulk reduction (40-80%), moisture reduction (50-75%), BOD reduction (90%), odor elimination and pathogen control. The major carbon sources they are studying are sawdust and horse litter, but also using sawdust, bark, and other wood wastes. They are also exploring the role that chitinases, or some component of from the fish, might have on the prevention of fungal diseases on plants. They often add magnesium sulfate, ferrous sulfate or sodium monohydrogen phosphate to trap ammonia. One market is in replacing potting mixes--but need to add some peat moss or mixture is too rich. Bill Jackson of North Atlantic Products in Rockland, ME discussed their experience trying to develop a large scale composting site, including details of the environmental work that was required to prepare the site so that there would be no run off. Their major waste is dogfish--which they ground into a liquid material--could then handle in closed tank trucks and applied wet to the compost piles. They currently are giving it away locally to create goodwill. They did find that they had a "compost smell" (not fish) up to a mile away.

Susan Goldhor from the Center for Applied Regional Studies in Cambridge, MA reported on hydrolysis, either by direct acidification or by the use of fermentation to produce the acid. This process requires very high quality materials, but can be done over a range of costs, from relatively low cost systems that do not involve drying to on-board units with follow-up on-shore drying. Current work is focused on minimizing drying costs. One major market for such materials is the baby pig weaning feed market.

David Roberts of CFC discussed salmonid nutrition. Salmon have a need for 10 essential amino acids. Flame drying may destroy lysine. They probably have a maximum carbohydrate tolerance and also need both w3 and w6 fatty acids. Formic acid is palatable while propionic acid is not. Care must be taken to avoid acid hydrolysis of tryptophan.

The issues relating to fishing rights and stock management will remain the purview of diplomats and politicians, but there is an urgent need for a new focus on applied seafood technology to optimize future supplies, and assure they will be utilized in a manner that most efficiently and economically provide consumers with both the pleasure and benefits of eating seafoods.

IFT SEAFOOD PRODUCTS TECHNOLOGY GROUP

1990 ANNUAL ELECTIONS

Select one individual for Chairman-Elect and Secretary-Treasurer and three for Executive Committee Members-at-Large.

Chairman-Elect (Vote for ONE):

_____ W. Steve Otwell, University of Florida

_____ Write-In

Secretary-Treasurer (Vote for ONE):

_____ Russel J. Midget, Texas A&M

_____ Write-In

Executive Committee (Vote for THREE):

_____ S. Shenouda, General Foods

_____ Ronald Lundstrom, NMFS Gloucester

_____ Thomas A. Gill, Technical University of Nova Scotia

_____ Jong Lee, Univ. of Alaska Fishery Industry Tech Center

_____ Keith W. Gates, University of Georgia Marine Extension

_____ Pat Donahoo, Rich-Seapak

Continuing Members:

Mike Moody, LSU, Chairman
George Flick, VPI, Past-Chairman
Joe Regenstein, Cornell, Newsletter Editor
Nina Burt, Singleton, Executive Committee
Jim Daniels, Mrs. Pauls, Executive Committee
Roy Martin, NFI, Executive Committee

Please Return Ballots to:

Bob Collette
National Fisheries Institute
1525 Wilson Boulevard, Suite 500
Arlington, VA 22209

BALLOTS DUE MAY 1, 1990

NEW YORK STATE COLLEGE OF AGRICULTURE
AND LIFE SCIENCES AT CORNELL UNIVERSITY
Department of Poultry & Avian Sciences
RICE HALL
ITHACA, NEW YORK
14853-5601



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FIRST CLASS