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Photo: Biosolid waste land application at the Conservation Funds Freshwater Institute.

Volume 11  
Issue 2  
Spring 2008

## President's Message

To my colleagues and friends,

It is my great pleasure to write to you as the new President of AES. As many of you know, the Society has experienced significant growth and is poised to further expand its scope, significance, and impact to the international community of aquacultural engineers and scientists. I am grateful for this opportunity and am deeply appreciative of the strong support provided by all our members.

With the recent election of Dr. German Merino (Coquimbo, Chile) as Second Vice President, AES has reached a significant milestone in the expansion of our global reach and significance. I am very proud to have Dr. Merino in this leadership position and believe he will aid us greatly as we continue to further the Society's goal to serve the international aquaculture community.

I also want to extend my personal thanks to Dr. Asbjørn Bergheim (Stavanger, Norway), a member of the AES Board of Directors (BOD) and a candidate for the Second VP position in 2008. I believe all AES members understand the substantial commitment needed to run for office, are greatly appreciative of Dr. Bergheim's service as a BOD member,

and look forward to his continued contributions to AES's mission.

Under the strong leadership of our Past President, Dr. Greg Boardman (Blacksburg, Virginia, USA), AES realized a substantial increase in membership last year – from ~140 to 260 members. We are continuing his considerable efforts to engage new members and reconnect with those whose memberships have lapsed. I personally ask each of you to reach out to those you believe would benefit from AES membership in addition to past members and encourage them to become an active part of our growing Society.

At the annual membership meeting in Orlando, Florida, four awards (each consisting of \$500 in travel support and a complimentary conference registration) were made to student members. Recipients were chosen from a pool of 32 applicants. This tremendous response from student members was due in large part to the great efforts of AES BOD Member David Smith (Vicksburg, Mississippi, USA), who has led efforts to enhance student engagement throughout 2007 and will continue his important work this year. I encourage all AES members, and particularly those

who work in academics, to make your students and those in allied fields aware of the many benefits of AES membership and the opportunity to join AES as a student, at no charge. Based on the student participation at Orlando, there is clearly a high degree of momentum among our up-and-coming aquacultural engineers, and it is our responsibility to engage and mentor them.

We are fortunate to have a year filled with conferences, workshops, and short courses that feature both AES members and Society sponsorship. Dr. Yoram Avnimelech (Haifa, Israel) has taken the lead, with his co-chair, Dr. Xiao-Hua Zhang (Qingdao, China), in developing a biofloc technology (BFT) session at World Aquaculture 2008, in Busan, Korea. In recent correspondence, Dr. Avnimelech noted the substantial participation of faculty and students from China. We are grateful to Drs. Avnimelech and Zhang for bringing the BFT session to fruition and look forward to the positive impacts this engagement will have on AES's international exposure and membership.

In July, the seventh International Conference on Recirculating Aquaculture will be held in Roanoke, Virginia (US). This event will be preceded by the AES Issues Forum that will include special sessions on (1) the production of

# Awards

## Steve Serfling Receives AES Award of Excellence



Steven Serfling was a pioneering applied scientist who too soon leaves an enduring legacy to aquaculture. Many of our members are dedicated to extending and fully understanding many of the insights that originated with Steve. Through his innovative research in the field of aquaculture and his energetic efforts to apply emerging technology, Mr. Serfling has had a significant impact on our field worthy of this Award of Excellence.

During his early career, Steve designed and managed several pilot scale projects, using emerging aquaculture technology to culture numerous species in recirculating systems. He developed innovative wastewater treatment technology using high-rate aquaculture systems and methods for treating aquaculture effluents.

At Solar Aquafarms, Inc. in California Steve conceived and implemented the largest closed-cycle biofloc-based aquaculture farm in the world at that time, culturing 4 million lbs/yr of tilapia in an intensive recirculating facility. The company

commercially demonstrated fish production using biologically integrated water treatment systems. In many ways, Solar Aquafarms was a prototype of commercial aquaculture processes on the cutting edge of today's aquaculture technology.



John Colt with Steve's sister Sally Navarro (left), his mother Ruth Townsend (middle), and sister Susan Swan (right). Photo courtesy of Rick Martin, Fish Farm News.

As a keen observer of aquaculture technology, he constantly extended the applications for biological processes in aquaculture facilities in three fundamental ways:

» He recognized the inherent advantages of suspended microbial systems and that an ecological approach to managing aquaculture systems has intrinsic efficiency and stability.

» He revealed synergisms within aquaculture systems such as pro-biotic effects and that feeding on detritus and suspended microbial particles often enhance growth performance and feed conversion rates.

» He was among the first realize that integration of biological and ecological processes within cultural systems was often a valid alternative to mechanical unit processes.

Steve was a maverick and a leader. He constantly displayed the courage to demonstrate technical innovations even when they were controversial. He created numerous opportunities for many in aquaculture and most all of them will tell you that, although he was not a formal instructor, he was a fine teacher that left a lasting impression and inspiration for many to find a better way.

He presented his last paper at the 2006 U.S. WAS meeting in Las Vegas "Use of Suspended Microbial Treatment Methods in Recirculating Tank Systems for Culture of Freshwater and Marine Fish, and Marine Shrimp." Ironically we believed at that time that Steve had triumphed over a long battle with cancer; he relapsed in November 2006 and passed away February 15, 2007. We will miss this gentle person and we hope this award somehow comforts Steve's family and friends by recognizing the value of his work.

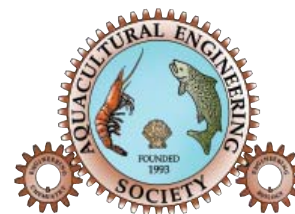


## Steven Summerfelt Receives the AES Meritorious Service Award

AES can honor its members with two types of very special awards to recognize excellence and dedication, the Award of Excellence and the Meritorious Service Award. These awards are not necessarily made each year; only when deserving individuals are identified. This year, at the AES General Membership meeting held in conjunction with the 2008 Aquaculture America Conference in Orlando, Dr. Steven Summerfelt was presented the AES Meritorious Service Award. This award recognizes an AES member's unswerving loyalty, dedication, and meritorious service to the society over a long period of time; and for exceptional commitment to the programs, ideals, objectives and long-term goals of AES. Dr. Summerfelt is only the second member to receive the award since AES was founded in 1993.

Dr. Steven Summerfelt is the Director of Aquaculture Systems Research at The Conservation Fund's Freshwater Institute (TCFFI) in Shepherdstown, West Virginia. Dr. Summerfelt joined the TCFFI staff in 1992. He is Co-Project Leader of TCFFI's USDA-ARS project titled, "Development of Sustainable Land-based Aquaculture Production Systems." His research focuses on water treatment unit processes (e.g., fluidized-sand biofilters, microscreen filtration, aeration, air-stripping, oxygenation, ozonation, ultraviolet irradiation), waste management systems, and optimization of fish production (e.g., engineering of fish culture tanks, continuous production modeling and management, ultrasonic waste-feed control, and fish health management). He has worked on the design of several large commercial fish-farms, and with state and federal agencies on the evaluation and design of hatchery water supply, production systems, and effluent treatment systems. His professional affiliations include: Aquacultural Engineering Society (AES) - Secretary from 1996-2000, 2nd Vice President in 2000, 1st Vice President in 2001, President in 2002, Past President in 2003, AES Newsletter Co-Editor from 1996-2003 & 2006-present, current member; American Institute of Chemical Engineers - current member; Water Environment Federation - current member; and USDA Joint Sub-committee on Aquaculture Waste Management - current member. He is the author or co-author of 40+ peer-reviewed journal publications, eight book chapters, and a book titled Recirculating Aquaculture Systems.

Dr. Summerfelt epitomizes the type of person who should earn the AES Meritorious Service Award. For more than 11 years, he has served the society admirably. And, it is clear that he will serve the society for many more years, given his enthusiasm for society goals and activities. Steven is indeed one of the most well-known and respected members of the society; a reputation that was born out of exceptional service, professional activity, and integrity.



## 2008 AES Superior Paper Awards

The AES Superior Paper Awards were presented during the AES Annual Membership Meeting held at Aquaculture America 2008, Lake Buena Vista, Florida.

The AES Superior Paper was presented to:

Barbara C. Benson and Kelly A. Rusch. 2006. Investigation of the light dynamics and their impact on algal growth rate in a hydraulically integrated serial turbidostat algal reactor (HISTAR). *Aquacultural Engineering* 35(2), 122-134.

The Honorable Mention Paper Awards were presented to:

Jianyu Xu, Ying Liu, Shaorong Cui, and Xiangwen Miao. 2006. Behavioral responses of tilapia (*Oreochromis niloticus*) to acute fluctuations in dissolved oxygen levels as monitored by computer vision. *Aquacultural Engineering* 35(3), 207-217.

Shulin Chen, Jian Ling, and Jean-Paul Blancheton. 2006. Nitrification kinetics of biofilm as affected by water quality factors. *Aquacultural Engineering* 34(3), 179-197.

## Recipients of the Award of Excellence and the Award of Meritorious Service:

Dr. John Colt	Award of Excellence (2003)
Dr. Barnaby Watten	Award of Excellence (2005)
Dr. Brian Vinci	Award of Meritorious Service (2006)
Mr. Steven Serfling	Award of Excellence (2008)
Dr. Steven Summerfelt	Award of Meritorious Service (2008)

# Upcoming Events

## 2008 AES Issues Forum

The next AES Issues Forum will be held July 23-24, 2008, in Roanoke, Virginia, USA, at The Hotel Roanoke and Conference Center (HRCC). Gregory Boardman (AES Past President) and George Flick are hosting this "Members Only" Issues Forum. The AES Issues Forum is intended for members of the AES to gather and reflect upon the advances and current issues in the field of aquacultural engineering. The 1.5 day Forum will focus on two special topics: (1) Production of New Species and (2) Design, Loading, and Water Quality in Recirculating Systems for Salmonids. The sessions will consist of a mix of invited and contributed presentations. The 2008 AES Issues Forum will be held immediately before and at the same location as the 7th International Conference on Recirculating Aquaculture (ICRA), which will run from July 25-27, 2008. As in the past, the Forum will be organized to allow for a question and answer period following each presentation. A reception and dinner will be held at the HRCC after the first 0.5 day session on July 23. Continuous break foods will be provided throughout the program and lunch will be served on the second day. Selected papers from the Issues Forum will be published in a special issue of *Aquacultural Engineering*.

Registration received before June 23, 2008 will be \$265 and can be submitted along with the form being used for ICRA registration. Those who are not members of AES can participate in the Forum by simply joining AES. The AES membership fee (\$25) can be paid when you register for the Forum. Please contact Greg Boardman (ph: 540-231-1376; email: gboard@vt.edu) if you would like more information about the 2008 AES Issues Forum.

Special Session (0.5 day): *Production of Emerging Aquaculture Species* – organized by Greg Boardman and George Flick

For many years, the tools of the commercial fisherman provided a variety of finfish and shellfish for consumers. Now, it is clear that aquacultural practices are needed to fill the voids in the wild catch. The focus of this session is on the production of emerging species of finfish. The session will be developed from both invited presentations and submitted abstracts. Aquacultural researchers will be invited to share their experiences in culturing species that appear to show promise for culture in recirculating systems. Session authors should plan on addressing the challenges faced in culturing the species, special requirements (e.g., feeds, water quality, system configuration, etc.) of the species, and future research areas.

## Session: Production of Emerging Aquaculture Species, Wednesday, July 23

<i>Presenter</i>	<i>Presentation Title</i>	<i>Time</i>
G. Boardman G. Flick	Welcome	1:00
M. Schwarz	Assimilation of RAS and Net Pen Operations to Enhance Global Cobia Production	1:15
J. Ebeling	Engineering Design of a Commercial Spotted Sea-trout Recirculating Aquaculture Production System	2:00
J. Goldman	Culturing Barramundi	2:45
	Networking Break	3:30
A. Ritar	Water Treatment for the Culture of Rock Lobster Larvae	4:00
G. Merino	Worldwide Abalone Farming and Aquacultural Engineering Challenges for Its Culture in Chile	4:45
	Reception and Banquet	6:00

## Session: Design, Loading, and Water Quality in Recirculating Systems for Salmonids, Thursday, July 24

<i>Presenter</i>	<i>Presentation Title</i>	<i>Time</i>
S. Summerfelt	Introduction	8:00
A. Bergheim	Dominating Systems for Production of Atlantic Salmon Smolt in Europe	8:10
T. Kristensen	Transition from Current Technology to Recirculation in Atlantic Salmon Smolt Production: Water Quality, Water Utilization and Feasibility	8:40
Y. Ulgenes	The Motivation for Using Recirculation in Norway – A Shift from the Need for Restricted Water Consumption to Better Control of the Culture Water Environment and Higher Product Quality	9:10
R. Morey	Design Keys of the Last Recirculating Facility Built in Chile Operating with Fluidized Bed Biofilters	9:40
	Networking Break	10:10
I. Warrer-Hansen	Intensive Large Scale Salmon Smolt Production in RAS	10:30
W. Wolters	Recirculating System Design, Loading, Water Quality, and Atlantic Salmon Grow-Out Performance at the USDA National Cold Water Marine Aquaculture Center (Franklin, ME)	11:00
M. Couturier	TSS Concentrations within a Salmon Smolt Farm	11:30
	Lunch	12:00

## Session: Design, Loading, and Water Quality in Recirculating Systems for Salmonids, Thursday, July 24

<i>Presenter</i>	<i>Presentation Title</i>	<i>Time</i>
P.B. Pedersen	Environmental Benefits Achieved by Applying Recirculation Technology at Danish Trout Farms (Model Trout Farm)	1:20
J. Davidson	Water Quality and Treatment Efficiency in Replicated Recirculating Systems for Salmonids Operated Under (1) High Feed and Low Flushing or (2) Low Flushing Conditions With or Without Ozonation	1:50
E.J.M. Emparanza	Nitrification in Fixed Bed Biofilter RAS for Salmonids: Experience in Chile	2:20
P-D. Sindilariu	Waste and Particle Management in a Commercial, Partially Recirculating Trout Farm	2:50
	Networking Break	3:20
S. Skybakmoen	Coldwater RAS in an Arctic Char Farm in Northern Norway	3:50
G. Fischer	Evaluation of Brook Trout Culture in a Water Recirculating System	4:20
A. Tesch	Recirculating Aquaculture Use for Sport Fish Stocking Programs in Alaska	4:50
B.F. Terjesen	RAS Research Facility Dimensioning and Design: A Special Case Compared to Planning Production Systems	5:20

### Posters:

S.I. Siikavuopio

Comparative Growth Study of Wild and Hatchery Produced Arctic Charr (*Salvelinus alpinus* L.) in a Coldwater Recirculating System

Special Session (1.0 day): *Design, Loading, and Water Quality in Recirculating Systems for Salmonids* – organized by Steven Summerfelt and Asbjorn Berghheim

Worldwide production of salmon, trout, and arctic char in recirculating systems has expanded rapidly in the past 5 yrs. Although there is tremendous heterogeneity in production system design, water quality control is a common factor in intensive recirculating systems that produce salmonids. System design, loading, and management all interact to determine the concentration of dissolved oxygen, carbon dioxide, ammonia, nitrite, nitrate, total suspended solids, bacteria, and organic carbon exiting the fish culture tank in water reuse systems. Session organizers are inviting presentations on case studies and research that describe the interaction between recirculating system design, loading, and water quality in salmonid production systems. Presentations should also include details on water use (e.g., kg feed per m<sup>3</sup> makeup), system exchange rate (e.g., % system volume flushed daily), culture tank exchange rate (e.g., hydraulic retention time), system production (tons per yr), unit process treatment efficiency (e.g., waste removed each pass through the unit), system waste capture efficiency, fish performance, and energy consumption (e.g., KW per kg produced). Presentations that discuss the important interaction between salmonid welfare and water quality in recirculating systems will also be considered.

## 7th ICRA

The Seventh International Conference on Recirculating Aquaculture and Trade Show will be held at The Hotel Roanoke and Conference Center, July 25-27, 2008. This conference allows researchers, industry professionals, government personnel to share findings and explore the newest innovations in the field of recirculating aquaculture. Past attendance has included recirculating facility operators, aquaculture managers, fishery biologists, veterinarians, food technologists, banking and insurance representatives, engineers, and teachers.

Program highlights include presentations on completed research in the areas of system design, fish health, pond recirculation, ornamental species, waste management and resource recovery, economics, biomedical applications, hydroponics, and polyculture. The trade show allows for buyers to network with manufacturers and suppliers in a relaxed atmosphere. Your registration fee includes admittance to all program sessions, continental breakfast, two luncheons, and our opening reception. Also included is a copy of the proceedings on CD-ROM, a two-year subscription to the International Journal of Recirculating Aquaculture, and refreshments each conference day.

For more information about the AES Issues Forum and/or ICRA, please visit our website at:

<http://www.cpe.vt.edu/aquaculture/r-aqua>

or contact: Ms. Terry Rakestraw  
ph: +1 540 231-6805  
email: aqua@vt.edu.

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*Thanks for your support!*

# AES Board of Directors 2008

Name	City, State Country	Position	Term	Engineering Status	E-mail address
Greg Boardman	Blacksburg, VA	Past-President	2005-08	ENGR	gboard@vt.edu
Roger Viadero	Macomb, IL	President	2006-09	ENGR	RC-Viadero@wiu.edu
Steve Hall	Baton Rouge, LA	Vice-President	2007-10	ENGR	shall5@lsu.edu
German Merino	Chile	2nd Vice -President	2008-2011	INT-ENGR	gmerino@ucn.cl
Tim Pfeiffer	Fort Pierce, FL	Secretary/Treasurer	2006-08	ENGR	tjpfeif@comcast.net
Paul Hundley	Charleston, SC	Director	2007-08	ENGR	phundley@rmf.com
Dave Smith	Vicksburg, MS	Director	2007-08	ENGR	david.l.smith@erdc.usace.army.mil
Simon Dunn	Denmark	Director	2007-08	INT-ENGR	sdunn@interaqua.dk
Asbjorn Bergheim	Stavenger, Norway	Director	2007-08	INT-ENGR	asbjorn.bergheim@irisresearch.no
Oliver Schneider	Wageningen, Netherlands	Director	2007-08	INT-ENGR	oliver.schneider@wur.nl
Yoram Avnimelech	Haifa, Israel	Director	2007-08	INT-ENGR	agyoram@techunix.techion.ac.il
George Flick	Blacksburg, VA	Director	2008-09	NON-ENGR	flickg@vt.edu
Raul Piedrahita	Davis, CA	Director	2008-09	ENGR	rhpiehita@ucdavis.edu
Joel Barraza	Chile	Director	2008-09	INT-ENGR	jbarraza@ucn.cl

## Job Announcements

UAPB Aquaculture/Fisheries Center is currently offering several positions in the Department of Aquaculture and Fisheries, University of Arkansas at Pine Bluff, Pine Bluff, Arkansas.

### Assistant Professor (Small Impoundments /Reservoir Management)

Twelve month tenure track (30% teaching; 30% research; 40% extension)

Must have Ph.D. in Aquaculture, Fisheries or closely related field.

Duties and Responsibilities: Arkansas has over 100,000 private-owned impoundments that are managed for fisheries, wildlife, and aesthetic purposes, as well as one of the highest angler participation rate in the U.S. The Aquaculture/Fisheries Center has statewide responsibility to provide research-based extension recommendations in the state of Arkansas for aquaculture, fisheries, small impoundments and reservoir management. The incumbent will develop a productive research program in these same areas and will be expected to produce science-based management recommendations. The incumbent will teach graduate and undergraduate courses in management of small impoundments and other fisheries subject areas.

### Assistant Professor (Water Quality)

Twelve month tenure track (25% teaching; 75% research)

Must have Ph.D. in Aquaculture, Fisheries or closely related field.

Duties and Responsibilities: Arkansas is a leader in commercial aquaculture production in the U. S. The Aquaculture/Fisheries Center has statewide responsibility for aquaculture and fisheries to provide research-based solutions to problems faced by fish farmer stakeholder groups in Arkansas. The incumbent will develop a productive research program to improve management of water quality in aquaculture production systems, with an emphasis on pond production. The incumbent will teach graduate and undergraduate courses in water quality and other fisheries subject areas.

### Assistant Professor (Aquaculture and Fisheries Biostatistics)

Twelve month tenure track (25% direct classroom teaching; 25% individual teaching/guidance related to statistical design and analysis; 50% research)

Must have M.S. or Ph.D. in Biostatistics, Statistics, Bioinformatics, Agricultural Statistics, Econometrics, or closely related field.

Duties and Responsibilities: The Aquaculture/Fisheries Center has statewide responsibility to provide research-based solutions to problems of stakeholder groups. The incumbent will provide support on statistical design and analysis across a wide range of aquaculture and fisheries disciplines to fac-

ulty, staff, and students on a one-to-one or as-needed basis. The incumbent will teach a series of graduate courses in the statistical analysis of research data, with an emphasis on aquaculture and fisheries data. The incumbent will develop a productive research program related to statistical design and analysis of aquaculture and fisheries research and extension problems and will be expected to produce peer-reviewed publications.

The persons selected for these positions must have the ability to communicate effectively with students, staff, and faculty. Must be committed to a productive research program and to contributing statistical advice on research and extension projects. Must be committed to effective teaching. The individual must be willing and capable of developing effective working relationships across various fisheries and aquaculture disciplines within the department.

Positions close June 1, 2008 or until a suitable candidates are found.

For more information, contact

Dr. Carole R. Engle, Chairperson  
Department of Aquaculture and Fisheries, Mail Slot 4912  
University of Arkansas at Pine Bluff  
1200 N. University Drive  
Pine Bluff, AR 71601

TEL: (870) 575-8523;  
FAX: (870) 575-4637  
E-mail: cengle@uaex.edu

## Director of the Institute of Aquaculturs

(Professorial Appointment)

The Institute of Aquaculture is the leading international centre in its field and the largest of its kind in the world. Bringing together cross-disciplinary, world class researchers in reproduction, genetics, aquatic animal health, nutrition, production systems, environments, markets, and social and economic impacts, our research and training focuses on critical questions relating to strategies for sustainable aquaculture.

The Institute has over 100 staff and 90, largely postgraduate, students. We have a first class international reputation in research, teaching, training and consultancy, and an annual operating budget of some £5 million. We work in close partnership with the global aquaculture

industry and through an extensive network of international research collaborations.

The University wishes to appoint a new Director for the Institute of Aquaculture. This is a professorial appointment and an internationally-renowned scientist with an outstanding research record is sought.

The Director will be responsible for developing and delivering a strategic vision for the next phase of growth and development of the Institute. Providing inspiring scientific leadership, s/he will promote continuous improvement in research performance and external funding, quality enhancement and innovation in training, teaching and learning, and effective knowledge transfer. S/he will also be responsible for ensuring effective management of the Institute,

including financial and human resource management.

The Director will take account of developments within the external academic, public and commercial environment and will play a major role in representing the Institute outwith the University, both nationally and internationally.

Informal enquiries can be made to Professor Ian Simpson (i.a.simpson@stir.ac.uk)

Further particulars are available by using the link below: <http://www.hr-services.stir.ac.uk/vacancies/academic.php#A14516> or email: [hr-services@stir.ac.uk](mailto:hr-services@stir.ac.uk)

Closing date for applications: Wednesday 25 June 2008.  
Please quote reference number: 14516/5952

## Continued from page 1 - President's Message

emerging aquaculture species and (2) the interaction between recirculating aquaculture system (RAS) design, loading, and water quality, with a focus on salmonid culture. These are AES "members only" sessions that provide a unique service and value to the Society. These events are bookended by two short courses on recirculating aquaculture systems and water reuse in intensive aquaculture offered by Mike Timmons in Blacksburg, Virginia, USA and the Freshwater Institute in Shepherdstown, West Virginia, USA, respectively.

Based on informal feedback, it appears many AES members will be in attendance at the AES Forum. To take advantage of this circumstance, we are tentatively planning a meeting of the AES BOD during this time. Of course, all AES members are invited and encouraged to attend BOD meetings to learn more about particular initiatives and exchange their thoughts with the Board. More information on this meeting will be provided in the near future.

Drs. Tom Losordo (Raleigh, North Carolina, USA) and Ron Malone (Baton Rouge, Louisiana, USA) will be giving keynote addresses at Australasian Aquaculture 2008, held in Brisbane, Australia, from August 3-6. These activities are central to enhancing AES's exposure to the aquaculture community and broadening our membership base. We all extend our

thanks to Drs. Losordo and Malone for the time and effort they have invested on behalf of AES.

Finally, we look forward to your participation in the 2009 World Aquaculture and Aquaculture America Conferences to be held in Veracruz, Mexico, and Seattle, respectively! More information on particular sessions will be sent to you by our Second VP, Dr. German Merino.

In February, AES recognized the many accomplishments and contributions of Dr. Steven Summerfelt (Shepherdstown, West Virginia, USA) with the AES Meritorious Service Award. The Meritorious Service Award is one of the two highest honors the Society can bestow on a member. Clearly, everyone who knows Steve, his work as an aquacultural engineer, and his dedication to AES will recognize that a single award can never fully reflect the scope and significance of his contributions to our Society.

We also congratulate Drs. Barbara Benson (Lafayette, Louisiana, USA) and Kelly Rusch (Baton Rouge, Louisiana, USA), recipients of the AES Superior Paper Award for their exceptional contribution to aquacultural engineering literature. Two Honorable Mention Paper Awards were also made to Drs. Jianyu Xu (Ningbo, China), Ying Liu (Quingdao, China), Shaorong Cui (Hangzho, China), and Xiangwen Miao (Hangzho, China), and Drs. Shulin Chen (Pullman, Washington, USA), Jian Ling

(Pullman, Washington, USA), and Jean-Paul Blancheton (Palavas les flots, France) for their outstanding work. Competition for paper awards continues to become more intense each year, due to the number and high quality of the work AES members submit for publication in Aquacultural Engineering. This is truly an outstanding trend which I believe is just one of the many ways AES continues to grow.

During meetings of the Board of Directors and the AES General Membership in Orlando, there were presentations and discussions related to the Society's Bylaws. The majority of issues were focused on clarifying and updating details. All members will receive additional correspondence on any potential changes and feedback will be solicited. In preparation, members interested in learning more about AES's current bylaws can access the complete text at: [http://www.aesweb.org/documents/aes\\_general/bylaws.html](http://www.aesweb.org/documents/aes_general/bylaws.html).

As you can tell, in early 2008, we have been blessed by the many significant achievements and accomplishments of AES's members. I thank each of you for your hard work and contributions to the Society and look forward to working with you this year!

Kindest Regards,

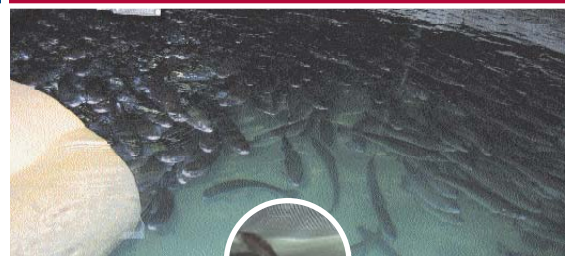
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AES President, 2008

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The AES is looking for sponsors within the aquaculture industry to support the cost of producing the AES News. The sponsors listed above have donated generously to support the AES in 2007-2008.



## A.E.S. Information

The AES News is printed quarterly by the Aquacultural Engineering Society. You can receive the AES News by joining the Aquacultural Engineering Society. If you would like to discuss the contents of the AES News, or if you would like to contribute information to the AES News, please contact the editor.

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