AES Members and Supporters,

As the COVID-19 pandemic continues throughout the world in various stages, it is vital to remain positive and informed. Aquaculture is a necessary industry for each region of the world that is being affected by this pandemic and related consequences. While many of us are in quarantine or have restricted movement, now is an ideal time to learn for these experiences and prepare for the future.

While each country has various protocols in place to reduce the detrimental affects of COVID-19, we hope that each of you remain as healthy as possible and safe. AES is always available for as much support as possible and look forward to recovering from this pandemic in a positive manner with more knowledge than before.

Thank you,

Tiffany Conner
Executive Director

News

eCornell University has developed an online Certificate in RAS Design and Operation.

This certificate was developed by Dr. Michael Timmons from Cornell University.

This certificate is available to all and more information will be updated at www.aesweb.org/members/ras-design-and-operation-certificate-program

Topics covered in course:

- Overview of recirculating aquaculture systems (RAS) engineering
- Water quality objectives, monitoring and measurement
- Fish growth and system staging
- Engineering design of individual unit processes
- System management
- Fish health management
- Economic and risk evaluation

The certificate program in RAS Design and Operation is intended to validate, or certify, the competency of an individual that is involved in this area of aquaculture production. Basic competency requires a demonstration of knowledge about the fundamental principles of designing and operating RAS.

For more information visit the AES website or contact us at info@aesweb.org.
Upcoming Events

Due to COVID-19 many events have been postponed or canceled. Please check with the organizing associations for more information.

Aquaculture UK

*Date Change*

Reschedule to Sept. 15-17

Scotland, UK

https://aquacultureuk.com/

ISFNF 2020

May 31st– June 5th

Busan, South Korea

https://www.isfnf2020busan.com/sub/program.php

Aquaculture Canada & WAS North America 2020

August 30th– September 2nd

Newfoundland, Canada

https://www.was.org/meeting/code/wana2020

Elsevier Aquacultural Engineering Journal

Elsevier publishes an Aquacultural Engineering Journal and we offer discounted subscriptions for AES members. Both printed and online journals are available.

If you’d like to learn more about subscribing to the Elsevier Aquacultural Engineering Journal, contact us today!

AES Member Spotlight

Do you have an innovative program? Emerging technology? Sustainable practice?

Please send information, articles, etc. that you would like to share with AES members and supports to tiffany@aesweb.org

THE AQUACULTURE ENGINEERING SOCIETY

EMAIL info@AES.org   WEBSITE www.AES.org

Para asegurar recibo de nuestro email, favor de agregar info@AES.org a su libreta de direcciones.
As of February 2020, we have 68 members, 3 Lifetime members, and 59 student members. With incentives for membership including reduced subscriptions to Elsevier, access to member’s only sections of the AES website, exclusive information at aquaculture conferences around the world, it is essential for those in the aquaculture engineering field to be an AES member. For more information about membership, visit www.aesweb.org/member_registrations

The geographical distribution of the AES membership is:

<table>
<thead>
<tr>
<th>Member geographical distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>58%</td>
</tr>
<tr>
<td>Europe and UK</td>
<td>17%</td>
</tr>
<tr>
<td>Canada</td>
<td>15%</td>
</tr>
<tr>
<td>Other (Asia, S. America, Oceania)</td>
<td>10%</td>
</tr>
</tbody>
</table>

Financial Update

<table>
<thead>
<tr>
<th></th>
<th>Ending balance 12/31/19</th>
<th>Current balance 2/29/20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checking</td>
<td>$1,102.70</td>
<td>$1,853.31</td>
</tr>
<tr>
<td>Savings</td>
<td>$62,672.22</td>
<td>$54,990.75</td>
</tr>
</tbody>
</table>

$: US dollars

Current expenses include the salary of our new Executive Director, Tiffany Conner, expenses related to Aquaculture America 2020 and Elsevier discounted subscriptions.

Society Update

In February of 2020, AES hosted numerous speakers at Aquaculture America 2020 in Honolulu, Hawaii. We also had a booth in the expo hall. During the three full days of the convention and expo, we were able to interact with many members and those that became members! It was a wonderful experience to participate in and be able to provide education opportunities for all that attended.

Thank you to the board members and members that assisted at AA 2020!

As we receive the presentations from the AES sessions that took place, they will be uploaded onto our AES website with permission from the presenters.
A new joint venture in the US: HTH aquaMetrics llc and Alpha Aqua A/S creating Alpha Aqua North America

The global future of aquaculture is here to fulfil US market needs

**Denmark, March 2020:** The Danish company Alpha Aqua A/S ([www.alpha-aqua.com](http://www.alpha-aqua.com)) and HTH aquaMetrics llc, a US based consultancy and engineering company ([www.hthaqua.com](http://www.hthaqua.com)) are joining forces under Alpha Aqua North America to provide advanced RAS planning, design, construction and full-service packages to the American aquaculture markets.

Taking advantage of HTH aquaMetrics™ experience in the market together with Alpha Aqua A/S unique RAS design, Alpha Aqua North America will rethink the entire value chain, pushing the limits for a better aquaculture by adding new methods, materials, best practices, and innovation. “We see a tremendous opportunity in the US market and Alpha Aqua North America can bring the value and resources required”, says Paul Hundley, founder and project manager for HTH with over 30 years of experience in the field.

Alpha uses recyclable food grade PP (polypropylene) for their Water Treatment Units as well as the tanks and production systems. The concept has been developed and designed with a strong emphasis on sustainability, fish welfare, a minimum environmental impact and strong construction principles. As Ramon Perez, COO of Alpha Aqua and a DVM says, “we rethink the usual and push the limits for a better aquaculture.”

HTH aquaMetrics™ was created in 2017 between Paul Hundley and Maddi Badiola, a RAS PhD and sustainability expert with an international background. Partnering with HTH is Alpha Aqua A/S, a Danish company strategically created for the purpose and lead by Johan Højgaard, a MBA and business development specialist. “After several meetings and discussions with Paul and Maddi and learning about the American market, we are convinced that our products and services are the right solution.” The new company will work in close cooperation with strategic partners in the international aquaculture industry.

Alpha Aqua North America will provide land-based Recirculating Aquaculture solutions for a sustainable future:
- Turnkey solutions
- Modular systems and production units developed in phases
- Faster construction with no fixed concrete structures providing flexibility and adaptability to market changes
- Efficient planning, safer production units and lower total costs

For more information about this article please contact Maddi Badiola (mbadiolamillate@gmail.com)

Have an article or press release that you would like included in our newsletter? Please send your information to Tiffany@aesweb.org
Our sponsors are an integral component to the society and we encourage you to reach out to them when you are seeking products or services.

Interested in becoming a sponsor?

Sponsorship of the AES includes:

• Listing your company as a sponsor in the AES News
• Posting your company as a sponsor on the AES webpage
• Annual membership and journal subscription

If you are interested in becoming a sponsor please visit www.aesweb.org/sponsors or contact tiffany@aesweb.org.
2020 Membership Registration

AES 2020 MEMBER REGISTRATION (Please type or print clearly) Date ___________________

___ New or ___Renewal ___Full ___Student or ___Sponsor

Title ___________________ Name ___________________ Company ___________________

Street Address __________________________________________

City ________________ State _______ Postal Code __________ Country _______________

Phone ___________________ Fax ___________________

Email __________________________________________

☐ 2020 Annual membership. Includes: $30
   Access to Online Member Directory

☐ 2020 Student membership. Includes the same as above. Free

☐ 2020 Sponsor (membership, printed journal subscription, and advertising on website) (www.aesweb.org) $650

Options (additional cost to the $30 annual membership dues):

☐ Lifetime Membership $60
   For those who have been AES members for 20+ years

☐ Printed subscription to Elsevier’s journal Aquacultural Engineering $94

☐ Standard one year subscription of the printed journal

☐ Online subscription to Elsevier’s journal Aquacultural Engineering $74

☐ Web-based access through ScienceDirect (www.sciencedirect.com/science/journal/01448609)

Total ________

PAYMENT OPTIONS:

☐ Check (Made payable to Aquacultural Engineering Society in US Funds)

☐ Online: Go to www.aesweb.org

Charge: ☐ Visa ☐ MasterCard ☐ Discover

Credit Card #: __________________________________________

Expiration Date: ___________ ___________ Security No. (3 to 4 digits) ___________

Name on Card: ___________________ Signature: ___________________

Please send this form and payment to: Aquacultural Engineering Society, c/o Tiffany Conner,
P.O. Box 2974, Riverview, FL, 33568, USA, email: tiffany@aesweb.org