On behalf of the IWA AD SG North America Region, we are proposing to organize the 16th World Congress on AD on the shores of Lake Tahoe, USA. The conference would take place in the summer or fall of 2019, with a date to be determined after reviewing competing conferences and academic schedules in various countries. The following paragraphs present the information requested in the request for proposals.

1. Place and specific venue for conference.

We are proposing to organize the conference in the western USA at Lake Tahoe in Incline Village, Nevada. Lake Tahoe is a spectacular mountain lake (Fig. 1). The lake encompasses nearly two hundred square miles within beautiful mountain terrain. To the west of Lake Tahoe, the peaks of the Sierra Nevada Mountains rise up to 1,200 m above the lake. The lake is one of the leading recreational areas in the western USA with abundant opportunities for hiking, biking, boating, and other outdoor activities.

Fig. 1: Scenery of Lake Tahoe and Hyatt Regency Lake Tahoe Resort
(sources: www.ironman.com and http://www.gpugsummit.com/gpugsummit/explore/)

The venue would be the Hyatt Regency Lake Tahoe Resort. This facility has almost 5,000 m^2 of indoor and outdoor event venues, including a lakeside ballroom and private beach. Their largest ballroom can be set up in different configurations (e.g., theater – 774 people, classroom – 480 people, banquet – 528 people, reception - 750). This ballroom can also be separated into as many as six separate meeting rooms for smaller group activities or breakout meetings. The adjoining foyer is ideal for hosting pre-meeting continental breakfast buffets, cocktails or event registration.

2. Proposed themes.

Conference theme: 16th World Congress on AD: From wastewater residuals stabilization to energy positive water reclamation, and everything in between.

Topics of particular interest: Biorefinery; Domestic wastewater treatment; Industrial wastewater treatment; Pretreatment for water reuse; Bioelectrochemical systems; Co-digestion with traditional and novel biomass substrates; Resource recovery; New chemical products and fuels; Sanitation and energy in developing countries; Novel tools to study and monitor AD, including modeling, controls, automation, CFD simulations, molecular biology and microbial ecology; Pilot- and full-scale implementation.

3. Details about accommodation and transport.

North Lake Tahoe offers more than 7,000 rooms in hotels with a broad range of prices to accommodate different budgets. The host hotel has more than 400 rooms and provides access to Lake Tahoe. Traveling to Incline Village is convenient through the Reno/Lake Tahoe International Airport, which is 32 km away. Participants can travel from the airport to the conference via shuttle buses, taxis, or rental cars. The Reno/Lake Tahoe International airport has flights to/from major US airports, including Chicago, Dallas, Denver, Houston, Las Vegas, Los Angeles, New York, Phoenix, Portland, San Francisco, and Seattle. The location can also be reached by road transportation from San Francisco in about 3 ½ hours.

4. Organizing Committee

Our organizing committee will consist of a highly motivated and diverse team of AD specialists from academia, utilities, consulting, and government labs. Confirmed members of the committee are: Lutgarde Raskin (UMichigan), co-chair; Krishna Pagilla (UNevada-Reno), co-chair; Alex Miot (San Francisco Public Utilities Commission), Wayne Parker (U Waterloo), Spyros Pavlostathis (Georgia Tech), Adam Smith (U Southern California), Dan Zitomer (Marquette U), Toshio Shimada (Carollo Engineers).

The following individuals will be considered as additional members of the organizing committee or as members of the scientific committee: James Field (U Arizona), Craig Criddle (Stanford), Perry McCarty (Stanford), Serge Guiot (National Research Council, Canada), George Nakhla (Western U, Ontario), Elizabeth Edwards (UToronto), Samir Khanal (UHawaii), Francis de los Reyes (NC State), Daniel Yeh (U South Florida), Sarina Ergas (U South Florida), Shihwu Sung (UHawaii), Matt Higgins (Bucknell U), Charles Bott (Hampton Roads Sanitation District), Sudhir Murthy (DC Water), Meltem Urgun-Demirtas (Argonne National Laboratory) Sherri Cook (U Colorado), David Bagley (U Wyoming); Pratap Pullammanappallil (U Florida); Reyes Sierra (U Arizona); Vinka Oyanedel (U Rhode Island); Ann Wilkie (U Florida); Largus Angenent (Cornell). Jason He (Virginia Tech), Mark Philbrick (DOE)

We will consult with previous AD conferences organizers and ask them to share their planning and organizing experience (e.g., Juan Lema, Rolando Chami, German Buitron, Lea Carbol, Jorge Rodríguez, Martha Carballa).

The organizing committee will work closely with IWA USANC, which will be facilitated through Krishna Pagilla, in-coming chair (2016-18) of USANC. We will request a loan from USANC to be used towards the proposal and conference planning.

5. Scientific committee selection policy.

We will put together a diverse scientific committee. We plan to have a strong North American group with representatives from academia, utilities, consulting, and government labs (tentative list is given above), as well as experts from all the regions in the world. We plan to include a mix of senior and junior experts, and will strive for gender balance.

6. Motivation for organizers (why you are doing this).

Applications of AD have expanded greatly in North America over the last decade, and this progress should be shared with the rest of the world. Furthermore, the western region of the US has become a leader in water reuse and promotion of AD in this field is important. The location of the conference will result in excellent representation from industry, consultants, and utilities from the western region of the US. We are further interested in increasing IWA and AD SG membership in the US and North America.

7. Motivation for attendees (why people should come).

We will offer a strong technical program. In addition, the conference will provide networking with participants from academia and consulting, but also with managers of municipal and industrial AD plants in the US, who will be in attendance and hosting technical tours. Finally, the location offers the opportunity to explore the beautiful areas around Lake Tahoe and the Sierra-Nevada Mountains.

8. Possible technical tours and networking events.

We are planning exciting technical tours and networking events. Possible technical tours include:

- Trip to San Francisco Bay Area after the conference, including visit to East Bay Municipal Utility District AD facility (largest co-digestion program in North America), visit to San Francisco's Public Utility Commission Southeast Water Pollution Control Plant (temperature phased anaerobic digestion and the second largest thermal hydrolysis plant in North America will be under construction), and visit the City of San Francisco.
- Winery tour
- Visit to the Truckee Meadows Water Reclamation Facility, which has a two-phase AD facility and a co-digestion program.

Networking events will include a reception and dinner, most likely at the Hyatt Regency with spectacular views of Lake Tahoe and a private beach. Other locations will be considered for the conference dinner.

9. Ways you will address low income nation attendance in line with IWA policy.

We propose to increase participation from low income countries through reduced rates. Similarly, we will increase student participation by offering lower student rates. These lower rates will be subsidized through funding obtained through two mechanisms:

- Industrial sponsors: Equipment manufacturers, utilities, and consulting firms frequently sponsor conferences. We have received a positive response from several parties about becoming sponsors for the conference.
- Federal agencies, such as the U.S. National Science Foundation, U.S. Department of Energy, and the U.S. Department of Agriculture, which will be approached to obtain small grants.