

SOP UPDATES - 2020

All abstracts are scored by subject matter experts using the below criteria. Abstracts are given a numerical score. A range of experts provide scores, with each abstract receiving between 5 and 25 separate reviewer scores, depending on the subject matter and relevance to the experts providing the scores. All reviewers are given the option to “opt out” based on conflicts of interest to insure unbiased scores. All scores are then normalized to equate scores from different reviewers. This is done in excel using a normalization formula. Then the normalized scores are shared with the committee who uses the highest rated abstracts to select sessions based on related topics that the audience needs and would be interested to learn.

WEF SCORING CRITERIA

All abstracts and session proposals will be judged with the following criteria. These criteria are the minimum criteria, and all abstracts meeting these will be considered for the program. The selection process is highly competitive, and submitters should take time to be sure all submissions meet or exceed the following criteria.

APPLICABILITY

The abstract should present ideas, concepts, or lessons learned that are transferable and usable at other facilities and situations.

DEMONSTRATED RESULTS/CONCLUSIONS

The topic presented in the abstract should be mature and proven, including lessons learned. Depending on the type of abstract, this could measure the extent that plans are developed or stages/projects are completed.

CONSEQUENCES

The abstract should address the consequences of the issue/project presented. The consequences, both intended and unintended, could include environmental, economic, and social impacts. Both positive and negative results are encouraged.

RELEVANCE

The topic presented in the abstract should appeal to the WEFTEC audience, i.e., presenting breakthrough technologies, new concepts, and novel applications of concepts, original ideas, new twists, hot topics, or application of fundamental techniques to today's problems.

Standard Operating Procedures - SAMPLE

1. Committee name: WEFTEC Program Committee: Research Symposium Subcommittee

2. Last updated: January 25, 2020

3. Purpose: To deliver state-of-the-art research presentations to academic, leading-edge practitioner, and industrial/municipal/government technical expert stakeholders at the annual WEFTEC.

4. Membership:

Name	Contact	Term	Expertise*
Daniel B. Oerther, Chair, Liaison to BER <i>WER</i>	University of Cincinnati, (513) 556-3670, Daniel.Oerther@uc.edu	Autumn 2001 – Autumn 2007	Molecular microbial ecology
Sudhir Murthy, Vice Chair	District of Columbia Water and Sanitation, (202) 787- 4091, smurthy@dcwasa.com	Autumn 2002 – Autumn 2009	Full-scale municipal
Charles Bott	Virginia Military Institute, (540) 464-7752, bottcb@vmi.edu	Autumn 2002 – Autumn 2007	Microbial stress
Willie Harper	Auburn University, (334) 844-6260, wharper@eng.auburn.edu	Autumn 2002 – Autumn 2007	?
Leonard Casson	University of Pittsburgh, (412) 624-9868, casson@engrng.pitt.edu	Autumn 2003 – Autumn 2008	?
Jin Li	University of Wisconsin, Milwaukee, (414) 229-6891, li@uwm.edu	Autumn 2003 – Autumn 2008	Biological wastewater treatment
JB Neethling	HDR Engineering, (916) 817- 4830, Neethling@hdrinc.com	Autumn 2003 – Autumn 2008	Biological nutrient removal
Philip Pedros	F.R. Mahony & Associates, (781) 982-9300 x33, PhilipPedros@frmahony.com	Autumn 2004 – Autumn 2009	?
Denny Parker	Brown and Caldwell, (925) 210-2274, DParker@brwncald.com	Autumn 2004 – Autumn 2009	Biological nutrient removal
Kartik Chandran	Columbia University	Autumn 2006 – Autumn 2011	Respirometry
Sarina Ergas	University of Massachusetts, Amherst, (413) 545-3424, ergas@ecs.umass	Autumn 2006 – Autumn 2011	?
Katherine McMahon	University of Wisconsin, Madison	Autumn 2006 – Autumn 2011	Molecular microbial ecology

* committee composition: the Research Symposium Subcommittee should be composed of at

least twelve diverse individuals representing young and experienced professionals; academics and leading-edge practitioners; and relevant specialty areas within environmental engineering and science (e.g., wastewater treatment; collection systems; management; surface waters; bioremediation).

Membership on the committee shall be a democratic decision of the current members with consideration for maintaining balance. Applicants must submit an application for membership on a WEF committee identifying their preference to participate on the WEFTEC Research Symposium Subcommittee. Applications will be reviewed as received and election of new members will occur at the twice annual meetings of the Program Committee (which occur at WEFTEC and the mid-year meeting).

Leadership of the committee shall be provided by a duly elected Chair and Vice Chair. The election process is organized by the current Vice Chair and includes nominations for a new Vice Chair (self-nominations are accepted), the assembly of a ballot, and anonymous voting (or via email to the current Vice Chair). Upon completion of their term, the Chair resigns from the Research Symposium Committee, the Vice Chair rises to the Chair, and the newly elected Vice Chair is installed. Length of service in the position of Vice Chair is two years. Length of service in the position of Chair is two years.

5. Collaborations: Board of Editorial Review of *Water Environment Research* (BER *WER*) and the Association of Environmental Engineering and Science Professors (AEESP).

6. Annual activities:

(a) Develop a call for abstracts for the Research Symposium at WEFTEC including solicited topics in conjunction with BER *WER* (due at the February mid-year meeting of the year WEFTEC_{xxxx-1});

(b) Review submitted abstracts (initiated December of the year WEFTEC_{xxxx-1} and completed January of the year WEFTEC_{xxxx});

(c) Develop the program for the Research Symposium at WEFTEC including: (1) selecting the AEESP/WEF Lecturer for Research Session 1 on Monday afternoon at WEFTEC; and (2) selecting the AEESP/WEF Lecturer for the Scientist Luncheon on Monday afternoon at WEFTEC (due at the February mid-year meeting of the year WEFTEC_{xxxx}) (both of these selections should be coordinated with AEESP; the current contact is Dr. Francis de los Reyes, North Carolina State University, (919) 515-7416, fldelosr@eos.ncsu.edu);

(d) Collaborate with the BER *WER* to expedite intensive peer review of select conference proceedings for consideration for publication in thematic issue of *WER* (initiated May of the year WEFTEC_{xxxx}, review completed September of the year WEFTEC_{xxx}, and articles published January of the year WEFTEC_{xxxx+1}) (the current liaison to the BER *WER* is Dr. Daniel B. Oerther, University of Cincinnati, (513) 556-3670, Daniel.Oerther@uc.edu) ; and

(e) Moderate the delivery of presentations for the Research Symposium at WEFTEC (performed at WEFTEC_{xxxx}).

7. Performance of annual activities:

(a) The liaison to the BER *WER* participates in the annual meeting of the BER *WER* that occurs on the Sunday of WEFTEC_{xxxx-2} to identify potential solicited topics for consideration at the next mid-year meeting (of the year WEFTEC_{xxxx-1}). At the February mid-year meeting, the

Research Symposium Subcommittee prepares the call for abstracts for WEFTEC_{XXXX}. **The call identifies that Research Symposium abstracts are to be a maximum total length of four pages including all figures, tables, and references (*this is something we would like to work towards; the committee feels that shorter abstracts would receive better attention in the review process*).**

(b) Submitted abstracts (typically more than one hundred) are reviewed by **all** members of the Research Symposium Subcommittee who provide a numeric score, identification of a potential session(s), and **peer review comments (*something we have not yet done, but would like to do as part of potential publication of articles in WER or via on-line WEF publication).** Based upon historical trends in submissions, potential sessions include: (1) activated sludge; (2) membrane bioreactors; (3) anaerobic digestion; (4) biosolids; (5) physical/chemical treatment; (6) ground water/remediation; (7) modeling; (8) analytical technique; and (8) hydrology (surface, collection, storm). The Chair of the Research Symposium Subcommittee calculates a rank order listing of the abstracts (First, calculate the mean and standard deviation for each reviewer. Then, for all the scores for each reviewer calculate the t-statistic as (mean - score)/Standard Deviation. This approach provides a weighted score that accounts for differences in the average rating for each reviewer, as well as how much each reviewer spreads out their ratings). The highest quality abstracts (typically the top third) will be presented at WEFTEC in the Research Symposium (platform and poster presentations). The lowest quality abstracts (typically the bottom third) are generally unsuitable for presentation. In collaboration with the Chair, an *ad-hoc* committee of the Research Symposium Subcommittee will help to guide the remaining abstracts to the attention of their second choice symposium to help ensure that abstracts submitted to the Research Symposium Subcommittee are strongly considered for presentations at WEFTEC.

Metric Used to Evaluate Abstracts:

Scoring Level	Originality	Status of Project	Technical Content	Benefits & Significance	Quality
1	Potential Breakthrough	Research Fully Completed and Documented	Clear Objectives, Methods Described, and (Anticipated) Conclusions Outlined	Broad Benefits to Broad Audience	Clear Text, High Quality Figures and Tables
2	Very Significant Incremental Improvement	Preliminary Results Demonstrating Good Potential for Successful Research	Clear Objectives and Methods. Outcomes Suggested But Not Fully Described	High Interest and Benefit to Focused Audience	Text, Figures, and Tables Presented But Some Not Clear and/or Readable
3	Modest Incremental Improvement	Interesting Results But Much Work Remaining	Clear Objectives and Methods	Modest Benefit to Broad Audience	Includes Text and Either 1 Table or Figure
4	Chance of Small Improvement	Experimental Plan Well Developed But No Idea	Clear Objectives	Modest Benefit to Focused Audience	Several Pages of Text But No Tables or Figures

5	Nothing New	Just an Idea With No Plan Developed to Test	Just and Idea	Of No Interest to WEF Audience	One Page Abstract
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(c) Using the rank order listing of the abstracts, **all** members of the Research Symposium Subcommittee in attendance at the mid-year meeting work together to develop six and one-half full-session equivalents (note: this number can be modified as needed if abstract quantity or quality justifies change) for WEFTECxxxx including: (i) a thematic session for Research Session 1 on Monday afternoon at WEFTEC including the AEESP/WEF Lecturer and the highest quality topically-related abstracts that will be forwarded to the BER *WER* for expedited intensive peer review and consideration for publication in thematic issues of *WER*; (ii) a thematic session (***to be implemented in the future***) and an unsolicited session for Tuesday morning at WEFTEC; (iii) a thematic session (***to be implemented in the future***) and an unsolicited session for Tuesday afternoon at WEFTEC; (iv) an unsolicited session for Wednesday morning at WEFTEC; and (v) an unsolicited half-session for Wednesday afternoon at WEFTEC. Special attention will be given to the identification of at least one alternate and two poster presentations to accompany each session. A member of the Research Symposium Subcommittee will be identified to moderate each Research session at WEFTEC. Typically, the Chair and Vice Chair of the Research Symposium moderate WEFTEC Research Session 1 on Monday afternoon and coordinate with the President of AEESP to provide an introduction for the WEF/AEESP scientist luncheon speaker and the WEF/AEESP lecturer.

In general the format for the Research Symposium includes:

Monday: WEF/AEESP scientist luncheon speaker; Research Session 1 with WEF/AEESP keynote speaker (1hr) and 4 additional talks (30 min each) (plus two alternates/posters and two posters).

Tuesday: Morning – two concurrent Research sessions with 6 talks each (30 min each) (plus two alternates/posters and two posters); Afternoon – two concurrent Research sessions with 6 talks each (30 min each) (plus two alternates/posters and two posters).

Wednesday: Morning – one Research session with 6 talks (30 min each) (plus two alternates/posters and two posters); Afternoon – one Research session with 4 talks (30 min each) (plus one alternate/poster and two posters).

Thus, the ‘slots’ available for the Research Symposium include:

- WEF/AEESP lecture
- $4 + 6 + 6 + 6 + 6 + 6 + 4 = 38$ talks
- $4 + 4 + 4 + 4 + 4 + 4 + 3 = 27$ posters

Prior speakers for the AEESP/WEF luncheon and AEESP/WEF Lecture in Research Symposium Session 1 include:

Year	City	Luncheon	Lecture
2006	Houston	Phil Bendient	James Barnard – BNR
2005	Washington DC	Edwards et al – Lead in DC water	Dick Speece – Anaerobic treatment
2004	New Orleans	Thibodeaux/Reible/Logan – Microbial Fuel Cells	Makram Suidan – Emerging Micropollutants
2003	Los Angeles	Judith Wilson - ?	Michael Kavanaugh - ?

2002	Chicago	Deborah Swackhamer - ?	George Tchobanoglous – Small Treatment Systems
2001	Atlanta	Joan Rose – Microbial Source Tracking	H. David Stensel – Biological Phosphorus Removal
2000	Anaheim	William Mills - ?	Walter Weber - ?
1999	New Orleans	Nancy Rabalais - ?	C.P. Leslie Grady – Kinetics of Synthetic Organic Chemicals
1998	Orlando	Thomas Fontaine - ?	Gary Saylor - ?
1997	Chicago	Wesley Eckenfelder - ?	Gene Parkin - ?
1996	Dallas	Raymond Loehr - ?	**
1995	Miami Beach	Eugene Odum - ?	
1994	Chicago	Cecil Lue-Hing - ?	
1993	Anaheim	James Morgan - ?	
1992*	New Orleans	Louis Thibodeaux - ?	

*Note 1992 and earlier—we had a Scientist’s Breakfast instead of a luncheon and the event occurred on the last day instead of the first day of the conference.

** AEESP Lecture did not begin until 1997

(d) The moderator for each Research session at WEFTEC will summarize the peer review comments provided by the Research Symposium Subcommittee and convey to corresponding authors how these comments should be addressed in the submission of conference proceedings. **All conference proceedings should undergo at least one editorial-level review for final approval by the session moderator before final acceptance as WEFTEC conference proceedings. Thus, the publication of the proceedings of the Research Symposium will be considered to be a peer-reviewed article and WEF will publish at least one, consecutively paginated, bound copy for distribution to the Institute of Scientific Information (ISI) to be indexed on-line (*this is what the committee would like to do in the future when WEF makes it possible to publish on-line papers in addition to WER*).**

(e) The liaison to the Board of Editorial Review of *Water Environment Research* will provide the Board with the list of potential papers to be considered for a thematic issue of *WER*. The liaison will work with the Board to identify appropriate peer reviewers for each potential manuscript. Corresponding authors will be notified as soon as possible, and a time table will be developed to facilitate the rapid, but **rigorous** peer-review of full-length research manuscripts for consideration for publication in a thematic issue of *WER*.

(f) At WEFTEC, the moderators for each Research session will evaluate the quality of the presentations as well as the quality of the conference proceedings and provide critical feedback to the Research Symposium Subcommittee to identify unacceptable performance that may be used to screen abstracts submitted in following years. **(*this information is not fully utilized at this stage; and future efforts should target how to use this feedback to improve the program for future years*)**