CE 591-Kappe Environmental Engineering Seminar Series

Course Description:
This is a seminar course offered primarily for graduate students in the Environmental Engineering program, although other graduate students may take this course for credit. All environmental engineering graduate students paid from a TA or RA are required to attend the seminar for any semester they are in residence. Graduate students may apply only one credit of seminar to their credits needed for graduation for each degree (i.e. 1 credit for M.S. and 1 credit for Ph.D.). Ph.D. students who have passed their comprehensive exam and need to take only one credit of CE601 to maintain continuous registration should audit this class. Maintaining high registration for the class is important for ensuring a large room (as the assign rooms based on enrollment).

This weekly seminar is intended to provide students practice giving research presentations and to help share their research plans and findings with other interested faculty, staff, students, and colleagues. In advance of their presentation, speakers are required to provide a title and brief abstract, which will be disseminated. The speaker from the previous week serves as the moderator. Feedback forms are completed for each student speaker by those attending the seminar to provide suggestions for improving presentation skills. In addition, each student is expected to be an active participant in the class by regularly asking questions.

Organizer: Dr. Bruce Logan, blogan@psu.edu

Meeting Time and Location: W 11:15-12:05, 367 Willard

Grading Policy: Attendance=50%, Participation (i.e., presentation, questions)=50%

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<th>Date</th>
<th>Presenter</th>
<th>Topic/Title</th>
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<td>1/17</td>
<td>Logan</td>
<td>Introductions of new students, discussion about good presentations</td>
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<td>1/24</td>
<td>Shunichi Iishi</td>
<td>Community analysis of microorganisms degrading cellulose in microbial fuel cells under electrogenic and methanogenic conditions</td>
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<td>1/31</td>
<td>John Senko</td>
<td>Microbiological oxidative precipitation of Fe in acid mine drainage-induced “kill zones”</td>
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<td>2/7</td>
<td>Lenny Tender</td>
<td>Electricity production from benthic microbial fuel cells</td>
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<td>2/14</td>
<td>Charles Winslow</td>
<td>Bacterial adhesion to metal oxide surfaces in the presence of natural organic matter</td>
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<td>2/21</td>
<td>Zhiyong Ren</td>
<td>Direct cellulose-derived electricity production in microbial fuel cells</td>
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<td>2/28</td>
<td>Pat Cirino</td>
<td>Understanding cofactor trafficking and xylose transport in E. coli engineered for xylitol production</td>
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<td>3/7</td>
<td>Tom Richard</td>
<td>Sustainable bioenergy systems</td>
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<td>3/21</td>
<td>He Huang</td>
<td>Diminish VOCs emission from foundries by an cost effective in-situ pyrolyzed coal</td>
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<td>3/28</td>
<td>Doug Call</td>
<td>Hydrogen production using membrane electrode assemblies in an electrochemically assisted microbial fuel cell (MFC)</td>
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<td>4/6*</td>
<td>Lee Krumholz</td>
<td>Shewanella or bioremediation…</td>
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<td>4/11</td>
<td>Hui Cai</td>
<td>Treatability study of perchlorate in situ bioremediation in vadose zone soil using gaseous electron donors</td>
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<td>4/18</td>
<td>Bob Parette</td>
<td>“I really have no idea”</td>
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<td>4/25</td>
<td>John Fox</td>
<td>Advanced oxidants used for foundry sand reclamation</td>
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<td>5/2</td>
<td>Fenglong Sun</td>
<td>The interaction between arsenic and iron/sulfide compounds under anoxic conditions</td>
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*Note special date