



**2018/2019 Division & Class Report  
to the  
ACerS Board of Directors**

Division/Class: Basic Science Division

Current Division/Class Officers: (complete as appropriate for your Division or Class)

Chair: **Paul Salvador**  
Chair-Elect: **John Blendell**  
Vice-chair: **Kristen Brosnan**  
Secretary: **Yiquan Wu**  
Counselor: **Shen Dillon**  
Counselor: **Xingbo Liu**  
Counselor: **Dunbar Birnie**  
ACerS Board of Director Liaison: **Lynnette Madsen**  
PCSA Division Delegate: **Lavina Backman and Victoria Christensen**

Incoming Division Officers: (complete as appropriate for your Division or Class)

Chair: **John Blendell**  
Chair-Elect: **Kristen Brosnan**  
Vice-chair: **Yiquan Wu**  
Secretary: **Wolfgang Rheinheimer**  
Counselor: **Xingbo Liu**  
Counselor: **Dunbar Birnie**  
Counselor: **Paul Salvador**

Current Membership of BSD is ????? members

Summary Oct 2018-Oct 2019

BSD continued strong support of the MS&T 2018 meeting. We provided registration waivers for speakers in BSD lead symposium, 2 waivers for PCAS delegates, and a registration waiver the Sosman awardee, Jürgen Rödel. Yuri Gogotki from Drexel was selected as the 2019 Sosman Awardee.

There were 49 applications for the 2018 Graduate Excellence in Materials Science Award (GEMS) and nine finalists were selected, Carli Moorehead, Kai Gong, Jiewei Chen, (Diamond), Peter Meisenheimer, Yiyu Li, Pranjal Nautiyal, Michael Presby, Laura Turcer, Shenli Zhang (Sapphire).

The Ceramographic contest overseen by Karren More of BSD was again a favorite of MS&T attendees. For MS&T 2018, 1<sup>st</sup> (\$75 award) and 2<sup>nd</sup> place (\$50 award) were awarded in the SEM, TEM, Optical, and Undergraduate categories, with a \$1500 prize for the Roland B. Snow Award (2018: "Phantom of the Phosphate" Christopher Marvel, Animesh Kundu, and Martin P. Harmer Lehigh University, Bethlehem, PA). Digital submissions were used in 2018 and will continue in 2019.

For MS&T 2019 the BSD is the lead organizer for 3 symposia, on Sintering, Interfaces, and Optical and Photonics. BSD provided \$2000 for registration waivers to each symposium to support the organizers. BSD also provided 4 registration waivers to PCSA delegates. BSD also supported the

registration of the Sosman Award recipient, Yuri Gogotski from Drexel. The 2020 Sosman awardee will be Wayne Kaplan from the Technion.

There were 47 applicants for the 2019 GEMS award, and ten finalists were chosen: Kimiko Nakajima, Xin Li Phuah, Shenglong Mu, Yi Yuan, Jun Gao, Archana Loganathan, Beecher Watson, Mingyang Zhao, Talia Barth, Jacob Cordell. They will be awarded the Sapphire or Diamond level award based on their talks at MS&T2019.

BSD was an active EMA 2019 participant. Yet-Ming Chiang was one of the plenary speakers. BSD had a lead role in 1 symposium and contributed to 3 others, and presented an evening tutorial on "Impedance Spectroscopy" for students, and participated in poster judging and student activities. BSD also provided support to speakers and to students to attend the Winter Workshop and PCSA activities.

BSD continues to strongly support the GRC Solid State Studies in Ceramics biennial meeting. This will take place on August 2-7, 2018 at Mount Holyoke College on "Multiphysical, Coupled Phenomena in Ceramics at the Atomistic and Nanometer Scales" (Chair: Ivar E. Reimanis, Vice Chairs: Wayne Kaplin and Edwin García). BSD is providing financial support for this conference as well as the graduate student symposium leading up to the main GRC event.

#### Future Planned Meetings/Activities (from Nov. 2019 – Oct. 2020):

MS&T 2020. BSD plans to continue and expand support for symposiums at MS&T2020. BSD will support symposium organizers and student and young professionals at this meeting. BSD will continue support for GEMS, the Ceramographic Rowland B. Snow Award, and the Sosman award.

For EMA 2020, BSD will contribute to symposiums on Structure-Property relationships in Functional Ceramics, Point Defects, Sintering and Microstructure control, and Hybrid Ferroelectrics as lead or co-organizers. BSD member Beth Dickey will give one of the plenary lectures. BSD will participate in the student lunch sessions and present an evening tutorial (topic TBD). BSD will provide limited funding for speakers but will support students at this meeting.

BSD support to GRC Solid State Studies in Ceramics in 2020 will continue. BSD members continue to be the organizers of this meeting.

#### New Initiatives/Opportunities:

BSD plans to strongly support symposium organizers at MS&T 2020 as our funding allows.

Action Items for ACerS Board Consideration at September 28, 2019 meeting:

Issues/Concerns:

The timing of EMA and ICACC continues to be difficult for the BSD. Many of our members would participate in both topical meetings, but the current timing makes that almost impossible. For meeting that a large number of members attend, this is an issue.

The addition of a new division is troubling. Without clear direction as to the function of divisions and how they help advance the role of the society new divisions should not be created. The basic structure of the organization needs to be critically examined.

Additional Items of Note:

Financial Statement: (Including year-end summary of expenditures from the Division's Funds)  
Attached

Submitted By: John Blendell