Ocean Acidification Principal Investigators' Meeting
Breakout group topics and discussion questions

Topic # I: Improving science through stronger collaborations, facilities and infrastructure. *One of the ongoing themes of the Best Practices guide to OA research was that no single research lab can "do it all" because there are so many specialized facets of OA research. We have also heard about the existing field and laboratory facilities currently taking on OA research. This breakout is for discussing what types of facilities, infrastructure, teamwork, etc. are needed to further OA research nationally and internationally.*

A. What pressing research questions (regional, topical, modeling, etc) require an improvement in facilities, instrumentation, etc.
1. Are the lack of facilities, collaborations, etc. a major impediment to existing projects
2. Do we anticipate the need for facilities to tackle frontier research?
3. Do we need to begin strong collaborations for any of these ideas?
4. Do we need to develop new techniques/instruments for monitoring OA?

B. Are there existing facilities, satellite data, datasets, or infrastructure that could be better utilized in the near term, and where is the lack of these resources limiting scientific progress?

C. Can we organize across facilities, sites, institutions, VOS, etc., to do a better job of monitoring, for example biological as well as biogeochemical changes? e.g., core variables to detect for biological / ecological change?
1. What would these core measurements be?
2. How would these vary from open ocean sites to coastal sites, etc.
3. What instrumentation needs to be developed
4. What kind of satellite measurements would be most desirable in the future

[Note: Can imagine a similar discussion as "C" but for some other research question]

D. What do we need to improve collaborations across agencies, disciplines, international colleagues
1. Brainstorming meetings
2. Joint projects of regional focus (e.g. process study) or topical focus (ecological impacts)

E. Building capacity – how to engage and train scientists in diverse fields to work on OA (including attracting young underrepresented groups)

F. National OA Activities – a National OA Program? A National Program Office?

G. Participation in International OA Collaboration Activities; i.e. support for an international Coordination Program?

H. **What role could a bottom-up organization like OCB offer to support this process?**