Both GSA and AGU have standard recommendations regarding structuring a scientific presentation. They suggest the following slide structure:

- A title
- An outline of the talk
- An introduction (background)
- Material and methods (or approach)
- Results
- Discussion of results
- Conclusions, (and sometimes acknowledgements)

General tips:

- Graphics must be well designed, simple, and legible to everyone in the audience.
- It is important to know your audience and prepare accordingly. The shorter the presentation time, the greater the effort required in preparing supporting PowerPoint slides and in practicing the presentation. If given 15 minutes for a presentation, one should take no longer than 10-11 minutes so that there is time for questions/discussion. This means that each slide must have maximum impact in helping you communicate with the audience.
- A general rule of thumb in preparing PowerPoint slides is no more than one slide a minute, one idea per slide, and as few lines of text per slide as possible.
- Presentations are most readable on a dark background (blue, for example) and bright lettering (yellow or white). It is helpful to step 8-10 feet back from your computer screen and make sure your slides are legible. Avoid using small fonts that will be illegible from the back of the room, and break up a complex slide into a series of slides.
- Devote each graphic to a single fact, idea, or finding. Illustrate major points or trends, not detailed data.
- Avoid long or complicated formulas or equations. Each graphic should remain on the screen for at least 20 seconds.
- Use the minimum number of words possible in titles, subtitles, and captions. Standard abbreviations are acceptable.
- Use bold characters instead of fancy fonts.
- Table preparation: Use not more than three or four vertical columns or more than six or eight horizontal rows. Information is hard to read with more columns or rows. Avoid vertical or horizontal rules as they distract the eye and clutter the graphic. Whenever possible, present data using bar charts or graphs instead of tables.
• Graph preparation: Avoid more than two curves on one diagram; a maximum of three or four curves may be shown, but only if well separated. Label each curve. Avoid symbols and legends. Avoid data points unless scatter is important.

• Colored graphs are very effective. Color adds attractiveness, interest, and clarity to slide and viewgraph illustrations and should be used whenever possible. Contrasting color schemes are easier to see.

• Examine every graphic and view each under adverse light conditions before presenting at a meeting. It is not often possible to provide excellent lighting at meetings.

• An introductory and a concluding graphic can greatly improve the focus of your talk.

• It helps to maximize the use of simple figures, tables and good quality pictures, and to keep the basic slide layout as simple and clean as possible. Remember that the slides are there to support your presentation, not to make the presentation for you. If the audience can read everything you say there is no point in you making a presentation as the audience will spend most of their time reading what’s on your slides rather than listening to and engaging with you as the presenter.

• In making your presentation the aim is to engage the audience, to make them feel like they are part of a “conversation” and not just passive listeners. Changes in voice levels and appropriate gestures that illustrate your energy and enthusiasm for the issues you are addressing will assist with this. By engaging with the audience they are more likely to follow up with questions and discussion, even after your session.

• CSA and AGU acceptable (typical) formats for Presentations:
  o MS Windows: Microsoft PowerPoint, Acrobat PDF.
  o Macintosh: Microsoft PowerPoint, Acrobat PDF, Apple Keynote.