Powerful Posters

Guidelines for poster presentations at scientific conferences by Dr. Pamela Alean-Kirkpatrick

As with all presentations, it should be clear what **the main aim** of this poster presentation is: presentation of new results, presentation of a new method, discussion of conflicting measurements etc. Your poster should clearly reflect this aim in the title and/or in its structure (how much space you allocate to which part), and in the conclusions.

Poster presentations differ from oral presentations mainly by the fact that your audience is **not** a captive one: individuals have to come to you. At a poster session, members of your audience often apply a set of **three filters**: criteria as to whether or not they will finally start to discuss your work with you.

Filter one – look at me!

First impressions
Make your poster attractive and inviting to read. Try to make it stand out from the others and **look interesting. How?**

Title
- Your title is a condensed statement of the main aim of your poster, e.g. new method, interesting results, interesting application.
- Make it **large and clear**! Include author(s) name(s) and address. It should be easily readable from a distance of 5 meters.
- How about a **headline** (everyday language, understandable to a larger audience) rather than a title?
- Make it as **interesting** as possible: in question form, unusual choice of words. Take care not to overdo the gimmicks to the extent that the scientific impact suffers.

Good visual impact
- At least 50% of the surface area is to be used for photos, graphs, diagrams: posters with less than 50% graphics are uninviting. If you are forced to display words, use flow diagrams, key-word lists, simple concept maps or selective tables.
- Minimum amount of text: «the less - the better» (see below)
- Clear structure and layout (see below)
- Good use of colour: be able to justify your use of colour (highlighting, structuring). Use black or dark blue for text. Too much colour can be offputting!
- Use objects if possible: mount small instruments, plant specimens, rocks on an appropriate place on the poster: «TOUCH ME».
- One or two large, high quality photographs attract attention.

Filter two – read me!

Information transfer

Make your poster easy to read and easy to follow. Provide visual instead of written information wherever possible.

> **Warning 1**
> In the last few years, the advancement of computer graphics and sophisticated printing facilities have provided the opportunity to first generate a background underlay of a relevant photograph (e.g. machine, cell structure, landscape) over the whole poster area before the text, graphs, tables and other diagrams or photographs are positioned. While making the poster attractive visually, thereby increasing the «LOOK-AT-ME» effect, the readability of the poster is often severely impaired.
> By all means utilise the effect of an underlay, but take great care that it does not affect the poster's «READ-ME» value.

> **Warning 2**
> The quality of the contrast (text-graphics, colour contrasts) on the computer screen does not, unfortunately, match that of the printer. Always check the contrast and readability against the chosen background on a smaller A4 or A3 print before plotting the full-size poster.

How?

Text

- Concentrate on "need to have" not "nice to have". **The shorter the text, the greater the chance that people will read your poster**. Reduce the text to the minimum: use **key words and lists**, not full sentences. Few people can read more than 2-3 sentences comfortably and easily when they are standing in front of a poster. Avoid superfluous information (e.g. "shake for 5 minutes" in the section on method). Do not write: "This poster shows . . . ."
- Use a **large** font (minimum 7 mm).
- Use generous line spacing (as least 1 mm larger than font size).
- **Never** copy A4-text pages on to your poster. If you do so, you discourage potential readers («killer posters»). If you want to provide interested persons with more information or text, hang an envelope containing copies of your full paper under the poster.
- Allocate a specific font / style / colour to subtitles to distinguish them clearly from the rest of the text.

Figures

- All figures should have self-explanatory captions and legends.

Structure

- Utilise two columns for the layout (or three for wide-format posters)
- Designate **distinct areas** for aims, introduction, method, results, conclusions, perspectives (coloured background, coloured frames or bars). Conclusions often get placed at the end, at the bottom edge and can easily get "lost". Make them stand out (coloured background, larger font).
- Make it clear in which **order** the poster should be read: use (large) numbers, arrows etc.

References

- You may want to list a few key references in a corner of your poster. They need not dominate and can be displayed in a smaller font.

Filter three – ask me!

Provoke discussion

Posters are an ideal instrument for not only presenting your work but also for discussing it with other interested scientists and engineers. You can encourage this contact when you design your poster. **How?**

Material

- Show provocative material and declare it as such! e.g., conflicting or surprising results, comparisons with work of other scientists, loose ends. Use this opportunity to display unsolved questions for work in progress.

Figures

- Place large question marks on results you find unusual or inexplicable.
- Build in interactive elements e.g. transparencies to hold on top of graphs to show parallel series of measurements.

Your audience

- Choose the vocabulary according to the audience you are addressing. Write acronyms out in full the first time they appear.
- Mathematical or statistical formulae should only be displayed if they are central to the main message and if appropriate to the audience's background.
- Consider providing a handout of your aims and conclusions in a second language (e.g., your native tongue) to overcome potential language barriers.