Designing Excellent Engineering Posters

Following these suggestions can help you design a professional poster for an engineering/scientific audience.

**Design**

- Landscape is most common: Size requirements for Xpo: 40" wide, 30" long.
- Title: 88 points, ~3cm, max 2 lines, centered at top, descriptive. Author name 36-72pt
- Headings: 36-48pt sentence style capitalization, avoid jargon (per audience) content-based (“Three cycles for testing heat effects”) vs generic (Methods) strong subject and verb to create an image for the reader
- Fonts: sans serif for titles, serif for text (no more than two font families), consistent line spacing limited, specific use of *italics* and **bold**, avoid underline
  - headings = max 72pt, min 36pt; bold is OK, no italics; expanded by 1-2pt is OK
  - text = large/readable size (16pt minimum, readable from 4 feet) except for references (12-14pt)
  - Left align (not justified), roughly 11-12 words per line (avoid long lines)
- Colors: limited palette (use the Adobe Color app)
  - white/light background for all charts
  - consistent coloring in graphics
- Graphics: consistent size, clear photos or illustrations; resize smaller *never* larger! Simplify!
- Branding: Limit logos, secure rights/permissions

**Story flow and content**

- Develop a focused story (read title and headings: Know the story now? If not, change!)
- Begin with motivation/goal/problem. Set the context for your audience.
- Describe methods/approach to problem. What novel/interesting approach did you use?
- Results: The largest amount of info goes here. What is the main finding/result/accomplishment? (Focus on most important.)
- Conclusion: What’s the main take away? Future ideas/research?
- Use logical flow through columns of text and graphics (top to bottom, left to right is standard)
- Reference images in text (numbers OK, graphical elements placed near text)
- All content must support the story focus. Delete unnecessary details, but be ready to discuss them.
- Graphics, photos, illustrations: all needed for understanding? Clear stand-alone titles?

**Language**

- Audience is key. What do they expect? What might they want to learn? Define terms as needed.
- Roughly 300–500 words; less is best
- Use bullets, numbered lists appropriately
- Use shorter sentences, smaller paragraphs (<50 words)
- Effective transition/connective words to show relationships. Logical organization (cause-effect, chronological, spatial, alpha-numeric, general to specific, classification, importance)
- Formulas: No derivation needed. Variables defined as necessary? Clear (not fuzzy) symbols
  - Proper symbols: 4.5 × 10⁻⁵ M or 45 μM NOTE X and x and × are different! μ is not u! and 75′ is different from 75'
- Spell and grammar check! Review, review, review!
Selected Resources

Stanford Guide to Designing & Printing a Research Poster
https://teachingcommons.stanford.edu/grad-support/grad-professional-development/designing-posters

Designing conference posters, Colin Purrington (word count of 800 is too high for engineering posters)
http://colinpurrington.com/tips/academic/posterdesign

Creating Effective Poster Presentations (George Hess, Kathryn Tosney, Leon Liegel)
http://www.ncsu.edu/project/posters/

Poster Perfect, Edyta Zielinska
http://the-scientist.com/2011/09/01/poster-perfect/

The Craft of Scientific Presentations (Michael Alley), chapter 4, “Visual Aids,”
http://searchworks.stanford.edu/view/10190926

For examples of whole presentations in the style advocated by Alley, take a look at
http://writing.engr.psu.edu/assertion_evidence.html and
http://writing.engr.psu.edu/teaching_slide_design.html (links in menu on the right).

Layout Samples