

How to prepare good graphics for scientific papers

Good Graphics?

Good Graphics consist of:

- Clarity
- Precision
- Web Optimised

Points to keep in mind while drawing figures

Figure Captions

Figure must be accompanied by a caption. The captions and legends are pivotal to the effectiveness of a figure. Don't forget to describe (Vertical axis quantity) and (Horizontal axis quantity)" in graphs and figures, Keep in mind that Caption should match the graphics.

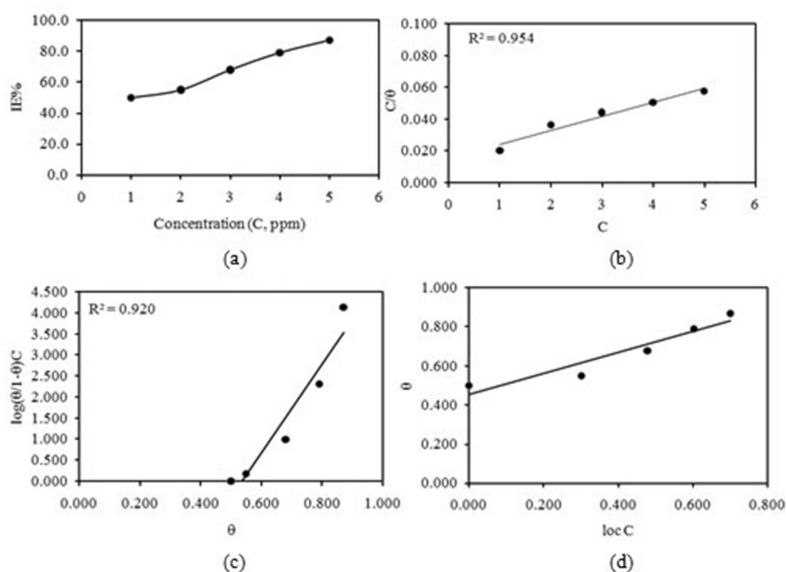


Figure 2. Steel corrosion inhibition behavior of MP in 0.5 M NaOH. (a) inhibitor concentration vs inhibition efficiency (IE%), (b) Langmuir, (c) Frumkin, and (d) Temkin adsorption isotherm.

Good readability

All the mentioned figures and graphs should be clear, concise and complete. The fonts should be legible (size, boldness, font choice). The font size of caption and legends must be 10 pt. All parts of figure are identified, explained and proofed carefully. Ensure image clarity.

Unclear Image

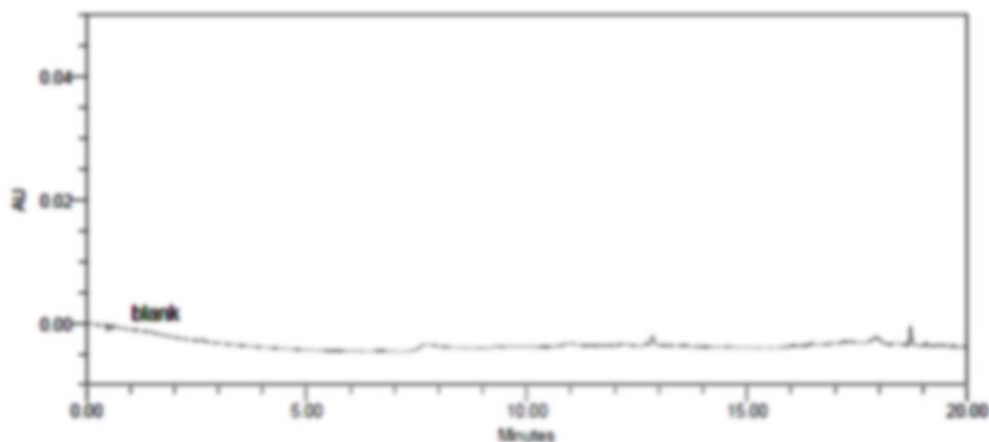


Figure 1.5: Specificity chromatogram of blank solution

Clear Image

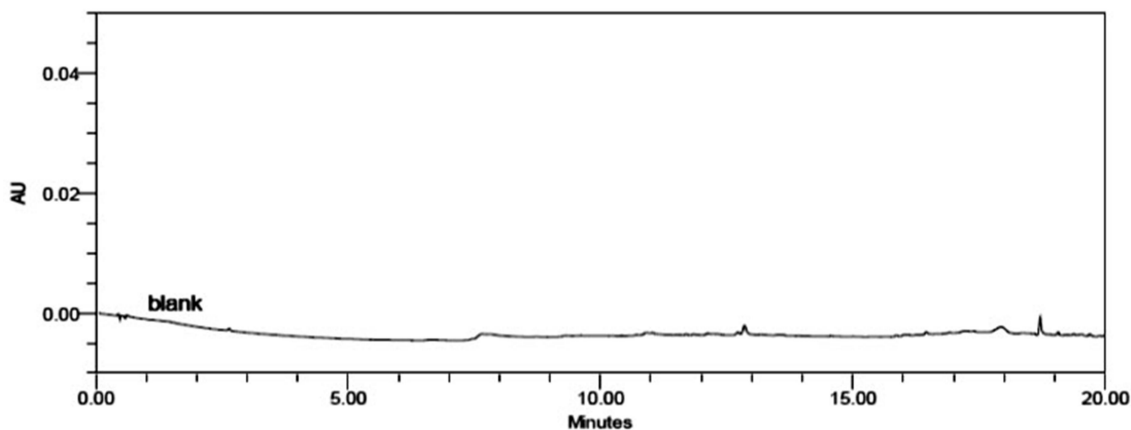


Figure 1.5: Specificity chromatogram of blank solution

Resolution

Photographic images should have a minimum resolution of 300 dots per inch. The figures should be of good resolution, clear and visible. All the internal details and headings must be clearly seen and easily readable. We prefer jpeg, png, pdf and tiff files.

Here is an example of High resolution VS Low resolution image

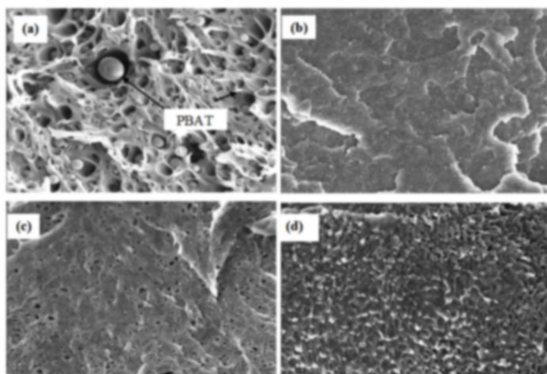


Fig. 4: SEM images of (a) PLA/PBAT blends, (b) PLA/PBAT/ODA-MMT, (c) PLA/PBAT/DDOA-MMT and (d) PLA/PBAT/C20A

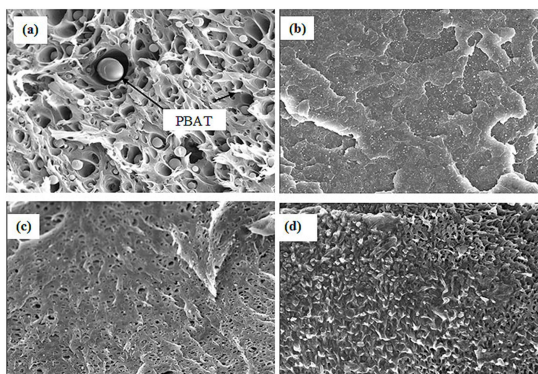


Fig. 4: SEM images of (a) PLA/PBAT blends, (b) PLA/PBAT/ODA-MMT, (c) PLA/PBAT/DDOA-MMT and (d) PLA/PBAT/C20A

Low Resolution

High Resolution

Legible Fonts

Avoid bolding the entire graphic, Bolding all characters often makes it more difficult to read, Use bolding only for emphasis. Use large font size, upper and lower case letters and uniform fonts.

Accurate Labelling

Label all important parts including the key sections, parts of schematic diagrams and photographs, axes, curves, and data sets in graphs and data plots.

- Label Axes Clearly
- Use the Correct Unit
- Use the same format
- Minimum font size is 9 points
- Axis labels are 9 to 12 points – six, seven, eight, nine
- Check for Accuracy

Illustrations

All figures should be numbered, serially in numerals in order of appearance. Parts of multipart figures, where necessary should be labelled (a), (b), (c), etc. (lower case). Multipart figures should be submitted as a composite, along with the individual images and labels that form the composite. Authors should take responsibility for neat and correct arrangement of multipart figures. Figure legends should be included in the file of the text. Line drawings should be sharp, and clearly visible. Individual parts in multipart groupings should be as close to each other as possible, with the parts labelled. Photographs should be sharp and high-contrast, and any labelling such as arrows or letter symbols should be clear.

Image Types

Raster Images

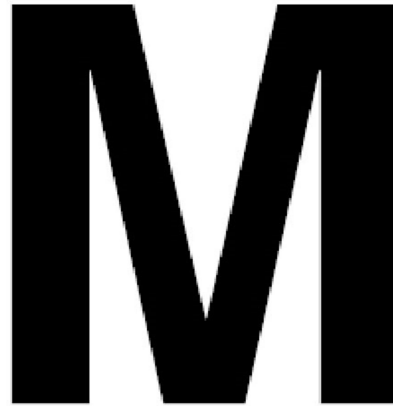
There are essentially two types of digital graphics: "raster" graphics (also known as "bitmap") and "vector" graphics. Raster graphics are comprised of entirely of coloured/shaded pixels, and as a result lose quality when you zoom in. Raster graphic formats (e.g. JPG, PNG, TIF) are for photographic images, and vector formats are for graphs, plots, diagrams, and cartoons. Raster images can be inserted into vector files (where they remain as raster), but not vice versa.

Vector Images

Vector graphics (e.g. SVG, PDF, EPS) are comprised of instructions to draw objects, and so are scalable and therefore do not lose quality when zoomed in. Importantly in vector plots, the text remains as text. Supply vector-based files such as those produced by Adobe Illustrator. Vector files give us maximum flexibility for sizing your figures properly. They maintain high print-quality resolution at any size. Do not rasterize line art or text .



Bitmap(Raster)



Vector