Presentation in Seminars and Conferences

Seminars and conferences offer alternative means of dissemination of research results. But they are by no means substitute for publications in scientific journals. This is because, barring a few prestigious ones, most conferences do not have strong peerreview systems. People know that, and that is why conference presentations are not treated in equal footing with journal papers when Institute authorities take stock of one's research output.

The main utility of a conference presentation is that it offers a chance of directly exposing your work before people who may be working on similar or related areas. It offers possibility of discussion which are often invaluable in generating new ideas. Such discussions often lead to new avenues of research, sometimes even new collaborations.

Some conferences ask the intending participants to submit full papers; but most often one has to submit an abstract (or a relatively longer 'extended abstract'). Where full papers are submitted, these are normally published in the Conference Proceedings. Nowadays most conference proceedings are distributed in electronic format in CDs or USB sticks and one can also search and download papers from the conference website. These papers are to be treated as publications, in the sense that the same

content cannot be sent to a journal for publication (it will amount to self-plagiarism). So one has to be careful in choosing the subject matter for presentation in a conference.

Sometimes researchers present in conferences when a piece of work is still not mature enough for communication to a journal. The aim is to sound the idea among peers and to get feedback. They then finish the work by taking into account the comments received in the conference. In such cases one has to ensure that there is significant amount of new material in the journal paper, and that the text is freshly written (chunks of text should not be copied and pasted from the earlier paper).

Some conferences allow one to present a work that has already been published in a journal, for better dissemination. In such presentations it is a good idea to include the new work that has been done on that problem after publication of the journal paper—so that there is some new material in the conference presentation that is not available in the published paper.

11.1 The art of preparing visual presentation material

Barring the field of mathematics where 'chalk-and-talk' is still the primary mode of presentation, nowadays all conference presentations are accompanied by slides prepared with LATEX, Powerpoint, or similar software. These visual material should be very carefully prepared to convey the key ideas effectively.

Note the following issues when preparing the slides.

- 1. Before starting to prepare the slides, get an idea of the audience to be expected. Are they specialists in your area of work, or are coming from different specializations? What background can you expect in the audience? Prepare the presentation with the typical person in the audience in mind.
- 2. Typical conference presentations are of 15-20 minute duration. Seminar talks may be for 30-40 minutes. And invited

talks in Universities and Institutes are typically for an hour. Prepare *one slide per minute* of presentation time. If you prepare too many slides, you will not be able to go through all of them. If you prepare too few slides, you will have to display a single slide for too long a time, resulting in visual boredom.

- 3. The first slide should contain the title of the presentation, the authors' names and their affiliations. Except for very short presentations where time is at premium, the second slide should give a plan of the talk—so that the audience can anticipate what is coming.
- 4. Describe the background knowledge briefly so that your work is put in perspective. Clearly present the question whose answer you are seeking through this work. Present the hypotheses, and your method of testing each hypothesis. Present your results in such a way that the audience can themselves reach the same conclusions that you will present in the last slide.
- 5. Say it in pictures. Images can add interest and support the content. Graphs convey data better than tables. Most slides should be dominated by images, with very few words. You should *not* type in everything that you want to say. You are there to explain, and the slides should assist your explanation.
- 6. Focus on the key points by writing them in bullets. Try to limit yourself to no more than about 4-5 major bullets per slide. Do not write blocks of text (nobody reads them). A good idea is to adopt what is known as the 6×6 rule: no more than about 6 lines of text per slide with 6 words per line.
- 7. Each slide should convey one main idea.
- 8. Try to compose each slide in an aesthetically pleasing way. Do *not* mix different fonts in a single slide. Normally sans serif fonts look better in slides. Use this font in 24 pt size for better legibility. Use highlighting and colour sparingly, where you

- really intend to emphasize something. Do not fill the slides completely with images and text; allow some white spaces.
- 9. In the projection the colours may not look the same as in your computer's monitor. So choose high contrast colours, so that lines that are intended to be in different colours are distinguishable even if the colour-fidelity of the projector is not good.
- 10. The whole set of slides should follow the same basic design. Use design templates for consistency.
- 11. Special effects in slide transitions tend to distract the audience away from what you are trying to convey. Limit the use of these.
- 12. Do not get lost in the details. Downplay the specifics, and emphasize the important issues of your work. You may keep a couple of slides after the last "Thank You" slide, which you can display only if there are questions demanding the specifics.
- 13. Plan the slides in such a way that you do not have to go back and forth while delivering the talk. While explaining a slide if you need to refer to a picture or an equation that appeared a few slides before, put that picture or equation again in the current slide. That eases the presentation.

11.2 The art of delivering a talk at a conference

Even if the slides are well prepared, the success of the enterprise depends on how you present it. Here are some recommendations on the style of presentation.

1. Smile when you start your talk. This is important, because it reduces your nervousness and allows you to connect with your audience. During the presentation, adopt a conversational tone. Do not read slides. Talk to the audience; make eye contact with them.

- A peculiar habit of most Indians is to start a talk with the word 'So'. Remember, the word 'so' comes in sequel of something already said. Make it a conscious habit not to start a talk with 'So'.
- 3. Especially in international conferences, everyone in the audience may not be familiar with your style of English pronunciation. So speak clearly, slowly, and loud enough so that those seated at the back of the room can hear it.
- 4. Do not try to tell them everything that you have done. This is not possible within the time allowed. Try to arouse interest in your work so that the members of the audience read your papers. So focus on the key issues, convey the "big picture", and spell out the take-home message.
- 5. Utilize the question-and-answer time as an opportunity for further engagement with the audience. While answering a question, do not deviate from the topic into things that were not asked. If you do not have an answer, admit it.
- 6. If you are challenged or attacked, respond courteously. Do not lose your composure. Thank the questioner for having raised the point, and answer the question as best you can. If you realize that you have really done a mistake, do *not* try to defend it.

Every PhD student should try to make at least one conference presentation within the period of doctoral research. This experience is valuable.

11.3 Poster presentation

Most scientific conferences and workshops offer scope of poster presentation. This medium of exposition of one's research work has its own advantages. In an oral presentation one gets a fixed amount of time to discuss one's work and this window of interaction is the same for all members of the audience. One cannot personalize the interaction depending on the interest of individual listeners. But in a poster session one can go to great lengths of interaction if someone is really interested in details of the work, while confining the interaction to brief expositions for those only interested in knowing 'what it is all about'.

11.3.1 Preparing the poster

In order for the poster presentation to be effective, the poster should be well designed. The material to be put in the poster should be carefully considered. Remember, nobody is going to read the whole poster. You will stand in front of it to explain. So put in only those issues, mostly as bullet points, that you would need to refer to while explaining.

The overall look of the poster should have aesthetic appeal. If a poster catches the eye from a distance, it is more likely to be spotted by those who might be interested in your work. One can easily look up good examples of scientific poster design by google search.

One can make a poster as one Powerpoint slide if one is working under Windows environment. LATEX offers many packages specifically designed for this purpose.

Every conference and workshop specifies the allowed size of the poster. Start by setting these dimensions right. Then copy and paste your own material into the template.

Make sure all text in the poster is readable from at least 1.5 metres. The suggested font sizes are, title: 60 points, section headings: 30 points, text: no smaller than 20 points. Select a sans-serif font (e.g., Helvetica, Arial) for titles and headings. If there are equations, choose a font for the running text that does not look too different from the font used in the equations (i.e., they should be from the same font family).

While talking to the audience, you will mainly need to refer

to graphs, charts, and similar pictures. The poster should be dominated by these, not by text.

11.3.2 Presenting a poster

Remember, most people in a conference will only be cursorily interested in what you are doing, and there will be only a handful people really interested in it. The whole art of presenting a poster is to attract those people to your poster and to have fruitful interaction with them.

The usual mistake that many presenters do, is to grab somebody who drifted to the poster and lecture him/her for half an hour. This person may not be really interested in the work, but cannot move away because of courtesy. Worse, another person who might be really interested may see that you are in the middle of an elaborate explanation and may not like to join in at that stage.

So, prepare a brief outline that can be presented in 3-4 minutes, meant for most people who come to your poster. It should tell the listener what it is all about, what scientific questions you are addressing, what is your methodology of investigation, and what are the prime conclusions out of the work. Go into further details only if the listener shows interest and asks questions.

There will be a few people who may be working in areas directly related to yours, or may be interested in your work due to other reasons. You should aim to have more elaborate discussion with them, explaining the details of the methodology, the graphs, the equations, etc. It is a good idea to keep a laptop computer with you, so that if a question comes up that will require you to refer to something not in the poster (for example, the detailed arrangement of an experiment or a video), you might be able to show it.