

Практичне заняття 5 для ОП «МЕ» та для ОП «ЕУРЗ»  
Тема 6. Підготовка та участь у міжнародних наукових конференціях

**Завдання 1.** Ефективна участь в наукових конференціях це те, чому треба вчитися. Прочитайте як правильно це робити та перекладіть українською мовою.

*How to Attend an Academic Conference by Tessa Lau*

Here's a collection of miscellaneous tips for young CS researchers attending conferences for the first time. Do you have any additional tips for the younger generation? Leave them in the comments!

Read the conference program ahead of time. Make notes on which talks sound interesting, and remind yourself to go to them. Sometimes I put entries on my calendar, sometimes I just mark up the conference schedule.

**Make a list of who you want to meet.** The main reason to go to conferences IMO is to expand your professional network. If you're unclear on networking, read *Networking on the Network*. You will want to meet grad students who are doing work in your area, senior faculty who are lifetime experts in your area, industry researchers who have internships in your area, and everything in between. A network is something you will use throughout your professional career. After grad school you'll mine your network to find job opportunities, to review papers, to hire your students, to give you candid feedback on your work. Your network is also the people who will help you succeed in your career by collaborating with you, nominating you for awards, and making your field more interesting. You will get to know these people for decades. So be nice.

**Who should you meet?** When you read through the conference program, make notes of who wrote the papers you find most interesting. If you have time, and if you can find them online, read their papers. Figure out who is the grad student and who is the professor (the web makes this easy). It's likely that the grad student knows the details of the specific work, and the professor can tell you how this specific work fits into a larger research agenda. Formulate one or two questions for each person you want to meet. Memorize their names. When you see their name badge at a conference, you will have a reason to introduce yourself to them and ask your question, and you'll sound prepared.

**Ask questions at the conference.** After each talk there's usually a couple minutes where the audience can ask questions. Step up to the mic, speak slowly, introduce yourself ("I'm Tessa Lau from IBM Research") and ask your question. Even if you won't be presenting a paper yourself, by asking a question you will gain visibility amongst the audience. If someone else wanted to ask the same question, they might find you after the talk and you might have an interesting conversation about it.

There are good questions and bad questions. Good questions are open-ended and let your subject talk for a while about a topic that's interesting to them. This makes you appear to be an interesting conversation partner. Bad questions have yes/no answers. After she answers the question, your subject will probably wander away to talk to someone else. Good questions are of general interest to the entire audience and

help everyone understand the technical material better. Bad questions nit-pick details of their work and ask why they didn't do it your way (you can still ask these, just do it in private, not in the main session).

Practice active listening by trying to formulate at least one question for each talk, whether or not you actually ask it at the microphone. If you find yourself at lunch with the speaker, you can always use that as a conversation starter. Listen to the questions other people ask; they can teach you how scientific work is evaluated by peers (which is critical to the peer review process and for getting your own papers accepted at conferences).

**Memorize your elevator pitch.** An elevator pitch is a 15-second explanation of who you are, what you work on, and why it's interesting. It gets its name from the following scenario: suppose you find yourself in the hotel elevator with the most important person in your field, the person you have been wanting to meet all conference. You have 15 seconds in which to make an impression on them. What do you say? Here's mine: I manage the Smarter Web research group at IBM. We create tools that make it easier to design, use and build web applications. My own research interests are in end user programming, enabling regular people to program computers without writing code. Your goal is that by the time you leave the elevator, your target knows who you are and associates you with an interesting research area. You want to be memorable, but in a good (positive) way.

**Have social lunches.** Conference attendees will often form big groups to go to lunch. It's a great way to meet people in an informal setting. Try to find one of the few people you have met and ask (nicely) if you can join them for lunch. If they say no, don't take it personally; assume they are having a private working lunch where you would be bored with their technical discussion and ask someone else. If all else fails, just look for a big group of younger-looking people (probably grad students, who tend to be open to random people joining them) all wearing conference name badges and ask if you can join them. Yes, this is terrifying. Do it anyway.

**Don't clump.** If there are a bunch of people from your organization all attending the same conference, don't cluster with them. You can see them back home. You have to push yourself out of your comfort zone and meet the people who you only see at conferences -- that's why you're there.

**Enjoy!** Attending conferences is one of the best parts of being an academic researcher. You get to expand your horizons, hear about interesting ideas, and meet fascinating people. Relax and don't stress out about it.

**Завдання 2.** При участі в науковій конференції для отримання гранту, необхідним є написання проекту. Прочитайте та перекладіть вимоги для успішного написання research project application.

*How can one write an application effectively to maximize the chances of success? by Seema Sharma*

Grant writing for research funding can be a difficult and time-consuming task, but one that underpins your academic success. We've put together some useful pointers and advice to help you with the application process.

**Do your background work:** Funding bodies, eligibility and guidelines. Prior to starting a grant proposal, it's essential to study your funding source. Ask yourself is this the right funding body to apply to, for your proposed research? What details are included in the funding opportunity announcement? What recent grants have they approved in a similar specialism to yours? What are their other calls to funding? Does your research match their priorities?

If you feel that your research traverses two disciplines, one of which your funding body may not cover, it's worth contacting them to discuss the details and relevance.

Individual funding bodies have differing criteria for research funding applications that need to be followed closely, with many opting for online submission. For example, in the UK, the Research Councils (RCUK) use a Joint Electronic Submission (Je-S) form. Whilst the framework is very similar, each of the seven individual councils that make up RCUK, have differences in guidelines, page length and format. Further details for RCUK are available [here](#). Individual councils also provide case studies of best practice applications that can be useful to read as a pointer. All funding bodies will provide guidelines for submission, usually available as a document to download from their site. These must be read carefully and digested. Any applications must strictly adhere to what's stipulated, as you risk your proposal not being accepted at all, or annoying the panel and reviewers before they've even given consideration to the content, however outstanding, if you don't.

Be aware of the different sections they need from you and the page limit. If it's a few pages — you can't include every detail, but will need to be succinct and prioritize the key facts that are asked for. Take care to emphasize how your proposed project fits into their criteria, at every stage of the application.

**Leave plenty of time.** You need to allow yourself plenty of time ahead of the deadline, to prepare a grant application. Each section requires due care and attention, with time set aside for you to review and get feedback from colleagues before submission. Reviewers complain that it's sometimes clear that researchers have spent the majority of their time on the case for support, rushing critical areas like budgets and an impact plan.

**Be clear and get feedback in advance.** Outstanding research that receives good peer reviews from the experts in the field is essential to your grant application's success. However, bear in mind that some members of your reviewing panel may not be specialists in your particular field. As such, clearly articulated statements on the significance of the project for a lay research audience, are also crucial to include.

Try to articulate how your work is going to change things, transform thinking in the field or advance research. It's an area that has to be perceived as important within your specific discipline and beyond. A useful way to get feedback for improving clarity is to ask colleagues, who are not experts in the field, to read it and provide input, making adjustments as required. Furthermore, asking colleagues, who have applied successfully to the same funding body, to review the proposal can prove invaluable.

**Explain the impact.** Most grant applications include a section for you to discuss the impact of your research. It's acknowledged that some proposals result in an academic advance in understanding, without an immediate applied impact. If this is the

case, bear in mind reviewers will expect you to know and state how your research fits into a pathway that will lead to an application.

If there is a clear academic impact, the panel will want to know how you will deliver this to relevant peers and get the message out, beyond relying on others to read a publication. Examples here would be through conference engagements or collaboration. If your research has a wider societal or economic impact, public engagement should also be discussed.

**Choose the best team for the work.** You need to include the details of a strong team to deliver the research and stipulate exactly what they will be doing. A common grievance from reviewers is that researchers include a name that is well known, just to influence the panel, without specifying a clear contribution. If a junior researcher is going to be doing the majority of the work, you should be clear about that. Additionally, your role in the project should be clear. Your application may require you to attach a short form CV or resumé for all those individuals involved in the project.

**Budget carefully and provide value for money.** Your application should be presented as good value for money to the funding body. All aspects of the project should be budgeted for. Reviewers tend to pick through things quite carefully, to insure the individual components of the project have been appropriately costed. Over-costing can kill your application. Ask yourself, does the advance you will make in the field justify the cost of the project?

**Provide a clear methodology.** Reviewers focus most on the quality of the core research in your application. As such, it's important to explain and reference detail of the methodology and experiments. Make sure you include data analysis methods — sometimes requested in the form of a data management plan, and avoid being vague.

In summary. Avoid common pitfalls:

- Writing only for specialists in your field
- Proposing a project that does not meet the funding call criteria
- Not allowing yourself enough time
- Over-costing or poor budgeting
- Neglecting the impact plan
- Not clarifying your role or contribution in the project
- Unclear methodology
- Repetition

Given the constraints on public funding, judging panels for grants and peer reviewers will select proposals that, not only include outstanding science or research, but also incorporate carefully thought out plans to reach end-users, represent value for money, with methodology that's clearly detailed and budgeted.

So, here is a template for grant application.

1. Proposal Summary (Executive Summary). The Proposal Summary should be about one paragraph of 1-3 sentences and should include the amount of funding requested and give the most general description of the use that will be made of the funds.

2. **Organization Description and History.** The Organization Description and History section should be about 1-4 pages in length and should include the history of the organization, its structure, information about office locations that will be involved in carrying out the activities that will be funded by the requested grant, major accomplishments of the organization, relevant experience and accomplishments of the organization, established partnerships and relationships that will be important to carrying out the activities funded by the grant, information about prior grants received from the source to which the proposal will be sent, and an explanation of how the description you provide makes your organization an appropriate grantee.

3. **Background.** The Background section, of 2-5 pages in length, should provide the reader with an explanation of the problem that has created the need for the program that will be funded by the requested grant. It should provide evidence that the problem exists as well as that the proposed project will contribute to a solution to the problem or will reduce the harmful impact of the problem. It should highlight media and government publications suggesting that the problem is a high priority and that the proposed solution is one that decision-makers support and believe in. It is important that the reader who finishes this section know why your program should be funded over others. Click here for fact sheets providing useful information on ATI, reentry, and alcohol and drugs to include in this section.

4. **Project Description (Program Narrative).** The Project Description may vary widely in length depending on the size and scope of the program that will be funded and the size of the award being sought. The project description should give the reader a detailed description of the program that will be funded by the requested grant. This description should explain the duration of time during which the funds will support the project, the goals of the project, how they will be achieved, how success or failure will be measured, what services you promise to deliver to what population and what results you expect to bring about. A useful structure is to break the project down into component goals. Use each goal as its own heading and under each goal heading, list and describe the activities that will be funded to achieve that goal and how achievement of that goal will be measured or defined. The Project Description may also include information about the staff who will work on the project, their experience and qualifications to perform the activities that will be funded.

5. **Project Timeline/Budget Timeline.** Using your Project Description, provide the reader with a timeline that shows the chronological order in which the activities listed under each goal heading will be undertaken and/or completed. Also include information about how/when funds that are awarded will be spent to support each activity.

Example:

Activity #1 (Enroll participants)

- Start designing enrollment marketing materials on October 1, 2020
- Spend \$X to create enrollment marketing tool by November 1, 2020
- X% of enrollment goal by January 31, 2021
- X% enrollment goal by March 31, 2021

Activity # 2 (Deliver Training Program)

- First training class to commence on December 1, 2020
- Conduct one four-week training class per month beginning on the first of each month commencing December 1, 2020.
- Spend \$X on incentives for participants by September 30, 2021 (\$X per fourweek course cadre)
- X% of enrollment goal complete training class by September 30, 2021

6. Budget. Provide the reader with a table with categories of expenditures that will be funded by the requested grant, how much funding will be required for each category, and how much of that funding will come from the grant request.

Expenditure Category	Fund request	Funds from other sources	Total
Salaries	\$120,000	\$65,000	\$185,000
Equipment	\$80,000	\$28,000	\$108,000
Rent/Mortgage	\$37,000	\$41,000	\$78,000
Utilities	\$12,000	\$13,000	\$25,000
Transportation	\$1,000	\$3,000	\$4,000
Totals	\$250,000	150,000	\$400,000

**Завдання 3.** Розробіть власний research project application, базуючись на вищевказаних вимогах.