

RSC 1: HOW TO APPLY FOR A PHD POSITION

Imagine you are a successful professor, naturally quite overloaded with a myriad of responsibilities ranging from teaching to leading a research team through to endless funding publications and funding applications and technology transfer aspirations. Every day you receive several PhD applications that are sent to many such busy professors in parallel, often on random topics that have nothing to do with the actual research interests of the group. Will you respond and grant the requested time for the appointments to discuss? Hopefully not, even though good PhD students are extremely hard to find! My approach has been to i) simply not respond (which still spams the inbox and good enquiries drown), ii) a period where I thought I could 'fix' every PhD student, and now to iii) send automated replies with clear instructions.

This mini coaching is designed for PhD applicants to increase success through thoughtful high-quality applications. Naturally this is the process at IAMT, while some insights are transferable.

- ◆ **PURPOSE:** Prior to applying for a PhD think about i) what your skills are, ii) what the motivation for doing a PhD is (not finding another job does not qualify), iii) what expertise you wish to develop, iv) who can best teach such expertise and v) how you intend to fund a PhD. Yes, there are many scholarships for all sorts of topics available, but is this topic really what gets you out of bed in the morning and will still do so when everything goes wrong in the lab (and good PhD training is about such trouble shooting)?
- ◆ **PREPARATION & COMMUNICATION:** Read the publications of the team of the supervisor you aspire to work with and look at the website (I still get applications that read 'Dear Sir'). Write a professional and concise email – neither Dear Ma'am, nor 'hello dear', pages of random information or divers social media styles are appropriate. Do not treat a professor like a job agency, we will not inform applicants about other opportunities, simply be prepared to do the leg work yourself, including information about the PhD process in a particular country or group (in Germany there are both country specific particularities as well as large differences in different organizations and groups)
- ◆ **APPLICATION:** A PhD application consists of a well thought through and personal cover letter that outlines the requirements of a particular research group (in our group this is a drivers license and a plan for funding applications – with deadlines) – note that three pages or irrelevant skills are not helpful; clear and well formatted CV (I would advise for professional photographs and against poor quality selfies); degree transcripts (in English); a thoughtful research proposal (typically this would be about 10 pages)

At IAMT PhD applications are assessed when the complete set of materials has been submitted. This process is very thorough at IAMT as there is nothing worse than a PhD candidate who is not compatible with the team or the supervisor. A strong team is essential for the daily work environment and the supervisor relationship is naturally a close one. Working together for 4+ years requires trust, resilience (there will be hard times in every PhD), should be fun and ultimately creates a life long bond of mutual support.

- ◆ **FEEDBACK:** If a proposal was sent (topic fit, thoughtful content and good format) then usually a feedback checklist is sent, possibly with a subsequent round of personal feedback. Again, how this feedback is incorporated is part of the evaluation stage. At IAMT a PhD candidate gets a lot of very thorough feedback, this is core to learning. We do not train people who already know everything best.
- ◆ **INTERVIEW:** If proposal was improved with the feedback and all looks promising then an interview is scheduled. Note that there is no discussion of ideas before this point – the IAMT website provides extensive information about research interests, publications and team activities that this stage can be reached without meetings (this is a matter of responsible time management).
- ◆ **RESILIENCE:** In the interview both personal fit and research topic are discussed. If mutually positive, then all further documents for scholarship application (or in very rare cases direct appointment) are issued. If a candidate is strong, knows what she/he wants, has resilience and is willing to put the effort a PhD appointment will succeed. Failures are due to not willing to i) do the preparation work, ii) writing the proposal or incorporating feedback and iii) giving up when funding fails – success often follows failure!

When a PhD is funded and commences at IAMT, a journey of extensive skills training, experimental research, preparation of publications and very holistic career development begins. Graduates are very employable and have achieved research independence (how to get there will be another coaching). This is rewarding, often frustrating and certainly a lot of work. It needs careful thinking if this is really what you are looking for!