Willkommen Welcome Bienvenue





PhD @ Empa: General Remarks



As one of the Swiss Federal Laboratories, Empa is <u>NOT</u> a granting institution (no ECTS credits). PhD students have to be enrolled in a PhD Program at a university (CH / abroad).

→ The relevant regulations of the «home» university will have to be followed.



PhD @ Empa: What is «special» about it?

As a PhD student @ Empa, you may (or may not) be a «servant of two masters», i.e. your

- PhD advisor / Doktorvater: professor @ home univ.
- Supervisor @ Empa: senior scientist / professor
 - Support: postdocs, technicians, other team members
- → Potential for conflicts
- → Clarify mutual expectations in advance (i.e. before start of your thesis work)



PhD @ Empa is, above all, a research project

As such, it comprises the following elements:

- Project plan incl. milestones, deliverables, timeline etc.
- Presentation of progress / results, i.e.
 - internal meetings such as PhD Student Symposium
 - (inter-)national conferences
 - scientific publications / papers
 - PhD thesis
- Proper (primary) data management (lab journal etc. incl. handover after completion of thesis)



PhD @ Empa: Students' Rights & Responsibilities

- Access to technical equipment, facilities, literature, etc. necessary for carrying out PhD project
- Regular access to supervisor to discuss results, progress, difficulties, research plans etc.
 → critical feedback by supervisor
- Project presentation / progress report at
 - Empa's annual PhD Student Symposium
 - internal lab meetings (regularly !!!)
- Opportunity to present research at international conference(s)



PhD @ Empa: Students' Rights & Responsibilities

- Complete thesis as outlined in PhD supervision / project plan
- Write up results for publication in scientific journals
- Hand over complete data record to supervisor
- Attend courses of Empa's PhD program (and other relevant events / symposia, both at Empa and elsewhere)
- Teaching (lab courses, seminars etc.): no duties @ Empa <u>BUT</u> possibly at home university
- Adhere to standards of scientific integrity



PhD @ Empa: Supervisors' Rights & Responsibilities

- Sketch out PhD supervision plan (incl. milestones, deliverables, timeline etc.)
- Coach, support and educate PhD student
- Grant (regular) personal availability
 - incl. regular feedback (positive and negative)
- Assure funding and infrastructure
- Responsible for timely completion of thesis project
 - incl. swift corrections of manuscripts, esp. PhD thesis
- Scientific quality assurance
 - incl. principles of scientific integrity



PhD @ Empa: Other Framework Conditions

- Interdisciplinary education:
 - PhD courses @ Empa incl. «soft skills», e.g. paper, poster & grant writing; presentation skills; project management; Ethics in Research etc.
 - Numerous invited talks / presentations at Empa by renown international speakers throughout the year
- Annual Empa «PhD Student Symposium»
- PhD ombudsperson (in case of conflict)
- Employment conditions: fixed-term contracts according to Empa's «Rules & Regulation»



PhD @ Empa: Some (unsolicited) advice

- Try to learn from the best –
 attend seminars from «big shots» in your field,
 but also in unrelated fields (broaden your horizon)
- Be honest (especially to yourself) give feedback
- Be critical
- Be curious ask (a lot)
- Be curageous speak up
- Be patient

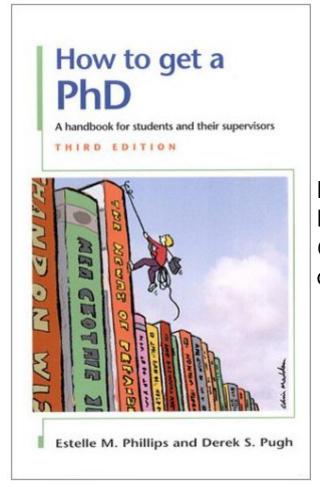


PhD @ Empa: Contacts

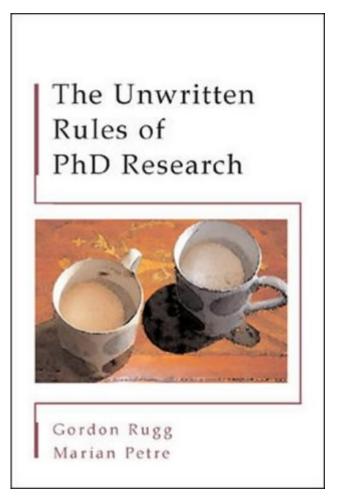
- PhD advisor / Doktorvater
- Supervisor @ Empa
- Lab and / or Department head
- Research team members
- Fellow PhD students at Empa
- Ombudspersons @ Empa: H. Leutwyler, U. Bünter
- Ombudsperson for PhD students: M. Hagmann
- PV Representative for PhD matters: D. Passerone
- Director: G.-L. Bona



PhD @ Empa: Literature that might be of help



Books or journals? Library 4 RI @ Forum Chriesbach or under www.lib4ri.ch





PhD @ Empa: Literature that might be of help



... an important issue !!!

