

How to apply for a postdoc position

Dr. Joanna Drażkowska

Introduction

- This presentation is based on my personal experience and on what I learned while attending the lecture “Jobs and careers in astronomy” given by prof. Eva Grebel in Heidelberg in 2013
- Topics I will cover:
 - Types of postdocs
 - What should you be doing during your PhD
 - When to apply for postdocs
 - Where to find the job ads
 - How to prepare your application (in detail)
- Topics I won't cover:
 - Interviews & negotiations
 - Applying for tenure-track and tenured positions
 - Non-academic careers

Types of postdocs

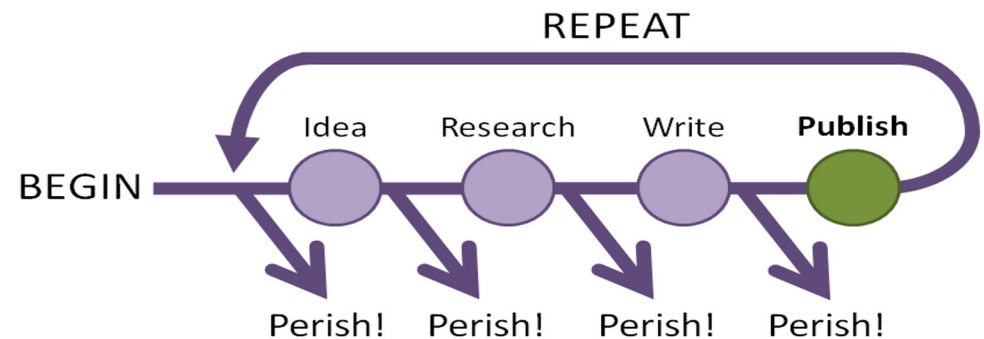
- **“Normal” postdoc:** someone got money to hire you and you are expected to work on a pre-defined project
- **Fellowship:** the University / research lab / faculty got money for you to work on your project (examples: Gliese fellowship in Heidelberg, Zwicky in Zurich, Nordita in Stockholm, CITA fellowship in Toronto, Hubble in USA)
- **Research grant:** you get money for yourself (sometimes also for your group) to work on your project and typically you decide where you take it (examples: DFG research grants, Marie Curie, Emmy Noether, ERC)
- Common characteristic: these are **time-limited** positions



My CV

- 2006 – 2011 Nicolaus Copernicus University of Toruń, Poland
Bachelor and Master degree in Astronomy
- 2011 – 2014 Heidelberg University, Germany
Doctoral degree in the group of Kees Dullemond, member of IMPRS-HD
- 2015 - 2018 University of Zurich, Switzerland
Postdoc position within the National Center of Competence in Research PlanetS
- 2018 – 2022 Ludwig Maximilian University of Munich, Germany
Postdoc position in the ERC Starting Grant-funded group of Til Birnstiel
- 2021: winning the ERC Starting Grant myself
- Now: Max Planck Institute for Solar System Research in Göttingen
Research Group Leader

How to increase your chances



➤ Publish

➤ Network

- Go to conferences **and talk to people**
- Talk to the visitors / seminar speakers
- Exist online – set your professional **website** early to be indexed high in search results!

➤ Gain some experience in proposal writing

- Apply for your own funding to go to a conference / school
- Apply for your own computing time
- Apply for money to organize a workshop or a seminar

➤ Gain technical experience

- Learn different data reduction / analysis techniques
- Acquire proficiency in different programming languages

When to apply?

- The peak of the job season is in the fall (deadlines October to December) for jobs starting the next fall.
- However, recently more positions are advertised outside of this schedule.
- You should start thinking about postdoc applications **about one year before** you plan to graduate or your current postdoc contract ends.



Where to find the job ads

- The job register of AAS:
<https://jobregister.aas.org/>
- Specific newsletters (examples from my field: Exoplanets News, The Star Formation Newsletter)
- Website of your dream group / institution
- Your email (ask your supervisor to forward all the job advertisements he/she gets to you)

How to read the ads

▼ Announcement

Job Announcement Text:

The STAR Institute of the University of Liège invites applications for two postdoctoral fellowships in the field of exoplanet imaging, open in the Planetary & Stellar system Imaging Laboratory (PSILab) of Dr Olivier Absil. The first postdoctoral fellow will focus on the development, commissioning, and scientific exploitation of a new mid-infrared vortex coronagraph on VLT/VISIR, within the Breakthrough Watch program (search for rocky planets around alpha Centauri). The second fellow will support the development of the high-contrast imaging mode of ELT/METIS, and explore the impact of its combination with high-resolution spectroscopy on the scientific yield of the instrument. Both fellows are expected to spend about 70% of their time on the proposed projects, while the rest of their time can be spent on a personal research subject related to high-contrast imaging of planetary/stellar systems. They will have the opportunity to collaborate with the rest of the PSILab team and with its international partners on on-going observing programs, including vortex coronagraph observations at Keck and VLT.

Candidates must hold a PhD in astronomy or a related field by, but not for more than 6 years before, the starting date of the position. They must additionally not have worked more than 24 months in Belgium over the last 3 years. Applications should include:

- a cover letter
- a curriculum vitae and a list of publications
- a statement of past and future research (up to 3 pages)

The application, merged into one single pdf file, should be sent by email to Olivier Absil (olivier.absil@uliege.be). The applicants should also provide the names and contact details of three referees who could be contacted for reference letters.

Complete applications received by 16 April 2018 will receive full consideration. The starting date of the appointments is 1 September 2018, although later dates could be considered. The appointments are for two years, with a possible renewal for a third year contingent upon continued funding and satisfactory progress.

Included Benefits:

The positions come with full benefits and a competitive salary.

Related URLs: [University of Liège](#)
[STAR Institute](#)
[PSILab \(Dr Olivier Absil\)](#)

Application Deadline: Monday, April 16, 2018

Selection Deadline: Tuesday, May 15, 2018

Current Status of Position: Accepting Applicants

▼ Apply to Job

Attention To: Olivier Absil

Title: Dr

Institution/Company: University of Liège

Department Name: STAR Institute

Country: Belgium

Phone: +3243669724

Email: olivier.absil@uliege.be

URL: [STAR Institute - Jobs](#)

▼ Inquiries About Job

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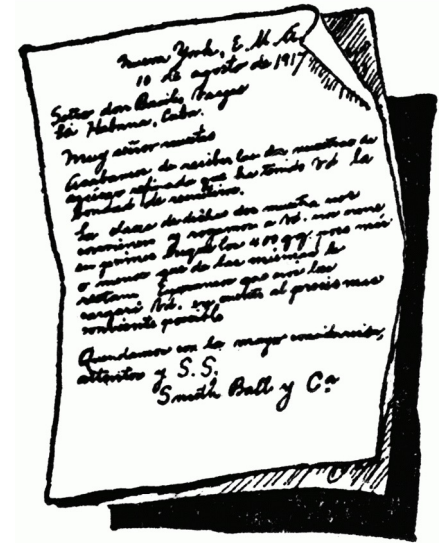
Email: olivier.absil@uliege.be

How to prepare the application

- Create all required documents
 - Typically: cover letter (**even if not mentioned in the ad**), CV, publications list, statement of previous and future research / statement of research interests
- Follow the instructions and page limits
 - Sometimes you will have to create an account in the university system and upload your application documents there, otherwise merge them into a **single PDF**
- Personalize the application
 - Direct it to the right person (never use “To whom it may concern...”, “Dear Sir”, etc.)
 - Tailor the CV / research statements: use keywords from the ad
 - Learn about the group and make connection to their research in your application
- **Spell-check and proofread!**
- Ask your supervisor and colleagues for feedback on your application and iterate – have the first draft ready early!

Cover letter

- This is the first thing the reviewers will read
- It should be 1 to 2 pages
- It should be personal
- It should present your background
- If there are any particular requirements mentioned in the ad, explicitly mention if you fulfill those
- Explain why you are the best person for this position
- Mention your current situation (When does your contract end? Could you end it earlier if you get this job?)



Cover letter

Cover Letter

Dear Madam, Sir,

I am currently a postdoctoral fellow at the Center for Meteorite studies, Arizona State University. I am applying to the postdoctoral position in isotope cosmochemistry and computational planet formation. This position would provide a particularly good opportunity to me, as I am actively involved in isotope cosmochemistry and would want to add to my skills astrophysical numerical modelling. Indeed, my interpersonal and organizational skills coupled with my research and education experiences, would prove to be assets for the post I am applying for.

My research experiences in both Arizona State University as a postdoctoral scholar and at the Muséum National d'Histoire Naturelle as a PhD student has given me a holistic view of the myriad aspects of cosmochemical research. My main research interest is about the volatiles in the inner Solar System, with a predilection for hydrogen isotopes and water quantification, using secondary ion mass spectrometers. During my PhD, I have studied chondrules and thus have a good knowledge of these chondrite components and the problematic of their formation. Moreover, I also have a MS in computer sciences where I learned different programming languages.

I have good writing and communication skills in both French and English, which have further been honed by my various scientific presentations and interactions at international conferences. I am confident that my past experiences in science research coupled with my knowledge of programming, as well as my dynamic personality, would allow me to be a promising candidate for this position.

I hope you will enjoy the different elements of my application. Please contact me if you need any further information.

Best regards,



Professor Maria Schönbacher
Inst. Für Geochemie und Petrologie
Clausiusstrasse 25
8092 Zürich
Switzerland
Tel: (0041)446323792
E-mail: mariasc@ethz.ch



Dear Professor Schönbacher,

I am currently a postdoctoral fellow at the Max Planck Institute for Chemistry (MPIC) in Mainz (Germany) where I undertook a project that I designed in Dr. Peter Hoppe's Particle Chemistry group, a comparative study of corundum or hibonite bearing refractory inclusions in CM and CO chondrites. This project is due to end on the 15th of June 2017. Thus, I am currently searching for a new project to take part in after this date and I have been made aware of the postdoctoral researcher position you are advertising at the ETH Zürich.

Before my current position, I acquired a PhD from the Open University (OU, Milton Keynes, UK) and the Natural History Museum (NHM, London, UK) where I worked with Ian Franchi (OU), Natalie Starkey (OU), Sara Russell (NHM) and Ian Wright (OU). My PhD work has focussed on the study of oxygen and magnesium isotopes in Calcium-, Aluminium-rich Inclusions (CAIs) and their Wark-Lovering rims in an effort to characterise the oxygen isotope reservoirs present in the protosolar accretion disk. The individual layers constituting Wark-Lovering rims can be very thin ($\leq 10 \mu\text{m}$) and so the NanoSIMS 50L with its high spatial resolution and precision allowed for in-situ measurement of oxygen and magnesium isotope ratios in these rims.

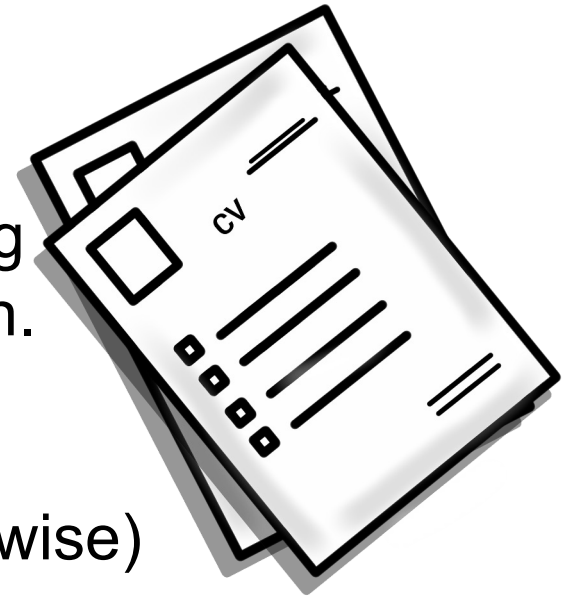
In the course of both my PhD and postdoctoral fellowship, I developed a vast knowledge of the mineralogy and petrology of chondritic meteorites and their components as well as a deep knowledge and interest for early Solar System processes and the reservoirs that took part in these processes.

I have also developed technical skills that would be very valuable in attempting to answer these questions. I have enjoyed the benefit of months of instrument time to undertake extensive oxygen isotope measurements and developed the skills to acquire high-precision results for O isotopes (typically ± 2.5 (2σ) ‰ for $\delta^{17}\text{O}$, ± 1.5 (2σ) ‰ for $\delta^{18}\text{O}$) with a high mass resolution (MRP > 10000, Cameca definition). In addition, I successfully developed the technique for magnesium isotope analyses on the NanoSIMS instrument at the OU which is something that was new to this lab.

During these projects I also had the opportunity to acquire extensive electron microscopy

CV

- Unless there is a page limit, it can be as long as it needs to include all relevant information.
- It should be easy to read:
 - Font size 11 or 12 (unless specified otherwise)
 - Clear structure.
 - Enough space between sections.
- Differences between Europe and US:
 - In Europe you are supposed to include your personal information such as date of birth, marital status, number of children, in US you never include those (you may be asked to include gender and race though).
 - Photo: in Europe you may include a photo, in US you should not.



CV: Sections

- Personal information
 - Name
 - Work address, contact information (phone, email)
 - Nationality
 - Date of birth
 - Gender
 - Marital status, number of children
- Present position
- Education (reverse chronological order)
 - Only Bachelor, Master, PhD
- Employment history (reverse chronological order)
 - Only academic & research positions!

CV: Sections, cont'd.

- Honors and awards (if any)
- Training courses / technical skills
- Observing experience (if any)
- Teaching experience (if any)
- Funding (if any)
- Supervision experience (if any)
- Community service:
 - Refereeing experience
 - Committees, LOC / SOC
 - Seminar organization, etc.
- Talks, posters, and conferences attended

Publications list

- If not requested as a separate document, just include it in the CV.
- Make a clear distinction between refereed and not-refereed publications (or: journal papers and conference proceedings).
- If you want to include unpublished papers, indicate their status (submitted or in prep.)
- Reverse chronological order.
- Format: Authors, title, year, journal, volume, pages (or id).
- You may highlight your surname, particularly if you are n-th author.
- Is the paper available in open access?



Research statement

- This part is very different for the “normal” postdoc application and fellowship!
 - In the first case, you want the research plan to go along the outline presented in the job ad.
 - In the second case, it should present an independent and innovatory ideas based on your previous experience and possible to realize within the postdoc lifetime.
- In both cases you want the research statement to highlight your major achievements and your connection to the research group / institute you are applying to (include references!)
- Don't be overly modest, but don't be dishonest either.
- It is a good idea to include some plots but make sure they will also look good printed in black and white.

Reference letters

- Whom to ask for the reference letter
 - Your advisor (if you do not have a reference letter from your advisor, explain the situation in the cover letter)
 - Your (senior) collaborators
 - Your mentors
- Don't just ask for *a* letter – ask if they are comfortable writing you a *strong* letter!
- Contact the recommendation letters writers well in time and make sure they know where to send / upload their letters. They will sometimes ask you for your application so start to prepare it early!
- People tend to give more weight to letters from their friends, so be aware of the politics!
- Female applicants: make the reference letter writers aware of the unconscious bias (google: “Avoiding gender bias in reference writing”)

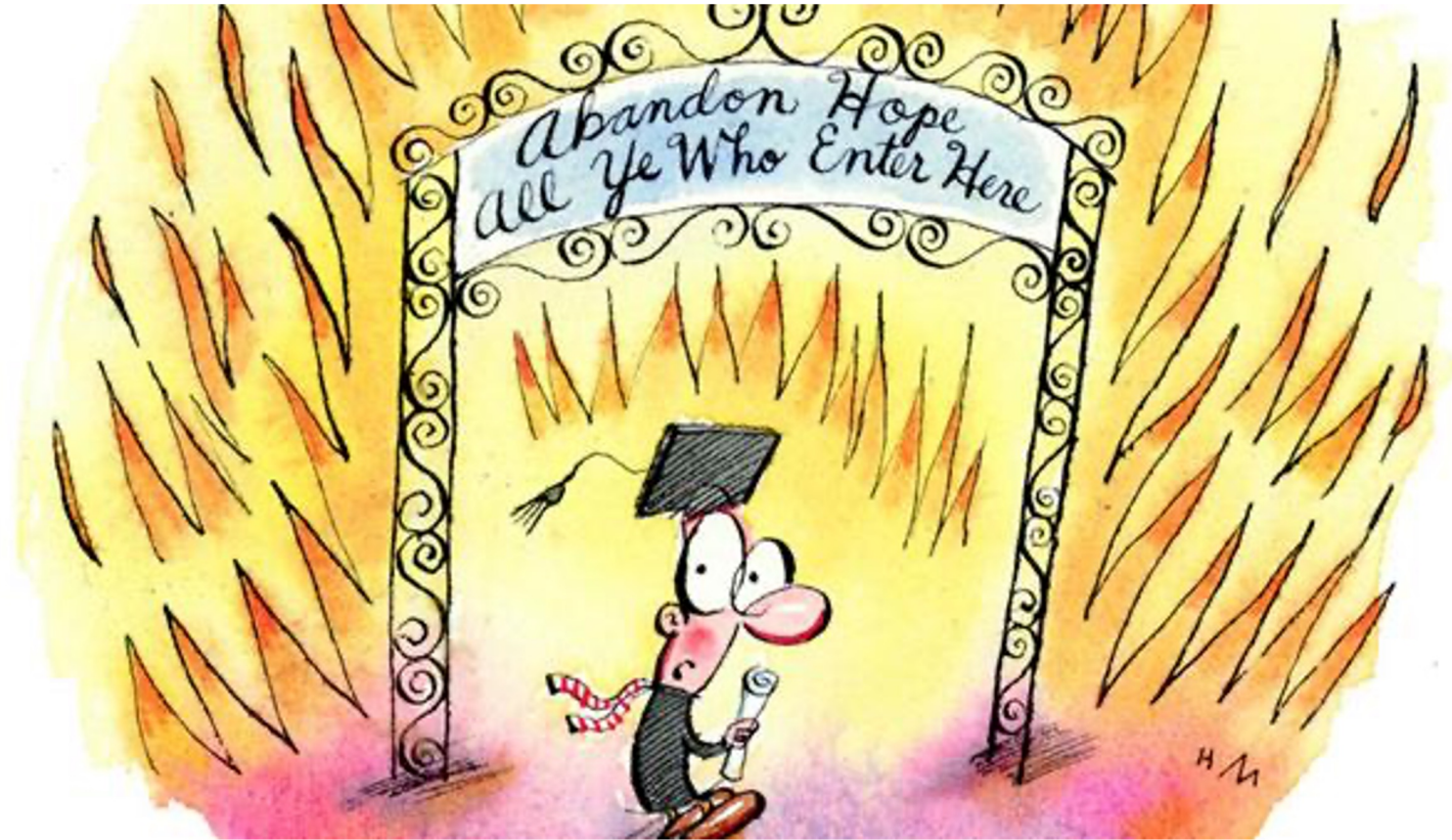
Submission

- Don't exceed the deadline!
- Unless otherwise specified, submit your application in as a single pdf.
- Don't send huge files.
- Don't send published or unpublished papers (unless explicitly requested).
- When the addressee is an administrator or when submissions occur through a web page, you'll usually get an acknowledgement.
- When the addressee is a professor who receives 100 applications and 300 letters, he/she may not acknowledge receipt.
- Don't start follow-up messages asking whether your application was received! Unless you received an error message it most likely was. You don't want to compromise your chances by being a pain.

After submission



You can also check the Rumor Mill (but this is not 100% reliable)
<http://www.astrobetter.com/wiki/Rumor+Mill>



“The earliest postdoctoral appointment was in 1931. That postdoc hopes to go on the faculty job market sometime in the next couple of years.”

from A. Ruben: “The Postdoc: A Special Kind of Hell”, Science, 2013

Good luck with your
applications!

