Workshop
Attracting and selecting your future team members

Finding the first few people

- My personal hiring challenge
- What I did, what I intended, and what (I think) resulted from that

Finding additional people

- Ideas for later stages of an Emmy Noether Research Group (staff for additional projects, students, etc.)

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Ege Civas

The first few people

- My personal hiring challenge
- What I did, what I intended, and what (I think) resulted from that

Novel nitride materials for electronic devices

Background: What my team needs to deal with (apart from myself)

FAU Friedrich-Alexander-Universität
Hochdrucklabor der Technischen Fakultät

Ammonothermal synthesis

- High pressures, high temperatures, harzadous chemicals
- Custom reactors that require attention to detail in handling
- Complex interdisciplinary topic that requires analytical thinking from the improvement of tools to the interpretation of results

Think about what study subjects prospective team members should bring

Chemical engineering
(ammonothermal synthesis of nitrides)

Physics
(of nitride semiconductors)

Mechanical engineering
(high-pressure technology)

Electrical engineering
(nitride semiconductor devices)

Materials science
(semiconductors; high-pressure technology)

Chemistry
(ammonothermal synthesis of nitrides)

2 people can never cover all of these

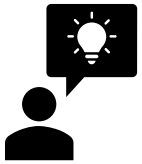
- ➔ Which subject areas are most important in the beginning?
- ➔ For those that matter only at a later stage of the project, try to find someone who is at least intrinsically drawn towards the things they will need to learn.
- ➔ What do I have the least knowledge about (which additional knowledge by a PhD student would be most helpful)?

Think about what knowledge, skills and traits are critically important in your situation

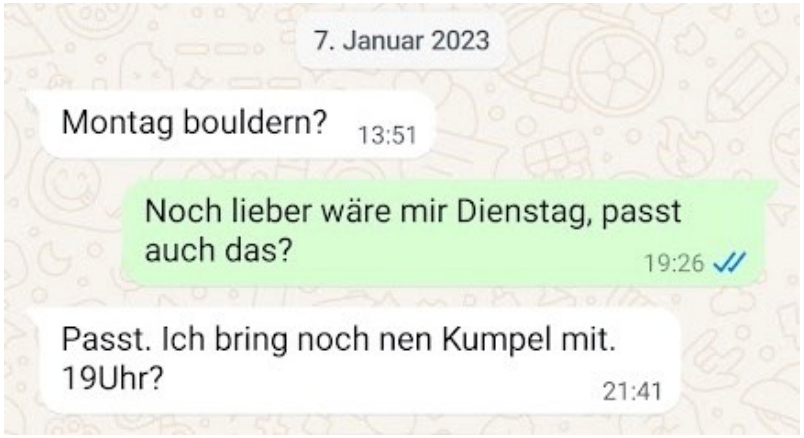
People who work confidently AND carefully with potentially dangerous stuff

People who are willing to plan and set up a lab before the science can begin, and distribute the tasks in whatever way is best for the team

Someone who is ideally more experienced than the average person starting a PhD, who can work more independently early on



Assist your luck: Tell your network that you got the grant and will establish a group!



You might head out for leisure time
… rolling over the floor … *in front of your candidate without knowing …*

➔ *they get the most authentic impression of you as a person*

(we did an extensive, exhausting on-site interview later)

Tell people who
- Know you
- Know something about the work
- Will bring in only people they think would fit

If possible, invite applicants for a lab tour

- If necessary, clean up just well enough to not scare them off… make sure they get an authentic idea about inevitable tasks

- Observe how they react (including body language) upon e.g.,
  - Seeing inevitable „blue-collar-jobs“ at hand
  - Realizing hazards associated with the necessary work

- Observe what questions they ask

If they pester you with questions that‘s a good sign (shows interest and curiousity), particularly if *you* have trouble answering some of them (shows knowledge)

To attract good fits, provide them with more than just a job add

Don‘t show too much either, to ask open questions in which applicant‘s can‘t take the „right“ answers from what you have shown

Use an eyecatcher that preferentially „catches“ people with traits you look out for

1 year later

materials

MDPI

Review

Ammonothermal Crystal Growth of Functional Nitrides for Semiconductor Devices: Status and Potential

Thomas Wostatek [1], V. Y. M. Rajesh Chirala [1], Nathan Stoddard [2], Ege N. Civas [1], Siddha Pimputkar [2,*] and Saskia Schimmel [1,*]

Saskia Schimmel (She/Her) • Sie
Emmy Noether Research Group Leader
1 Jahr • Bearbeitet •

I'm currently about to establish my own research group working on nitride semiconductors at FAU Erlangen-Nürnberg - special thanks to Prof. Jörg Schulze for hosting the group!

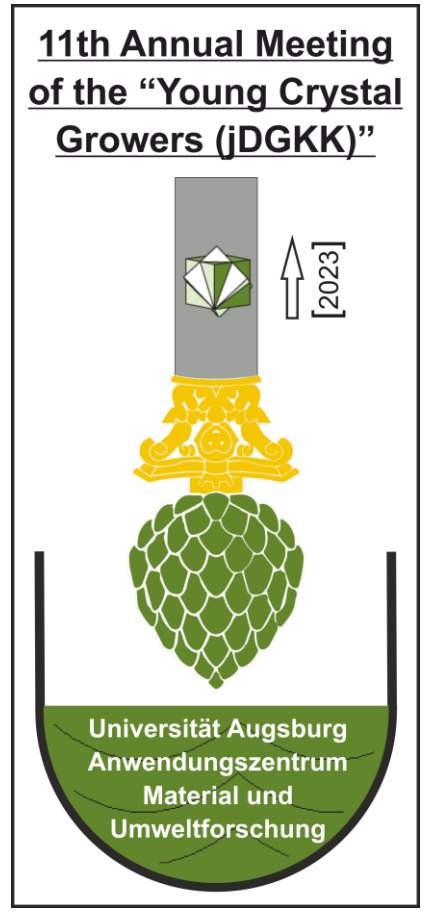
The first batch of research objectives defined has attracted funding right away: The Deutsche Forschungsgemeinschaft (DFG) - German Research Foundation has recently decided to fund my project on "Novel nitride materials for electronic devices" via the Emmy Noether Programme.
In addition, FAU Erlangen-Nürnberg supports me in developing another proposal via the Emerging Talents Initiative (ETI).

My vision for the team is that while everyone will have their own scientific directions to explore, there will be a culture of mutual support and shared overall objectives.
Each of these research endeavors will come with significant challenges and provide plenty of learning opportunities due to their cross-disciplinary nature and novelty.

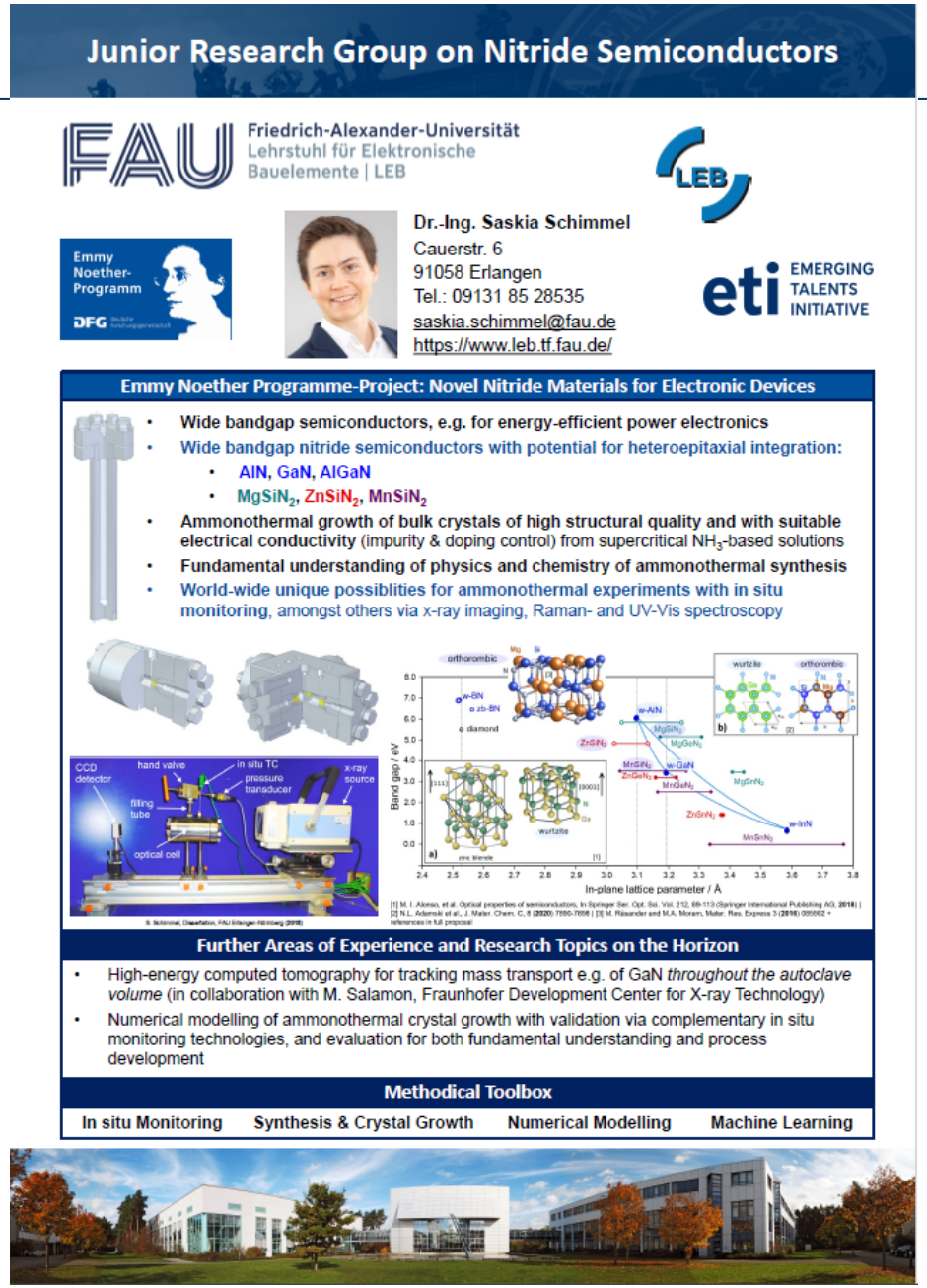
Links to job offers (in German) will be posted in the comments!

#nitride #semiconductor #synthesis #crystallization #phdposition #inorganicchemistry #physics #engineering #materials

Present your group at events for young researchers



Online/offline
National/international
…

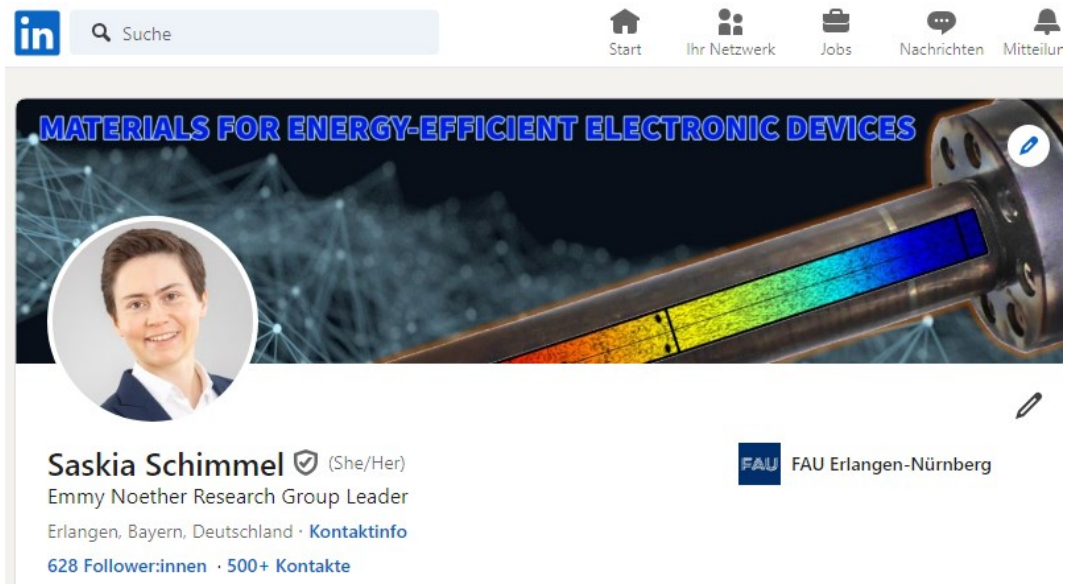


Additional people

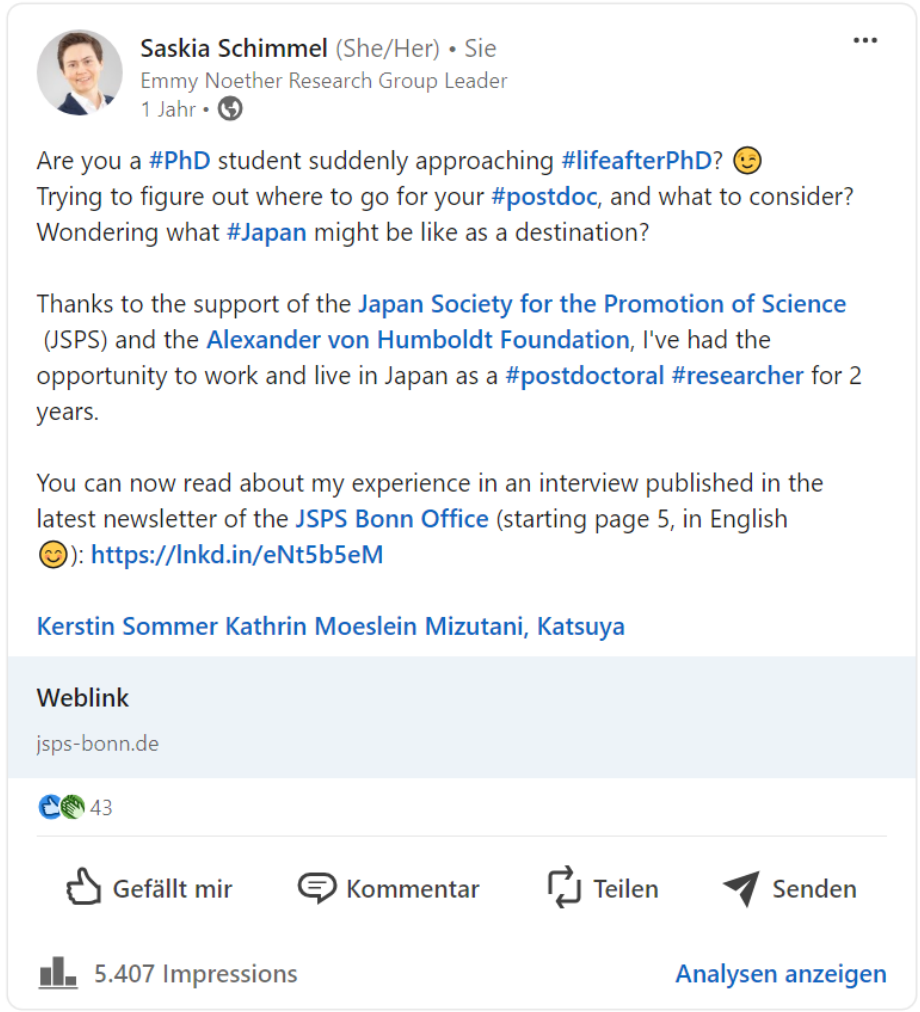
- Ideas for later stages of an Emmy Noether Research Group (staff for additional projects, students, etc.)

Stay in touch with reasonable people you met during the recruitment process

- Take the time to treat your applicants reasonably, including those that don‘t get the job
- Some will stay in your network, extending your reach towards younger people in relevant subjects



Share experiences/content relevant to young researchers



Helps to grow your network among younger researchers

If it‘s your experience, it also helps your applicants to get an idea about you as a human being

Researchers Interview in the **JSPS Bonn Office Newsletter ‘Bonbon Dokei’**, No. 74, **2023**

Organize something for young researchers in your field

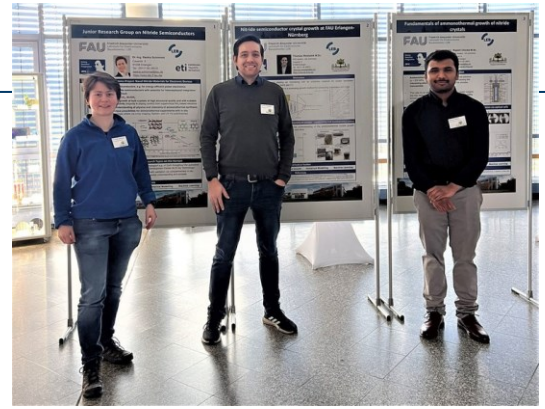
Young researchers working in crystal growth and characterization, read on!
We're looking forward to welcoming you in Erlangen to attend the
12th Annual Meeting of the Young Crystal Growers (jDGKK):
- Present your own research!
- Meet your peers!
- Explore career possibilities!

Tuesday, March 5th in Erlangen (Germany)

Lectures:
- "**Defects in Single Crystal Growth**" by Prof. Andreas Danilewski (formerly Albert-Ludwigs-Universität Freiburg)
- "**Bulk Crystal Growth of Novel Oxides**" by Dr. Christo Guguschev (Leibniz-Institut für Kristallzüchtung)
- "**High Energy X-Ray Diffraction as a Method for Defect Analysis of Massive Crystals**" by Dr. Matthias Weisser (FAU Erlangen-Nürnberg)
- "**AIXTRON company profile - MOCVD Production Technology**" by Prof. Michael Heuken (AIXTRON SE)
- "**CdTe-Einkristalle für Photon Counting – Ein Quantensprung in der CT-Bildgebung**" by Dr. Justus Tonn (Siemens Healthineers)
- "**Material engineering of multijunction solar cells for space applications**" by Dr. Mahmoud AL Humaidi (AZUR SPACE Solar Power GmbH)

More information: https://lnkd.in/dquzkwEs

Sebastian Gruner, Thomas Wostatek, Merve Kabukcuoglu, Arvind Subramanian thank you for contributing to our work in the orga team! The process of our logo design was an example that having a team with #diverse backgrounds clearly improves the outcome.

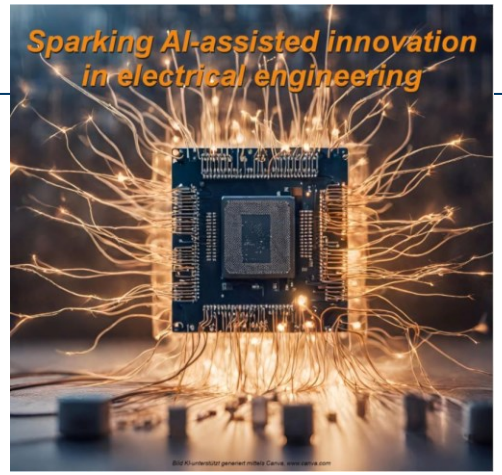


Abstract Deadline: February 12th, 2024

12th Annual Meeting of the Young Crystal Growers

Be visible for young researchers and build your network among them

Get involved in teaching



Saskia Schimmel (She/Her) • Sie
Emmy Noether Research Group Leader
1 Std. •

At the Chair of Electron Devices (Lehrstuhl für Elektronische Bauelemente, https://www.leb.tf.fau.de/), we're embarking on a project targeting a novel #teaching approach that simultaneously aims to spark #AI-assisted #innovation in #electrical #engineering.
We will provide our students with subject-specific training in dealing with AI, specifically in the fields of #semiconductor devices and semiconductor technology. The innovative and interactive approach to the lecture material will also create a new way of domain knowledge aquisition and consolidation.

Together, Professor Jörg Schulze and I have aquired funding for this via the "Innovationsfonds Lehre" of FAU Erlangen-Nürnberg. Thanks to Jörg Schulze and Jan Frederik Dick for contributing to the proposal and helping to set things up!

Further information on support for projects that develop innovative concepts for teaching at FAU Erlangen-Nürnberg (in German): https://lnkd.in/dNyAkG2s
#Elektrotechnik #Lehre #KI #Halbleiter

- Get in touch with prospective student assistants, Bachelor/Master thesis students (who may want to do a PhD afterwards)
- Educate students in skills useful for work in your group

Thank you for listening!
Now, let‘s discuss and collect more ideas & experiences!

Short URL:
https://qrco.de/bfEqKN