



**Seminar 2021**  
of the young Crystal Growers

October  
5th&6th  
2021  
Berlin

# 10<sup>th</sup> meeting of the Young Crystal Growers (jDGKK)



**ikz**

LEIBNIZ-INSTITUT FÜR  
KRISTALLZÜCHTUNG  
im Forschungsverbund Berlin e.V.

# Welcome Note

**Dear participants of our 10<sup>th</sup> JDGKK annual meeting,**

we are highly pleased to welcome you to our young crystal growers seminar in Berlin!

2021 is a special year, since we celebrate our **10th seminar anniversary** and for most of us this might be the first scientific meeting with colleagues of other institutes / companies since the rise of the COVID-19 pandemic.

You will enjoy a diversified program consisting of Academic Talks, Industry Talks, Patent Agent Talk, a Lab Tour and last but not least YOUR poster presentations.

Take the opportunity to **gain knowledge**, **present** your work, **discuss** scientific topics and **connect** with peers in a relaxed atmosphere.

The speakers will cover various topics around crystal growth and characterization- don't hesitate to ask questions and learn from them.

We wish you a pleasant meeting- enjoy and have fun!

Best Regards

Sebastian Gruner

Dr. Karoline Stolze

Jan Philipp Wöhrle

Dr. Ludwig Stockmeier

## Venue

The seminar will be held at:

**Max-Born Saal,  
Max-Born-Str. 2a,  
12489 Berlin-Adlershof**  
(see the red circle „1“ in  
the map on the next page)

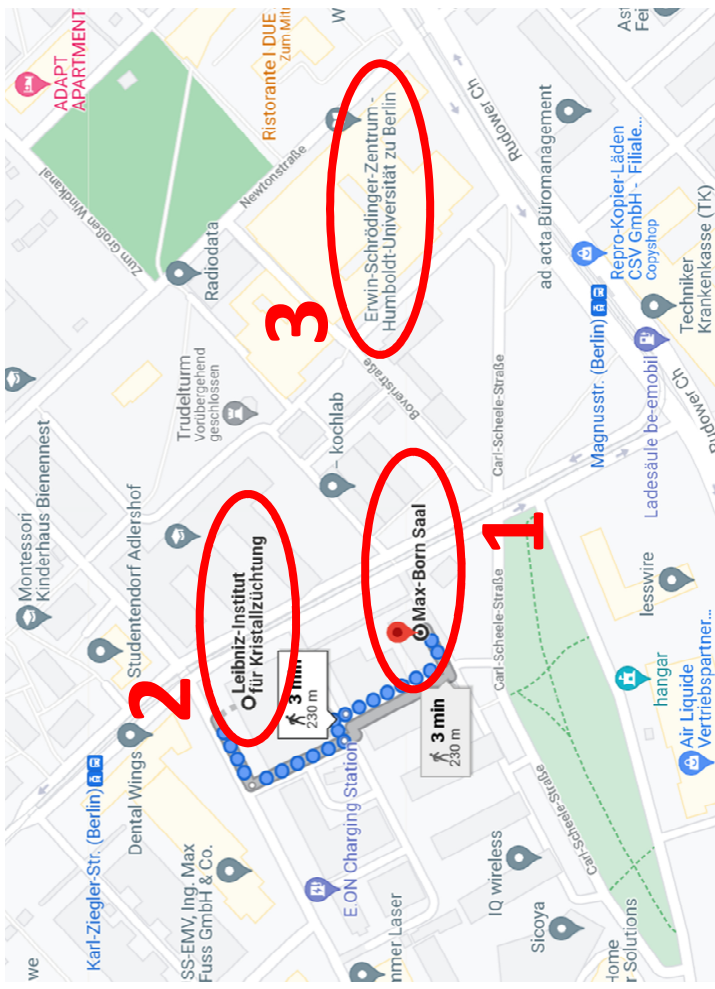
The lab tour will take  
place at the  
Leibniz-Institut für  
Kristallzüchtung  
Max-Born-Straße 2,  
12489 Berlin-Adlershof  
(see „2“ in the map).



## Corona test center

In case you need a rapid antigen test on Tuesday morning,  
the next test center is the “Medicare Testzentrum” at:

**Erwin-Schrödinger-Zentrum** next to GERDAN’s Café,  
entrance from Newtonstraße (see „3“ in the map).



# Hygiene rules

The participation is regulated according to the so called „3G-rule“ (1 of the 3 following options needs to be fulfilled):

- **compl. vaccinated** (2nd vaccination lies more than 14 days in the past)
- **recovered** (recovery less than 6 months ago)
- **tested** (official rapid antigen test max. 24 h old or PCR test max. 48 h old).

**The 3G-criteria will be verified at the registration.**

The participant's name tag is proof of registration and also serves as 3G-proof.

**Additionally, for indoor spaces wearing a medical mask that covers mouth and nose is mandatory (including the poster session).**

Exceptions are:

- at your seat in the lecture hall  
(please, don't change position)
- to consume food/drinks at the bar table  
(≤ 4 persons/bar table)
- at the dinner while sitting at the table

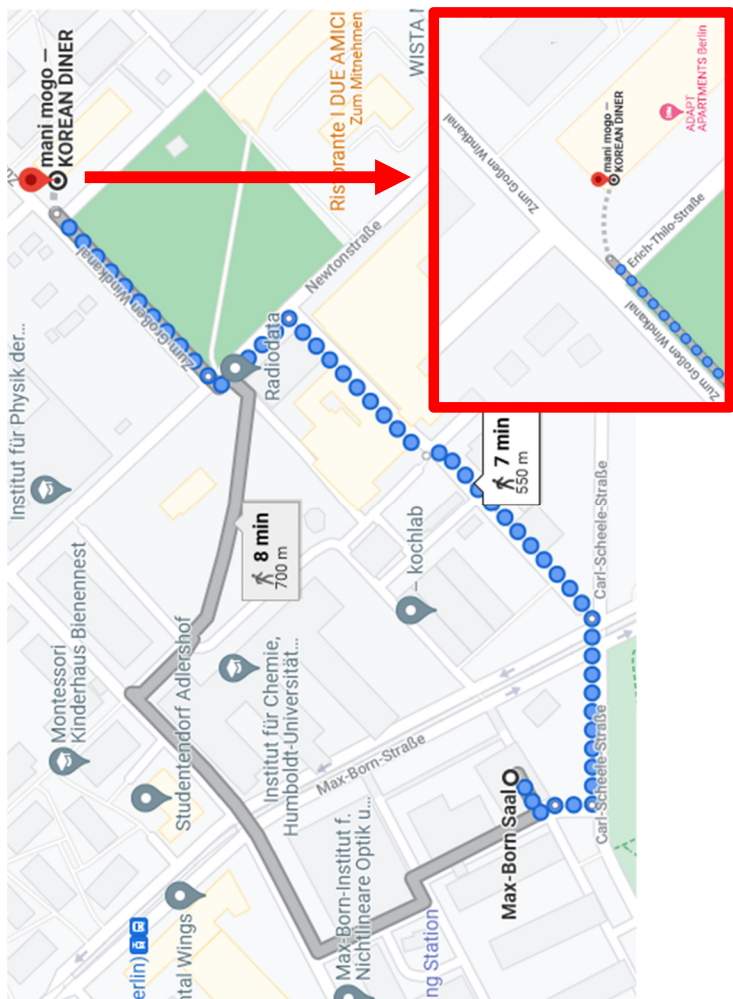
At the registration every participant has to accept the hygiene rules by signing a respective form.

Repeated violation against the rules of hygiene can lead to an exclusion from the event.

# Dinner

Restaurant „Mani Mogo“, (<http://www.mani-mogo.com>)

Erich-Thilo-Straße 3, 12489 Berlin



# Talks and Poster Presentations

## Academic Talks (45 min):

Prof. Dr. Peter Rudolph (Crystal Technology Consulting, Berlin): *"Über das Leben eines Kristallzüchters"*.

Prof. Saskia Fischer (Humboldt Uni Berlin): *"Why size matters– nanopatterning in electronics"*.

Dr. Anton Jesche (Uni Augsburg, Physik): *"Solutions for Crystal Growth: Crystal Growth from Solutions"*.

Dr. Hiroki Tanaka (IKZ Berlin): *"Laser Cooling in Fluoride Crystals: Interdisciplinary Research Project"*.

## Industry Talks (30 min):

Dr. Paul Sass (Scientific Instruments Dresden GmbH).

Dr. Artem Shalimov (Rigaku Europe SE): *"14 methods for crystal structure characterization using one X-ray diffractometer"*.

Lars Grieger (Malvern PANalytical).

## Patent Agent Talk (45 min):

Dr. Jörn Plettig (Berlin, Patent and law firm ltd): *"Challenges and opportunities in the profession of patent attorney"*.

### **Poster Presentations (1:15 h:min) + Lightning Talks (3 min):**

Felix Anger (IFW Dresden): *„Growth and characterization of substitution variants of LaOFeAs single crystals“.*

Arved Enders-Seidlitz (IKZ Berlin): *„Experimental and numerical analysis of resistive and inductive heating in CZ growth“.*

Owen Ernst (IKZ Berlin): *„Development of novel bottom-up growth methods for crystalline thin film structures“.*

Maik Förste (TUBAF Freiberg): *„HTVPE of GaN layers with faceted structures“.*

Sebastian Gruner (RWTH Aachen): *„Growth study and structural characterization on MBE grown Bi<sub>2</sub>Se<sub>3</sub> thin films“.*

Abanoub Hanna (HZB Berlin): *„Crystal growth, characterization and phase transition of the highly frustrated magnet PbCuTe<sub>2</sub>O<sub>6</sub>“.*

Yujia Liu (IKZ Berlin): *„Strained <sup>28</sup>Si for quantum circuits by MBE-CVD combined growth“.*

Saskia Schimmel (FAU Erlangen): *„Numerical simulations of ammonothermal crystal growth of GaN and pathways towards their experimental validation“.*

Sreejith Thamban (HZB Berlin): *„Single Crystal Growth and Physical Properties of Distorted Triangular Lattice Compound La<sub>2</sub>CuGe<sub>2</sub>O<sub>8</sub>“.*

Isabel Streicher (IAF Freiburg): *„Development of AlScN HEMT Structures by MOCVD“.*



# Schedule

## Tuesday, 5<sup>th</sup> of October:

09:30 - 10:30 Registration

10:30 - 11:00 Welcome Notes

11:00 - 11:45 Academic Talk 1 / Dr. Anton Jesche:

*"Solutions for Crystal Growth: Crystal Growth from Solutions"*.

11:45 - 12:30 Lightning Talks / 3 min poster presentation

12:30 - 13:45 Poster Session + Lunch (Pizza)

13:45 - 14:30 Academic Talk 2 / Dr. Hiroki Tanaka:

*"Laser Cooling in Fluoride Crystals: Interdisciplinary Research Project"*.

14:30 - 15:00 Industry Talk 1 / Dr. Paul Sass

15:00 - 15:30 Coffee Break

15:30 - 16:15 Academic Talk 3 / Prof. Peter Rudolph:

*"Über das Leben eines Kristallzüchters"*.

16:15 - 16:45 Industry Talk 2 / Dr. Artem Shalimov:

*"14 methods for crystal structure characterization using one X-ray diffractometer"*.

16:45 - 17:30 Coffee Break

17:30 - 18:00 Industry Talk 3 / Lars Grieger

18:00 - 18:45 Academic Talk 4 / Prof. Saskia Fischer:

*"Why size matters– nanopatterning in electronics".*

18:45 - 19:00 Transfer to the restaurant

19:00 - open Dinner / Social Evening

**Wednesday, 6<sup>th</sup> of October:**

09:15 - 09:30 Arrival

09:30 - 10:30 Lab Tour (IKZ)

10:30 - 11:00 Break

11:00 - 11:45 Patent Agent Talk / Dr. Jörn Plettig

*"Challenges and opportunities in the profession of patent attorney".*

11:45 - 12:00 Closing Remarks

12:00 Registration for DKT21 conference

## Next meetings

...presumably in autumn 2022 in Freiberg, Saxony

**Joint meeting of jDGKK & yDGK (young crystallographers)!**

...presumably in spring 2023 (location not yet clear)

**11<sup>th</sup> annual jDGKK meeting** right before DKT23 conference

Stay informed about conferences, seminars and workshops  
on the DGKK webpage:

<https://www.dgkk.de/tagungskalender.html>

# **German Crystal Growth Society/ Deutsche Gesellschaft für Kristall- wachstum und Kristallzüchtung (DGKK)**

Be part of our community of young crystal growers within the DGKK society and join the network of colleagues, institutes and companies working in crystal growth!

As a society member you may easily get in touch with peers, do social networking, receive job offers via circular email and enjoy a reduced conference fee for the DKT.

The annual dues for students and PhD students is 20€, for regular members it is 30€.

For further information, please visit our website:

<https://www.dgkk.de/mitgliedschaft/allgemeine-mitgliedschaft.html>

