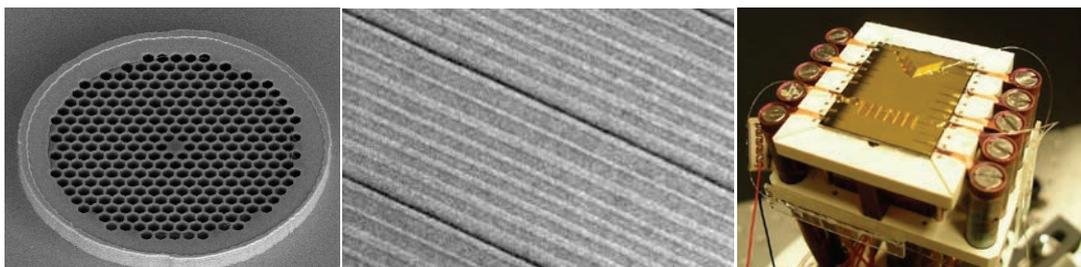
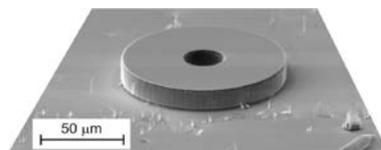


**Doctoral Program (DK+)**

# **BUILDING SOLIDS FOR FUNCTION**

**(Solids4Fun)**

## **HANDBOOK**



## Introduction

The Doctoral School (DK) **Solids4Fun** was financed by the FWF for 4 years initially (March 2012 – February 2016), with some financial contributions by TU Wien. It has been extended for additional 4 years after a positive evaluation. The evaluation took place in summer 2015. Operation of the DK is based on a contract between FWF and TU Wien. The DK currently comprises 13 Faculty Members. The DK is governed by the Faculty Member Assembly and represented by a Speaker (Prof. A. Pimenov) and a Vice Speaker (Prof. J. Fleig). A Coordinator (A. Vogel) is responsible for administration of the DK. Students elect two student speakers (Isabella Floss, Thomas Ruh).

The program of the DK is research and training-oriented. It provides a teaching program that will allow all participating students to develop their careers and become experts in their field on a competitive international level. Participants in the DK can be “*internal*” or “*associated*” doctoral fellows. Internal PhD students get their salary directly from the **Solids4Fun** budget, while associated students are paid from another project (“Drittmittelprojekt”) of their supervisor. Internal and associated fellows have the same rights and obligations within the DK. All administrative matters of the internal students (work contract, holiday leave etc.) are handled directly by the DK, while that of the associated students by their corresponding institutes.

## Application

Students must apply via the internet portal of **Solids4Fun**. Suitable candidates will be selected by the Faculty Member Assembly and invited for a hearing. Persons applying as PhD students of **Solids4Fun** must comply with the formal requirements for admission to the PhD program of TU Wien. In addition the **Solids4Fun** rules for the recruitment of PhD students apply.

Applicants invited for the hearing are asked to give a short presentation (English language, 10 min talk, 5 min discussion) on their own previous research. The Faculty Member Assembly decides on admission to the PhD program of the DK. The procedure is the same for internal and associated students. All candidates will be informed about the outcome of the selection procedure within 2 weeks after the hearing.

## Employment issues

The coordinator will handle the employment formalities for internal students as well as the enrolment process for doctoral studies at TU Wien for both internal and associated PhD students. He will also assist internal foreign students in obtaining visa documents and finding a proper accommodation.

Internal students will be employed for a maximum of 3 years. This period can be extended to 4 years if the student has stayed abroad for at least 6 months to perform research in another laboratory. Such a stay is highly encouraged. At least 3 of the six months must fall within the initial 3 years of the respective period. The stay abroad must not necessarily be a continuous period, but can be split in several visits. Participation in international conferences etc. does not count towards this stay. The 3 years rule (+ possible extension) also applies to the other financial benefits mentioned below (money for consumables, travel, etc.). Internal students may become associated students after 3 years (+ possible extension) through support by some other funding of the supervisor.

## Training Programme and Curriculum of the DK

An extended training programme is the hallmark of the Doctoral School “Solids4Fun”. Active participation in all training activities of the DK – beyond the minimum requirements of TU Wien for doctoral studies – is therefore mandatory. The **Solids4Fun** faculty is responsible for all scientific and training aspects of the DK and decides on whether a doctorate is awarded within the framework of the DK.

Each student suggests a *Thesis Advisory Committee* (TAC) for herself/himself. The TAC gives support and guidance to the student through their studies. It is composed of the supervisor, a second member of the DK faculty and (optionally) an external expert.

Each DK student must present the results of his/her scientific work at international workshops and conferences and be the first author of at least one major scientific publication. Funding by **Solids4Fun** (FWF) must be mentioned in the acknowledgement of all publications and presentations (“project W1243”). All publications must be Open Access, if possible; any Open Access fees are reimbursed by FWF (for papers of both internal and associated students).

Key elements of the *training programme* are:

- “*Ringvorlesung*”: Students must participate for 4 semesters with a minimum attendance of 80% each. The subject matter of the Ringvorlesung changes every semester. As a rule, each Ringvorlesung consists of 3-4 modules; each module will be presented by one of the faculty members. The Ringvorlesung of one term will be graded. To this end, the student selects one module of the Ringvorlesung (but not that of his/her own supervisor) and takes an examination with the faculty member in charge of this module. 3 ECTS credits will be awarded for each Ringvorlesung (= 12 ECTS credits in total).
- The *Summer School* must be attended at least twice. 1.5 ECTS credits will be awarded for the soft skills portion of each Summer School. Each student should present a poster or a talk on his/her research during each Summer School. At least one presentation must be oral.
- The *students’ seminar* is the centrepiece of the DK. It has a double function: to report progress of the research work and to train interdisciplinary communication. To this end, each contribution should contain a general part, which explains the work to non-specialists, and a more specific part. Lively discussion and questioning is strongly encouraged. Students must participate in the seminar series during their whole participation in the DK; a minimum attendance of 75 % in each semester is required. Every student should present her/his research at least once per year in the seminar. 3 ECTS credits in total will be awarded once before finishing the doctoral work; grading is based on the Summer School presentation.
- **Solids4Fun** students need to select additionally graded lecture courses from the list of courses offered by TU Wien, preferentially in the own research field. The selected lecture course(s) must be approved by the TAC. Normally once per year, an external **Solids4Fun** guest professor will be invited to give a (blocked) lecture course on a topic related to the DK. It is highly recommended to select these special lecture courses.
- *Guest lectures*. At least once per month the DK invites an external speaker for a seminar talk. Regular attendance of the guest lectures is expected.

## Travelling

The expenses for the yearly summer school are covered for both internal and associated students by the budget of the DK.

Travel and accommodation costs as well as conference fees for conferences, workshops, etc. can be reimbursed from the DK budget up to ca. 2.000–3.000 € per year for both internal and associated students. Active participation in the event (talk, poster) is required. The accepted abstract and an excerpt of the conference program showing the entry of the contribution must be submitted together with the request for reimbursement.

Travel and accommodation costs for doing research abroad can also be reimbursed within the financial limits given above. In this case, a brief description and justification of the research work must be submitted together with the request for reimbursement.

It is highly recommended to contact the coordinator for organizational arrangements before registering for a conference or planning a research stay.

Reimbursement for travel costs is based on the guidelines of TU Wien. Money should be spent economically. The costs for 2<sup>nd</sup> class train tickets and economy class flights (where necessary) will be reimbursed. Upper limits for accommodation per day apply. Taxi costs or costs of social events cannot be reimbursed, as well as all costs not directly connected to the purpose of the stay. It is expected that part of the expenses is privately financed, if some vacation is combined with the travel. In such a case, the coordinator should be contacted in advance.

## Consumables and small equipment

Each research group has a budget of 10.000 € for consumables and small equipment (up to a commercial value of 400 €). Consumables for associated students will be paid from resources of the supervisor.

For orders of consumables/small equipment up to 1.000 € no approval is necessary. For more expensive orders please contact the coordinator. All bills must be addressed to:

Prof. Andrei Pimenov  
Institut für Festkörperphysik  
Technische Universität Wien  
Wiedner Hauptstraße 8-10  
1060 Wien, Austria

It is important that the UID of TU Wien is included.

Please make sure that the *delivery address* is your own and not that of Prof. Pimenov.

One PC can be bought for each internal or associated student at the expense of the DK after approval of the quotation by the Speaker.