KNMF User Guidelines

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Welcome to KNMF

KNMF is an open access research infrastructure for multimaterial nano and micro fabrication and characterisation. We pride ourselves on a collaborative approach with our users, offering portfolio of technologies and expertise which can be applied to solve challenging requests. You do not need to be able to operate the equipment to be a KNMF user, our technology experts are on hand to accompany you from proposal idea through to publication of the results.

What does KNMF offer?

KNMF offers a broad portfolio of nano and micro structuring and characterisation technologies. Close proximity of the research centres at KIT means that we have particular expertise in the area of optics and photonics, catalysis, printed materials, and materials and systems for electrical energy storage. The technologies, which may be combined into process chains, are located in several institutes at KIT and are organised in two laboratories:

KNMF Laboratory for Micro- and Nanostructuring combines an impressive set of constructive bottom up and ablative top down structuring and replication technologies.

KNMF Laboratory for Microscopy and Spectroscopy stimulates the current and future trends for high energy microscopy and spectroscopy.

The technologies currently on offer can be found on the web page http://www.knmf.kit.edu/technologies.php

Eligibility; Who can access KNMF?

Users from universities, research organisations and industry from anywhere in the world may access our facilities. These are termed **external users**.

Up to 50% of our user time may be allocated to so-called in-house research; this includes experimental work towards advancing the state of the art of our capabilities, and projects with in-house users. **In-house users** are researchers employed by KIT or the Helmholtz Association research centres.

How can I access KNMF and what does it cost?

Proposals are submitted on the KNMF online application form in response to an open call. The first step is to Create a user account in the KNMF proposal submission system (https://proposal.knmf.kit.edu/ksp/) then you will receive login details which allow you to submit a proposal.

There are two calls for proposals per year. The deadlines are 15th January and 15th June. These proposals are reviewed by an independent Peer Review Board (PRB), and if the PRB recommends the project to proceed then the access is free of cost.

Partners in third party funded projects are invited to be KNMF users as soon as KNMF staff enters the projects in the KNMF proposal submission system.

Public research

Public research is for projects where the results are intended for publication. These proposals are subject to independent peer review. KNMF should be acknowledged in the publication. Public research projects, approved by the independent peer review board are supported by the HGF funding of KNMF and therefore not subject to a charge.

Proprietary access

Proposals for proprietary access may be submitted *via* the on-line application form; alternatively, it is also possible to arrange the work directly with the research groups involved. Proprietary access is fully confidential, not subject to peer review and publication of the results is not required. The costs are based on full cost recovery and negotiated on an individual basis.

Create a user account

In order to open an application form you need to create an account. To do this enter the requested information under the link https://proposal.knmf.kit.edu/ksp/user/create. Please make sure that you do not create multiple accounts without prior check with the User Office. Accounts are discriminated by the associated email addresses.

Help, I have forgotten my password

You can receive a new password under the link

https://proposal.knmf.kit.edu/ksp/auth/receiveNewPassword; you will need to enter your user name. You will be sent a new password. If you do not know your user name please contact the User Office.

Help, I have forgotten my user name

Please send a message to the User Office knmf-useroffice@kit.edu . The user office will respond as soon as possible and remind you of your user name. You can then enter it to receive a new password.

Before submitting a proposal

Before you submit a proposal you should

- 1. Formulate your idea
- 2. Select the necessary technologies
- 3. Discuss your idea and requirements with the technology experts
- 4. Decide which type of proposal you are requesting
- 5. Complete the application form.

If you do not know which technologies are most suitable for your request then the User Office will direct you to an expert.

Types of proposal

There are four types of proposal available to external users:

Standard (st): a standard proposal is for Public research which is normally completed within a six month time frame. Several technologies may be combined in the proposal. Standard proposals are assessed by an independent peer review board within four to eight weeks of the close of the call. Users are notified of the peer review board's decision by the User Office and in the online proposal submission system.

Long term (It): A long term proposal is for Public research which takes place over a time frame longer than six months. Projects may run for up to two years. The long term status can be requested at the end of the application form. Progress is monitored by submission of an interim report after twelve months. The project may be terminated if insufficient progress is made. Long term proposals are assessed by an independent peer review board within four to eight weeks of the close of the call. Users are notified of the peer review board's decision by the User Office and in the online proposal submission system.

Fast track (ft): A fast track proposal is for Public research which needs to be completed before the close of the current open call. These proposals are typically short term, requiring a maximum of five days access, and can be completed in a two week time frame. The fast track status can be requested at the end of the application form. The status fast track is dependent upon the availability of the equipment and personnel needed and will be assigned by the User Office. In order to maintain the quality of user projects at KNMF fast track proposals are reviewed *a posteriori*.

Proprietary proposals (pr) are usually submitted by industry; these are handled with full confidentiality and are not subject to peer review.

How do I submit an application to KNMF?

The first step is to Create a user account at KNMF and follow the steps details in Before submitting a proposal.

It is possible to save an application on-line and submit it at a later date. Only submitted proposals (marked "S") will be considered for peer review.

What does a Co-proposer need to do?

Co-proposers can be named by the submitting user and will receive an email notification indicating the required steps. Co-proposers can accept or reject the role of co-proposer (or ignore the request). Co-proposers with existing KNMF account should be requested by using the email address that is associated with the account. If requested co-proposers are not yet KNMF users they need to create a KNMF account.

How can an in-house researcher submit a proposal to KNMF?

In-house researchers are those employed by KIT or one of the other Helmholtz Research Centres (HGF).

If you are interested in using KNMF facilities, please contact the relevant technology expert to discuss your idea. In-house researchers can create a KNMF account. After validation of the in-house account (KIT of HGF) the navigation item "Create ih-proposal" appears in the KNMF proposal submission system and you can submit an ih-proposal (institute/Helmholtz proposal).

When is the deadline for a proposal?

You can apply for access to KNMF at any time. It is a good idea to submit proposals as early as possible. An early submission can help to fix inconsistencies or add supplementary information in time for the PRB make a decision.

We have two calls a year and the deadlines are 15th January and 15th June. The deadline is at 12.00 midnight on the final date of the call. This is a strict deadline. Proposals received after this deadline will be referred to the next call end.

What happens after submitting a proposal?

Feasibility check

After the close of the deadline, the technology experts of the requested technologies assess the feasibility, and the expected time needed to carry out the work. They also comment on any previous discussions they had with the applicant and in the case of over-booked technologies may rate the priority for the proposal.

Peer Review of proposals

Each application is assessed by the peer review board according to the assessment criteria. The PRB takes the comments of the KNMF scientists into account however they will make an independent decision as to approve a proposal or not. In the case of oversubscribed technologies the allocated time may be less than the amount requested, or proposals are put on a waiting list.

What are the assessment criteria?

Scientific value, relevance to KIT research, commitment of user to KNMF, and in the case of returning users, success of previous work, proper reporting and high-value publications arising from the previous proposals.

The proposal must include sufficient information to allow the technology experts and reviewers to evaluate the feasibility and scientific excellence of the proposed work.

What are the possible outcomes of the peer review?

Proposers are informed of the decision of the peer review board. There are 5 possible outcomes:

- Proposal is accepted and may proceed
- Proposal is accepted but is put on a waiting list and will proceed in the current call if instrument time becomes available
- Proposal is accepted under the condition that an open question is clarified; if clarified the proposal can proceed in the current call
- Proposal is suggested to be resubmitted in the next call
- Proposal is rejected

What happens if a technology is over-subscribed?

If a technology is oversubscribed the accepted proposal will be placed on a waiting list. In the event that time becomes available you will be informed that the work can proceed. If no time is available the proposal will be taken off the waiting list and can be resubmitted in the current open call.

Carrying out your KNMF project

Following the recommendation of the peer review board that your proposal can proceed, you should contact the technology expert at KNMF, to arrange the work.

When will my project start?

The technology experts involved with your successful proposal will discuss the timing of the work with you. Standard proposals are expected to be completed before the close of the next call date.

Execution of the project

You are welcome to visit KNMF to discuss your project, and the execution of the work. Information on Travel to KNMF is given below.

Reporting and publishing your results

Access to KNMF is supported by funding from the HGF, in order to secure future funding it is essential that we report on the success of user access to KNMF.

We therefore request that our users submit a final report at the completion of the work using the template on the web page.

Publication of results

Users are expected to publish results in ISI referenced journals. Please submit publications in the online proposal submission system or notify us of publications relating to your user project.

You are requested to acknowledge the use of KNMF in your work. In the case that a journal does not allow acknowledgements, then please refer to the use of KNMF in the text. It is also a sufficient acknowledgement if a co-author of the paper has a KNMF affiliation.

Travel to KNMF

The majority of the technologies are located on the north campus of the KIT

Karlsruhe Institute of Technology Hermann-von-Helmholtz-Platz 1 76344 Eggenstein-Leopoldshafen

Directions to KIT Campus North

Directions can be found under the link http://www.kit.edu/kit/english/directions.php.

Upon arrival, at the North Campus you will need to register at the gate: "Anmeldung". Please make sure you have your passport or photo identity card with you.

Eating and drinking at KIT North Campus

A canteen and is located on the campus. This operates on a cashless system. Guests can acquire a card which can by pre-uploaded with money. A KIT employee will gladly assist you.

Get to know KNMF

You are welcome to attend our annual user meeting at which training courses are offered on selected technologies, and users present their results.

If you would like to be informed of upcoming events, including the User meeting, then please open a user account.

Contact details

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