Call and Guidelines for Proposals for International Project Teams

CALL IDENTIFIER: International Project Teams, Call 2021
CALL OPENS: October 14, 2021
CALL CLOSES: November 17, 2021
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EXECUTIVE SUMMARY:

This call is addressed to all professors and PostDocs at TUM. Funding is provided for international, consistently interdisciplinary collaborations with EuroTech universities. In addition, there is a special focus on the mobility and training of doctoral researchers and PostDocs who are part of these project teams.
1. Purpose

The TUM International Graduate School of Science and Engineering (IGSSE) acts as a hub for innovative research across all TUM Schools and their international research partners. IGSSE combines academic excellence with high-profile doctoral education in flexible and interdisciplinary project teams. A comprehensive doctoral training program fosters international orientation as well as career and personal development.

IGSSE comprises several programs and funding lines. In this call, applicants can apply for funding of an International Project Team. With this format, IGSSE aims to strengthen TUM’s network across the globe, to support international scientific collaboration and to promote the mobility of Doctoral Researchers (DRs).

2. Focus and eligibility

2.1. Focus universities

In this year’s call for proposals, IGSSE targets international collaboration with its partner universities in the EuroTech Universities Alliance. Applications for International Project Teams are possible if the co-applicant is from one of these focus universities:

- Danmarks Tekniske Universitet (DTU)
- Technische Universität Eindhoven (TU/e)
- École Polytechnique Fédérale de Lausanne (EPFL)
- École Polytechnique (l'X)
- Technion – Israel Institute of Technology

2.2. Co-funding principle

A basic requirement for eligibility is the co-funding of at least one DR each by the TUM PI and the international PI. All DRs, the IGSSE-funded and the co-funded TUM & international ones, are working in close cooperation on the research topic of the International Project Team. It is required that all have their dissertation topics within the scope of the project, and that TUM DRs become exclusive members of Graduate Center IGSSE and complete the IGSSE qualification program (see Annex 2).
2.3. Interdisciplinarity

Interdisciplinarity is one of the cornerstones of IGSSE and IPT. In order to create projects which benefit from a strong interdisciplinary approach, we fund proposals which involve at least two different disciplines. This means that the PI(s) and PostDoc (CPD) of the designated project team have to be spread across different faculties/disciplines.

2.4. Eligibility of TUM PIs

Eligible TUM PIs are authorized examiners according to the TUM Regulations for the Award of Doctoral Degrees § 10. It is necessary that they have a position at TUM for the entire duration of the project. If this is not possible, a co-PI needs to be integrated to whom this applies.

Ongoing applications or participation in other IGSSE funding programs do not prevent participation.

3. International Project Teams

3.1. Structure

Proposals for International Project Teams are submitted jointly by a TUM PI and a PI from an international partner from strategically selected partner universities (see section 2), together with the designated CPD. One half of the project is provided and funded by the external partner institution.

On the TUM side, the International Project Teams consist of:
- (at least) one PI at TUM
- one postdoc (also referred to as Coordinating PostDoc (CPD, see below)
- two DRs: one funded by IGSSE and one co-funded DR funded by the TUM PI through other sources.

On the international partner’s side, they consist of:
- one PI from an international partner university
- at least one DR working on the project’s subject affiliated with the international partner

3.2. Members

3.2.1. Principal Investigators (PIs)

IGSSE aims to achieve a ratio of at least 20% of women among PIs. Upon approval of the proposals, PIs are in charge of selecting suitable Doctoral Researchers (DRs) and ensure a transpar-
ent selection process for all DRs in the International Project Team ensuring diversity (e.g. internationality, gender) in the team composition. The PIs share the supervision of the DRs. PIs do not receive direct funding through this grant.

### 3.2.2. Coordinating PostDoc (CPD)

International Project Teams are led by a TUM postdoc, namely the Coordinating PostDoc (CPD), who must be named in the proposal. The CPD’s salary will not be funded by IGSSE, but supplementary funds will be available as outlined below.

The CPD is responsible for setting up the collaboration within the project as well as monitoring its progress. In addition, the CPD is in charge of the team’s budget administration, the financial controlling, interim and final reports. The CPD will be the key contact for communication within the team and with IGSSE management. (S)he will mediate in cases of conflict and support the PIs in their supervisory role. To foster project team communication, the CPD organizes regular team meetings and joins the DRs in the workshop ‘Project Team Toolbox’ as described in the IGSSE Qualification Program Guide (Annex 2).

### 3.2.3. Doctoral Researchers (DR)

Each International Project Team includes two DRs at TUM and at least one at the partner institution. These teams are based on a co-funding model for DRs:

- On the TUM side, for each IGSSE-funded DR, the respective TUM PI must complement the project team with one additional DR (‘co-funded DR’) funded through other sources. All TUM DRs have to become a member of the Graduate Center IGSSE and TUM Graduate School.
- On the international side, the partner is responsible for funding at least one DR at their institution. Ideally, they should match TUM’s funding and setup, i.e. bring an equal number of DRs into the project and send them to TUM for an extended research stay abroad. All doctoral theses must be elaborated on in the proposal.

### 4. Funding

#### 4.1. What will be funded?

Successful applicants for International Project Teams will receive funding in several categories (see fig. 2).

#### 4.1.1. Doctoral Researcher (DR)

IGSSE funds one DR in each International Project Team with a monthly stipend of € 2,000 for four years provided that the progress of the doctoral project is positively evaluated after the first two years. The additional co-funded TUM DR (as well as the international DR) must receive their salary/scholarship through other sources organized by the TUM PI (see 2.2. Co-funding principle).
4.1.2. Direct project costs
Both the IGSSE-funded and the co-funded DR receive in total € 4,000 for funding direct project costs, e.g., computer equipment, chemicals, or laboratory equipment. The funds can also be used for hosting project-relevant conferences or inviting guests. The individual expenses have to be approved by the CPD, and the relevant financial regulations at TUM have to be obeyed. Direct project costs are dedicated solely to the advancement of the DRs.

4.1.3. Mobility funds
Part of IGSSE’s qualification program is a compulsory research stay abroad of (at least) three months duration, for both IGSSE-funded and co-funded DRs. All TUM doctoral members in International Project Teams receive up to € 4,000 to help with travel and living costs abroad. Funds remaining after completion of the research stay may be used for other trips (e.g. for conferences). In addition, these DRs receive another € 4,000 each for trips including prolonged stays abroad, conferences, research visits, etc. The mobility budget may be supplemented by the direct project cost money (but not vice versa). It cannot be transferred from one DR to another.

4.1.4. Student assistants
International Project Teams may request up to € 4,000 to employ student assistants. These funds cannot be used for other purposes.

4.1.5. Coordinating PostDoc (CPD)
The CPD will receive up to € 8,000 for mobility and other direct project costs. Furthermore, (s)he may apply for participation in specific personal development or qualification measures.

Table 1: Funding Table

| International Project Teams. Total Funding over project lifetime (TUM-DRs): 128k € |
|-----------------------------------|---|---|---|---|---|
|                                   | Scholarship | Travel | Research stay | Direct project costs | Student Assistant |
| Doctoral researcher (DR1 – scholar) | €96,000 | €4,000 | €4,000 |                      |                   |
| Doctoral researcher (DR2 – co-funded) | €4,000 | €4,000 |             |                      |                   |
| Project funds                      |             |       |               | €4,000               | €4,000             |
| Coordinating PostDoc (CPD)         |             |       |               | €8,000               |                   |
4.2. Funding period

Funding will have to start being used within one year of the grant approval letter, otherwise funding will lapse and the project cannot be supported. Funding can begin only after both the IGSSE-funded DR and the co-funded DR have joint IGSSE as a member, and both TUM PI and CPD have attended the so-called Hand-Over meeting, in which necessary administrative information is given.

All funding will end five years after the issued date of the grant approval letter. Unspent money will no longer be available after this date. Payouts from the funds are only possible if the requirements defined in this call and the IGSSE Statues are adhered to continuously. This counts especially for the continuous execution of the co-funding principle of DRs (see 2.2.).

The scholarship will be provided for a maximum of four years. Initially a 2 years contract is issued, which will be followed by another 2 years contract after successful midterm evaluation.

All funds are administered through IGSSE and granted upon request and availability of funds. IGSSE reserves the right to alter funding schemes.

5. Requirements

Requirements for funding will be outlined in detail in the approval letter. In short, they are:

- Before funding can begin, all TUM DRs (funded and co-funded) are required to become members of Graduate Center IGSSE, which implies that they do not hold a membership at another Graduate Center. For Membership, a registration on the List of Doctoral Candidates of TUM via the respective Degree-Awarding Institution is necessary. This in turn requires the nostrification of the study degree. Especially the recognition of foreign study degrees might take considerable time. In this case, upon approval by IGSSE, a registration on the preliminary list of doctoral candidates can be accepted.

- It is highly recommended to start the nostrification process as soon as possible.

- The dissertation topics of all DRs (funded and co-funded) are to be kept within the scope of the project application.

- Completing IGSSE’s specific qualification program is mandatory, a change into another Graduate Center at a later stage is not possible.

- The TUM Regulations for the Award of Doctoral Degrees as well as the TUM-GS and IGSSE statutes apply.

- It is required to submit an interim report 24 months after the project start latest and a final report at the end of the project (templates will be provided).

- On IGSSE’s website, short descriptions of the projects will be published. It is the responsibility of the teams to keep these updated with the technical support of the IGGSE office.

- International Project Teams shall establish links on their web pages to the IGSSE website. They shall give credit to IGSSE in all scientific activities (e.g., papers, conference contributions, etc.) resulting from IGSSE-funded research and must include the note: “Supported by the TUM International Graduate School of Science and Engineering (IGSSE)”.
6. Proposals

The structure and content of the proposals are outlined in the Annex. They must be signed by the PIs and CPD. Please note the instructions on the template regarding the format of the proposal (e.g. its 10 page limit). Other things to keep in mind when writing the proposal are:

The descriptions of the thesis projects (see 7. in Annex) of all participating DRs, including co-funded DRs and those of the international partners, are central to the proposals. These descriptions should be supplemented by a summary of the research field and own preparatory work. It is crucial that the application contains a clear concept that ensures close scientific cooperation between the DRs of the International Project Team, and the joint training of DRs. The dissertation topics of all TUM DRs are to be within the scope of the project application. The proposal should also detail the anticipated collaboration with international partner institutions (see 3. in Annex) including plans for organizing the mandatory international 3-month research stays abroad for all TUM DRs. Applicants should provide a mobility and communications plan for the entire International Project Team (including descriptions of the TUM and international DRs' thesis topics). At least one annual meeting of all members involved in the project is required.

A clear concept of the interdisciplinary collaboration of the team and envisaged doctoral training modules are key elements in the proposal reviewing process. In the proposal, a future perspective on how to develop the project beyond the IGSSE horizon (see 9. in Annex) should be elaborated (e.g. externally funded research group, joint publications, spin-offs).

Partner institutions must provide a letter confirming an understanding of these regulations together with the proposal ("Letter of Support", see 13.2. in Annex).

In additional to the proposal, we ask all applicants to provide (via separate email at the time of submitting the proposal) contact data (name, email, affiliation) of four individuals who are willing to act as referees. They must be familiar with the research fields, but not have conflicts of interest. In particular, they must not have joint publications or other scientific work with the proposing PIs. The proposers should ensure that the referees agree to provide a review prior to submitting the proposal. For further details, see Annex 1 – Proposal Template.

7. Evaluation procedure

Upon arrival, all project proposals will be checked by the IGSSE management team for formal eligibility. This is followed by a two-stage evaluation process.

In Stage 1, the IGSSE Board will review the proposals in light of the scientific and educational objectives of IGSSE. As a result, proposals for Stage 2 will be selected.

In Stage 2, the Board will make a funding decision based on at least two external reviews, which will evaluate primarily scientific excellence. To this end, the Board will usually select one referee from the proposer's suggestions and identify another themselves.
8. Call & Selection Timeline

- Call opens: October 14, 2021
- Call closes: November 17, 2021
- Stage I selection committee meeting: 29.11.2021
- External reviewing: in between committee meetings
- Stage II selection committee meeting: early 2022
- Announcement of final decision: March 31st 2022 latest

9. Supplements

- Annex 1 – Proposal Template
- Annex 2 – Qualification Program Guide