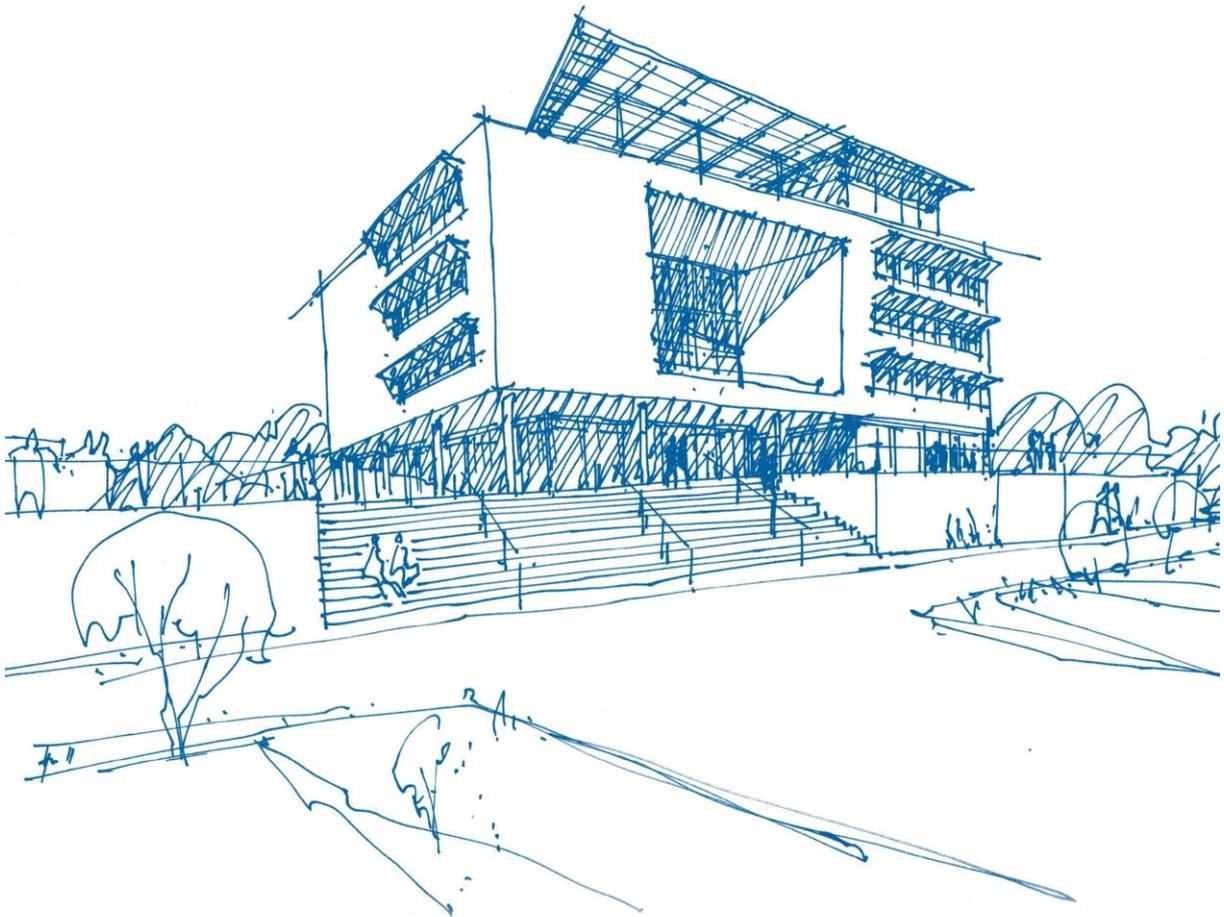


# Nomination Guidelines for Fellowships



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July 2019

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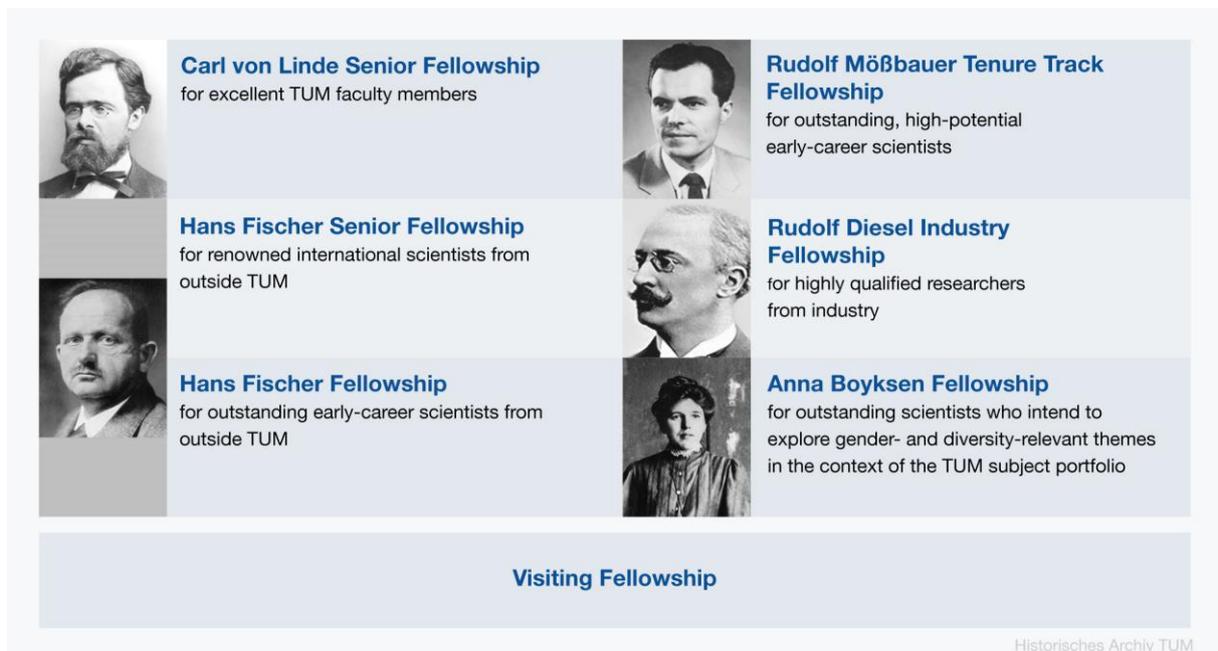
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## Opportunities at the TUM Institute for Advanced Study

### Fellowships

The Technical University of Munich has established its Institute for Advanced Study (TUM-IAS) with the goal of creating fields of excellence in “Science and Technology”. Embedded in a comprehensive technical university, TUM-IAS seeks to promote research in fields ranging from natural and applied sciences, life sciences and medicine to all areas of Engineering, many of which are strongly influenced by modern science. TUM-IAS awards Fellowships to distinguished researchers and gives them the necessary time and financial support to explore new venues, to develop novel research areas, especially at the border between classical disciplines, and to establish intensive international collaborations as well as collaborations with industry.

The main program at TUM-IAS is the Fellowship program, summarized in the following picture:



The Fellowships offered by TUM-IAS are subdivided into six categories. With these programs, TUM-IAS seeks to attract scholarly talent on senior- and early-career-level both from inside TUM and from around the globe, as well as researchers from the industry.

In addition, TUM-IAS awards the title of “TUM-IAS Visiting Fellow” to distinguished short-term visitors (one week to two months) from outside TUM, who have a great international reputation as scientists or engineers, and who have the intention to engage in a short-term, but intensive collaboration with researchers at the Institute. Details about each type of Fellowship are given in the following pages.

## Anna Boyksen Fellowship

The Fellowship is named after Anna Boyksen, the first female engineering student at TUM (1906).



**Target Group:** Outstanding scientists from outside TUM who intend to explore gender- and diversity-relevant themes in the context of the natural and engineering sciences together with a TUM research group are eligible for a TUM-IAS Anna Boyksen Fellowship. The proposal is to be submitted jointly by the nominee and the planned TUM-IAS host.

**Duration/Stays at TUM:** The Fellowships last two years, during which Fellows are expected to spend a total of three to six months at TUM. In this way, TUM-IAS intends to further a lasting and productive connection on an international level.

**Funding:** Anna Boyksen Fellows receive an award of max. €20,000 plus max. €50,000 for travel, housing and research-related costs (depending on the length of their stay). Fellows will be given a maximum degree of freedom as to how they utilize these funds (within bounds set by funding agencies; the funds are administered by the TUM-IAS) and their time. The award will be transferred to the Fellow typically in two or three installments.

**Family support:** For Fellows with family responsibilities, the TUM-IAS offers flexible funding (for example for childcare/school fees), additional administrative support, and various other kinds of provisions. For more information, please see page 19.

**Anna Boyksen Visiting Fellowship:** For those scientists who cannot make the requirement of several months' stays at TUM, TUM-IAS offers Visiting Fellowships. TUM-IAS supports these short stays with travel and accommodation funding.

**Tandem nomination:** It is possible to nominate an Anna Boyksen Fellowship candidate as part of a "tandem package" together with a Hans Fischer (Senior) / Rudolf Diesel Industry Fellowship candidate. However, this is not mandatory – it is also possible to only nominate one candidate for a Anna Boyksen Fellowship.

**How to apply:** Please submit the following documents:

- letter of nomination from the Dean of the hosting department or another member of the TUM Extended Board of Management (EHP) or TUM-IAS Board of Trustees,
- a nomination letter by a TUM professor including the facilities provided for the Fellow by the TUM Host institute,
- a CV (no more than 5 pages) including a list of major publications (please highlight the 3-5 most important publications of the past 5 years),
- a statement of purpose jointly signed by the candidate and the hosting professor, describing how the Fellowship would contribute to the innovation of the scientific environment at TUM, the specific goals to be achieved, a budget plan and a time plan regarding the candidate's projected periods of stay at TUM. The statement should clearly indicate to what extent the research project covers gender- and/or diversity-related themes.

Calls will be published once a year on the TUM-IAS website. Please submit nominations online.

Decisions on the award will be made in consultation with the TUM Senior Vice President Talent Management and Diversity and the TUM Gender & Diversity Board.

## Carl von Linde Senior Fellowship



**Target Group:** Active TUM faculty members with a distinguished track record in research who intend to develop innovative, high-risk topics in their scientific research areas, if possible within a trans-disciplinary team, are eligible to become Carl von Linde Senior Fellows. Carl von Linde Senior Fellows should be well-established within the TUM network with at least three years of experience as a TUM professor.

**Background:** This Fellowship is named after TUM professor Carl von Linde (1842-1934), who invented the air liquefaction and founded the “Linde’s Eismaschinen” company in 1879.

**Aim:** Carl von Linde Senior Fellows are expected to provide substantial scientific leadership towards the creation of new research areas at TUM, and to contribute substantially to the intellectual life of the Institute and the university.

The Institute awards up to two Carl von Linde Senior Fellowships each year.

**Duration:** The TUM-IAS offers Fellowships lasting three years, along with the opportunity to fully devote time to the development of the new research area, completely unrestricted by teaching obligations, non-relevant administrative functions or – in the case of the Medical School – clinical obligations. The applicant may plan the duration of the Fellowship according to his/her requirements.

**Funding:** Support for Carl von Linde Senior Fellows consists of a qualified substitute professorship for up to three years. Additionally, max. €50,000 of financial support for travel, consumable supplies, and other research related costs such as the organization of workshops etc. can be allocated to the Fellowship if required. This further funding requires an application to the TUM-IAS office and will be granted on the basis of quality, need and availability of funds. Fellows will be given a maximum degree of freedom as to how they utilize these funds (administered by TUM-IAS) and their time.

**How to apply:** Currently, it is not possible to apply for a Carl von Linde Senior Fellowship.

## Hans Fischer Senior Fellowship



**Target Group:** Outstanding international scientists who intend to explore innovative, high-risk topics in their scientific research areas together with a TUM Research Group are eligible for a TUM-IAS Hans Fischer Senior Fellowship. The nominee and the planned TUM-IAS Host should submit a joint proposal.

**Background:** This Fellowship is named after TUM professor Hans Fischer (1881-1945), who was awarded the Nobel Prize in Chemistry in 1930 for his pioneering work on hemoglobin and related structures.

**Duration/Stays at TUM:** The Fellowships last 3 years with the expectation that the Fellow will spend a total of at least 9 months at TUM (which can be divided individually into several stays). In this way, TUM-IAS intends to further a lasting and productive connection on an international level.

Hans Fischer Senior Fellows will automatically receive the benefits of a TUM-IAS Visiting Fellow for the year following the end of their tenure. Support includes up to €10,000 for non-European or up to €5,000 for European travel to TUM and housing expenses. Afterwards Alumni Fellows may apply for a Visiting Fellowship, depending on the availability of funds.

**Funding:** Hans Fischer Senior Fellows receive an award of €60,000 plus €50,000 for travel, housing and research related costs, such as the organization of workshops etc. A further €50,000 can be allocated to the Fellowship if required (e.g. projects with special experimental needs). This further funding requires an application to the TUM-IAS office and will be granted on the basis of quality, need and availability of funds. Fellows will be given a maximum degree of freedom as to how they utilize these funds (within bounds set by the funding agencies; funds are administered by the TUM-IAS) and their time. The award will be transferred to the Fellow typically in two to three installments.

**Doctoral candidate:** Hans Fischer Senior Fellows receive support for one doctoral candidate at TUM (TV-L E 13 position (max. 75%) for three years), who will be co-advised by the TUM Host professor and the Hans Fischer Senior Fellow. Hans Fischer Senior Fellows have the right to award doctorates (Promotionsrecht). The doctoral candidate is encouraged to spend a significant part of his/her studies abroad at the home institute of the TUM-IAS Fellow. The doctoral work should be performed mainly during the Fellowship time, therefore the search and hiring process of a candidate should be accomplished within six months after the Fellowship appointment. In exceptional cases TUM-IAS may also consider a limited post-doc position, within the same financial framework.

**Family support:** For Fellows with family responsibilities, the TUM-IAS offers flexible funding (for example for childcare/school fees), additional administrative support, and various other kinds of provisions. For more information, please see page 19.

**Tandem nomination:** Each Host has to suggest two candidates for a Fellowship. At least one of these candidates must be a female researcher. It is possible to nominate two candidates for the same Fellowship, or for two different Fellowships (options: Anna Boyksen, Hans Fischer, Hans Fischer Senior, Rudolf Diesel Industry Fellowship).

**How to apply:**

- The Deans of TUM departments, all further members of the TUM Extended Board of Management (EHP) and members of the TUM-IAS Board of Trustees can directly nominate candidates for TUM-IAS Fellowships (any member of the university community can propose, but the nomination must be channeled through the Dean of the hosting department or the Director of the hosting Institute).
- Please submit the following application documents:
  - nomination letter by the host at TUM, including the facilities provided by the hosting institute,
  - a CV (no more than 5 pages) including a list of major publications (please highlight the 3-5 most important publications of the past 5 years),
  - a statement of purpose jointly signed by the candidate and the hosting professor, describing how the Fellowship would contribute to the innovation of the scientific or technological environment at TUM, and the specific goals to be achieved. The statement of purpose should also include the following elements:
    - a budget plan,
    - a time plan regarding the candidate's projected periods of stay at TUM,
    - an identification of possible additional (interdisciplinary) collaboration partners both within TUM-IAS and within TUM as well as a short explanation as to why this collaboration would be beneficial,
    - an outline for an international, ideally interdisciplinary workshop/colloquium, to be organized during the active Fellowship period,
  - a list of 4-6 international peer-reviewers without any conflict of interest (definition: please see page 15) – if applicable, also a list of persons that should be excluded from reviewing the proposal,
  - a letter of nomination from the Dean of the hosting department or another member of the EHP or Board of Trustees.
- Calls will be published once a year on the TUM-IAS website. Please submit nominations online. Decisions will be mailed within six months.

## Hans Fischer Fellowship



**Target Group:** Outstanding early-career (doctorate completed within the past 12 years) international scientists who intend to explore innovative, high-risk topics in their scientific research areas together with a TUM Research Group are eligible for a TUM-IAS Hans Fischer Fellowship. The nominee and planned TUM-IAS Host should submit a joint proposal.

**Background:** This Fellowship is named after TUM professor Hans Fischer (1881-1945), who was awarded the Nobel Prize in Chemistry in 1930 for his pioneering work on hemoglobin and related structures.

**Duration/Stays at TUM:** The Fellowships last 3 years with the expectation that the Fellow will spend a total of at least 9 months at TUM (which can be divided individually into several stays). In this way, the TUM-IAS intends to further a lasting and productive connection on an international level.

Hans Fischer Fellows will automatically receive the benefits of a TUM-IAS Visiting Fellow for the year following the end of their tenure. Support includes up to €10,000 for non-European or up to €5,000 for European travel to TUM and housing expenses. Afterwards Alumni Fellows may apply for a Visiting Fellowship, depending on the availability of funds.

**Funding:** Hans Fischer Fellows receive an award of €30,000 plus €50,000 for travel, housing and research related costs, such as the organization of workshops etc. A further €30,000 can be allocated to the Fellowship if required (e.g. for projects with special experimental needs). This further funding requires an application to the TUM-IAS office and will be granted on the basis of quality, need and availability of funds. Fellows will be given a maximum degree of freedom as to how they utilize these funds (within bounds set by funding agencies; the funds are administered by the TUM-IAS) and their time. The award will be transferred to the Fellow typically in two to three installments.

**Doctoral candidate:** Hans Fischer Fellows receive support for one doctoral candidate at TUM (TV-L E 13 position (max. 75%) for three years), who will be co-advised by the TUM Host professor and the Hans Fischer Fellow. Hans Fischer Fellows have the right to award doctorates (Promotionsrecht). The doctoral candidate is encouraged to spend a significant part of his/her studies abroad at the home institute of the TUM-IAS Fellow. The doctoral work should be performed mainly during the Fellowship time, therefore the search and hiring process of a candidate should be accomplished within six months after the Fellowship appointment. In exceptional cases TUM-IAS may also consider a limited post-doc position, within the same financial framework.

**Family support:** For Fellows with family responsibilities, the TUM-IAS offers flexible funding (for example for childcare/school fees), additional administrative support, and various other kinds of provisions. For more information, please see page 19.

**Tandem nomination:** Each Host has to suggest two candidates for a Fellowship. At least one of these candidates must be a female researcher. It is possible to nominate two candidates for the same Fellowship type, or for two different Fellowships (options: Anna Boyksen, Hans Fischer, Hans Fischer Senior, Rudolf Diesel Industry Fellowship).

**How to apply:**

- The Deans of TUM departments, all further members of the TUM Extended Board of Management (EHP) and members of the TUM-IAS Board of Trustees can directly nominate candidates for TUM-IAS Fellowships (any member of the university community can propose, but the nomination must be channeled through the Dean of the hosting department or the Director of the hosting Institute).
- Please submit the following application documents:
  - nomination letter by the host at TUM, including the facilities provided by the hosting institute,
  - a CV (no more than 5 pages) including a list of major publications (please highlight the 3-5 most important publications),
  - a statement of purpose jointly signed by the candidate and the hosting professor, describing how the Fellowship would contribute to the innovation of the scientific or technological environment at TUM, and the specific goals to be achieved. The statement of purpose should also include the following elements:
    - a budget plan,
    - a time plan regarding the candidate's projected periods of stay at TUM,
    - an identification of possible additional (interdisciplinary) collaboration partners both within TUM-IAS and within TUM as well as a short explanation as to why this collaboration would be beneficial,
    - an outline for an international, ideally interdisciplinary workshop/colloquium, to be organized during the active Fellowship period,
  - a list of 4-6 international peer-reviewers without any conflict of interest (definition: please see page 15) – if applicable, also a list of persons that should be excluded from reviewing the proposal,
  - a letter of nomination from the Dean of the hosting department or another member of the EHP or Board of Trustees.
- Proposed Fellows have to have completed their doctorate within the last 12 years (allowance can be made for special circumstances like parental leave). Hans Fischer Fellows have to provide proof of employment at their home institution for the duration of the Fellowship.
- Calls will be published once a year on the TUM-IAS website. Please submit nominations online. Decisions will be mailed within six months.

## Rudolf Mößbauer Tenure Track Professorship



**Target Group:** Within the comprehensive TUM Faculty Tenure Track system, TUM-IAS created a special fellowship offering merit-based academic career options from the appointment as *Assistant Professor* through a permanent position as *Associate Professor* and on to *Full Professor*. Rudolf Mößbauer Tenure Track Professorships are intended for outstanding, high-potential early-career scientists who have already achieved a major scientific or technological

breakthrough and who have the ambition of developing a new field of endeavor when joining TUM (as a Tenure Track Assistant Professor).

**Background:** This Fellowship is named after TUM professor Rudolf Mößbauer (1929-2011), who was awarded the Nobel Prize in Physics in 1961 for his research concerning the resonance absorption of gamma radiation and his discovery in this connection of the effect that bears his name.

**Aim:** TUM-IAS Fellows are expected to develop independent and vigorous programs, including the acquisition of research funds and the societal positioning of their fields. Besides the development of their research, Fellows are expected to participate in TUM-IAS programs and organize activities in order to contribute to the intellectual life of the Institute and the university. Furthermore, candidates should be committed to excellence in undergraduate/graduate teaching and in supervising PhD candidates, although the emphasis of the professorship lies in the creative development of the proposed new field of science and/or technology.

**Funding:** The Rudolf Mößbauer Tenure Track Professorship consists of a salary according to the W pay scale (initially grade W2) for up to six years, the funding of a research assistant (TV-L E 13), and an expense account for research support. TUM-IAS Fellows will be given a maximum degree of freedom as to how they utilize these funds (within bounds set by funding agencies; the funds are administered by TUM-IAS) and their time.

**Tenure Track career path:** After positive evaluation in the sixth year, the Rudolf Mößbauer Tenure Track Fellow is tenured on an Associate Professor level. Tenure evaluation may be initiated after a minimum of three years only in exceptional cases, justified by extraordinarily outstanding achievements or in regard of particularly strategic significance in shaping the university's profile.

### Eligibility criteria:

- Doctorate or comparable academic degree (PhD or equivalent), completed with distinction in an area of research appropriate to the TUM research portfolio.
- Two years of postdoctoral experience during which the applicant has achieved scientific independence.
- Strong scientific track record documented by a comprehensive list of academic publications for internationally reviewed journals and/or publishing houses, depending on the practices of the field of expertise.
- International research experience,
- Teaching skills at university level and additional academic achievements (according to Art. 7 and Art. 10 BayHSchPG).
- Excellent knowledge of the English language.

**How to apply:** Please send in the following documents

- a statement of purpose describing the research and teaching goals and strategies of the planned professorship, including how the proposed program would be instrumental in (strongly) innovating the research environment at TUM,
- a CV (including third-party funding and list of courses taught),
- a list of publications including three selected reprints,
- names and addresses of at least three references.

For the complete list of documents required please see the individual calls which will be published on the TUM-IAS website. Applications are to be submitted online. TUM-IAS follows the TUM Faculty Tenure Track Entry Evaluation procedure (please see the document "[TUM Faculty Recruitment and Career System](#)") to evaluate the quality of the proposals. Decisions will be mailed within six months.

## Rudolf Diesel Industry Fellowship



**Target Group:** The TUM-IAS Rudolf Diesel Industry Fellowship is designed for outstanding researchers from industry who would like to expand their connection to a TUM research group.

**Aim:** It is the Fellowship's purpose to enhance collaboration and knowledge-sharing between research units at TUM and company research laboratories. To increase international collaboration, TUM-IAS especially welcomes applications from companies from outside Germany.

**Background:** The Fellowship is named after Rudolf Diesel (1858-1913), who was a TUM student with Prof. Carl von Linde. In 1897, Diesel invented the combustion principle that is named after him.

**Duration/Nature of the Fellowship:** The Fellowship lasts three years, during which the Fellow continues to be employed by his company. It is based on a joint proposal by the applicant and the TUM Host professor. Throughout the affiliation period, the Rudolf Diesel Industry Fellows may offer special courses and lectures in their field of expertise to enhance the connection between the university and industry. Fellows are expected to develop an intensive collaboration with their hosting Focus Group, to participate in TUM-IAS programs and events, and to organize activities such as a workshop, public talks, or speakers' series in order to contribute to the intellectual life of the Institute and the university.

**Funding:** The Fellow receives a research fund (up to €20.000) for travel, accommodation and research related costs (e.g. organizing a workshop) depending on the length of his/her actual stay at TUM. Fellows will be given a maximum degree of freedom as to how they utilize these funds (within bounds set by funding agencies; the funds are administered by the TUM-IAS).

**Doctoral candidate:** Rudolf Diesel Industry Fellows receive support for one doctoral candidate at TUM (TV-L E 13 position (max. 75%) for three years), who will be co-advised by the TUM Host professor and the Rudolf Diesel Industry Fellow. The doctoral work should be performed mainly during the Fellowship time, therefore the search and hiring process of a candidate should be accomplished within six months after the Fellowship appointment. In exceptional cases TUM-IAS may also consider a limited post-doc position, within the same financial framework.

**Family support:** For Fellows with family responsibilities, the TUM-IAS offers flexible funding (for example for childcare/school fees), additional administrative support, and various other kinds of provisions. For more information, please see page 19.

**Tandem nomination:** It is possible to nominate a Rudolf Diesel Industry Fellowship candidate as part of a "tandem package" together with a Hans Fischer (Senior) Fellowship candidate. However, this is not mandatory – it is also possible to only nominate one candidate for a Rudolf Diesel Industry Fellowship.

**How to apply:**

- The Deans of TUM departments, all further members of the TUM Extended Board of Management (EHP) and members of the TUM-IAS Board of Trustees can directly nominate candidates for TUM-IAS Fellowships (any member of the university community can propose, but the nomination must be channeled through the Dean of the hosting department or the Director of the hosting Institute).
- Please submit the following application documents:
  - nomination letter by the host at TUM, including the facilities provided by the hosting institute,
  - a CV (no more than 5 pages) and a list of publications,
  - a statement of purpose jointly signed by the candidate and the hosting professor, describing the content of the joint research, its innovative potential and the concrete implementation plans. This statement should also include
    - a budget plan,
    - a time plan regarding the candidate's projected periods of stay at TUM,
    - an identification of possible additional (interdisciplinary) collaboration partners both within TUM-IAS and within TUM as well as a short explanation as to why this collaboration would be beneficial,
    - an outline for an international, ideally interdisciplinary workshop/colloquium, to be organized during the active Fellowship period,
  - a list of 4-6 international peer-reviewers without any conflict of interest (definition: please see page 15) – if applicable, also a list of persons that should be excluded from reviewing the proposal,
  - a letter of nomination from the Dean of the hosting department or another member of the EHP or Board of Trustees
- The TUM-IAS may ask its Rudolf Diesel Industry Fellows to provide proof of employment with their company for the duration of their Fellowship.
- Calls will be published once a year on the TUM-IAS website. Please submit nominations online. Decisions will be mailed within six months.

### **Visiting Fellowship**

**Aim:** TUM-IAS awards the title of “TUM-IAS Visiting Fellow” to distinguished short-term visitors (one week to one month) from outside TUM who have a great international reputation as scientists or engineers and who have the intention to engage in a short-term, but intensive collaboration with a TUM research unit.

**Funding:** The Visiting Fellowship contains funding for travel and local accommodation costs. The overall amount will be appointed individually by TUM-IAS and depends on various factors such as the length of the period of stay. A renewal of a Visiting Fellowship is possible under special circumstances.

**How to apply:** TUM-IAS awards the Visiting Fellowship on the basis of a nomination by a leading scientist or researcher from the TUM-IAS community.

- Nominations can be made at any time of the year.
- A nomination must include the CV of the candidate and a statement of purpose written by the proposer. The statement of purpose must include a reference to how the TUM-IAS community will benefit from the visit, for example via a planned talk at a TUM-IAS event or research meetings with TUM-IAS members (please include a short plan of activities).
- The nomination should also provide information on the proposed length and period of stay, a budget plan, and practical arrangements for hosting the candidate (TUM-IAS can provide assistance and limited hosting facilities).

The Director of TUM-IAS will decide on the award after consultation with the staff of TUM-IAS, taking budgetary considerations into account. After Fellowship completion, a short activities report (one to two pages max.) must be delivered to the TUM-IAS office. The costs will be reimbursed to the Visiting Fellow once the report has been received.

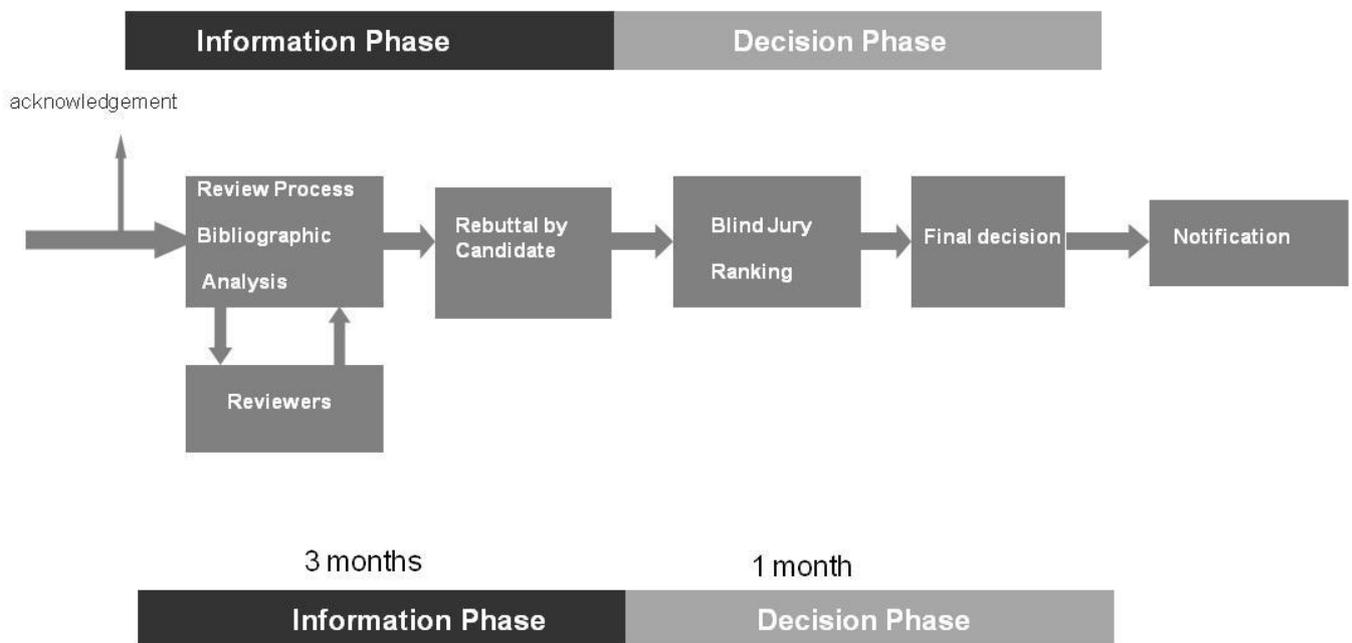
## General Information about Fellowships

- In order to enhance successful nominations, a preliminary discussion with the TUM-IAS office is highly recommended.
- Carl von Linde Senior Fellowships are awarded by the TUM-IAS Director based on consultation with international experts in the respective field and advice from the TUM-IAS Advisory Council. An independent peer-review process (the so called Delphi process) is used to select the Hans Fischer (Senior) and Rudolf Diesel Industry Fellows. TUM-IAS follows the TUM Faculty Tenure Track Entry Evaluation procedure (please see the document "[TUM Faculty Recruitment and Career System](#)") to evaluate the quality of the proposals for Rudolf Mößbauer Tenure Track Professorships. Visiting Fellowships are decided on a case by case basis by the Director. A detailed description of the Delphi process can be found on page 14.
- All Fellows are "embedded" in the department to which their Host belongs, and receive all the benefits, accommodation and honors the respective department provides to its guest scientists.
- Rudolf Diesel Industry Fellows: TUM-IAS has an IPR agreement/concept that covers mutual IPR rights and duties in the cooperation between TUM and the company or university of the Fellow, via the research unit he/she is participating in. The agreement is in accordance with the purposes of the Fellowship. These purposes aim at the expansion of the mutual scientific and technological knowledge base for the benefit of both parties and the enhancement of the cooperation between research groups at TUM and other universities or companies. The IPR agreements are typically dealt with on a case-by-case basis. For TUM employees different rules apply as stated in the respective TUM employment arrangements.
- TUM-IAS funds doctoral candidates by paying a TV-L E 13 position (max. 75%) for three years.
- Doctoral candidates and postdoctoral researchers are part of the TUM-IAS community. In case of changes in personnel, the TUM-IAS office must be informed immediately and the further procedure will then be discussed.
- Fellows will be allocated office space in the TUM-IAS building in Garching depending on need and availability. Postdoctoral researchers and doctoral candidates connected to Fellows may also be accommodated.
- TUM-IAS will provide assistance to all non-Munich based Fellows in search for accommodation for themselves or their families.
- Travel expenses of Hans Fischer (Senior) Fellows to Munich will be covered by their research fund. To present the research of the Focus Group travel costs to conferences can also be covered by their research fund. The TUM-IAS office may require further documentation on these expenses (conference program/paper/poster/presentation; invitation letter for a lecture).
- TUM-IAS recognizes the challenges that scientists who are also parents may face. Flexible funding is available to facilitate the extra needs of Fellows with children (taking budgetary considerations into account).

## Evaluation Process

### Delphi Procedure

TUM-IAS follows a strict Delphi procedure to evaluate the quality of the proposals for its Hans Fischer (Senior) and Rudolf Diesel Industry Fellowships. The Delphi process consists of two phases: an *evaluation phase* based on peer review and bibliographical analysis, during which a maximum of relevant information about the proposal is collected (including a rebuttal by the applicant on the reviewers' comments), and a *decision phase* in which the collected information on the proposals is evaluated, a ranking is established and a decision on the Fellowships is made. Except for the very last decision on the caesura in the ranking (which is based on financial possibilities) both phases are done blindly, as is required in an orthodox implementation of the Delphi process. The process is designed so that the reviewers and evaluators do not influence each other (this is essential to make assessments between very diverse fields possible). The process is represented below:



Upon receipt of a nomination the candidate and the nominator (if applicable) receive an acknowledgement. The IAS Advisory Council decides together with the Director which applications will be sent for external evaluation. The Delphi process stipulates that after three months the nominator and candidate must receive a "concept evaluation protocol" to which they are asked to attach either their agreement or rebuttal. The protocol contains the anonymous answers peer reviewers have given to the questions on the quality of the proposal. The whole documentation including the protocol and the motivation of the nomination are offered to a jury. The body is constituted by top professionals, selected internationally and covering the technological and scientific areas active at TUM. The jury then ranks the proposals blindly on the main criteria. The results of the jury ranking are then presented to the TUM-IAS Advisory Council, who decides on the awards, following the ranking of the jury and taking into account financial possibilities. The proposer and candidate will be informed of the final decision after the meeting of the Advisory Council.

**Conflicts of Interest**

All shortlisted applications for Hans Fischer, Hans Fischer Senior and Rudolf Diesel Industry Fellowships are evaluated by independent reviewers. In order to ensure that there is no actual or potential conflict of interest, we must ask any reviewers to refrain from evaluating the proposal if the following circumstances apply:

1. First-degree relationships, marriage, life partnership, domestic partnership with the applicant and/or host.
2. Personal (financial) interest in the proposal's success or (financial) interest by persons listed under no. 1.
3. Current (within the past three years) or planned close scientific cooperation with the applicant and/or host.
4. Dependent supervisory relationship (e.g. teacher-student relationship up to and including the postdoctoral phase) with the applicant and/or host, extending six years beyond the conclusion of the relationship.
5. The affiliation or pending transfer to the department or to the non-university research institute of the applicant or host.
6. Any other situation that would compromise your ability to evaluate the proposal impartially.

## Responsibilities of Fellows

TUM-IAS wants to foster an active community of scientists based on dialogue and communication and therefore expects a few direct contributions from its Fellows and Hosts, in particular

- The Fellows are expected to spend a certain time of their Fellowship (as stated in the letter of appointment) at TUM, preferably in one of the institutes offices.
- For administrative purposes, we expect the Fellow to announce every stay in Munich to the responsible program manager at least two weeks in advance. Failure to do so may result in the declaration of expenses related to this stay as non-eligible.
- The mission of TUM-IAS is to develop new, excellent research areas at TUM and to promote the building up of a functioning interdisciplinary community generating new ideas and researcher networks. Therefore, during their stays at TUM Fellows are expected to really use the premises provided by TUM-IAS and participate in common activities including Wednesday Coffee Talks, Fellows' Lunches, the General Assembly and TUM-IAS lectures. These events have a core importance in the Institutes Mission and repeated absences are strongly discouraged.
- The Fellows should actively participate in TUM-IAS programs and events, and organization of activities such as an inaugural lecture, a workshop, public talk, or speakers' series in order to contribute to the intellectual life of the Institute and the University.
- The Fellows are obliged to state the TUM-IAS address in scientific publications related to their fellowship. The correct address designation is: Institute for Advanced Study, Technical University of Munich, Lichtenbergstrasse 2 a, D-85748 Garching, Germany.
- Acknowledgment of the (partial) support from TUM-IAS in publications, including articles, books, etc. The TUM Publications Guidelines apply. Publications that are made in the context of a TUM-IAS Fellowship must include the following statement:
  - "With the support of the Technical University of Munich – Institute for Advanced Study (and the Excellence Strategy)."
  - For EU-cofunded Fellows: "With the support of the Technical University of Munich – Institute for Advanced Study, funded by the German Excellence Initiative and the European Union Seventh Framework Programme under grant agreement n° 291763."
- Acknowledgment of the support from the TUM-IAS should include the affiliation on the Fellows' homepages and inclusion of the TUM-IAS logo on publications, posters, PowerPoint presentations, etc.
- Patent applications filed by or on behalf of the Fellow must include the following statement:
  - "The work leading to this invention has received financial support from the Technical University of Munich – Institute for Advanced Study (and the Excellence Strategy)."
  - For EU-cofunded Fellows: "The work leading to this invention has received financial support from the Technical University of Munich – Institute for Advanced Study, funded by the German Excellence Initiative and the European Union Seventh Framework under grant agreement n° 291763."
- TUM-IAS generates an annual report on the research activities of the Institute. Active Fellows must provide text and graphic material on their research activities to be included in these publications.

- Fellows are asked to provide data for the TUM-IAS webpage including research interests, publications, and upcoming events and workshops for their Focus Group.
- Key performance data of the Fellowship, i.e. publications, patents, conference presentations, major projects and collaborations started etc. have to be provided after the three years tenure, in form of a final written report on the Fellowship results.

### **Responsibilities of Doctoral Candidates:**

- Doctoral candidates are also members of the TUM-IAS community and are expected to make active use of the opportunities provided by the TUM-IAS. In particular they are expected to attend all General Assemblies during the IAS funding period and an average of 5 Wednesday Coffee Talks per semester.
- Doctoral candidates planning a longer stay abroad at their Fellow's home institution are strongly encouraged to make an appointment with the responsible program manager at their earliest convenience. During this appointment, the framework for travel cost reimbursement will be explained and specified according to the plans of the doctoral candidate. Please note that if the TUM-IAS is not involved beforehand there may be expenses we will not be able to reimburse and that you have already incurred in.
- TUM-IAS funded doctoral candidates should acknowledge the TUM-IAS support in their doctoral theses and on publications. The TUM Publication Guidelines apply. Publications must include the following statement:
  - "With the support of the Technical University Munich – Institute for Advanced Study (and the Excellence Strategy)."
  - For doctoral candidates supervised by EU-cofunded Fellows: "With the support of the Technical University of Munich – Institute for Advanced Study, funded by the German Excellence Initiative and the European Union Seventh Framework Programme under grant agreement n° 291763."

A copy of the PhD thesis must be sent to the TUM-IAS office to be displayed in the Institute's library.

- Acknowledgment of the TUM-IAS affiliation and inclusion of the TUM-IAS logo on publications, posters, PowerPoint presentations, etc. Failure to do may cause a rejection of the respective travel cost reimbursement request.
- Doctoral candidates are part of the TUM-IAS community. In case of changes in personnel, the TUM-IAS office must be informed immediately and the further procedure must be discussed.

TUM-IAS operations and funding decisions are primarily based on TUM's financial regulations. On the TUM-IAS webpage you can find a FAQ list (including general financial and administrative questions) which is intended to be a helpful guideline for the preparation of reimbursement requests.

## **TUM-IAS – A Family-Friendly Institute**

The TUM-IAS is proud of the diverse nature of its community. Our Fellowships have been explicitly designed not only to attract scientists from all over the world to TUM, but also to attract scientists on various stages of their careers – early-career scientists as well as experienced senior scientists. Naturally, this implies that many of our Fellows are not only very active scientists, but also have demanding family obligations.

Therefore, the TUM-IAS offers the following services to scientists with a family:

- The TUM-IAS encourages its Fellows to bring their family along when coming to Munich, especially when considering a longer period of stay. Therefore, not only the travel expenses and accommodation for the whole family can be paid out of the Fellowship expense account, but also the costs for childcare or school fees in Munich. Flexible additional funding is available to facilitate the extra needs of Fellows with children (taking budgetary considerations into account).
- The TUM-IAS staff is glad to be of assistance with any matter regarding the organization of the family stays in Munich. This includes organizing a suitable accommodation, helping with finding bilingual/international day cares, kindergartens, or schools, or pointing out the family and childcare services of other TUM institutions that are open to the TUM-IAS Fellows.
- While the TUM-IAS encourages its Fellows to spend at least one or ideally several longer periods at TUM, it acknowledges that sometimes this can be incompatible with the Fellow's family obligations. It is therefore possible to split the overall 9 months at TUM in as many short time periods as needed.
- The TUM-IAS hopes that not only our scientists, but also their families feel welcomed. The staff would be very happy to meet your partners and/or children at some point. Also, at the TUM-IAS there are not only nappy-changing facilities but also toys, books and games for the children of those scientists who would like to bring them along to the Institute from time to time.
- In the Mathematics/Informatics building, a five-minutes' walk away from the TUM-IAS building, there are two "Kinderzimmer" (children's rooms), one of which is open for children with their parents/person in charge, and one of which also offers caring staff which can be booked at short notice (more information: [Kinderzimmer](#)). In the Mechanical Engineering building there is a "family room", open for families as well as for pregnant women who need rest. In the Chemistry building there is a children's room open for children with their parents/person in charge as well as a nursing room.

**Start-up Support**

The TUM-IAS Start-up Fund is dedicated to fostering the exploration of new scientific or technological topics. Eligible for this program are first and foremost, members of the TUM-IAS Community who want to explore new areas with the possibility of generating new collaborations/research grants in the future, mainly via the organization of exploratory workshops. These funds cannot be used for supporting regular seminars or conferences or already ongoing collaborations. Exploratory workshops are mostly by invitation and aim at engaging an international community of researchers to spend a few days in Munich in both formal and informal presentations and discussions on new ideas and developments. This special fund is limited, and potential organizers will typically have to arrange for additional funding through other means. The contribution to such an event will be in the range of € 4000, to be negotiated with the TUM-IAS management team. TUM-IAS will also provide some services towards the organization of the event and the use of the TUM-IAS building and facilities. The TUM-IAS management team shall be happy to provide prospective organizers with further information. For Fellows in their active Fellowship period, such activities will be covered primarily by the research funds available through their Fellowship. To apply for Start-up support, TUM-IAS members hand in a short proposal describing the project, the overall budget, and the funds required via Start-up support.

## Research Areas and Focus Groups

The innovative research TUM-IAS Fellows engage in does not usually happen in a vacuous environment. Fellows and their Hosts are part of research units at TUM. They either provide leadership to institutes, research units or laboratories or are prominent guests at those. TUM-IAS deems such an institutional embedding necessary and gives it the status of a Focus Group. Focus Groups form the local, topical and organizational units of the Institute. They provide the social environment where Fellows, Hosts, their doctoral candidates, and collaborators meet to share the development of their topic, organize activities, and cater for mutual support. Ideally, these teams are also diverse in terms of disciplines and gender.

TUM-IAS is Fellow-driven, not thematically driven. However, big themes emerge dynamically and are further developed over time. The Research Areas embedded into TUM-IAS therefore cover a wide range of innovative, interdisciplinary fields. While the Fellowships can only last for a limited period of time, it is their purpose to establish sustainable, long-term research collaborations that are embedded in the TUM departments.

- External Fellows are associated with Hosts. These are professors at TUM who have been successful in proposing and obtaining a Fellow, have agreed to host her/him and are jointly developing the proposed research. TUM-IAS honors not only the Fellow, but the proposer as well and recognizes her/his contribution by inviting her/him to be a member of the Institute. New Fellows and Hosts can join an existing Focus Group or create a new one, depending on topic and necessity. TUM-IAS appreciates intense interaction between Fellows, Hosts and their further collaborators and doctoral candidates, but leaves the choice of the precise set up to them.
- Focus Groups are headed by either a Carl von Linde Senior Fellow or one of the Host Professors. They are created by mutual agreement between the participating Fellows, their Hosts and the TUM-IAS.
- Focus Groups have a coordinator who documents the activities of the group and keeps the TUM-IAS office informed about the groups' activities (workshops, special lectures, events, or other programs).
- Focus Groups can apply for funding of exploratory workshops, and for any kind of additional Fellowship furthering their goals (Fellow nominations have to meet the requirements of the individual Fellowship categories, but natural embedding of new Fellows and their Hosts in established Focus Groups is seen positively).
- Focus Groups are expected to document their field and their goals and to present their Fellows on the webpage of the Institute.
- Focus Groups exist as long as active long-term Fellows are participating in them (formally up to a maximum of one year after the tenures of the last Fellows have terminated). TUM-IAS encourages its Focus Groups to assure their sustainability by actively pursuing new Fellowship proposals.

## **TUM-IAS Community Members**

### **Alexander von Humboldt Awardees**

A Memorandum of Understanding between the Alexander von Humboldt Foundation and TUM-IAS was signed on May 7, 2009 to promote the integration of Humboldt Awardees into TUM-IAS. The TUM-IAS welcomes the Humboldt Professors as Honorary Fellows and members of the TUM-IAS community.

Humboldt Research Awardees are appointed Honorary Hans Fischer Senior Fellows and members of the TUM-IAS community. They provide for very much appreciated new ideas and strengthening of the scientific work at TUM. At TUM-IAS they find a natural environment where they can smoothly merge into the scientific proceedings of our university.

### **Amalie Baur Fellows**

The Amalie Baur Fellowship was established at TUM in 2016 to attract and promote excellent early career scientists from Social and Cultural Sciences, which otherwise would have no access to the TUM or the TUM-IAS.

The Fellowship has been named after Amalie Baur, the first woman who completed her doctorate at TUM (Dr. Ing., 1918). The Fellowship is open to outstanding early career scientists, who have completed their doctorate within the past 12 years. Self-nominations are not possible.

The Fellows and their projects need to be embedded in one of the departments or Integrative Research Centers at TUM.

The funding for this Fellowship is provided either by the TUM Board of Management or by one of the TUM departments. TUM-IAS coordinates the evaluation and selection process of the Fellowship.

### **ERC Grant Awardees**

ERC (starting, consolidator, advanced, and proof of concept) grantees become Honorary Fellows and members of the TUM-IAS community in recognition of their high quality of work and success on this highly competitive program of the EU.

### **Gottfried Wilhelm Leibniz Prize Winners**

The TUM-IAS welcomes the Gottfried Wilhelm Leibniz Prizewinners as Honorary Fellows and members of the TUM-IAS community. This prize is the highest honour awarded in German research and aims to improve the working conditions of outstanding scientists and academics, expand their research opportunities, relieve them of administrative tasks, and help them employ particularly qualified early-career researchers, very much in accordance with the TUM-IAS philosophy.

### **TUM August-Wilhelm Scheer Visiting Professors**

August-Wilhelm Scheer Visiting Professorships are awarded to scientists with an outstanding international reputation who wish to engage in an intensive collaboration with TUM researchers.

August-Wilhelm Scheer Visiting Professorships are available for up to two semesters. The TUM-IAS welcomes August-Wilhelm Scheer Visiting Professors as members of the TUM-IAS community.

### **TUM Distinguished Affiliated Professors**

TUM Distinguished Affiliated Professors are major international figures in research who have decisively advanced and put their stamp on their disciplines. Therefore, they are considered as Honorary Fellows and members of the TUM-IAS community.

### **TUM Liesel Beckmann Distinguished Professors**

Liesel Beckmann Distinguished Professorships take their name from the first woman professor at Technische Hochschule München, as the university was known in her time. The honorary title is bestowed on full professors at TUM who have significantly advanced their scientific field. This distinction is combined with an Honorary Fellowship and membership at TUM-IAS.

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