Directives for assessing academic qualification in habilitation requests and advice for the work of the habilitation committees at the TU Wien Faculty of Mechanical and Industrial Engineering

These directives apply to all habilitation procedures at the TU Wien Faculty of Mechanical and Industrial Engineering that are initiated by the applicant's request. Here and in what follows, the "applicant" means the person requesting authorisation to teach.

# **Preliminary remarks:**

- 1. The "venia docendi" is an academic qualification that must be awarded with utmost caution. After all, lecturers are authorised to provide academic teaching freely at our university in their habilitation field, to announce courses even without being commissioned and to assign, supervise and assess academic work. This means that substantial academic rights are acquired.
- 2. There are three ways to achieve this qualification:
  - a) by being appointed a University Professor (for the field of the professorship),
  - b) by being recruited as an Honorary Professor (awarded an honorary authorisation to teach; limited to a specific field),
  - c) by habilitation.
  - This directive deals with the latter.
- 3. The habilitation procedure is regulated in general in the 2002 Austrian Universities Act and specifically for TU Wien in the statutes of TU Wien. In this respect, these directives are seen as recommendations to prevent potential applicants applying to initiate a habilitation procedure on the basis of insufficient information and therefore possibly under false assumptions. As potential applicants are usually advised by the head of the working group to which they belong before they apply for habilitation, these directives should also act as a guide for these lecturers and professors, and help to create equal and therefore fair conditions for all applicants. Last but not least, these directives should aid quality assurance. After all, this directive is of course also aimed at the members of the Habilitation Committee.
- 4. The habilitation procedure considers and assesses whether the applicant has the legally required outstanding academic qualification and the required teaching ability. This focuses on research performance compared to teaching ability.
- 5. Potential applicants are expected, before the planned submission of the habilitation application, to give a lecture in person to faculty members as part of a short presentation organised by the Dean's Office. The lecture should last no more than 20 minutes and should include the following:
  - 1. Motivation for a possible habilitation request,
  - 2. Short presentation of academic career,
  - 3. Field of academic work, including overview of scientific literature
  - 4. published so far,
  - 5. Name of the specialist field for which habilitation is desired,
- 6. Reference to TU Wien and the faculty,
- 7. Overview of courses held so far

After the presentation, habilitation candidates have one year to submit their habilitation. If this is not possible in time, a new presentation of the habilitation to the faculty (incl. Professorial Curia and Faculty Council) is necessary.

## The "exceptional academic qualification" criterion:

In academia, it is usual for academic qualification to be assessed mainly by means of the number and quality of scientific literature publications (including patents with scientific content). Scholarly projects, resulting from a positive reference in the application in terms of content (projects taken on for funding, projects currently running, projects already completed) can also be included in the assessment, and it is only the scientific merit of the project that matters.

The postdoctoral thesis (habilitation) is increasingly being prepared as a consistent compilation of scientifically assessed publications appearing in respected scientific journals or accepted for publication (and some of these publications can also originate from the proceedings of prestigious, international, scientific conferences, or consist of substantial contributions to other scientific compilations), which are supplemented by an additional explanation of the thematic correlations of the individual publications and the correlation to the desired habilitation field (e.g. in the form of an opening chapter in the postdoctoral thesis).

If an independent postdoctoral thesis (habilitation) is submitted (i.e. not a compilation), the statutes of TU Wien dictate that this must have been published or accepted for publication by a scientific publisher. Scientific publishers are those that review manuscripts not just on formal criteria, but also on scientific content criteria, and assess this in a peer review process.

The statutes also require "other academic work" to be produced, and here of course, work that may have been used in the postdoctoral thesis (habilitation) does not count.

If the submitted publications have additional (co-)authors, evidence in an appropriate format must be provided to demonstrate that the applicant has made a substantial contribution to the submitted work.

# "Quality of academic work":

To comply with legal requirements, the academic work must have been published or accepted for publication by a scientific publisher. – The following criteria apply to the habilitation directives as the academic standards for journals or conference proceedings:

#### For Journals:

- 1. The journal must meet the usual academic standards. To qualify as "referenced", it must, above all, have at least one blind peer review process.
- 2. At the time the documents are submitted, the journal must have been published regularly at least twice a year for at least two years.
- 3. The journal must be known to the public and its editorial board must have been essentially and predominantly stable for many years.
- 4. The journal should have an international orientation (international editorial board, published in English).

5. The journal must have at least one evaluation reference (in a relevant ranking list, for example) or an impact factor (from the ISI Web of Knowledge, for example).

## For publications in conference proceedings and lecture notes:

- 1. For publication in proceedings to be rated as "referenced", the conferences must have exposed the submitted manuscripts to at least one blind peer review process (full papers, not just abstracts).
- 2. The conferences must take place regularly.
- 3. They must have a relevant academic standard and should address a wider, scientific audience.
- 4. The conferences should have an international orientation (international programme committee, conference language English).

## "Quantity of academic work":

This form of habilitation only exists in a small number of countries (such as Germany, Switzerland and France). Therefore, it may be difficult for foreign specialists to assess whether the quantity submitted is sufficient. A piece of advice for the assessor – you could ask whether these achievements would make habilitation realistic at your own university, or whether the submitted performance would be enough for tenure there.

Within the MWB Faculty, the way in which the research results are published differs from discipline to discipline. To take this situation into account, the required quantity cannot be rigidly specified by stating a minimum number of publications. However, as a guideline<sup>1</sup>, an applicant should be able to show at least 5 publications in relevant, referenced journals (manuscripts accepted for printing can also count here). If there are not enough publications in referenced journals in strongly application-oriented subjects, publications (not abstracts) in the proceedings of prestigious international scientific conferences or substantial contributions to other scientific compilations can also be taken into account, with 1.5 proceedings publications or contributions to scientific compilations being necessary for each missing journal publication; in this case, however, at least three of the submitted publications must have been published or accepted for publication in referenced journals.

In addition to this, other publications (e.g. in non-referenced scientific journals or scientific compilations, but always in media accessible to the public) and additional academic achievements, such as the scholarly projects positively evaluated in terms of content mentioned at the start (projects taken on for funding, projects currently running, projects already completed) can also be included in the assessment of academic quality. The implementation and supervision of projects, scientific collaboration with companies, writing textbooks, etc., are all assessed as positive, although they must never be allowed to make up the substance of academic qualification.

# Selecting assessors:

The statutes require that the submitted postdoctoral thesis (habilitation) and the other academic work must be assessed by at least two representatives of the desired

habilitation field, including at least one external representative. Care should be taken in any case to ensure that the assessors have not come into close contact with the habilitation applicant; i.e., that they are not biased towards the applicant, either positively or negatively. Even if only one external assessor is required as the absolute minimum, it is nevertheless desirable for all assessors to be external assessors.

#### General information:

Habilitation is applied for at the Rector's Office via the Dean's Office. Habilitation candidates are advised to come to an agreement with the Dean before officially applying.

#### TU Wien statute extract:

The habilitation procedure is regulated in section 103 of the 2002 Universities Act and in the TU Wien statute extract: Habilitation procedure.

Application must be made at the Dean's Office, bringing the following:

- CV (including list of publications and description of academic work and teaching activity conducted so far)
- Postdoctoral thesis (habilitation) (3 hardcover copies and 2 working copies)
- Additional publications (2 hardcover copies and 3 working copies)
- Explanation of the applicant's own contribution to the postdoctoral thesis (habilitation) and additional publications (if the applicant is not the sole author).
- Proof that the doctorate or equivalent academic qualification has been completed (original and 4 copies).

Once a date has been agreed, habilitation candidates are asked to arrive in the morning.

<sup>&</sup>lt;sup>1</sup>However, compliance with this quantity "guideline" is in no way prejudicial to the assessment of the academic qualification of the applicant by the assessor and by the committee.