# Aalto University School of Science (SCI): Recruitment and Promotion Guidelines

Recruiting to tenure track and promotion/tenure review is conducted through a **comprehensive evaluation** considering each of the three main evaluation dimensions:

- Research work
- Teaching
- Service (i.e. activity in the scientific community, academic leadership and societal interaction)

Comprehensive evaluation means that the candidate is evaluated by looking at all criteria and any additional merits as a whole. Thus no single criterion can be considered to be absolutely critical in favor or disfavor of the candidate. Emphasis on high quality research potential is higher in the beginning of the career; demonstrated high quality research, involvement in development of teaching and curricula as well as supervision of doctoral candidates and contributions to service are expected to increase with seniority.

The review is based on evaluation using outside experts who should address in their reports the following questions:

- What is the international standing of the candidate in relation to individuals in the same career stage in the same field?
- Would the candidate receive a corresponding position in the university of the expert or in other high-standing research universities in the world?

There is also a separate evaluation of teaching, carried out by the Aalto SCI Teaching Evaluation Committee (SCITEC), which gives a statement of the quality of teaching.

The minimum requirements for reaching tenure are

- 1. Excellence in research and high quality teaching or
- 2. Excellence in teaching and high quality research work

In the following, important criteria to consider are given, to help the external evaluators in assessing the candidates, and the candidates in knowing what is expected at each level of the tenure track. The criteria for recruiting external candidates to the positions, and promoting candidates who are already on the Aalto tenure track, are in principle the same. However, for promotion/tenure review, an additional criterion is that the candidate has shown a clearly increasing trend in his/her achievements, compared to the previous tenure track level.

# Fixed term positions

### Assistant Professor 1st term

Decision maker: Dean

# Important criteria to consider:

### Research

The most important publications and their quality and impact including the quality of the publication forums from the view point of the candidate's field of research. **Demonstrated potential** to high quality research.

- High quality publications in international peer-reviewed forums
- Citations and h-index in relation to the academic age and research field

- Work in progress and research plan
- Technical outcomes and innovations
- Scientific collaboration, international networking
- Merit: Awards, prizes

Mobility: Research work in other universities and research institutes or professionally relevant positions (incl. doctoral studies and the post-doctoral phase)

• Typically at least one year in aggregate, preferably showing international mobility; working experience at other university/research environments than the one where he/she graduated.

# Capability to raise competitive research funding

Merit: Excellence funding, e.g. ERC, EU, national (such as Academy of Finland), etc.

# Ability to conduct independent research

Independent publications (without supervisor or instructor as co-author)

### **Teaching**

Teaching experience incl. supervision of doctoral, master and bachelor level theses

- Principal teacher or shared responsibility for some courses
- Bachelor and/or master level theses instructed/under supervision

Development of teaching, experience in course and curriculum development

Potential and interest in course and curriculum development

# Pedagogical education and studies

Interest in pedagogical studies

# The quality of teaching

- SCITEC-evaluation, including successful teaching demonstration
- Interest in collecting feedback and utilizing it systematically

# Service

Service to scientific community

- Reviewer responsibilities
- Participation in conference organization

# Academic leadership and internal service

- Research group management
- Merit: Recognized potential for academic leadership

# Assistant Professor 2nd term

Decision maker: Dean

Promotion evaluation by Head of Department, together with other senior professors of the department.

### Important criteria to consider:

### Research

The most important publications and their quality and impact including the quality of the publication forums from the view point of the candidate's field of research. **Demonstrated potential** to high quality research.

 High quality publications in international peer-reviewed forums. For promotion review: progress in Aalto.

- Citations and h-index in relation to the academic age and research field. For promotion review:
   Progress in Aalto.
- Work in progress and research plan
- Technical results and innovations;
- Scientific collaboration, international networking
- Merit: Awards, prizes

Mobility: Research work in other universities and research institutes or professionally relevant positions (incl. doctoral studies and the post-doctoral phase)

 Typically at least one year in aggregate, preferably showing international mobility; working experience at other university/research environments than the one where he/she graduated.

# Capability to raise competitive research funding

Merit: Excellence funding, e.g. ERC, EU, national (such as Academy of Finland), etc.

# Ability to conduct independent research

 Independent publications (without supervisor or instructor as co-author) with significant contribution

### **Teaching**

Teaching experience incl. supervision of doctoral, master and bachelor level theses

- Principal teacher or shared responsibility for some courses
- Master and bachelor level theses supervised
- Doctoral candidates under supervision/instruction

Development of teaching, experience in course and curriculum development

- Potential and interest in course and curriculum development
- For promotion review: Involvement in course and curriculum development

### Pedagogical education and studies

- Pedagogical studies and interest in pedagogical competence are considered a merit
- For promotion review: Typically at least 5 credits of pedagogical studies.

# The quality of teaching

- SCITEC-evaluation, including successful teaching demonstration. For promotion review: Instead of teaching demonstration, SCITEC attends one lecture of an ongoing course.
- Interest in collecting feedback and utilizing it systematically

# Service

Service to research community

- Editorial board memberships
- Conference, workshop and other scientific event organizer

# Academic leadership and internal service

- Research group management; Involvement in department-level administration
- Merit: Recognized academic leadership
- Merit: Awards, prizes, fellowships

# **Tenured positions**

# **Associate Professor**

Decision maker: President

### Important criteria to consider:

### Research

The volume of important publications, their quality and impact, including the quality of the publication forums from the viewpoint of the candidate's field of research and in relation to the level of the position.

- High quality publications in high-impact peer-reviewed forums of the research field. For tenure review: Progress in Aalto
- Citations and h-index in relation to the academic age and the research field. For tenure review:
   Progress in Aalto
- Visions and goals, work in progress, scientific collaborations, international networking
- Technical outcomes, innovations and similar achievements
- Merit: Awards, prizes, etc.

Mobility: Research work in other universities and research institutes or in professionally relevant positions (incl. doctoral studies and the post-doctoral phase)

 Typically at least one year in aggregate, preferably showing international mobility; working experience at other university/research environments than the one where he/she graduated.

# Capability to raise competitive research funding

Merit: Excellence funding, e.g. ERC, EU, national (such as Academy of Finland), etc.

# Ability to conduct independent research

• Independent research profile as principal investigator, co-investigator and project partner; group leader with post docs and doctoral students.

# **Teaching**

Teaching experience incl. supervision of doctoral, master and bachelor level theses and post-doctoral supervision and instruction

- Principal teacher for a number of courses
- Bachelor and master level theses instructed/supervised
- Doctoral candidates under supervision/instruction, preferably 1-2 doctoral candidates instructed or in final stage of their doctoral studies
- Post docs supervised and instructed

Development of teaching, experience in course and curriculum development

Course and curriculum development record

# Pedagogical education and studies

- Pedagogical studies are considered a merit
- For tenure review: pedagogical studies of at least 5 credits are required, and any additional pedagogical studies are considered a merit

# The quality of teaching

- SCITEC-evaluation, including successful teaching demonstration. For tenure review: Instead of teaching demonstration, SCITEC attends one lecture of an ongoing course.
- Student feedback collected and utilized systematically
- Evidence of teaching quality such as awards, certifications, and external evaluations

### Service

Service to scientific community

- Editorial board memberships
- Conference, workshop and other scientific event organizer

### Academic leadership and internal service

- Mentoring and tutoring
- Academic leadership. For tenure review: Participation in leadership training
- Research management and research team management
- Chairs and memberships in University committees
- Merit: Awards, prizes, fellowships, positions of trust

### Societal interaction

Participation in societal activities and industry collaboration (e.g. consulting tasks), active
participation/leadership in Aalto Factories and other Aalto collaborative platforms, entrepreneurial
promotion and interaction with stakeholders, collaboration with decision-makers

### **Full Professor**

Decision maker: President

### Important criteria to consider:

### Research

The volume of important publications, their quality and impact, including the quality of the publication forums from the viewpoint of the candidate's field of research in relation to the level of the position.

- High quality publications in high impact peer-reviewed forums of the research field
- Citations and h-index in relation to the academic age and research field (Promotion review: progress in Aalto)
- Visions and goals, work in progress, scientific collaborations, international networking
- Technical outcomes, innovations and similar achievements
- Merit: Awards, prizes

Mobility: research work in other universities and research institutes or in professionally relevant positions (incl. doctoral studies and the post doctoral phase)

• Typically at least one year in aggregate, preferably showing international mobility; working experience at other university/research environments than the one where he/she graduated.

# Capability to raise competitive research funding

• Merit: Excellence funding, e.g. ERC, EU, national (such as Academy of Finland), etc.

# Ability to confront major research challenges

- Recognized leadership, group leader with independent creative thinking
- Ability to initiate new lines of research

# **Teaching**

Teaching experience incl. supervision of doctoral, master and bachelor level theses and post-doctoral supervision and instruction

• Responsible teacher for courses at different levels

- Several master level theses supervised
- Doctoral theses supervised
- Post docs supervised and instructed

# Development of teaching, experience in course and curriculum development

• Teaching portfolio, including curriculum development record

# Pedagogical education and studies

- Typically at least 5 credits of pedagogical studies (candidates in Aalto tenure track career system) or equivalent studies
- Candidates are encouraged to take additional pedagogical studies (5-10) credits before promotion review or equivalent studies

# The quality of teaching

- SCITEC-evaluation including successful teaching demonstration. For promotion review: instead of teaching demonstration, SCITEC attends one lecture of an ongoing course.
- Student feedback collected and utilized systematically
- Evidence of teaching quality such as awards, certifications, and external evaluations

### Service

Service to scientific community and international networking

- Editorial board memberships, conference committee memberships
- Membership/Chair in academic institutions, Fellow nominations; positions of trust in scientific/learned communities
- Plenaries and keynotes

# Academic leadership and internal service

- Mentoring and coaching more junior colleagues
- Recognized academic leadership. For promotion review: Attendance in leadership training
- Research management and research team management
- Chairs and memberships in University committees
- Merit: Awards, prizes, fellowships, positions of trust

### Societal interaction

• Participation in societal activities and industry collaboration (e.g. consulting tasks), active participation / leadership in Aalto Factories and other Aalto collaborative platforms, entrepreneurial promotion and interaction with stakeholders, collaboration with decision-makers, media visibility