



Scientific Memberships of TRAIL Research School

Revised version: Bert van Wee & Vincent Marchau

Date: June 2018

Summary and procedure

The table below gives an overview of the different types of TRAIL memberships and their criteria.

	TRAIL PhD student	TRAIL associated fellow	TRAIL fellow	TRAIL visiting fellow
Membership advantages	<ul style="list-style-type: none"> • Access to TRAIL courses • Access to TRAIL symposia and conferences • Network to support your PhD research • Support for thesis publishing and advertisement PhD thesis • Guidance in planning PhD research 	<ul style="list-style-type: none"> • Access to TRAIL courses • Research network to support research proposal writing • Guidance in PhD supervision • Access to TRAIL symposia and conferences • Access to TRAIL network 	<ul style="list-style-type: none"> • Support cooperation between TRAIL researchers and external partners • Support in research funding/acquisition • Access to TRAIL courses • Platform for research dissemination • Access to TRAIL symposia and conferences • Access to TRAIL network 	<ul style="list-style-type: none"> • Access to TRAIL courses • Access to TRAIL symposia, conferences, and masterclasses • Access to TRAIL network
Criteria	<p>a. PhD student position at a TRAIL member faculty (employed at the university, externally funded but (temporarily) working at the university, or external PhD)</p> <p>b. supervisor should be TRAIL -(associate) fellow</p> <p>c. a basic PhD research plan, relevant for an area of interest of TRAIL</p> <p>d. follow the TRAIL educational program and take part in some TRAIL knowledge transfer activities (i.e. conferences)</p> <p>PhD students who successfully pass ≥ 15 ECTS of courses receive a TRAIL-diploma (see TRAIL website for details)</p>	<p>a. postdoc or higher position (0.2 or more) at a TRAIL member faculty</p> <p>b. a plan for becoming a TRAIL fellow</p> <p>c. supervision of TRAIL PhD students, participation (or intention to participate) in TRAIL courses and/or TRAIL knowledge transfer activities (i.e. the annual TRAIL PhD conference)</p>	<p>a. postdoc or higher position (0.2 or more) (tenured or tenure track) at a TRAIL member faculty</p> <p>b. one publication in an ISI journal as first author per year over the past 5 years. (co-authored papers count for 0.5).</p> <p>c. (co)promotor or daily supervisor of TRAIL PhD students, participation (or intention to participate) in TRAIL courses and TRAIL knowledge transfer activities</p>	<p>a. temporary position (PhD or 'higher') at one of the TRAIL faculties, and in collaboration with at least one TRAIL staff member</p>

All memberships are for free.

Candidates can be invited by the Scientific Director or candidates can proactively contact the TRAIL office for getting the application form. TRAIL staff members submit a request by e-mail for visiting fellows to the TRAIL office.

Within one month after receiving an application for membership, the Scientific Director of TRAIL will decide if to grant the application, and will inform the applicant of his decision. The Scientific Director will base the decision upon the criteria mentioned above and on the information provided by the applicant. If necessary, the Scientific Director may ask for additional information to the applicant. The Scientific Director may deviate from the formal criteria with a clear motivation.

An appointment as TRAIL member starts with the positive decision of the Scientific Director. The appointment ends when one of the requirements of membership – especially those related to the appointment of the member to the university – is no longer met. The criteria are (re-) assessed during an evaluation procedure..

The applicant may appeal against the decision of the Scientific Director, by submitting a request for a revision of the decision to the chairman of the TRAIL Board of Supervision. This board decides upon follow-up steps.

1. Introduction

Being a TRAIL scientific member means that you are an integral part of the scientific community that forms the research school. Membership of TRAIL gives you access to a variety of education and knowledge transfer opportunities, a renowned scientific community, an interesting network of public and private parties cooperating with TRAIL, and support in finding funding for research. TRAIL members are appointed based on their active participation in TRAIL and their scientific output (quantitative and qualitative). Although not a formal criterion, TRAIL appreciates their members to produce societal output. There are four types of TRAIL membership:

1. TRAIL PhD student (with or without a diploma – see below)
2. TRAIL associated fellow
3. TRAIL fellow
4. TRAIL visiting fellow

The criteria for becoming a TRAIL member relate to (see Appendix):

- The member's level of education;
- Type of university appointment;
- The level of participation in TRAIL research, education and knowledge transfer activities, and
- Societal output, relevant for the areas of interest of TRAIL.

Each type of TRAIL membership has its own benefits/functions, specific criteria, and procedure for application. These are summarized below. Candidate members can apply proactively (by using the appropriate membership-form) or candidates can be invited by the Scientific Director of TRAIL. The Scientific Director of TRAIL may deviate from the specific criteria, as formulated below, with a clear motivation.

This document explains the benefits of becoming a TRAIL member, the criteria that need to be fulfilled and procedure.

2. TRAIL PhD student

Benefits of membership for PhD students: TRAIL offers a unique and challenging course program to support PhD students in performing their PhD research. Next, PhD students can participate in regularly organized TRAIL-symposia and -conferences. In addition, by becoming a TRAIL member, a PhD student can interact with a large network of fellow PhD students and other TRAIL members. This can be done on an individual basis or during meetings. Next, TRAIL offers support for publishing the PhD students' thesis and organizing a master class around the defense. In addition TRAIL 'advertises' the PhD thesis and related activities.

The criteria for becoming a TRAIL PhD student are the following – all criteria should be met¹:

- a. A PhD student position (0.2 fte or more) at a TRAIL member faculty, or an external PhD position² (to be discussed with the Scientific Director);
- b. At least one of the supervisors should be a TRAIL fellow;
- c. A basic PhD research plan, relevant for an area of interest of TRAIL;
- d. Participation in the educational program according to the rules of TRAIL (see education program) in collaboration with the local Graduate Schools (if applicable).

Procedure: the first step for becoming a TRAIL PhD student is to submit the TRAIL PhD application form – this can be obtained by sending a request to info@rstrail.nl or [download it from the website](#). TRAIL will next organize one individual introduction meeting between the PhD student and the (vice)scientific director. Topics on the agenda include (a) getting acquainted, (b) what can TRAIL do for you?, and (c) information on the TRAIL PhD program. In addition, TRAIL organizes two additional optional meetings: (1) an intermediate meeting. Topics on the agenda are at the request of PhD students. Examples include (a) monitoring progress, and (b) feedback on research proposal (if appreciated by the PhD student). (2) A TRAIL PhD exit meeting, close before, or after the defense, topics on the agenda include (a) final phase PhD project, (b) future outlook, (c) evaluation of TRAIL, and (d) the policy relevance of the PhD thesis (if applicable). As far

¹ The Scientific Director of TRAIL may deviate from the specific criteria, as formulated below, with a clear motivation.

² Fully external PhD students, i.e. which have no contract with a TRAIL member faculty but are writing a PhD thesis under supervision of a TRAIL fellow, can become a member. Supervisors decide upon (requests for) memberships. In case they are no TRAIL member, they can follow (paid) courses.

as the final phase of the PhD project concerns, topics to be potentially relevant include publication of the PhD thesis in the TRAIL Thesis Series and master class opportunities around the PhD thesis defense.

PhD candidates, who meet the requirements as formulated in the Education Program (≥ 15 ECTS passing TRAIL courses), receive a diploma listing the courses they passed.

As far as TRAIL is concerned, PhD students can decide whether or not to opt for a diploma before starting to do research, but also in a later stage. Note that supervisors and local Graduate Schools can have related requirements.

PhD students who do not want to receive a diploma do not have to participate in the TRAIL education program at all, and certainly not as much as required to receive the diploma. Nevertheless, they are very welcome to follow some courses in the TRAIL educational program and participate in the TRAIL knowledge transfer activities (i.e. the annual TRAIL PhD conference). These can be students with a full-time or part-time contract at a TRAIL faculty, or even fully external PhD students.

3. TRAIL fellow or staff member

TRAIL fellows or staff members are, together with PhD students, the core of the research school. Fellows are active researchers in the TRAIL domain, supervise TRAIL PhD students, and are active in teaching for TRAIL.

Benefits of membership for fellows: Fellow members are an explicit fellow within a KNAW accredited research school. Scientific performance will be included in the accreditation procedures. In addition to these 'status benefits' key benefits of being a TRAIL fellow are firstly that TRAIL supports its fellows in research activities (support cooperation and setup research agenda, initiate acquisition at scientific foundations and other research programs (e.g. NWO/STW, EU-FP programs). TRAIL can support fellows by providing project management support on a non-commercial basis. Contact the TRAIL office for further information. Secondly fellows can follow courses including a course on how to write a research proposal. Thirdly TRAIL provides a platform for disseminating research results (international TRAIL handbooks, master classes, and conferences, etc.). Next TRAIL fellows can participate in TRAIL symposia and conferences. And finally TRAIL provides a large network of researchers.

Criteria: TRAIL wants to select members who (1) are active and visible within the TRAIL community/network, and (2) are respected researchers/academics in the TRAIL scientific domain. Academic output is measured in terms of publications in ISI-journals. The idea of criterion 2 is that members who are involved in training PhD students should themselves be of a certain academic level. We deliberately do not only select the most excellent researchers only, firstly because we aim to provide a national network of academics for our PhD students, (and even others, such as companies and Ministries), and secondly because according to this criterion teachers in TRAIL courses can become members – being rejected as a member could demotivate (potential) teachers.

The criteria for others to become a TRAIL fellow are the following – all criteria should be met³:

- a. A postdoc or higher position (0.2 fte or more) (tenured or tenure track) at a TRAIL member faculty;
- b. At least one ISI publication per year over the past five full calendar years, of which the fellow is first author/applicant. Papers can be research papers, but also peer-reviewed 'designed artefacts', according to the KNAW quality indicators for the technical sciences. If the candidate is a co-author of a paper written by two or more authors the paper is valued as a 'half publication');
- c. (Co)promoter or supervisor of TRAIL PhD students,
- d. Participation (or intention to participate) in TRAIL courses and TRAIL knowledge transfer activities (i.e. the annual TRAIL PhD conference);

Not really a criterion, but highly appreciated: a significant societal output in terms of: use of results/considered expert by external stakeholders, contribution to knowledge dissemination through public lectures, media (television, radio, etc.).

Procedure: A candidate fellow can apply for TRAIL fellowship by sending in the application form (this can be obtained by sending a request to info@rstrail.nl) and the required additional information to the Scientific Director of TRAIL Research School. The application will be processed directly after receipt.

³ The Scientific Director of TRAIL may deviate from the specific criteria, as formulated below, with a clear motivation

Please note: Fellow membership is evaluated about every 3 years, in order to re-assess the qualifications of an applicant. When the evaluation results in the observation that the criteria are not (no longer) met, the scientific director will consult the fellow to consider the desirability of maintaining the fellowship. In particular, the scientific director will discuss which aspects need improvement and how TRAIL can support the fellow in meeting the fellow-criteria. Eventually, the scientific director decides upon the continuation of the fellowship, following the procedure stated above.

Retirement: After retirement or leaving a TRAIL member faculty fellows/staff members can remain that position as long as they (a) (co)supervise at least one TRAIL PhD candidate, and/or (b) are still active for TRAIL, e.g. by giving a course.

4. TRAIL associated fellow

TRAIL associated fellows are the members of TRAIL that are expected to (qualify to) become a TRAIL fellow within 3-5 years.

Benefits of membership for associated fellows: associate fellows can follow TRAIL courses. In addition TRAIL supports its associated fellows in their further development with respect to writing research proposals, supervising PhD students, PhD course development, etc. Next TRAIL associated fellows will be involved/have access to all TRAIL disseminating activities (international TRAIL handbooks, master classes, and conferences, etc.). And finally TRAIL provides a large network of researchers.

The criteria for becoming a TRAIL associated fellow are the following⁴– all criteria should be met:

- a. A postdoc or higher position (0.2 fte or more) at a TRAIL member faculty;
- b. A publication plan in order to comply with the TRAIL fellow requirements in the future (see above)
- c. Supervision of at least one PhD student
- d. Participation (or intention to participate) in TRAIL courses and/or TRAIL knowledge transfer activities (i.e. the bi-annual TRAIL PhD conference).

A role in the supervision of TRAIL PhD students is a pre because the associate fellowship very likely leads to a full membership.

Procedure: in order to become a TRAIL associated fellow an application form (this can be obtained by sending a request to info@rstrail.nl) and the required additional information should be submitted by the candidate to the Scientific Director of TRAIL Research School. The application will be processed directly after receipt.

5. TRAIL visiting fellow

TRAIL visiting fellows do not have a position at a TRAIL university/faculty, but visit a TRAIL faculty temporarily.

Benefits of membership for visiting fellows: visiting fellows can follow TRAIL courses, and have access to symposia, conferences, and master classes (all organized by TRAIL). They also have access to all TRAIL disseminating activities. And finally, TRAIL provides a large network of researchers.

Procedure: in order to become a TRAIL visiting fellow, the TRAIL staff member hosting the visitor should send a request by e-mail to info@rstrail.nl, stating the following:

- a. Name visitor;
- b. University & faculty of origin;
- c. Hosting TRAIL university & faculty and contact person;
- d. E-mail address visitor;
- e. Start and end date of visit.

The application will be processed directly the Scientific Director of TRAIL Research School after receipt.

⁴ The Scientific Director of TRAIL may deviate from the specific criteria with a clear motivation.

Appendix: KNAW Quality Indicators

Below we present the KNAW quality indicators for:

- Technical sciences
- Social sciences
- Humanities

See www.know.nl for the three full docs.

Note that although not all these indicators have been used in section 2, 3, and 4, applicants might use these indicators to express their scientific and/or societal quality.

Table 3.1 Quality indicators for the Technical Sciences

	INDICATORS FOR OUTPUT	INDICATORS FOR PERSON
SCIENTIFIC QUALITY	<p>Scientific publications Articles in peer-reviewed journals (no. and type of journal) Articles in peer-reviewed conference proceedings (no. and type of proceedings) Scientific books published by leading publishers or significant contributions to such books (no. and type) Citations of individual articles Impact factors of journals in which articles are published</p> <p>Designed artefacts Peer-reviewed artefact (design) + documentation. This also includes software design</p> <p>Research impact (ex-post) Use of scientific products by other researchers (artefacts, methods, measuring instruments, tools, standards and protocols)</p> <p>Potential research impact Possible contribution to development of theories and models, methods, operational principles or design concepts</p>	<p>Recognition by scientific community Membership of prominent organisations such as academies of sciences Prestigious grants (VENI, VIDI, VICI, or ERC Grants) Honorary doctorates Visiting professorships</p> <p>Editorships Chief/full editorship of international scientific journal/book/conference proceedings</p> <p>Considered expert by peers Advisory capacity in scientific circles (NWO, external inspections, etc.) Keynote lectures at science conferences Membership of programme committees Participation in international assessment committees for scientific programmes/institutes or scientific advisory councils/institutes</p> <p>Research impact across the course of career Person's citation score Contribution to developing a 'school of thought'</p>
SOCIETAL RELEVANCE	<p>Use of results by external stakeholders (ex-post impact) Contribution to solving societal problems Market introductions and new projects in industry Income generated by use of results Spin-offs with industry Patents used Artefacts used (designs, software)</p> <p>Use of results by profession (ex-post impact) Use of artefacts, methods, measuring instruments, tools, standards and protocols</p> <p>Involvement of external stakeholders in scientific output (potential societal relevance) Businesses or civil-society organisations involved in guiding research projects (e.g. in user committees) Contract financing by potential users (e.g. industry) Public financing related to societal questions Valorisation grants</p> <p>Contribution to knowledge dissemination Professional publications and papers, non-scientific publications, exhibitions and other events related to research results</p>	<p>Considered expert by external stakeholders Advisory and consultancy work (focused on users) Leading position in industrial research (e.g. managing director of R&D department)</p> <p>Considered expert by profession Oeuvre prizes (e.g. architects) Retrospective exhibitions</p> <p>Contribution to knowledge dissemination Activities focusing on popularisation of science, education and contribution to public debate Training of professionals PhDs with their first job in relevant practice</p>

Criteria for assessing the quality of social science research

Diagram. Six assessment criteria

Diagram. Six assessment criteria

		QUALITY DOMAINS	
		SCIENTIFIC QUALITY: Conducting scientific research: carrying out research within the context of the research organisation and ensuring that peers consider this research of outstanding quality	SOCIETAL RELEVANCE: Communicating and/or collaborating with external target groups about one's own peer-reviewed research
ASSESSMENT DIMENSIONS	DEMONSTRABLE OUTPUT	(1) Demonstrable output that peers regard as of outstanding quality	(4) Demonstrable output for external target groups
	DEMONSTRABLE UTILISATION	(2) Demonstrable utilisation by peers of researcher's output	(5) Demonstrable utilisation by external target groups
	DEMONSTRABLE RECOGNITION	(3) Demonstrable recognition by peers for researcher's output	(6) Demonstrable recognition by external target groups

KNAW: quality indicators humanities (to be replaced by English language version in due time)

