



# GUIDELINES FOR THE SUPERVISION OF DOCTORAL RESEARCHERS AT FORSCHUNGSZENTRUM JÜLICH

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# 1. PREAMBLE

For most scientists, the doctorate forms the basis for the start of a scientific career. It is a phase in which key knowledge and skills are acquired, and the groundwork for a professional future is laid. In addition to suitable working conditions and a good infrastructure, good supervision is the key to a successful doctorate and a self-determined future career path.

This document is intended to provide guidelines for the supervision of doctoral researchers at Forschungszentrum Jülich (FZJ), irrespective of the content of the doctorate or the doctoral researcher's employment conditions. Forschungszentrum Jülich is a non-university research organization and thus cannot award doctoral degrees autonomously. The doctoral degree for a doctoral project at FZJ is therefore always awarded in cooperation with a partner university, whose regulations are ultimately the decisive factor. Consequently, these guidelines do not contain strict criteria and rules, but are intended to ensure that doctoral researchers receive the best possible supervision. In accordance with the [German Research Foundation's \(DFG\) Guidelines for Safeguarding Good Research Practice](#), this *"...includes ensuring adequate individual supervision of early career researchers, integrated in the overall institutional policy..."* In general, this document should not be understood as a substitute for, but rather a specification of, the corresponding [guidelines of the Helmholtz Association](#).

Although there are of course similarities with the supervision of bachelor's or master's students or even early postdocs, these guidelines are specifically aimed at the supervision of doctoral researchers to meet the specific needs of this group. Corresponding [guidelines for postdocs](#) already exist and can be consulted if necessary.

First of all, the question arises as to what exactly is meant by *"good supervision"*. To this end, different aspects that constitute good supervision are described in [chapter 2](#). Furthermore, the supervision of a doctoral project usually involves several people and can take many different constellations. To address this fact, [chapter 3](#) describes the various different roles and their associated responsibilities. The additional chapters give practical advice on the monitoring of doctoral projects ([chapter 4](#)) and qualification measures for supervisors ([chapter 5](#)). Despite all good intentions and preparations, problems and conflicts may arise during a doctoral project. Therefore, [chapter 6](#) concludes these guidelines by providing advice and assistance in the event of conflicts and problems.

These guidelines are intended to combine the positive experience and vast expertise regarding the supervision of doctoral researchers at Forschungszentrum Jülich, and to make these available to all supervisors, especially those who recently took on this important role.

## 2. WHAT CONSTITUTES GOOD SUPERVISION?

Doctoral projects are instrumental to the scientific development and output of the research community. Supervising doctoral researchers is therefore an important, demanding, and multifaceted task. In this chapter, the term “*supervisor*” represents individual supervisors, supervisor teams, and (co-)supervisors – independent of their individual supervision roles. Based on positive experience and best practice examples, the following list covers some crucial aspects of good supervision. This list, which is by no means complete, serves to underline the high complexity and responsibility of the task that supervisors face on a daily basis.

Supervisors who strive to provide good supervision are typically active researchers with a solid reputation and profound expertise in the relevant research area as well as a strong interest in the topic of the doctoral project. Furthermore, they usually:

- actively engage with the scientific community by participating regularly in international scientific conferences and workshops in the field.
- aim to present their work at conferences and workshops, and to publish articles in peer-reviewed journals to remain visible in the community.
- are aware of any personal matters that may have an impact on the research, and reach out for support if needed.
- are able to understand and adapt their own supervision style and to clearly communicate expectations, deadlines, and preferred working styles.
- are trained to successfully manage scientific projects, ensuring they can use this knowledge to help the doctoral researcher to manage their doctoral project.
- support doctoral researchers in developing their own research topics and in gaining transferable skills and thus advancing their career development.
- guide doctoral researchers to develop into independent researchers in a creativity-stimulating and failure-tolerant environment.
- are aware of their hierarchical position and corresponding duties in the relationship with the doctoral researcher through the scientific evaluation of the projects, knowledge transfer, their influence on working conditions, and their role in conflict resolution.
- are aware of the legal implications of their own position (e.g. knowledge of the “*General Act on Equal Treatment*”).

### 3. SUPERVISION ROLES AND ASSOCIATED RESPONSIBILITIES

Due to the wide range of research areas investigated at Forschungszentrum Jülich and the diverse characteristics of the different institutes, there are no generic guidelines that apply to the supervision of all doctoral researchers at Jülich. Furthermore, the regulations of the different universities awarding degrees – which may even differ between the faculties of a given university – need to be taken into account.

As revealed by a FZJ-wide survey of Jülich supervisors in 2019, 95 % of all Jülich doctoral researchers were supervised by several scientists at the time of the survey, although the constellations and arrangements varied vastly between institutes and research fields.

#### DEFINITION OF ROLES INVOLVED IN THE SUPERVISION OF DOCTORAL RESEARCH PROJECTS.

ROLE	DEFINITION
Doctoral researcher	Researcher spending >50 % of their working hours on the doctoral research project at FZJ, regardless of the affiliation type. <sup>A</sup>
Day-to-day supervisor	Researcher guiding the doctoral researcher on a daily basis at FZJ, but does not necessarily have a role in the university process. <sup>B</sup>
Internal doctoral parent (Doktorvater/-mutter)	Scientist supervising the doctoral researcher in the university process and during research at FZJ. <sup>B</sup>
External doctoral parent (Doktorvater/-mutter)	Scientist supervising the doctoral researcher in the university process, but has no function at FZJ. <sup>B</sup>
Jülich expert in university process	FZJ employee involved in the university process, but not a doctoral parent (Doktorvater/-mutter). <sup>B</sup>
Head of institute	Disciplinary superior for all doctoral researchers at the respective FZJ institute. <sup>B</sup>
Forschungszentrum Jülich	Non-university research organization which does not have the right to award doctoral degrees.

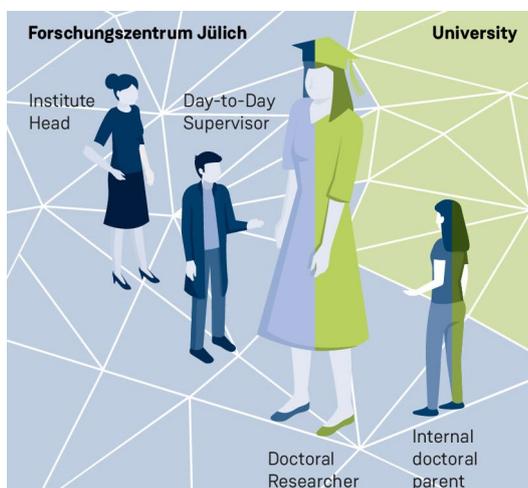
**A**  
Definition according to Board of Directors resolution from 14.12.2009

**B**  
Role description resulting from JuDocS supervisor query 2019/2020.

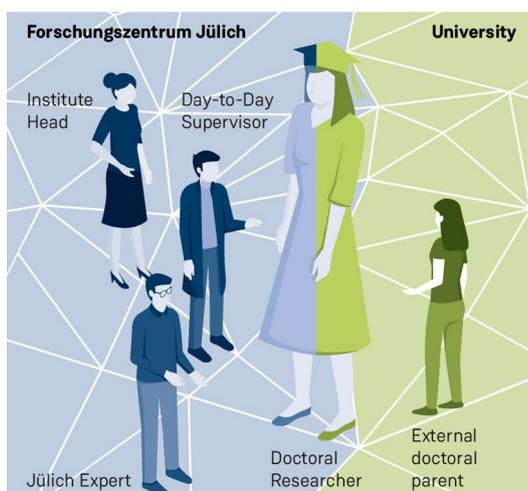
At this point, it is important to clarify which partners are involved in the supervision process and to name them consistently. The Table names and defines the different roles involved in the supervision of doctoral projects at Forschungszentrum Jülich, while the following Figure shows the two most common supervision constellations. The responsibilities and tasks of the individual roles are described in more detail in the following sections.

## THE TWO MOST COMMON SUPERVISION CONSTELLATIONS AT FORSCHUNGSZENTRUM JÜLICH (FZJ).

**Due to the diverse nature of supervision at FZJ, it is not possible to depict all supervision constellations here; however, the two most common constellations are shown.**



A: The doctoral researcher is affiliated to FZJ and the institute head is the disciplinary superior. An internal doctoral parent (Doktorvater/-mutter) supervises the doctoral researcher in the university process and during research at FZJ. A day-to-day supervisor guides the doctoral researcher on a daily basis at FZJ. Due to the accumulation of roles, the institute head and the internal doctoral parent may be the same person. Likewise, the internal doctoral parent and the day-to-day supervisor may be the same person.



B: The doctoral researcher is affiliated to FZJ and the institute head is the disciplinary superior. An external doctoral parent (Doktorvater/-mutter) supervises the doctoral researcher in the university process and a Jülich expert acts as the link between FZJ and the respective partner university. A day-to-day supervisor guides the doctoral researcher on a daily basis at FZJ. Due to the accumulation of roles, the institute head and the Jülich expert may be the same person.

### 3.1. DOCTORAL RESEARCHER

The doctoral researcher is an early career scientist striving for a doctoral degree typically within 3-4 years, depending on the scientific discipline and the framework conditions. As defined in the Table, the doctoral researcher spends >50 % of their working hours on the doctoral research project at FZJ, regardless of the form in which they are affiliated to FZJ.

The doctoral researcher is the person primarily responsible for the success of the doctoral project. This requires pro-active communication with their supervisor(s) on a regular basis, but especially in the event of problems and questions. It is the task of the doctoral researcher to enrol at the corresponding partner university and familiarize themselves with the conditions and guidelines of the respective faculty. The partner university may impose further requirements, such as supervision tasks

regarding bachelor's or master's students, as well as the supervision of lectures, internships, and students. With the affiliation to Forschungszentrum Jülich, the doctoral researcher also agrees to participate in the JuDocS transferable skills programme ([↗ chapter 3.9](#)) and to submit progress reports as part of the monitoring process ([↗ chapter 4](#)).

Within their own working group, doctoral researchers have reporting obligations (e.g. jour fixe, team meetings, working group seminars). This includes a willingness to share knowledge and experiences with other working group members. The doctoral researcher has to follow the guidelines for research data management that apply to the respective institute. In general, each doctoral researcher should become familiar with the rules of good scientific practice. It is the responsibility of the doctoral researcher to adhere to these rules and implement them in everyday work.

Furthermore, doctoral researchers are encouraged to actively shape their own career paths, and to make use of career development support services offered by the Helmholtz Association, Forschungszentrum Jülich, and the relevant graduate schools and universities.

## 3.2. “SHARED” TASKS AND RESPONSIBILITIES OF ALL SUPERVISOR ROLES

Some tasks and responsibilities apply to all supervisory roles, while others are more associated with a specific role. While the “*role-specific*” tasks and responsibilities are described further below, the “*shared*” tasks and responsibilities are briefly summarized here.

### **It is the responsibility of all persons involved in the supervision of doctoral researchers to:**

- provide regular feedback on the doctoral research project and the performance of the doctoral researcher.
- assume ethical responsibility, and to follow and convey all principles of good scientific practice.
- accept supervision responsibilities only to the extent that their own schedule will allow it. Depending on the phase of the doctoral project or in the case of personal issues relating to the doctoral researcher, more time may be required for supervision. Therefore, flexible time resources should be devoted to supervising doctoral researchers.
- help the doctoral researcher to get started with effective networking within the scientific community and to encourage scientific interactions, discussions, and collaborations between the doctoral researcher and other scientists wherever possible.
- regularly participate in supervisor training and peer-mentoring programmes, in particular supervisor training offered by the Helmholtz Association, Forschungszentrum Jülich, and the relevant graduate schools and universities.
- support the doctoral researcher in shaping an independent scientific profile and, in particular, to encourage and support active participation in conferences and the production of scientific publications, which help increase the doctoral researcher's visibility.

- enable the doctoral researcher to acquire competencies beyond their particular research topics, for example to communicate scientific results to different audiences, fulfil leadership tasks, and gain teaching and supervision experience that is appropriate for the current stage of their careers.
- promote an inclusive working environment for the doctoral researcher. This takes into account personal interactions, communication, the scheduling of meetings and retreats, and extramural activities as well as team culture and team conduct.

### 3.3. ACCUMULATION OF ROLES

The supervision roles outlined in the ↗ Table do not necessarily have to be fulfilled by different persons. In many cases, there can be an accumulation of roles where an individual holds more than one supervisory role (e.g. an institute head can also be the internal doctoral parent of a doctoral researcher). In such cases, the tasks and responsibilities associated with the different roles are held accumulatively by one person.

### 3.4. DAY-TO-DAY SUPERVISOR

The day-to-day supervisor guides the doctoral researcher in the doctoral project on a daily basis and thus plays an essential role in the supervision process. They are the first contact person for everyday problems, especially with respect to methodology and administration. The day-to-day supervisor provides “hands on” supervision and bears the responsibility for short-term decisions regarding the doctoral project. Furthermore, they support the doctoral researcher in the correct implementation of research data management and documentation by providing or referring to the respective institute’s training and infrastructure.

In terms of communication and exchanges, the day-to-day supervisor should discuss the current status of the project with the doctoral researcher at regular intervals, which are adapted in accordance with the development of the doctoral project (e.g. weekly jour fixe). They typically take part in seminars and working group meetings with the doctoral researcher and ensure their active participation in these meetings (e.g. by giving talks about the current status of the doctoral project). Furthermore, the day-to-day supervisor participates in the annual progress meetings and provides reliable and complete information required for monitoring the doctoral project (↗ chapter 4).

More generally, the day-to-day supervisor helps the doctoral researcher to develop a high level of skills in the respective research field, for example by formulating appropriate scientific questions that help the project to advance. At the same time, the day-to-day supervisor gradually allows the doctoral researcher to take on an appropriate level of responsibility and scientific freedom.

### 3.5. INTERNAL DOCTORAL PARENT (DOKTORVATER/-MUTTER)

The internal doctoral parent (Doktorvater/-mutter) is a scientist supervising the doctoral researcher in the university process and during their research at Forschungszentrum Jülich. The precise tasks and responsibilities of the internal doctoral parent partly depend on their academic status (W1/W2 professorship) at the respective university and on their position in the given institute at FZJ (e.g. department head, group leader, PI).

The internal doctoral parent develops an initial project plan together with the doctoral researcher and all relevant stakeholders, in particular the head of institute, and helps to regularly revise this plan in order to complete the project within the agreed time frame. They also bear general responsibility for medium-/long-term decisions regarding the doctoral project.

The internal doctoral parent offers regular meetings to the doctoral researcher and participates in the annual progress meetings ([↗ chapter 4.1](#)). In the event of completing or discontinuing a doctoral project, the internal doctoral parent should report this immediately to the responsible contact person at the institute for the purpose of maintaining the doctoral researchers' database ([↗ DokMS](#)).

Furthermore, the internal doctoral parent encourages the doctoral researcher to publish their work, points out publication opportunities, and helps the doctoral researcher to prepare their publication. They also bear considerable responsibility for the doctoral process and for the publications that arise from the doctoral project, and give the doctoral researcher as many opportunities as possible to be the first (co-)author on publications that acknowledge the work they have carried out. If required, the internal doctoral parent supports the doctoral researcher in submitting their own grant applications that are appropriate to their career stage and qualifications.

### 3.6. EXTERNAL DOCTORAL PARENT

The external doctoral parent (Doktorvater/-mutter) is a scientist supervising the doctoral researcher in the university process, but who has no function at Forschungszentrum Jülich. To compensate for the latter point, the external doctoral parent should ideally be supported by the Jülich expert in the university process ([↗ chapter 3.7](#)) to ensure good communication between the respective partner university and Forschungszentrum Jülich.

The external doctoral parent acts as a mentor to the doctoral researcher and accompanies them through the university process. The external doctoral parent helps to develop and regularly revise a project plan together with the doctoral researcher and all relevant stakeholders. To do so, the external doctoral parent offers regular meetings to the doctoral researcher and participates in the annual progress meetings ([↗ chapter 4.1](#)).

### 3.7. JÜLICH EXPERT IN THE UNIVERSITY PROCESS

In cases where the doctoral researcher does not have an internal doctoral parent (and only an external doctoral parent), the Jülich expert acts as a link between Forschungszentrum Jülich and the partner university. They typically act as a reviewer for the doctoral examination and participate in the annual progress meetings ([↗ chapter 4.1](#)).

### 3.8. HEAD OF INSTITUTE

The head of institute is a scientist who has organizational responsibility for the entire institute. They therefore act as the disciplinary superior for all doctoral researchers at the respective institute and are also obliged to report to the Board of Directors of Forschungszentrum Jülich.

The head of institute bears responsibility for the required infrastructure and resources for the doctoral project and creates an interactive, cooperative working atmosphere for the doctoral researchers at the institute. This includes a clear allocation of individual supervisory roles for each doctoral researcher and the establishment of rules and instructions for solving problems. In the event of a disagreement, the head of institute has final say on medium-/long term decisions for the doctoral project.

The head of institute ultimately ensures that the conditions at the institute enable the doctoral researcher to fulfil the doctorate requirements of the partner university. Clarifying the admission requirements at the partner university is primarily the responsibility of the doctoral researcher ([↗ chapter 3.1](#)).

The head of institute is responsible for ensuring adequate funding for the doctoral researcher, especially if an extension of the original funding period is necessary. With respect to the latter point, transparency and an open dialogue with the doctoral researcher is of the utmost importance.

### 3.9. FORSCHUNGSZENTRUM JÜLICH

In this context, Forschungszentrum Jülich is a non-university research organization which does not have the right to award doctoral degrees. Forschungszentrum Jülich's task and responsibility is to implement and maintain an overall institutional policy for the supervision and promotion of young scientists. This includes ensuring an appropriate framework and working conditions as well as the targeted promotion of career planning. The primary instruments to help achieve these goals for doctoral researchers are JuDocS and the Career Center.

JuDocS, the Jülich Center for Doctoral Researchers and Supervisors, offers support to all doctoral researchers and supervisors at Forschungszentrum Jülich. By providing onboarding, qualification opportunities, project monitoring, and counselling, it promotes high standards for all doctoral projects on the Jülich campus. Upon starting their doctoral project at Jülich, all doctoral researchers become part of JuDocS and are required to complete the transferable skills programme to gain further qualifications.

Forschungszentrum Jülich's Career Center offers early-career scientists comprehensive support in all career-related matters. This includes various measures for career development, advice, orientation, and networking, for example individual career counselling and coaching, or demand-oriented careers events and training courses.

## 4. MONITORING OF DOCTORAL PROJECTS AT FORSCHUNGSZENTRUM JÜLICH

The regular review of the progress of a doctoral project (hereinafter referred to as “*monitoring*”) should ensure that a doctoral project is successfully carried out and completed within the planned time frame. At Forschungszentrum Jülich, doctoral projects are monitored on two different levels to ensure optimal support. Most importantly, each doctoral researcher receives content-based scientific supervision from the institute where they are working. Moreover, additional monitoring support is provided by JuDocS in a central, independent, and structured manner.

### 4.1. SUPERVISION PROVIDED BY THE INSTITUTE

At the institute where the doctoral project is carried out, the doctoral researcher receives intense content-based scientific supervision and support. This starts with designing the frame of the doctoral research project (including milestones) and the accompanying training programme. For each doctoral researcher, at least one person should be appointed at the Jülich institute who is responsible for day-to-day supervision and serves as a primary contact in case of any questions or problems. Supervision includes offering scientific support with regard to content and methods as well as providing feedback on a regular basis. At least once a year, the doctoral researcher and all the supervisors and other scientists (e.g. cooperation partners) involved in the doctoral project meet up to discuss the progress of the doctoral project as well as to agree on potential readjustments of the work plan and to follow up on the training programme. Depending on the regulations of the partner university, it is recommended (in accordance with the [Helmholtz Doctoral Guidelines](#)) that this annual meeting take place in the form of a thesis advisory committee (TAC) meeting. This meeting can take on other formats should they be better suited to the institute's supervision structure. The TAC is typically composed of at least three members, including the internal/external doctoral parent, two or more independent scientific experts, additional university supervisor(s) (if applicable), and the day-to-day supervisor(s). In order to avoid duplications, comparable procedures of the partner universities are accepted by FZJ authorities. A report on the results of this meeting should be filed centrally for the purpose of documenting the project. Most institutes have additional internal regulations regarding regular progress reports from the doctoral researcher (e.g. short presentation every 3 months), but these vary from institute to institute. It is generally recommended that further progress reports be scheduled in smaller frameworks between the annual meetings.

## 4.2. ADDITIONAL SUPPORT PROVIDED BY JUDOCs

As the central umbrella organization for Forschungszentrum Jülich's doctoral researchers and supervisors, JuDocS provides additional support in monitoring doctoral projects. In this structured process, each doctoral project is routinely reviewed after 6, 18, and 27 months by independent scientists (not involved in the supervision of the particular doctoral project by the institute). This monitoring process is central and comprehensive, meaning it applies to all doctoral researchers (independent of the respective affiliation type). Furthermore, the monitoring ensures that the detailed status of the doctoral project is known to the doctoral researcher and all parties involved. The additional support provided by JuDocS does not assess the content or methods of the doctoral project, instead focusing on procedural requirements and addressing the following questions:

- Have the admission requirements been clarified with the partner university?
- Have all supervisory roles been clarified and filled?
- Has funding been ensured for the doctoral researcher?
- Does the planned thesis type (monography/publications) fit with the scheduled work packages?
- Is there a sound and evolving work plan from a project management perspective, potentially including risk mitigation?
- Does the reported status of the project correspond to the submitted work plan and schedule?
- Has the doctoral researcher been given the opportunity to participate in relevant events (e.g. conferences)?
- Has the doctoral researcher participated in the mandatory JuDocS transferable skills courses or equivalent courses of the respective partner university?

## 5. QUALIFICATION MEASURES FOR SUPERVISORS

The modern curriculum of a doctoral researcher is highly diverse and requires expertise and skills in many different areas that often go beyond standard learning and research activities. Supervisors have the demanding task of guiding doctoral researchers through this process to help them develop into mature and independent scientists. In order to successfully supervise a doctoral researcher, supervisors must acquire various skills that are appropriate to the task at hand.

In addition to the existing training and qualification programme for all FZJ employees, parts of a special qualification programme for supervisors at Forschungszentrum Jülich have been implemented by the [Supervisors' Forum](#). The objective of the Jülich Supervisor Plus (JuPluS) concept is to provide training opportunities for supervisors and to increase the visibility of the Jülich supervisors. All Jülich supervisors are warmly invited to become part of JuPluS on a voluntary basis without any obligation. Current components of this programme include the “*Supervision 101*” training course, which provides participants with various tools and best practices

The Supervisors' Forum is a bottom-up initiative of an active community of supervisors at FZJ.

that can support their supervision in practice, and peer group supervision (PGS), an effective form of leaderless peer group counselling, which taps into the network of existing supervisors and their collective experiences.

## 6. DEALING WITH CONFLICTS THAT ARISE DURING DOCTORAL PROJECTS

Doctoral projects are not only very complex in terms of content, but also link various stakeholders to a common goal. Conflicts may therefore arise. The emergence of conflicts in itself is not a problem, but conflicts can become critical if they are not dealt with properly. The handling of unproductive and destructive conflicts is an important aspect of supervision and a challenging task for supervisors.

### 6.1. PREVENTING CONFLICTS

In order to prevent conflicts, communication is of the utmost importance. Communication is always a two-way task. Doctoral researchers and supervisor(s) alike are responsible for proper communication. Regular meetings facilitate communication, since they provide a framework for exchanging and sharing information. Another very important aspect is that all parties clearly and distinctly communicate their (mutual) expectations. Especially at the beginning of a doctoral thesis, it can be useful to document these expectations.

Creating an error culture and raising awareness for the constructive handling of problems in the institute can help in the long term. Not only should successes be reported, but also the difficulties and problems that may otherwise have resulted in further conflicts.

Supervisors and doctoral researchers should use the documentation of a doctoral project to ensure authentic (!) communication about the doctoral project. In particular, problems and difficulties should be clearly identified and documented. If documentation of the doctoral project is not authentic, it can become an issue in cases of conflict. Perspective plays an important role here. For instance, a change in plan for a doctoral project should be seen as a chance for a better project rather than a setback. In fact, successfully adapting the doctoral project plan, i.e. adjusting the work packages and milestones to a new situation, is one of the most relevant and demanding tasks for a supervisor. *“The doctoral project plan was successfully adapted”* is therefore an entry in the documentation that should be considered to be an achievement.

## 6.2. MANAGING CONFLICTS

This section deals with the management of conflicts of a scientific or interpersonal nature. In the event of conflicts with legal implications, other bodies must be consulted with (e.g. Human Resources (P) or Law and Patents (R)). In case of doubt about whether a given conflict has legal implications, these bodies should be contacted in order to clarify the issue.

In cases of conflicts communication needs to be open, while also respecting the issues of confidentiality and data protection. Appropriate measures should be taken to ensure that information about conflicts does not spread, as such rumours can be damaging to the reputation of the persons concerned. If persons with personal relationships are involved in a mutual conflict, Forschungszentrum Jülich's regulations concerning conflicts of interest should be taken into account when moderating conflicts.

In general, the thesis advisory committee (TAC) or a comparable committee should always be the first point of contact for conflicts of any kind, as those involved have the best insight into the doctoral project. If this does not seem possible or reasonable (e.g. due to personal conflicts), there are a number of counselling services at Jülich that can be contacted ([↗ Appendix](#)). At this point, special mention should be given to the JuDocS Committee for Counselling in Supervision Conflicts, which offers support to doctoral researchers and supervisors who are confronted with a supervision conflict that they cannot resolve alone.

In addition, it is recommended that internal contact persons be established for conflict management at each institute department. In addition to serving as contact persons in cases of conflict, these individuals can help to establish a two-way feedback culture, ensuring that both types of feedback (top-down feedback: supervisor giving feedback to doctoral researcher; bottom-up feedback: doctoral researcher giving feedback to supervisor) are used to further improve supervision at a given institute department.

## 6.3. DEALING WITH THE CONSEQUENCES OF CONFLICTS

Many conflicts can be resolved simply through (moderated) discussions. In other cases, more comprehensive measures may be necessary (e.g. change of supervisor, change or adjustment of the topic, change of partner university or faculty, etc.). Conversely, there are also cases in which conflicts cannot be resolved by mutual agreement.

Under certain circumstances, an unresolved conflict might ultimately lead to the premature termination of a doctoral project. If this outcome is being considered by the parties involved, then it is strongly recommended that conflict moderation and support be sought out ([↗ Appendix](#)). The premature termination of a doctoral project can lead to a variety of new problems. A number of considerations and formalities need to be taken into account here:

- In general, the premature termination of a doctorate (if not by mutual agreement) should be a measure of last resort after all possible conflict management measures have been exhausted and documented.

- The procedure for cancelling or terminating a working contract can be a lengthy process and should therefore be discussed with the contact person responsible at Personnel Management (P-B) at the earliest possible moment.
- In case of termination or expiration of a working contract, the doctoral researcher should be advised to apply for unemployment benefits, if applicable.
- Keep in mind: for international doctoral researchers, their visa may depend on the employment contract! Therefore, in such cases, the termination of a working contract must be discussed in detail and precisely planned with the person concerned.
- In order to plan their next career steps, the doctoral researcher should be referred to Jülich's Career Center at the earliest possible stage.
- A concept should be drawn up for handing over the project and backing up data together with the doctoral researcher and the supervisor(s) concerned. The main focus here is on avoiding the loss of knowledge, experience, and data.

Finally, the institute departments are encouraged to establish a system that incorporates a process evaluation ("*manoeuvre critique*") for the premature termination of doctorates. The idea behind this is that the institute departments learn from such instances and can thereby optimize measures to prevent such unwanted outcomes.

## 7. CLOSING REMARKS

The successful completion of a doctoral project is an outstanding achievement – both on the part of the doctoral researcher and on the part of the supervisor(s). In many cases, the work of the doctoral researcher on the doctoral project ends at this point, but not that of the supervisor(s). In addition to a structured and institute-specific offboarding of the doctoral researcher, it is important that the supervisor reports the completion of the doctoral project to JuDocS.

Although the actual process of awarding the doctoral degree takes place at the respective partner university, Forschungszentrum Jülich and its institutes stage various events (e.g. JuDocS ceremony) and observe certain traditions to celebrate the successful completion of a doctoral project – science should be fun after all!

### PUBLICATION DETAILS

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# APPENDIX

## OVERVIEW OF COUNSELLING SERVICES AT FORSCHUNGSZENTRUM JÜLICH (FZJ)

COUNSELLING SERVICE	OFFERED TO...	COUNSELLING FOCUS ON...
↘ JuDocS Committee for Counselling in Supervision Conflicts	... doctoral researchers and supervisors	... supervision conflicts of doctoral projects with the aim of finding a way to successfully complete the doctoral project with all parties involved.
↘ Peer group supervision (PGS)	... supervisors	... dealing with challenging situations related to supervision and learning about ways of better managing professional problems and reducing stress.
↘ Social Counselling	... all FZJ employees	... problems and conflicts regarding difficult situations at work and at home, e.g. conflicts at the workplace, personal crises, stress and burnout, sexual harassment, addiction problems, or mental illness.
↘ Equal Opportunities Officer	... all FZJ employees	... matters regarding equal opportunities for women and men.
↘ Equal Opportunities Bureau (BfC)	... all FZJ employees	... problems and conflicts concerning the reconciliation of work and family life.
↘ Ombudspersons for good scientific practice	... all FZJ employees	... matters of scientific misconduct.
↘ Works Council	... all FZJ employees	... matters of compliance with the applicable laws (including bullying and discrimination), regulations, accident prevention regulations, collective agreements, and internal agreements for the benefit of employees.
↘ Representatives for persons with disabilities	... all FZJ employees	... matters regarding discrimination of persons with disabilities.

