



for HITEC

## Transferable Skills Programme for HITEC PhD students at Forschungszentrum Jülich

The teaching of professional skills is a key component of our graduate school. The students will directly benefit from the experience during their thesis work. Furthermore they will be able to use these skills in the workplace from the start, where the command of professional skills is regarded as a prerequisite. The school's training programme is specifically developed for HITEC students by one of the best providers in the field *Impuls Plus*.

*Impuls Plus*, Cologne, is an innovative training and consulting company that specializes in the areas of science and research. Since 2001, *Impuls Plus* supports scientists on their career and advises universities and research institutions in the design of a strategic human resource development. *Impuls Plus* is working in cooperation with the "coaching network science" ([www.coachingnetz-wissenschaft.de](http://www.coachingnetz-wissenschaft.de)), one of whose founding members includes *Impuls Plus* CEO Dr. Anja Frohnen. Members of the *Impuls Plus*-team are both researchers from engineering, life and social sciences as well as actors. Such a unique constellation and its synergistic effects contribute to the success of the HITEC seminars.

All seminar modules ask for a high degree of individual activity and participation. Theoretical contents form the basis for the reflection of past behavior patterns. The practical exercises are directed towards the development of new, solution oriented ways. In all seminars the knowledge and the experience of the participants are systematically included and used creatively by the *Impuls Plus* trainers. Under professional guidance, practical situations and case studies are analyzed and personality-appropriate solutions are developed.

### Overview of training courses

The modules of the starter-set will be offered for the same group of 12 students. They get to know each other, learn about their projects and may stay in touch beyond the timeline of the transferable skills courses. The starter set as well as the course 'Getting Published' are mandatory for HITEC doctoral fellows.

Start of PhD students in HITEC	4. Month	6. Month	12. – 14. Month
	Starter-set– 3 days Getting Started: The Thesis as a Project (1 day) and Scientific Presentation (2 days)	Starter-set– 2 days Communication in interdisciplinary and international Teams	Getting Research Published – 2 days

## **Starter-set for PhD students of year 1**

Getting started: The thesis as a project (1 day in Jülich)

- The use of a realistic project plan for the individual thesis
- Basics of dynamic project management in research
- Methods of project management: flow chart, structural plan, time scheduling
- Implicit expectations during thesis work
- Risk management

Scientific Presentation - How to engage the audience into your talk (2 days in Jülich)

- Who will be the audience: target group specific preparation
- Nonverbal aspects: coherent body language
- Deliberate use of voice and language
- How to deal productively with fear of speaking, stage fright and 'catastrophes'
- Practise with video analyses
- To introduce yourself and your topic: practice your "pitch"

Communication in interdisciplinary and international teams (2 days in conference hotel)

- Basics of constructive and goal oriented negotiations
- Rules for successful cooperation in interdisciplinary and international teams
- Conflict management: strategies for solving ambiguities
- Awareness about one's own role in the team
- Give and accept feedback in a constructive way

## **Course in scientific writing for students of year 2**

Getting Research Published: Writing Effectively and Well for Doctoral Fellows in the Life Sciences, Natural Sciences and Engineering (2 days in Jülich)

- finding a focus by identifying an appropriate research question
- examining structural relationships within and between sections of a paper
- audience awareness
- managing your writing process professionally
- creating precise, accurate, and correct sentences
- recognizing stylistically adequate and inadequate language
- writing an Abstract for a "Letter to Nature", with feedback