



Faculty III Process Sciences

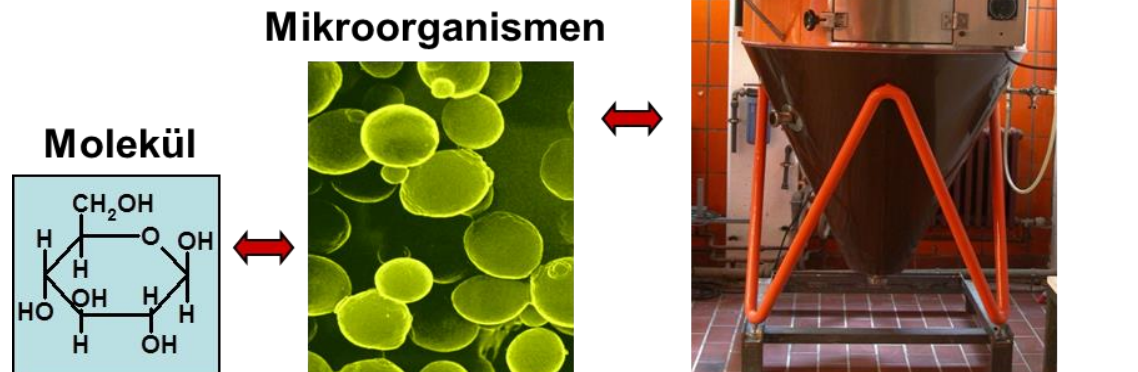
Information event for doctoral candidates

2020



Guiding theme: Resource efficiency for processes and products

- unique educational and research offer in the field of process-oriented scientific disciplines
- unique position: close connection of natural sciences and engineering sciences





Objective: Management of processes for the fabrication of well-defined products

- Transformation (as well as transport and storage) of energy and materials (Engineering Sciences) through physical, chemical und biological processes (Natural Sciences)
- Research and teaching on the interfaces of our science areas



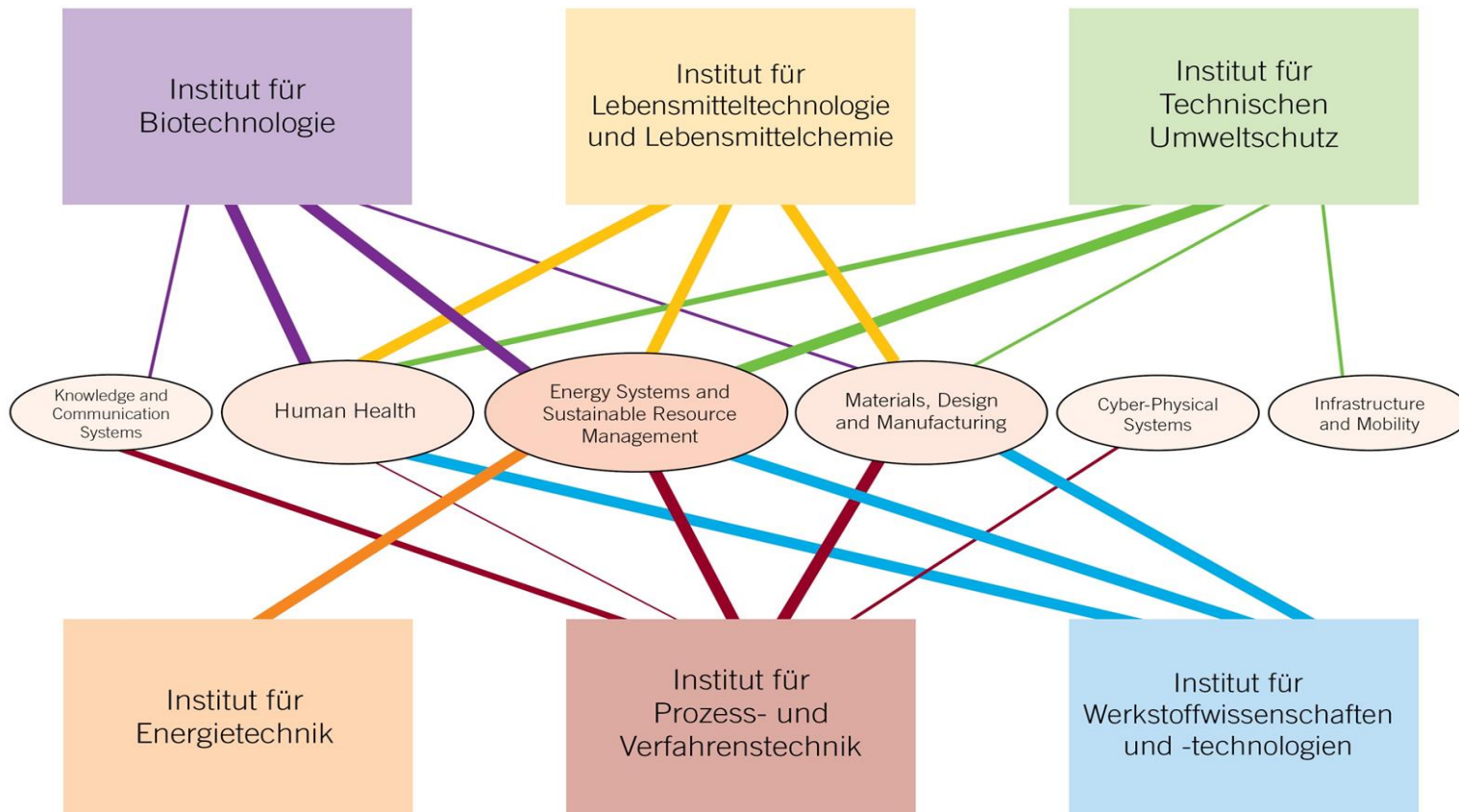


Facts (31.12.2018)

32	sought professorships (2 to come)
21	raised professorships (1 endowed chair, 6 joint professorships with non-university research facilities (3 to come) and 14 honorary and extraordinary professors)
10	private lecturer
306	research staff members, 194 financed by third parties
91	technical staff, 7 financed by third parties
35	administrative personnel, 1 financed by third parties
155	student assistants, 72 financed by third parties



Key areas





Institutes and Chairs I

	Vorname	Name	Fachgebiet
Hr. Prof.	Roland	Lauster	Medical Biotechnology
Hr. Prof.	Peter	Neubauer	Bioprocess Engineering
Fr. Prof.	Vera	Meyer	Applied and Molecular Microbiology
Hr. Prof.	Jens	Kurreck	Applied Biochemistry
Hr. Prof.	Juri	Rappsilber	Bioanalytics
Hr. Prof.	Lorenz	Adrian	Geobiotechnology
		Vorauss. 2021	Structural Biology
		Vorauss. 2021	Technical Immunology
Hr. Prof.	Hajo	Haase	Lebensmittelchemie
		N.N.	Lebensmittelanalytik
Hr. Prof.	Stephan	Drusch	Food Technology and Food Material Science
Hr. Prof.	Cornelia	Rauh	Food Biotechnology and Food Process Engineering
Hr. Prof.	Eckhard	Flöter	Lebensmittelverfahrenstechnik
		N.N.	Brewing Science
Fr. Prof.	Anja Maria	Wagemans	Food Colloids

Institute of Biotechnology

Institute of Food Technology and Food Chemistry



Institutes and Chairs II

	Vorname	Name	Fachgebiet
Hr. Prof.	Sven-Uwe	Geißen	Environmental Process Engineering
Hr. Prof.	Ulrich	Szewzyk	Environmental Microbiology
Hr. Prof.	Ferdi	Hellweger	Water Quality Engineering
Hr. Prof.	Andreas	Held	Environmental Chemistry and Air Research
Hr. Prof.	Matthias	Finkbeiner	Sustainable Engineering
Fr. Prof.	Vera	Rotter	Circular Economy and Recycling Technology
Fr. Prof.	Claudia	Fleck	Werkstofftechnik
Hr. Prof.	Walter	Reimers	Metallic Materials
Hr. Prof.	Aleksander	Gurlo	Ceramic Materials
Hr. Prof.	Dietmar	Auhl	Polymertechnik /Polymerphysik
Hr. Prof.	John	Banhart	Struktur und Eigenschaften von Materialien

Institute of Environmental Technology

Institute of Material Sciences and Technology



Institutes and Chairs III

	Vorname	Name	Fachgebiet
Hr. Prof.	Jadran	Vrabec	Thermodynamics and Thermal Separation Processes
Hr. Prof.	Harald	Krugger-Emden	Mechanische Verfahrenstechnik und Aufbereitung
Hr. Prof.	Matthias	Kraume	Chemical and Process Engineering
Hr. Prof.	Jens-Uwe	Repke	Process Dynamics and Operations Group
Hr. Prof.	Rudibert	King	Measurement and Control
Hr. Prof.	Martin	Kriegel	Building Energy
Hr. Prof.	Frank	Behrendt	Energieverfahrenstechnik, Umwandlungstechniken regenerativer Energien
Hr. Prof.	Felix	Ziegler	Energy Conversion Technology
Hr. Prof.	Boris	Heinz	Energy Systems
Hr. Prof.	Georgios	Tsatsaronis	Energietechnik und Umweltschutz
Fr. Prof.	Tetyana	Morozyuk	Exergy-based methods for refrigeration systems
Hr. Prof.	Gunnar	Luderer	Global Energy Systems Analysis
Hr. Prof.	Joachim	Seifert	Digital Interaction between Buildings, Energy Supply Systems and Users
Fr. Prof.	Rita	Streblow	

Institute of Chemical and Process Engineering

Institute of Energy Technology



How to do a PhD at Faculty III

Possibilities to do a PhD

- Teaching responsibilities (5 years)
- Project position with possibilities of doing the PhD (e.g. DFG)
- Position in a Research Training Group (e.g. Urban Water Interfaces)
- PhD as external doctorate candidate
(e.g. with a position in the industry, or at an external research institute; grants)



How to do a PhD at Faculty III / doctoral degrees

Doctoral degrees

- Doctoral degree in engineering (Dr.-Ing.)
- Doctoral degree in science (Dr. rer. nat.)



➔ The doctoral degree depends on the master's degree and the specific dissertation topic



How to do a PhD at Faculty III / application

Application steps

- *Letter of intent*
(mandatory for graduates of colleges of higher education with a diploma, and for candidates with a foreign degree, otherwise optional; required for the enrollment as PhD student)
- *Admission to PhD process*
(submission of the doctoral thesis and further documents → the evaluation process begins with the submission of all required documents)

For information and documents please visit the faculty's website



Direct access 48317



How to do a PhD at Faculty III / formats

Formats of a dissertation

Monograph

- Classical format (scientific paper)
- Prior publication of results is possible

Cumulative dissertation (publication-based)

- In accordance with the supervisor
- At least 3 publications (peer-reviewed paper), one of them can be submitted
- Form: Introduction, publications, discussion
- Co-authorship of reviewers possible



Scientific Defense in restricted presence at TU Berlin

- compromise between minimised physical presence and maximum legal certainty (partial presence implementation)
- only virtual Scientific Defense only in urgent, specially justified exceptional cases
- Members of the PhD Committee and the university public are digitally connected via a TUB-certified video conferencing tool, currently WebEx - tubMeeting
- Sections:
 1. Defense Participants: Candidate, Members of the PhD Committee, University public
 2. Voting of the members of the PhD Committee on the outcome of the PhD participants: Members of the PhD Committee
 3. communication of the results of the participants: Candidate, Members of the PhD Committee

The current version of the Implementation Rules for Scientific Debates can be obtained from Ms Neumann.



Support of Junior Scholars

Newsletter "WiMi-News" of the Department for Research and Junior Scholars

every three weeks with current information, including scholarships, calls and prizes.

→ please contact Dr. Becker to be added to the distribution list

Website especially for young scientists of the Faculty III (Direct Access 212604)

Overview of the most important contact points for doctoral students and postdocs

Information about consulting, funding, formalities or further education

Archive of the regular WiMi-News (with registration at the TU-Portal)

Catalogue of measures for the promotion of young scientists of the faculty and the university



Career paths after the doctorate

Scientific career or operation in the business sector?

70 % of the natural scientists and engineers with a doctorate do not work in the field of research but in other professional fields (Quelle: Jobvector <https://www.jobvector.de/karriere-ratgeber/bewerbung/karrierewege-nach-promotion/>)

→ Early orientation, career planning and competence development:

e.g. through

- Offers from TU DOC
- Further training courses offered by the ZEWK and WB II
- University Association for the Qualification of Young Academics in Germany (UniWiND)

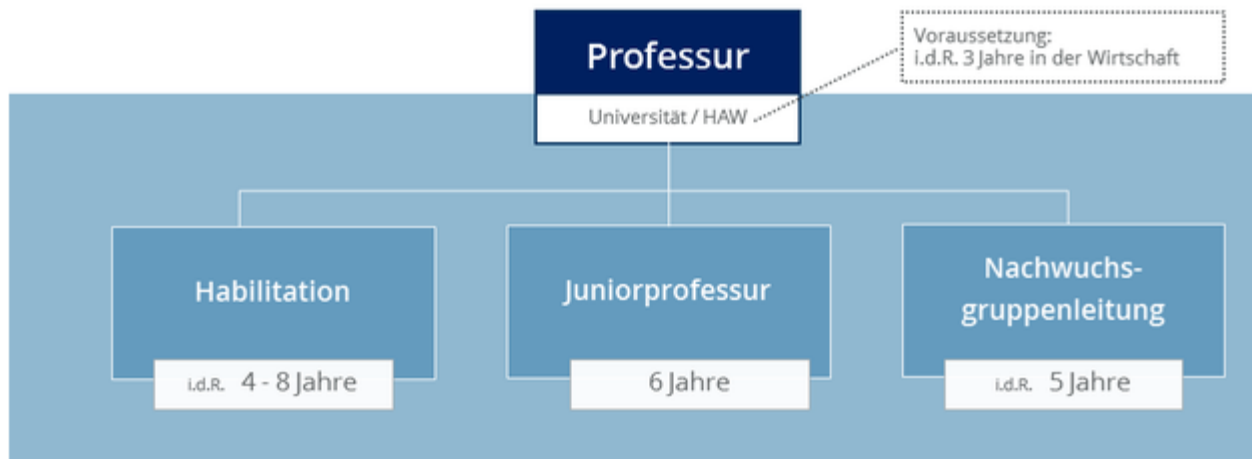


Career paths after the doctorate

Wege in die Wissenschaft

Nach: UniWIND (2015): *Qualifizierung in der Postdoc-Phase.*

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Frühe Postdoc-Phase





Career paths after the doctorate

Wege in die Wissenschaft | Akademisches Karriereportfolio

Mirjam Müller (2014): *Promotion – Postdoc – Professur: Karriereplanung in der Wissenschaft*

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Career paths after the doctorate

Doktorhut! Alles gut? | Außeruniversitäre Karriereperspektiven

UniWiND (2014): Nach der Promotion: Übergang zur Postdoc-Phase und in den außeruniversitären Arbeitsmarkt





Contact

Dekanat

Dean, also responsible for finances

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Vice Dean für learning and teaching, internationalization

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Vice Dean for research, young academics

Prof.-Dr.-Ing. Felix Ziegler,
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Postal Adress

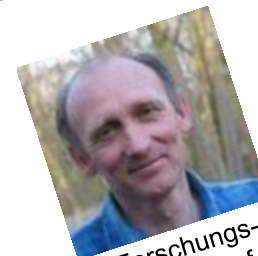
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Dekan Prof. Gurlo



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Ziegler



Contact

Faculty Service Center (FSC)

Head of Faculty

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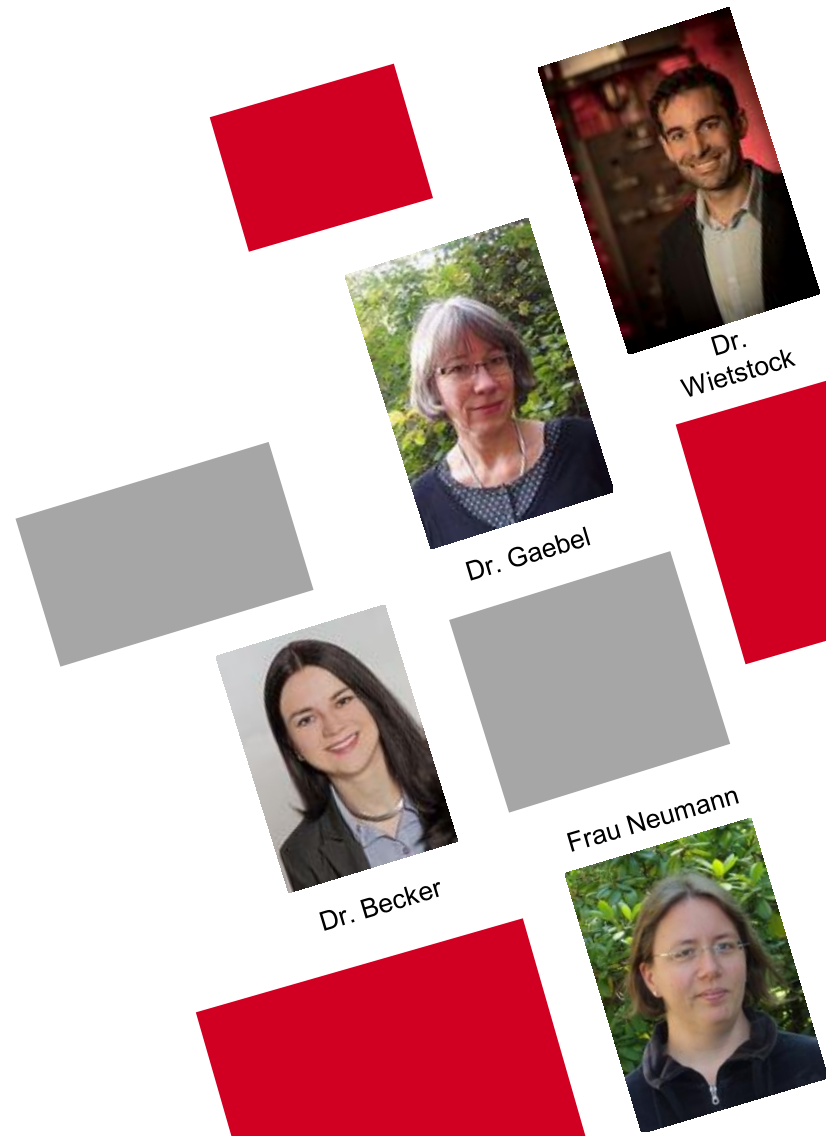
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