

# Gender Studies at Engineering Faculties in Austria

Bente Knoll

Büro für nachhaltige Kompetenz B-NK GmbH, Johannes Kepler University Linz

## INTRODUCTION

An analysis of various technical universities and faculties within Austria reveals that the number of female students has only slightly increased over the last few decades. At the Vienna University of Technology the overall women's quota among all studies was 24 % (2013). At the Faculty of Science and Engineering at the University in Linz, Upper Austria, the quota was 34 % (2011/12).

Over the last 15 years "Gender Studies" have become part of the curricula also at technical universities. Most of the universities have implemented gender studies lectures as a non-compulsory or an "elective" course ("Wahlfach"). Some studies, such as Architecture at the Vienna University of Technology provide a compulsory course. The Johannes Kepler University in Linz with its various faculties (law, social sciences, ...) has an outstanding position in Austria: Gender Studies as a compulsory class is implemented within all faculties and also at the facility of science and engineering – that means all alumnae and alumni had taken a course on gender studies and technology and engineering for at least 3 ETCS (European credit transfer and accumulation system) during the course of their studies.

Since 2005 the author has held various teaching assignments (seminars and lectures) at different universities in Austria in the field of gender studies and engineering. This paper provides an overview about the topics that are mostly discussed during her courses:

- Historical background and perspectives of women's liberation movement and its relation to science and technology
- Recent findings of gender inequalities in our society and their relation to working conditions in Austria
- Day-to-day gender-stereotype assumptions concerning technical competences and abilities of women/girls and men/boy on different educational levels (kindergarten, primary and secondary school, higher education and working lives) and their deconstruction
- Representation of technology as well as people dealing with technology within mass media and websites
- Gender scripts within technological artefacts and technological research and development processes
- Legal background of gender equality at the Austrian and European level

## THE SITUATION AT AUSTRIAN TECHNICAL UNIVERSITIES AND FACULTIES

An analysis of Austrian technical universities and faculties reveals that the number of female students has only slightly increased over the last few decades. As the table shows the increase was just about 4 percentage points in 9 years.

| <b>Studies in Science, Engineering and Technology at Austrian Universities</b> |          |          |          |          |              |
|--|----------|----------|----------|----------|--------------|
|  | <b>M</b> | <b>F</b> | <b>M</b> | <b>F</b> | <b>Total</b> |
| Winter semester 2013   | 66,6 %   | 33,3 %   | 59.634   | 29.774   | 89.408       |
| Winter semester 2012   | 66,6 %   | 33,3 %   | 59.632   | 29.878   | 89.510       |
| Winter semester 2011   | 66,9 %   | 33,0 %   | 58.117   | 28.675   | 86.792       |
| Winter semester 2010   | 67,2 %   | 32,7 %   | 56.032   | 27.273   | 83.305       |
| Winter semester 2004   | 70,7 %   | 29,2 %   | 43.999   | 18.224   | 62.223       |

Source:  
 Datawarehouse Hochschulbereich des Bundesministeriums für Wissenschaft, Forschung und Wirtschaft. (2014). Gender Monitoring; Studien Universitäten: Ordentliche Studien in Naturwissenschaften und Technik. Retrieved from <https://suasprod.noc-science.at/XLCubedWeb/WebForm/ShowReport.aspx?rep=010+gender+monitoring/003+studierende+studien+universitaet%20in%20naturwissenschaften+und+technik.xml&toolbar=true>

Looking at the graduates in particular and using the example of Vienna University of Technology the overall women's quota among all graduate in winter semester 2013 was 29 %. As the table shows this quota varies by the fields of studies. The lowest percentages of women graduates are noticeable in Mechanical Engineering – Economics (4.9%), in Electrical Engineering (7.5%) and in Computer Sciences (10.8%). Above average percentages of women we can state in Planning Studies (over 56%) and Technical Chemistry (47.5%).

| <b>Fields of Studies at the Vienna University of Technology (Graduates)</b> |               |               |            |            |              |
|---|---------------|---------------|------------|------------|--------------|
| <b>Winter semester 2013</b>   | <b>M</b>      | <b>F</b>      | <b>M</b>   | <b>F</b>   | <b>Total</b> |
| Architecture  | 43,6 %        | 56,4 %        | 106        | 137        | 243          |
| Civil Engineering   | 72,7 %        | 27,3 %        | 56         | 21         | 77           |
| Electrical Engineering  | 92,5 %        | 7,5 %         | 86         | 7          | 93           |
| Computer Sciences   | 89,2 %        | 10,8 %        | 165        | 20         | 185          |
| Mechanical Engineering  | 88,7 %        | 11,3 %        | 63         | 8          | 71           |
| Urban and Regional Planning   | 43,9 %        | 56,1 %        | 25         | 32         | 57           |
| Technical Chemistry   | 52,5 %        | 47,5 %        | 32         | 29         | 61           |
| Technical Mathematics   | 64,9 %        | 35,1 %        | 37         | 20         | 57           |
| Technical Physics   | 81,2 %        | 18,8 %        | 69         | 16         | 85           |
| Chemical and Process Engineering  | 80,0 %        | 20,0 %        | 16         | 4          | 20           |
| Surveying and Geoinformation  | 76,2 %        | 23,8 %        | 16         | 5          | 21           |
| Business Informatics  | 79,2 %        | 20,8 %        | 38         | 10         | 48           |
| Mechanical Engineering - Economics  | 95,1 %        | 4,9 %         | 58         | 3          | 61           |
| <b>Total sum</b>  | <b>71,1 %</b> | <b>28,9 %</b> | <b>767</b> | <b>312</b> | <b>1.079</b> |

Source:  
 Technische Universität Wien. (2014). TISS - Statistik: Studien pro Semester. Retrieved from <https://tiss.tuwien.ac.at/statistik/lehre/studien?filter%5B%5D=ohne+Mitbeleger&filter%5B%5D=nur+Absolventen&kategorien%5B%5D=Studienrichtung&kategorien%5B%5D=Geschlecht>

At the Faculty of Science and Engineering at the University in Linz, Upper Austria, the women's share of the student body was 26 % (winter semester 2011). Nevertheless, differences exist among the various fields of studies. A high disproportionate percentage of males is noticeable in such subjects as Mechatronics, Information Electronics, Computer Sciences and Business Informatics.

| <b>Fields of Studies at the Johannes Kepler University, TN - Faculty of Engineering and Natural Sciences</b>   |               |               |              |              |              |
|--|---------------|---------------|--------------|--------------|--------------|
| <b>Winter semester 2011</b>  | <b>M</b>      | <b>F</b>      | <b>M</b>     | <b>F</b>     | <b>Total</b> |
| Biological Chemistry   | 28,7 %        | 71,3 %        | 25           | 62           | 87           |
| Computer Sciences  | 87,0 %        | 13,0 %        | 795          | 119          | 914          |
| Information Electronics  | 92,2 %        | 7,8 %         | 106          | 9            | 115          |
| Polymer Engineering and Technologies   | 74,1 %        | 25,9 %        | 123          | 43           | 166          |
| Mechatronics   | 92,3 %        | 7,7 %         | 586          | 49           | 635          |
| Molecular Biology/<br>BioSciences  | 33,7 %        | 66,3 %        | 144          | 283          | 427          |
| Statistics   | 51,0 %        | 49,0 %        | 53           | 51           | 104          |
| Technical Chemistry  | 53,0 %        | 47,0 %        | 159          | 141          | 300          |
| Technical Mathematics  | 63,2 %        | 36,8 %        | 170          | 99           | 269          |
| Technical Physics  | 82,9 %        | 17,1 %        | 272          | 56           | 328          |
| Business Informatics   | 79,5 %        | 20,5 %        | 636          | 164          | 800          |
| <b>Total sum</b>   | <b>74,0 %</b> | <b>26,0 %</b> | <b>3.069</b> | <b>1.076</b> | <b>4.145</b> |
| Source:  |               |               |              |              |              |
| Johannes Kepler Universität Linz. (s.a.). JKU goes Gender: Frauen und Männer an der Johannes Kepler Universität Linz. Retrieved from <a href="http://www.jku.at/StGP/content/e12915/e12914/e12892/e12668/e131701/e238892/Gleichstellungsbericht_2012_2013_ger.pdf">http://www.jku.at/StGP/content/e12915/e12914/e12892/e12668/e131701/e238892/Gleichstellungsbericht_2012_2013_ger.pdf</a> |               |               |              |              |              |

Over the last 15 years “Gender Studies” become part of the curricula also at technical universities. In Austria most of the universities have implemented gender studies lectures as non-compulsory or “elective” course (“Wahlfach”). For certain studies however, such as Architecture at the Vienna University of Technology, Gender Studies is a compulsory course.

*„Im Rahmen der Curricula werden Lehrveranstaltungen mit wissenschaftstheoretischen und/oder methodenkritischen Inhalten in Bezug auf Frauen- und Geschlechterforschung den Studierenden zumindest als Wahlfach im Rahmen des Studiums angeboten und empfohlen.“*

([http://www.tuwien.ac.at/fileadmin/t/rechtsabt/downloads/Frauenfoerderungsplan\\_TU\\_Wien\\_26032012.pdf](http://www.tuwien.ac.at/fileadmin/t/rechtsabt/downloads/Frauenfoerderungsplan_TU_Wien_26032012.pdf))

The Johannes Kepler University in Linz with its various faculties (Faculty of Social Sciences, Economics and Business; Faculty of Law; Faculty of Engineering & Natural Sciences and, recently, the Medical Faculty) has an outstanding position in Austria: Gender Studies as an compulsory class is implemented within all faculties and also at the facility of science and engineering – that means all graduates had taken at least one gender studies course for at least 3 credits (ECTS) during their studies.

*„An der Johannes Kepler Universität ist die Frauen- und Geschlechterforschung (Gender Studies) sowohl in der Lehre als auch in der Forschung verankert. Gemäß des Frauenförderplans sind Gender Studies in allen neuen Curricula mit mindestens 3 ECTS-Punkten verpflichtend zu implementieren.“*

([http://www.jku.at/StGP/content/e12915/e12914/e12892/e12668/e131701/e211130/Gleichstellungsbericht\\_Jahre\\_2010\\_2011\\_ger.pdf](http://www.jku.at/StGP/content/e12915/e12914/e12892/e12668/e131701/e211130/Gleichstellungsbericht_Jahre_2010_2011_ger.pdf))

## **MY EXPERIENCES BASED ON MY VARIOUS TEACHING ASSIGNMENTS**

Since 2001 the author has held various teaching assignments (seminars and lectures) at different universities in Austria in the field of gender planning and geography as well as in the field of gender studies and engineering. Based on her experience she wrote together with Brigitte Ratzer a textbook (in the German language) providing an elementary overview on gender studies and their relevance for engineering and technology.

The author can reflect upon her experiences in teaching gender studies at various technical universities and faculties, as given in the following examples:

- Since 2005, she has provided 9 interactive seminars at the University of Technology in Vienna. These seminars were scheduled in each winter semester and were organised in a 2.5 days-block, in order to enable the students a deepen examination of gender topics related to their fields of studies as well as some self-reflection and rising of their individual gender-awareness in general.
- Since 2006, she has held 9 ex-cathedra lectures at the University of Technology in Vienna. These lectures took place 7 times each summer semester and lasted 4 units (in intervals of 45 minutes) every 2 weeks.
- Since 2008, she has given basic ex-cathedra lectures on gender studies, engineering, and technology at the Johannes Kepler University in Linz. These lectures are compulsory for all students at the Faculty of Engineering & Natural Sciences and all together the author has held 13 lectures. Each of them was organised in a block of a 2-days-lecture followed by a 1-day lecture.
- Over the last several years she did short term lectures and interactive seminars providing basic information on gender studies in engineering as well as basic gender awareness trainings. These courses were given at several other universities, such as the University of Applied Sciences in Eisenstadt, and in several postgraduate courses, such as sustainable mobility management at the Donau University in Krems and energy management at the Energy Institute of Linz.

The following table provides an overview of the number of students at the Johannes Kepler University in Linz, who were registered for the author's classes between 2009 and 2014. In total over 1,100 students were registered from various fields of studies and also students, for whom the lectures was not compulsory, such as from departments other than the Faculty of Engineering & Natural Sciences and from Doctorate Degree Programs, had registered for the courses.

| <b>Registered Students in the Gender Studies Course at JKU, TN - Faculty</b> |               |               |            |            |          |              |
|--|---------------|---------------|------------|------------|----------|--------------|
| <b>2009-2014</b>   | <b>M</b>      | <b>F</b>      | <b>M</b>   | <b>F</b>   | <b>?</b> | <b>Total</b> |
| Molecular Biology/<br>BioSciences  | 32,1 %        | 67,9 %        | 9          | 19         |          | 28           |
| Computer Sciences  | 82,0 %        | 18,0 %        | 73         | 16         | 5        | 89           |
| Information Electronics  | 91,4 %        | 8,6 %         | 64         | 6          | 1        | 70           |
| Polymer Engineering<br>and Technologies                                      | 77,9 %        | 22,1 %        | 166        | 47         | 2        | 213          |
| Mechatronics   | 93,4 %        | 6,6 %         | 354        | 25         | 8        | 379          |
| Statistics   | 25,0 %        | 75,0 %        | 4          | 12         |          | 16           |
| Technical Chemistry  | 50,4 %        | 49,6 %        | 62         | 61         | 3        | 123          |
| Technical Mathematics  | 57,1 %        | 42,9 %        | 4          | 3          |          | 7            |
| Technical Physics  | 78,2 %        | 21,8 %        | 133        | 37         | 2        | 170          |
| Business Informatics   | 62,5 %        | 37,5 %        | 5          | 3          |          | 8            |
| Studies from other<br>faculties  | 38,7 %        | 61,3 %        | 12         | 19         | 1        | 31           |
| Doctorate Degree<br>Program  | 77,8 %        | 22,2 %        | 21         | 6          |          | 27           |
| <b>Total sum</b>   | <b>78,1 %</b> | <b>21,9 %</b> | <b>886</b> | <b>248</b> |          | <b>1.134</b> |
| Source:  |               |               |            |            |          |              |
| Own survey   |               |               |            |            |          |              |

## **GENDER STUDIES IN ENGINEERING AND TECHNOLOGY – THE CONTENT**

In the following chapter the author provides – from her practical experience – an overview about the topics that were mostly presented in her classes. In general there are four main issues that are tackled:

### **1) Definitions, facts, and figures:**

In the German language the term “gender” is not that commonly used as in the English speaking world. Therefore, a definition including also the inter-sectional approach of both terms “sex” and “gender” helps to set up a common basis of understanding. As already mentioned, the participants of the courses mainly come from science, engineering or technology fields of studies. So this is highly recommended to include a brief introduction of the concept “doing gender” and the societal influence and construction on our being and present some recent findings of gender inequalities in our society and their relation to the working conditions in Austria, such as the gender pay gap.

During the classes the students are always very surprised about the lack of information and explanations of the 17 to 25 percent gender pay gap that is common – also when taking into account the professional background, full time equivalents, previous professional experiences as so forth.

### **2) Historical background:**

During the lectures an overview on the European women’s liberation movement and its relation to women’s education as well as science and technology is provided. Selected biographies of

women scientists, such as Sophie Brahe, astronomer in the 16<sup>th</sup> century and sister of Tycho Brahe; Maria Sibylla Merian, first German entomologist in the 17<sup>th</sup> century and traveller to South-America, Laura Bassi, first female professor at the University of Bologna and member of the Italian Academy of Sciences, Dorothea Erxleben, first female academic doctor in medicine in Germany and Caroline Herschel, first woman discoverer of a comet, show that women have always taken part in history but their achievements have often been forgotten or attributed to their achievements to their brothers or husbands.

When the first universities in Europe, especially in the German speaking world, were established in the 14<sup>th</sup> century, women were not allowed to enter university. The University of Zurich, Switzerland was the first German speaking university that allowed women to go to university – in the year of 1863. The students are surprised to learn that women were first allowed to enter the Vienna University of Technology as well as the other technical universities in Austria only in 1919. So we could not even celebrate the one hundred birthday of academic women in technology and engineering here in Austria yet.

During the courses, the author also provides an overview of the specific development of the job profile of an “engineer” in German speaking countries.

These historical background and facts show the development of female education in secondary and higher education which, overall, has impacted our lives as well as had an impact on opportunities in engineering that exist today.

### **3) Case studies:**

A main focus of the courses is dedicated to case studies and research findings. The author presents research on the day-to-day gender-stereotypes and assumptions concerning technical competences and abilities of women/girls and men/boys at various educational levels, such as in kindergartens, primary and secondary schools, in higher education as well as in the professional and working surroundings.

To highlight the situation of women in engineering, the case study “*Going my own way. The Situation of Independent Women Engineers in Austria*“ is discussed. This survey was financed by the Austrian Research Promotion Agency (FFG) and deals with the issue of independent work carried out by women in the technical-engineering field and approaches to the position of independent women engineers in Austria from various perspectives. This includes insight given to the engineers’ specific areas of activity, their general workday, as well as their specific experiences in starting up businesses and their motivation for doing so. The main aim of the study was to highlight, for the first time, the situation of independent women engineers in Austria and to develop a set of customised recommendations for improving their professional status.

Based on her own research findings, the author provides insight into representation of technology as well as into representation of people dealing with technology using the example of mass media, including printed brochures as well as websites.

In tacking the dimension of “gender at the organisational level of higher education institutions” the author provides a qualitative gender analysis of the faculty culture and social environment, specifically at the Electrical Engineering Faculty at the Vienna University of Technology. This study focussed on, at what appears to be at first glance, a very simple question: “What is

Electrical Engineering?” Between February and March 2007 interviews were conducted with all eleven heads of institutes at the Faculty of Electrical Engineering and Information Technology and with the head of the Micro Structure Centre. The aim was to highlight the diverse working areas and research fields from the actors’ perspective within faculty settings. The data and information gained via the interviews led to a better understanding of the culture and “behaviour” of the faculty, their research, their actors and actants (Bruno Latour). Based on the interviews, the researchers have learned a lot about the inner life of faculty members in electrical engineering. One specific example could be made of (electrical) engineering curricula, which is still based on the old idea of an extensive period of learning profound basics and principles of electrical engineering which is seen as a long lasting investment that will survive short term trends in research and enable lifelong learning. Thus the curricula function as a filter for those groups of students that are not willing or able to extensively learn theory without any practical reference. If one wants to get into the inner circle of technical sciences it is – according to the interview partners – necessary to pass a kind of initiation rite that is characterized by a stage of suffering at the beginning, a period of blind walking through a foreign world (i.e. learning theory without understanding the purpose) and the experience of salvation in the end (were “everything falls to its place” as one interview partner pointed out.) Of course the hero of this rite is a stand-alone person and does not need any help. This vision about the entrance conditions was nearly shared collectively.

#### **4) (Political) strategies towards gender equality**

In her classes, the author provides an overview of the legal background of gender equality at the Austrian and European level. At the European level the Treaty of Amsterdam as well as guidelines and directives point out the relevance of gender equality. In Austria the Austrian Constitution Law (Art. 7 (2) B-VG) makes it obligatory to provide gender equality and prohibits any form of discrimination in this regard. The Austrian government has committed itself to political and legal obligations for implementing a Gender Mainstreaming strategy as a part of its official federal policy. The national foundations for the implementation of Gender Mainstreaming are articulated within Article 7 of the Federal Constitutional Law and in five subsequent cabinet decisions and resolutions passed by the Council of Ministers. The most recent cabinet decision from the 6<sup>th</sup> of September 2011 focused more on establishing Gender Mainstreaming criteria among all ministries, departments as well as in legislation, funding programmes and public procurement. This latest decision also called for the provision of sex-disaggregated statistics in federal government reports, studies and publications as well as for reinforced information, training and inclusion of civil servants in Gender Mainstreaming projects. Additionally, the decision underlines those areas in which Gender Mainstreaming has been successfully implementing, e.g. gender budgeting and gender-neutral language, and emphasized that Gender Mainstreaming, consequently, be continued in these areas.

In order to illustrate these normative guidelines and regulations, concrete examples of gender equality in practice at universities, in industries, in research institutions, as well as, in small enterprises are provided. All these practices show that the implementation of gender equality strategies, such as Gender Mainstreaming and Gender Budgeting, are always linked to organisational development processes.

## CHALLENGES

As already mentioned, at the Johannes Kepler University in Linz, the gender studies classes are compulsory, meaning that students have to take the exams, however, they are not obliged to attend all the lectures personally. The table below shows the numbers of all exams that had to be graded by the author within the last few years – at the Johannes Kepler University in Linz.

| <b>Written Exams in the Gender Studies Course at JKU, TN - Faculty</b> |         |            |                      |
|--|---------|------------|----------------------|
| Sommer semester  | 2009    | 63         | written exams        |
| Winter semester  | 2009/10 | 64         | written exams        |
| Sommer semester  | 2010    | 53         | written exams        |
| Winter semester  | 2010/11 | 131        | written exams        |
| Sommer semester  | 2011    | 90         | written exams        |
| Winter semester  | 2011/12 | 113        | written exams        |
| Sommer semester  | 2012    | 88         | written exams        |
| Winter semester  | 2012/13 | 77         | written exams        |
| Sommer semester  | 2013    | 75         | written exams        |
| Winter semester  | 2013/14 | 63         | written exams        |
| Sommer semester  | 2014    | 66         | written exams        |
| <b>Total sum</b>   |         | <b>883</b> | <b>written exams</b> |
| Source:  |         |            |                      |
| Own survey   |         |            |                      |

As probably all lectures teaching gender studies in higher education institutions as well as vocational gender trainers are aware of: it is common fact that, when teaching gender studies and discussing gender (in-)equality, students tend to communicate their individual opinions and their individual day-to-day life experiences, e.g. with their boy- or girlfriends or with their own children and/or parents. It seems that, when debating gender issues, students neglect the academic discourse and gender theories.

The author aims to contribute to a “de-emotionalisation“ of gender and gender studies in STEM. She understands gender studies as a part of a broaden education

## MY DIDACTICAL APPROACH

As the previous sections show, the didactic approach of the author during her lectures is to provide a practical understanding rather than providing (too) much and an in-depth insight of gender studies theories. The students are, first of all, engineers and the author’s aim is to give them a glance at WHY gender and diversity perspectives may be important during their professional lives.

Therefore the following lines of arguments are used:

- European and Austrian national funding highly recommend to describe the gender impact of research and development
- Gender equality and gender budgeting are to be understood as cross cutting strategies

- Diverse project teams and a participatory reflecting the technology circle may bring better results
- When taking a gender perspective during the research and development process into account technologies and their products may become more suitable for different target groups

The personal goal of the author within her work and teaching is to open up people's eyes and to show the different perspectives that gender and diversity lenses may bring. Gender studies show that there is an alternative vision to the common-used-technology development process.

## **CONCLUSIONS**

Fix the women

Fix the institutions

Fix the knowledge

- Gender studies give us the opportunity to reflect and to think beyond boundaries
- Gender studies may help to find a way to deal with the complexity of the world
- Implementation of compulsory gender studies in all curricula is highly recommended

Gender in practice

## **ACKNOWLEDGMENTS**

The author would like to thank all students participating her gender studies classes from 2001 onwards at the universities of Klagenfurt, Vienna, Salzburg and Innsbruck as well as at the Johannes Kepler University in Linz, the Vienna University of Technology, the Donau University Krems and the University of Applied Sciences in Eisenstadt.

## **ABOUT THE AUTHOR**

Bente Knoll is founder and managing director of Büro für nachhaltige Kompetenz B-NK GmbH, a management consultancy and applied research company that is engaged in research and consulting processes within ecological, economic, social dimensions of sustainability. The fields of interests and experience include the integration of gender and diversity perspectives in science, engineering, technology, urban, transport and landscape planning, mobility research, as well as sustainable development. B-NK is specialized to take a gender and diversity perspective into account – also in apparently gender-neutral areas like town, landscape and transport planning, mobility research, science, engineering and technology, environmental research and sustainable development.

Bente Knoll has an academic and professional background and long-time experience in landscape, spatial and transport planning, mobility research, environmental sciences and engineering, sustainable development, gender equality as well as systemic communication and social media. In addition to her self-employed work, she works as a lecturer at the Vienna University of Technology, the Technical and Engineering Faculty of the University in Linz in Upper Austria as well as at the University for Applied Sciences in Eisenstadt, Burgenland. She has various teaching assignments, holds basic and advanced lectures as well as seminars in Gender Studies and Engineering. In the year 2010, she published a basic textbook (in German language) on this topic together with Brigitte Ratzler.

Bente Knoll is member of the board of the

- Austrian network and association WIMEN - Women in Mobility & Energy, Environment Network [www.wimen.at](http://www.wimen.at)
- Austrian research association TramOnDemand – promoting sustainable rail-bounded mobility in suburban and rural areas [www.tramondemand.at](http://www.tramondemand.at)

Contact:

B-NK GmbH Buero für nachhaltige Kompetenz

Schoenbrunner Strasse 59-61/26, A-1050 Vienna [www.b-nk.at](http://www.b-nk.at)

Telephone: +43 676 6461015

E-Mail: [bente.knoll@b-nk.at](mailto:bente.knoll@b-nk.at)

