



FOTOS: SANDRA GÖTTISHEIM

**PRANJAL RANKA,
GRADUATE OF
HECTOR SCHOOL
OF ENGINEERING
AND MANAGEMENT
AT KIT**

BY DR. STEFAN FUCHS

Studying at a university in Europe seemed a long way off for Pranjal Ranka. Today, the graduate of KIT's HECTOR School works in Germany as an engineer

Ein Universitätsstudium in Europa schien für Pranjal Ranka in weiter Ferne zu liegen. Heute arbeitet die Absolventin der HECTOR School des KIT als Ingenieurin in Deutschland

**“Now I Am
a Better
Version
of Myself”**



Pranjal Ranka has traveled a particularly long way between her place of birth in India and her graduation from HECTOR School in Karlsruhe. She was born in Bhilwara, a rather small town by Indian standards, half-way between Mumbai and New Delhi, nicknamed the Manchester of Rajasthan because of its renowned textile industry. Despite her excellent school grades, a university degree in Europe seemed a very long way off.

lookKIT: You are the first in your family to graduate from college. Traditional ideas about the role of women presented a major obstacle in the beginning. What were the challenges you faced in your family?

Pranjal Ranka: The first big challenge was to get out of my birthplace, where there is a strict division of roles. Men primarily study and work, while women stay at home. One assumes that it is not safe for girls to go out. I never thought I could even think of getting a job. No woman in my family worked. In my city, primarily men work. My parents were apprehensive about me. They didn't want to let me go alone to college, even though it was just a few miles from my home. They used to drop me there and pick me up again in the evening. Only after the first semester was I allowed to use public transport.

You chose electronics for your college degree. What influenced your choice?

Since nobody in my family had graduated, none of my family members had any advice related to studying. I took electronics because most of my classmates aspired to study that. That put me in a dilemma because studying engineering was more expensive than any other studies I could choose. I had no clue what I could expect, what I was going to do,

or how tough the courses would be. Choosing a career path was not the only hurdle; financing my career was one of many more obstacles.

What was your next step after the exams?

I halfheartedly applied for jobs in Bangalore, called the Indian Silicon Valley. Initially I just wanted to check my level of employability. I didn't tell my parents. When the companies started calling to invite me for interviews, I was sad because I knew my family would never allow me to go to a city almost 2000 kilometers away. Nonetheless I gathered all my courage and told them that I had studied hard and wanted to make use of it. To my surprise, they supported me. I taught myself programming with C++ and Java. I was dying to know its applications because in college, you don't know much about what is happening in the industry.

Your first professional assignment took you to Pune. It is the 7th most populous city in India. How did you experience work and life in a metropolis?

It was like a dream I never thought could become reality: Working in a multinational team, talking English, etc. With only one other candidate, I got the chance to work in a product team at the company Addnode India. I wanted to justify my position and had to work hard. Though I had studied electronics, I didn't have the basic knowledge that most IT students have. But my colleagues helped me a lot. We were teleworking with a team in Slovakia. Two vastly different cultures were working closely together. I also met people from all over India. It was the first time I interacted with people who spoke languages other than my native language.

In 2018, you had the opportunity to visit the parent company in Slovakia. What was that experience like?

I cannot describe my feelings when I landed in the Czech Republic. In Prague I was walking on the street while looking at renaissance and gothic architecture. I still remember that moment. I could not believe I was on a different soil than my motherland. That was a very proud moment for me. I had the opportunity to see something of Europe. I went on a solo backpacking trip to many countries in West Europe. I liked the public convenience and how things were organized in these countries. This was my first time so I thought I should experience Europe at the max. I did thorough research and found that the best way for me to experience Europe is to study there. Fortunately, I came across the HECTOR School, which offers a course in Master in Information Systems Engineering & Management in English. I quit my job in India in September 2019. Five days later, I came to Karlsruhe. I thought I had to take those risks to achieve something in my life. There were initial challenges, such as finding accommodation, but everything went well.

How did you manage to fund your master's studies?

I had worked three years in India and had some savings that were sufficient to pay the fee for one of the four semesters. The only way to bear the remaining expenses was to work part-time. The course structure at HECTOR School made this possible. I am thankful that I got a job as a Software Developer at emmtrix Technologies in Karlsruhe. Not only could I earn enough money to support my expenses, but I also learned about the software industry in Germany. To my great relief, emmtrix sponsored my master's thesis. But still, the money wasn't sufficient to pay my fees. Fortunately,



*Pranjal Ranka
met the hurdles
on her way with
strong will,
courage and
ambition*

*Pranjal Ranka
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Hürden auf ihrem
Weg mit starkem
Willen, Mut und
Ehrgeiz*



„Jetzt bin ich eine bessere Version meiner selbst“

Pranjal Ranka, Absolventin der HECTOR School of Engineering and Management am KIT

Die Inderin Pranjal Ranka hat einen weiten Weg zwischen ihrem Geburtsort Bhilwara und ihrem Abschluss an der HECTOR School in Karlsruhe zurückgelegt. Trotz ihrer hervorragenden Schulnoten schien ein Universitätsstudium in Europa zunächst in weiter Ferne zu liegen. Doch heute arbeitet Ranka als Softwareentwicklerin beim Analysegerätehersteller Bruker Biospin in Rheinstetten. Einen wesentlichen Entwicklungsschub hat ihr dabei das Masterstudium an der HECTOR School gegeben. „Diese drei Jahre meines Lebens waren die bisher produktivste Zeit. Es gab viele Höhen und Tiefen, aber ich habe immer versucht, etwas Neues zu lernen und an mich zu glauben. Jetzt bin ich eine bessere Version meiner selbst“, fasst Ranka die Zeit an der HECTOR School zusammen. Der erste große Schritt war für sie, aus ihrem Geburtsort herauszukommen und zu studieren. „In meinem Umfeld hatten hauptsächlich Männer eine Arbeit, die Frauen nicht“, sagt sie. Ranka schaffte nach ihrem erfolgreichen College-Abschluss mit dem Hauptfach Elektrotechnik dennoch den Sprung auf die Universität. Ihr erster Job bei der indischen Niederlassung der Firma Addnode brachte sie dann in Kontakt mit Europa. Sie arbeitete dort in einem internationalen Team. „Es war das erste Mal, dass ich mit Menschen zu tun hatte, die sich in anderen Sprachen als meiner Muttersprache unterhielten“, erzählt Pranjal Ranka. Die Tür zur Welt öffnete sich für sie, als sie 2018 den Stammsitz des Unternehmens in Prag besuchte. „Ich wollte die Chance ergreifen, Europa in vollem Umfang zu erleben“, sagt die Softwareentwicklerin. Bei ihrer Recherche stieß sie auf die HECTOR School, die einen englischsprachigen Masterstudiengang in Information Systems Engineering & Management anbietet. Um die Studiengebühren zu finanzieren, musste die Inderin nebenher Teilzeit arbeiten. Ein schwerer Unfall brachte ihre Pläne durcheinander, aber nichts hielt sie davon ab, das Studium pünktlich zu beenden: „Der stolzeste Moment war die Graduiertenfeier der HECTOR School im Juni dieses Jahres. Meine harte Arbeit war nicht umsonst gewesen, und am Ende habe ich mein Ziel erreicht“, sagt Ranka glücklich. ■

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I got a student loan from KFW bank, which was a big help in managing my fees. I also am thankful to HECTOR School for enabling a flexible payment plan.

Can you remember your first courses at the HECTOR School?

Initially, I took management classes related to Marketing and Financial Accounting. The diverse cohort allowed me to get to know the particularities of different corporate cultures. One of the advantages of HECTOR School is that you get to know not only the bookish things but also grow your network and broaden your horizons.

How would you describe your relationship with the lecturers at HECTOR School?

The lecturers were always very supportive. The fifteen-minute breaks between the courses allowed us to interact with lecturers. I am very thankful that Professor Jörg Henkel and Professor Alexander Mädche helped me complete my thesis early so I could take a full-time job in September 2021.

How did you experience the rhythm between the two-week study units and working at the company?

It was quite hectic. The classes started at 8 in the morning and ran until 5:30 PM. Twice a week, I had additional German classes till 9 in the evening. Living in Pfinztal, I needed half an hour by tram to get to school in Karlsruhe. I used to leave home around 7 AM and return at 10:30 PM. On weekends there were exams

and homework. However, everyone at emm-trix always supported me. I was never assigned for any tasks at my workplace during my two-week study units. I can proudly say that I had a fantastic work-study-life balance.

In 2020, you suffered an accident which severely restricted your mobility. How did you handle this challenge?

During an alumni event of HECTOR School in Mannheim, I was walking down the street and suddenly fell. My knee bone got dislocated, and my cartilage was damaged. It turned out to be the most challenging time of my life. Even harder than taking the risk of coming to Germany. There were strong COVID restrictions at that time. My friends couldn't visit me regularly. My daily activities became challenging, such as cooking on crutches and in a wheelchair, and studying with constant pain. It was challenging to manage everything – course work, German classes, recent job, etc. – while I was recuperating from surgery and could not walk. During that time, I missed one module because I didn't have a laptop. However, these challenges made me emotionally strong. It boosted my confidence to the next level, and I believe I am ready to face even more challenges in the future.

In contrast to those tough times, what was a particularly happy time for you in Karlsruhe?

The happiest moment for me was when I got an acceptance letter for a job at Bruker. It was a dream come true. The proudest moment was my graduation ceremony in June this year. I cannot express how it felt when I wore the robe for the convocation. I burst into tears of joy. Despite so many hurdles along the way, I never stopped trying. My hard work was not in vain, and finally, I had achieved my goal. My family was overwhelmed. Unfortunately, they couldn't come for the ceremony. I wish they could have lived that moment at my side.

How did your experience at HECTOR School influence you?

These three years of my life were my most productive period so far. There were many ups and downs, but I never stopped trying to learn something new and believing in myself. Now I am a better version of myself. That's the most significant improvement that I can see. Everybody in my family and those who know me well keep telling me that I have significantly improved. Moreover, I can contribute more efficiently and confidently to Bruker, my current employer, because of what I learned at HECTOR School. ■

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HECTOR School of Engineering and Management – The Technology Business School at KIT

TRANSLATION: MAIKE SCHRÖDER

In 2005, the HECTOR School of Engineering and Management was established at KIT's International Department with funds from Hans-Werner Hector, co-founder of the SAP company. Its continuing education programs are tailored to the needs of young executives of national and international companies facing the challenges of competition and globalization. The HECTOR School offers six master's programs corresponding to jobs in product development, production and operations, energy engineering, information systems, mobility systems, and financial engineering.

Study contents: The focus of the HECTOR School lies on imparting the latest technology know-how and management expertise. The programs combine five technology modules with five management modules and, thus, differ significantly from the usual master's program of business administration. They are intricately connected to KIT's research activities, which ensures students are acquainted with the latest technological developments and research findings. The study programs at HECTOR School are part-time programs, enabling technology transfer to

companies and providing an impetus to personal careers. Professional experience is required for attendance. This increases the course's practical relevance. Students from all over the world and from different fields enhance the diversity of study groups and interdisciplinary thinking and learning. The HECTOR School offers several types of training from certificate courses to training courses customized for companies. The training is designed to support transformational processes in the energy, CO₂ neutrality, digitalization, and mobility sectors.

Organization of studies: Fourteen days of on-campus studies at the International Department alternate with work at the company. Exams mark the completion of each on-campus. In the final semester, the master's thesis takes the form of an independent innovation project at either the company or at KIT. Four master's programs include a module for studies in Spain or China.

More information:
www.hectorschool.kit.edu



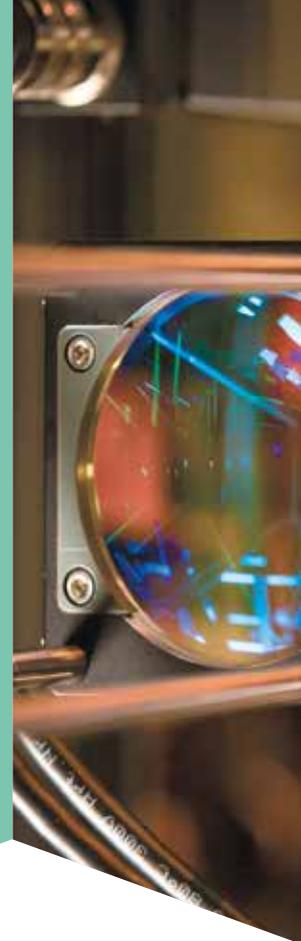
Excellence in International Education & Further Qualification

LEARNING AT THE SCHOOLS OF THE INTERNATIONAL DEPARTMENT OF KIT

TRANSLATION: MAIKE SCHRÖDER

In 1999, the International Department of KIT gGmbH was established as a non-profit limited-liability company. The goal was to internationalize German mechanical engineering training that closely connected teaching, research, and collaboration with industry and made it attractive to young researchers from abroad. Today, the campus of the International Department ac-

commodates students and four international schools that offer English-taught bachelor's, master's, doctoral, and continuous education programs corresponding to jobs and in close cooperation with industry. The four schools are the HECTOR School of Engineering and Management, the Carl Benz School of Engineering, the Karlsruhe School of Optics & Photonics, and the HEiKA Graduate School on Functional Materials at the Cluster of Excellence 3D Matter Made to Order.



Carl Benz School of Engineering (CBS) – The Mechanical Engineering College of KIT

The Carl Benz School of Engineering was founded in 1999. The first school of the International Department aims to enhance the international visibility of mechanical engineering studies at KIT.

Study contents: The international B.Sc. Program in Mechanical Engineering of the KIT Department of Mechanical Engineering and the College Program of the CBS are closely interlinked and help international high school graduates successfully start studies of mechanical engineering. Additional offerings and intensive support services guarantee the success of studies through the start of employment.

Organization of studies: The B.Sc. program of six semesters starts every winter semester and includes a preparatory course of eight weeks with exams in mathematics, physics, chemistry, and English. Starting in the fifth semester, students are offered specializations in Automotive Engineering, Energy Engineering, and Global Production Management. The CBS College Program includes accommodation on the campus of the International Department, help from mentors, German language courses, and personal advice on studies and careers, as well as administrative and academic support. In higher semesters, students have the opportunity to take part in industry or research projects.

More information:
www.carlbenzschool.kit.edu

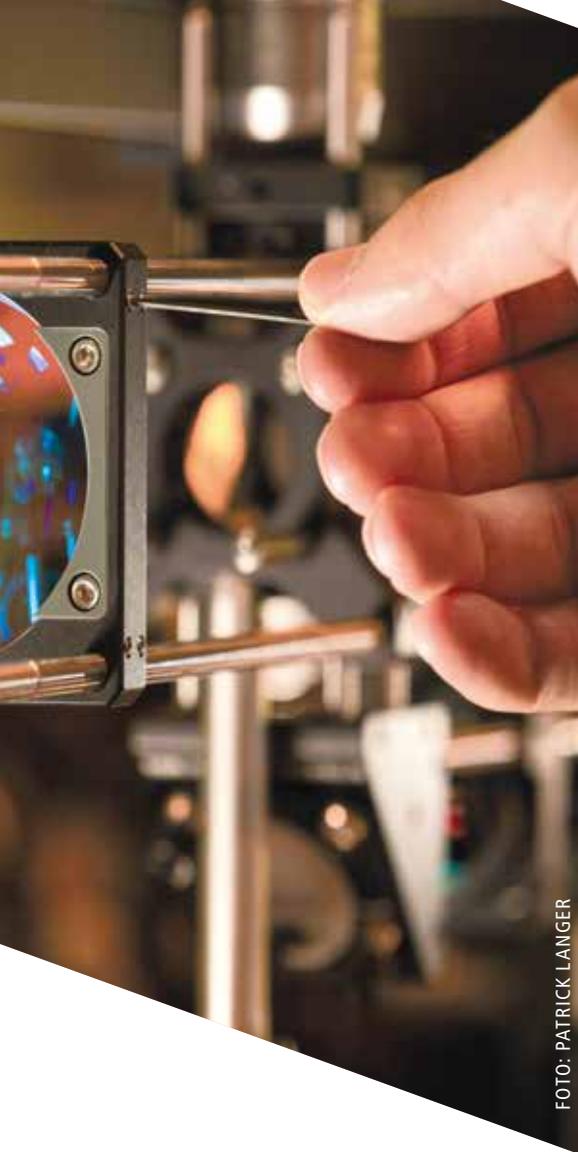


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Cluster of Excellence 3D Matter Made to Order & HEiKA Graduate School on Functional Materials

The Cluster of Excellence 3D Matter Made to Order is a joint research cluster of Heidelberg University and KIT. Since 2019, the Cluster has been funded by the Federal Ministry of Education and Research and the German Research Foundation (DFG) under the Excellence Strategy of the Federation and the States as well as by Carl Zeiss Foundation. The HEiKa Graduate School is one of the central elements of the Cluster in the promotion of young talents.

Importance of the Graduate School: Early-stage researchers are offered scientific training in the interdisciplinary research areas covered by the Cluster and receive support in executing their doctoral projects. The young scientists are prepared for their future professional careers in science or industry. In addition,

the Graduate School is a platform for exchange across disciplines and locations in order to start scientific collaborations.

Support and training offers: The early-stage researchers conduct research in the group of the principal investigator supervising them. They are affiliated to one or several research focuses of the Cluster. Apart from research work, they attend training modules on research, science communication, and research data management. In this way, the young researchers are enabled to master the technical challenges of their experimental and/or theoretical work in the strongly interdisciplinary environment of the Cluster. The researchers are free to join the MBA Fundamentals Program of the HECTOR School to extend their skills. In addition, the HEiKA Graduate School on Functional Materials offers mentoring, coaching, and soft skills training.

More information:
www.3dmattermadetoorder.kit.edu/graduate_school.php

Karlsruhe School of Optics & Photonics (KSOP)

The Karlsruhe School of Optics & Photonics was set up in 2006. The first graduate school of KIT was financed with funds from the Excellence Initiative of the Federation and the States.

Study contents: The Master's Program (M. Sc.) in Optics & Photonics offers multidisciplinary training in the area of optics and photonics. Specializations in the five areas covered by KSOP allow for a seamless transition to the international doctoral program. Scientific training is complemented by a strong network of industrial partners supporting the start of professional careers in one of the most innovative high-tech industries. The modules of the doctoral program convey technical skills and management knowledge. Participation in the MBA Fundamentals Program of the HECTOR School is possible. Men-

tors support the doctoral candidates. Numerous networking events enhance interdisciplinary exchange.

Organization of studies: During the four-semester master's program, students are offered exclusive access to projects of the industrial partners and get to know prospective employers. The KSOP Summer School, which includes poster sessions and presentations by external scientists, gives students the opportunity to strengthen their scientific network and to find their personal career path in academia.

More information: www.ksop.kit.edu



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