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India and Germany are natural partners. Despite the geographical distance between them, India and Germany are very close in terms of values, interests and goals. Both countries are strong democracies, upholding human rights and the rule of law, organized in federal systems. Both our economies are thriving while bilateral trade is increasing. In addition, India and Germany are dedicated to tackling global challenges, be it climate change, international terrorism or global pandemics. In short: our countries are strategic partners - a trait exemplified by the fact that the Prime Minister of India and the German Chancellor hold regular Inter-Governmental Consultations, bringing together both their Cabinets: 2013 and 2017 in Germany, 2011 and 2015 in India.

Scientific collaboration always enjoys a high priority during these consultations. As a consequence, Indo-German scientific relations are thriving. Currently, nearly 14,000 Indian students are enrolled at German universities, a number that has more than doubled over the past four years. Both our governments are funding the establishment of long-term partnerships between Indian and German universities. Moreover, India and Germany maintain joint large-scale research projects in various fields, from physics to computer sciences, from agriculture to biotechnology, or from civil security to sustainability research.
Indo-German scientific collaboration is largely shaped by two outstanding institutions. One of those is the Indo-German Science and Technology Centre (IGSTC), based in Gurugram near New Delhi. Founded in 2010, it is dedicated to funding applied research projects involving academia and industry from India and Germany. Each side is funding the Centre with 4 million Euros per year. The other outstanding institution is the German House for Research and Innovation (DWIH) New Delhi.

DWIH New Delhi is one of five such houses which the German government has set up five years ago.

The consortium of DIWH New Delhi consists of 15 organizations, among them funding organizations, research institutions, universities as well as the Indo-German Chamber of Commerce. The highlight of DWIH activities in 2016 was the three-day “CityScapes” conference, which I had the pleasure to inaugurate – a huge academic gathering shedding light on the themes of cities and urbanization from various angles.

I would like to thank the whole staff of DWIH New Delhi and the DWIH consortium members for all their hard work and continuous efforts in 2016. The German Embassy will, of course, continue to extend its full support to DWIH New Delhi and I am already looking forward to upcoming DWIH events in 2017.
The German Houses of Research and Innovation – or DWIH as we say in German, were established to intensify cooperation with strategic partner countries in the field of science and innovation. With backing and support of the Federal Foreign Office (AA), five DWIHs were set up in Brazil, India, Japan, Russia and USA as beacons of the German science diplomacy.

It is my proud privilege to share with the readers that from the year 2017 the German Academic Exchange Service – DAAD will take over the management of all DWIH around the world. This will give the DWIH a global perspective and a global edge. The German Houses of Research and Innovation will serve as central points of contact for international universities, research organisations and industry. They will create platforms for exchange and cooperation by providing expert advice on partnership opportunities, and through seminars, conferences, B2B events, institutional networking etc. In this, the DWIH is ably supported by various member organisations such as funding bodies, research institutions, universities and industry stakeholders.
The DWIH in India is a strong member of the international DWIH network and currently has 15 member organisations. Many of these have been present in India for a long time and have their well-established networks that play an important role in the ongoing Indo-German cooperation in various fields. Amongst the funding organisations, the DWIH has the Alexander von Humboldt Foundation - AvH, German Academic Exchange Service - DAAD and German Research Foundation - DFG as its members. Its members from the sphere of universities or research organisations include RWTH Aachen University, Freie Universität Berlin, University of Göttingen, Heidelberg University, University of Cologne, Technical University of Munich – TUM, Forschungszentrum Jülich, Max Planck Society, Fraunhofer Society. Organisations working in the areas of development cooperation, commerce and industry such as such the Deutsche Gesellschaft für Internationale Zusammenarbeit - GIZ, Indo German Chamber of Commerce - IGCC and Bavarian-Indian Centre for Business and University Cooperation – BayIND are also members of the German House for Research and Innovation - DWIH New Delhi.

I convey my gratitude to the DWIH in New Delhi and all its members for their dedication and commitment in working towards the goals of the DWIH, and wish them all the best for their future endeavours.
Executive Summary

Ms Heike Mock
Director German House for Research and Innovation, DWIH New Delhi and Director DAAD Regional office New Delhi

Germany and India consider science and innovation to be key areas for ensuring economic, social and sustainable development. For over 60 years, the two countries have promoted comprehensive and fruitful scientific cooperation. With the opening of the German House for Research and Innovation - DWIH New Delhi, Germany has taken an important step towards strengthening ties with its Indian partners.

The year 2016 witnessed an important change in that the German Academic Exchange Service - DAAD was entrusted with the leadership of the DWIH consortium in New Delhi. Yet, it was another year filled with activities. DWIH and its members organised numerous workshops and conferences on varied subjects in cooperation with several institutions of higher education in India.

The flagship event of 2016 was the Indo-German conference ‘CityScapes’ that took place in New Delhi in October. It attracted a large number of senior scientists, academicians as well as young researchers and stakeholders who discussed several aspects of urban development reaching from energy supply to the industry perspective, governance aspects to sociological impacts of migration.
Another highlight was the Falling Walls Lab India that the DWIH organised in partnership with Indian Institute of Scientific Education and Research (IISER) Pune. Twelve young researchers and entrepreneurs presented their innovative concepts to a renowned jury and competed for participation in the finale that took place in Berlin.

In cooperation with the Embassy and the Consulates of the Federal Republic of Germany, the DWIH also hosted numerous Science Circle Lectures in different cities of India on topics as varied as common law, air pollution, infectious diseases or paediatric oncology. For the Science Circle Lectures, renowned German scientists are invited to deliver public lectures in their fields of expertise.

In addition to these events, the consortium members of the DWIH New Delhi organized several workshops and conferences on pertinent themes such as ‘bridging the skill gap in engineering’, ‘pediatric leukemia’, ‘smart cities’ ‘sustainable water resource management’, or ‘high-performance computing’.

The initiatives of the DWIH New Delhi in the year 2016 were in keeping with its goal to boost Indo-German research cooperation, and met with great success. We look forward to more intensive cooperation in science in innovation in years to come.
Introduction

Created as one of the Federal Foreign Office’s strategic initiatives to internationalise science and research, the German Houses for Research and Innovation encourage and facilitate academic exchange, scientific collaboration, and research & development projects, acting as an active link between government officials, policy makers and representatives of leading German institutions. DWIHs have established their presence in five countries around the world: São Paulo (Brazil), Tokyo (Japan), Moscow (Russia), New York (USA) and New Delhi (India) and are committed to their mission of generating innovative technologies for industry.

The German House for Research and Innovation – DWIH New Delhi was inaugurated in October 2012 and is a consortium of 15 German organisations comprising funding organisations, research centres and universities. The main objective of DWIH New Delhi is to promote German research landscape in India, enhance existing research cooperation and strengthen ties between Indian and German academic and scientific communities.
Objectives

DWIH New Delhi

• Provides a platform for showcasing and promoting German contributions to science, research and innovation amongst Indian academics, scientists and researchers.
• Facilitates joint initiatives and bilateral projects between India and Germany.
• Assists scholars, young researchers and scientists to engage with German institutions.
• Acts as an active link between stakeholders and scientific communities in India and Germany.
Members of Board – DWIH New Delhi

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Ambassador Scientist
Alexander von Humboldt Foundation (AvH)

Dr Stefan Diederich
Head, Liaison Office
New Delhi
Freie Universität Berlin

Prof. Dr Dr h.c. Jürgen Lehmann
Chairman of the Board of Directors of BaylIND and President of Hof University of Applied Sciences

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Head of Science and Technology Section  
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The Alexander von Humboldt Foundation promotes academic cooperation between excellent scientists and scholars from abroad and from Germany. To this end, it grants more than 700 research fellowships and research awards annually. Researchers from all over the world come to Germany to work on a research question they have chosen themselves together with a host and collaborative partner. Scientists and scholars from Germany can also benefit from such support and carry out a research proposal abroad as the guest of one of well over 28,000 alumni of the Alexander von Humboldt Foundation worldwide: the Humboldtians.

Once a Humboldtian, always a Humboldtian. Even after the stay in Germany has come to an end, the Alexander von Humboldt Foundation maintains close ties with the alumni of its programmes. Alumni sponsorship is tailored to the needs of individual Humboldtians, providing flexible support for individual research stays as well as for cooperation with others.

With around 5,500 alumni, Asia has one of the largest networks of Humboldtians on a single continent. The Humboldt Network in India has grown continually since the Alexander von Humboldt Foundation was founded in 1953. Currently, 1,282 Humboldtians are based at universities and research institutions in the country, including 26 researchers who have received one of the Foundation’s prestigious research awards. So far, the Alexander von Humboldt Foundation has sponsored 15 Feodor Lynen research fellows who conducted research in collaboration with a member of the Humboldt Alumni Network in India.

Our perspectives

Today, more than ever, research is international and subject to fierce competition between research locations. The Alexander von Humboldt Foundation is therefore constantly improving its offers for globally sought-after researchers in order to attract the very best scientists and scholars and thereby strengthen research in Germany. For this purpose, the Foundation collaborates with various partners in marketing Germany internationally as a location for research and continues to expand both its cooperation with the European Union and its research and mobility programmes. On the basis of its traditional strengths as well as new ideas and initiatives, the Alexander von Humboldt Foundation contributes to making Germany a leading destination for the international academic elite.
Furthermore, the Alexander von Humboldt Foundation supports international cultural dialogue as a long-term policy for peace and security by utilising its network of understanding. The Foundation’s responses to specific regional and political requirements include a programme tailored to the needs of researchers from transition and developing countries, initiatives for Central and Eastern Europe and for European-Islamic cultural dialogue.

Both in its marketing of research in Germany and in the political dimension of its work the Alexander von Humboldt Foundation draws on its greatest asset: the worldwide network of Humboldtians, many of whom hold not only important scientific positions but also leading and influential political offices.

The Alexander von Humboldt Foundation’s Ambassador Scientists disseminate information about Germany as a research location at universities and research institutions in Germany and abroad, focusing particularly on the Foundation’s sponsorship programmes and international network. In India, the Alexander von Humboldt Foundation is represented by two Ambassador Scientists, Professor Dr Rekha Vaidya Rajan (Jawaharlal Nehru University, Delhi) and Dr Amol A. Kulkarni (National Chemical Laboratory, Pune).

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BayIND – Bavarian-Indian Centre for Business and University Cooperation

The Bavarian-Indian Centre for Business and University Cooperation (BayIND) has been set-up by the Bavarian State Ministry of Education, Science and the Arts in order to coordinate and promote the university cooperation between Bavaria and India. It acts as a central service institution for all nine Bavarian State Universities, 17 Universities of Applied Sciences and six Universities of Arts.

In addition, the Centre has been designed as a central service institution for companies and acts as a networking and service platform especially for SMEs in order to support them in terms of establishing or expanding mutual business ventures and to integrate the activities between universities and companies.

The Centre acts as a contact point for universities, students, lecturers or researchers, who are interested in the exchange between Bavaria and India.

In May 2013, the BayIND Science Office started its activities in India. It is set-up in Bengaluru, the capital city of the Bavarian partner state Karnataka. Currently, there are over 80 existing cooperation agreements between Bavarian universities and Indian universities and colleges and the number is constantly growing.

The Bavarian state has an excellent national and international reputation for its higher education, science and research and locates some of the best universities in Germany as well as non-university research institutions.
The Bavarian universities are equipped with modern facilities – and provide excellent conditions for studying and research. The universities of applied sciences offer practical-oriented courses of study, applied research and state of the art equipment. Besides courses such as technology, engineering, computer sciences and applied natural sciences, areas such as economics, social studies, design and media are taught here.

There are currently approx. 200 Bachelor and Master programmes in Bavaria which are taught in English, a number which is constantly rising. Regarding PhD programmes, there are around 66 structured international doctoral programmes in Bavaria which are held in English language.

The Free State of Bavaria is the largest of Germany’s 16 federal states. Apart from being one of the safest and most picturesque states in Germany, Bavaria is one of the most stable and prosperous economic regions of Europe.

Above all, the state of Bavaria is a trendsetter in the fields of information technology, biotechnology, nanosciences, energy and environment technology.

To ease the way to Bavaria, the Bavarian-Indian Centre informs and guides researchers, students and PhD candidates about the vast opportunities this state has to offer.

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The University of Cologne is the second oldest university in Germany, dating back to 1388. At present, there are 50,000 students studying at the university.

The University of Cologne has six Faculties covering a broad spectrum of disciplines and has developed internationally outstanding research profile areas on this basis.

The Faculty of Medicine, The Faculty of Mathematics and Natural Sciences, The Faculty of Arts and Humanities, The Faculty of Management Economics and Social Sciences, The Faculty of Law and The Faculty of Human Sciences.

The University of Cologne became one of eleven German Universities of Excellence in 2012. The Excellence Initiative is run jointly by the German Research Foundation (DFG) and the German Council of Science and Humanities (WR) and is funded by the German Government and the Länder. Funding has been granted for a period of five years (Nov. 2012 – Oct. 2017).

The University of Cologne (UoC) India Office was established in New Delhi in December 2009. It serves as a first point of contact for faculty and students, both in India and in Cologne. The office organises delegation visits, summer schools, workshops, conferences and seminars in India. Through the South Asian Student Association-SASA established at UoC (also comprising of the Indian Students), the office aims to reach out to the university’s network of Indian and German alumni.

The office aims to make important contributions to cultivating existing relations and launching new partnerships between UoC and Indian Institutes of Higher Education. The office also focuses on providing internship opportunities for German students in India, during and after university.
The UoC India Office is a member of the German House for Research and Innovation (DWIH), along with the Indian branch and liaison offices of 14 other German organisations in India. DWIH promotes research and academic activities between the DWIH members and Indian Institutes of Higher Education.

At present, the University of Cologne has 15 academic collaborations in India, in a whole range of fields such as Geography, Anthropology, Law, Management, Inorganic Chemistry, Environmental Science, Media Studies, Islamic Studies, Medical Studies, Organic Chemistry, etc.

The University’s representative in India is Dr Amisha Jain, Ph.D. (Law).

Dr Jain frequently visits Cologne to discuss and plan forthcoming activities in India and in Cologne, out of which one important event that she attends each year in June is the Cologne-India Week, which is jointly organised by the University of Cologne and the City of Cologne. During this week, she meets professors from different faculties who are interested in pursuing academic contacts with Indian Institutes of Higher Education. She also informs the professors about the latest educational policies in India and the research being conducted in different fields of study as well as planning the year-long strategy for the future activities of the UoC India Office, including marketing and publicity avenues. In addition to this, the cultural activities that are planned in the city of Cologne about India is eagerly attended by the students and people residing in Cologne and neighbouring cities.

The UoC India Office was the University of Cologne’s second office to be established abroad after Beijing, China (2007) and before New York, USA (2011).

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The German Academic Exchange Service (DAAD) provides information about higher education and research in Germany and is the world’s largest funding organisation promoting the international exchange of students and scholars. Each year over 100,000 students and researchers supported by the DAAD worldwide are able to gain valuable experience and expertise at home and abroad. The DAAD’s annual budget for international academic exchange is over EUR 440 million.

The DAAD relies on a network of 15 regional offices and 56 information centres (ICs) in 60 countries, over 500 “DAAD-Lektoren” (Visiting Faculty) and “Sprachassistenten” (Language Assistants) and a diverse range of DAAD-funded university projects abroad.

The DAAD Regional Office New Delhi was established in 1960. In addition, the DAAD has a network of Information Centres and Information Points in Bengaluru, Chennai, Mumbai and Pune. Currently, there are seven DAAD-Visiting Faculty and Language Assistants at various Indian institutions.

The DAAD has an active network of 25 DAAD Young Ambassadors and 25 DAAD Research Ambassadors functioning as honorary multipliers who promote Germany as a destination for higher education and research and foster Indo-German collaborations. In addition, over 5,000 DAAD alumni play an important role in furthering Indo-German academic cooperation.

The DAAD Regional Office New Delhi undertakes a wide range of activities such as education fairs, information sessions and webinars.
The DAAD administers a large variety of funding schemes for students, faculty and senior researchers from both India and Germany. The DAAD also has specific Indo-German schemes and initiatives, the most recent of which is the Indo-German Partnership (IGP) in Higher Education Programme. The IGP will witness India and Germany investing EUR 3.5 million each over a period of four years from 2016-2020 to encourage and support cooperation between higher education institutions in each country.

**Latest Trends in Student Mobility**

Germany has emerged as a top destination for higher education globally. The past decade has witnessed an enormous increase of over 400 per cent in the number of Indian students at German universities. 83 per cent of Indian students going to Germany opt for programmes in the STEM subjects, i.e. Science, Technology, Engineering and Mathematics.

Germany offers International Programmes taught in English, excellent quality education and research at no or low tuition fees, promising career opportunities and, above all, a vibrant social and cultural milieu.

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The Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) is the largest self-governing research funding organisation in Germany responsible for promoting basic research. With an annual budget of close to EUR 3 billion, provided primarily by the German Federal and Länder Governments, the DFG promotes the advancement of all branches of science, engineering and humanities. It drives excellence by selecting the best research projects on a competitive basis involving a rigorous peer-review process, and actively encourages interdisciplinary and international cooperation.

The DFG is particularly dedicated to the advancement of young researchers, promoting gender equality in science and academia, providing scientific policy advice to legislatures and government agencies on scientific matters and fostering relations both with the private sector and between scientists and academics in Germany and abroad. In organizational terms, the DFG is an association under private law and its member organisations include German universities, major non-university research institutions such as the Max Planck Society, the Fraunhofer-Gesellschaft and the Leibniz Association, the Academies of Sciences and Humanities as well as a number of scientific associations. To further internationalise the German research landscape and to facilitate cooperation between the world’s top researchers, the DFG is active across Europe and all over the world. Its activities range from fostering collaboration and networking amongst researchers by offering programmes specifically designed to promote international cooperation, to opening up traditional programmes to worldwide cooperation.

**About DFG India Office**

India is an important partner for Germany and during the last few years the extent of cooperation between German and Indian researchers has increased substantially. The DFG India Office, which was established in Delhi in November 2006, was the fifth liaison office to be opened, the others being in Washington, New York, Moscow, Tokyo and the Sino-German Center for Research Promotion in Beijing.
It plays an important role in fostering Indo-German cooperation, promoting the mobility of researchers as well as the internationalisation of German universities.

In addition, the DFG India Office is also responsible for the following:

- Information and Research Services: providing information to the scientific and academic communities on funding opportunities for bilateral cooperation between India and Germany
- Promotion of Young Researchers: funding outstanding young researchers from India and Germany within bilateral research projects and bilateral research training groups
- Create Visibility: taking steps to make Indo-German research cooperation and its potential more visible, both in India and in Germany
- Initiating and intensifying cooperation: organising scientific meetings in India and Germany within the existing funding programmes and creating framework conditions that will lead to a sustainable impact on joint research projects between German and Indian researchers
- Institutional Cooperation: implementing various bilaterally-funded research projects within the framework of the existing Memorandum of Understanding and Agreements between the DFG and Indian organisations:
  - Indian National Science Academy (INSA), New Delhi
  - Department of Science and Technology (DST), Government of India, New Delhi
  - Department of Biotechnology (DBT), Government of India, New Delhi
  - Indian Council of Historical Research (ICHR), Government of India, New Delhi
  - Indian Council of Social Science Research (ICSSR), Government of India, New Delhi

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Forschungszentrum Jülich GmbH

Forschungszentrum Jülich pursues cutting-edge interdisciplinary research on pressing issues facing society today. With its competence in materials science and simulation, and its expertise in physics, nanotechnology, and information technology, as well as in the biosciences and brain research, Jülich is developing the basis for the key technologies of tomorrow. In this way, Forschungszentrum Jülich helps to solve the grand challenges facing society in the fields of energy and the environment as well as information and the brain. Forschungszentrum Jülich is also breaking new ground in the form of strategic partnerships with universities, research institutions, and industry in Germany and abroad. With more than 5,700 employees, Jülich – a member of the Helmholtz Association – is one of the large interdisciplinary research centres in Europe.

Forschungszentrum Jülich is a powerful hub in the international research network. Together with partners from universities, the science community and industry, Jülich is meeting the major challenges of the future. The goal of research at Jülich is to contribute to a secure, affordable, and environmentally friendly energy supply. Scientists at Jülich are tapping into new green sources of energy and developing new solutions in the areas of renewables, storage technologies, and energy efficiency. Nuclear waste management is also part of Jülich’s portfolio. In addition, researchers at Jülich are concerned with the consequences of human activities for the climate, while simultaneously focusing on plants as one of the most important sources of nutrition worldwide.

Our brain comprises some 86 billion neurons. Understanding the complex processes within it is the key to the more effective diagnosis and treatment of brain diseases. New findings will also facilitate novel approaches to future information systems, the foundation for which is being laid by scientists from various disciplines working together. At the same time, Forschungszentrum Jülich operates supercomputers which it uses for scientific simulations, for example of the development of proteins in the body, the functioning of semiconductors, and the distribution of greenhouse gases in the atmosphere.
A total of 1041 visiting scientists from 68 countries conducted research at Jülich in 2015 in addition to the 3,595 scientists employed by Jülich. Forschungszentrum Jülich is an equal opportunities employer. It aims to appoint a woman to every third vacant or new scientific position by 2017. In 2015, out of total revenue of € 615.7 million, Forschungszentrum Jülich obtained third-party funds to the amount of € 238.4 million. Most of this income resulted from research and development activities from industry, the acquisition of funding from Germany and abroad, and project management on behalf of the Federal Republic of Germany and the federal state of North Rhine-Westphalia.

Talented young researchers from Germany, Europe, and all over the world benefit from exceptional conditions at Jülich that help them kick-start their career: as PhD students in the institutes, within the scope of one of the various support programmes, or as head of their own young investigators group. Heading a young investigators group offers scientists early independence and superb career opportunities. Forschungszentrum Jülich also participates in the Helmholtz Postdoc Programme. Funding for up to three years enables young scientists to enhance their own research profile directly after their PhD. Another form of recognition is the Jülich Excellence Prize, which is awarded by a panel of recognized experts. At Jülich, undergraduates, postgraduates, and PhD students are given the opportunity to work on interesting research projects at an early stage. In 2015, 537 doctoral researchers were supervised at Forschungszentrum Jülich. With respect to doctoral training, Jülich works together with universities in the framework of 19 graduate schools and research training groups – in six of which Jülich has a leading function. Forschungszentrum Jülich cooperates with numerous partners from science and industry. In 2015, Jülich was involved in 377 nationally funded projects and 225 EU projects.

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The Fraunhofer-Gesellschaft is the leading organization for applied research in Europe. Its research activities are conducted by 69 institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of 24,500, who work with an annual research budget totalling 2.1 billion euros. Of this sum, 1.9 billion euros is generated through contract research. More than 70 per cent of the Fraunhofer-Gesellschaft’s contract research revenue is derived from contracts with industry and from publicly financed research projects. International collaborations with excellent research partners and innovative companies around the world ensure direct access to regions of the greatest importance to present and future scientific progress and economic development. Fraunhofer’s global footprint is very strong, with offices and research centres in the USA, Europe and Asia. Its renowned innovations include the MP3, White LEDs and the smallest of cameras.

Fraunhofer’s unique selling point lies in fast-tracking research from lab to marketplace. It delivers what the economy needs: innovation, which is one of the most important factors in achieving commercial success. We offer contract research services and innovation support in practically all application oriented disciplines, including Energy and Environment, Health and Nutrition, Transportation and Mobility, Production and Materials, Information and Communication, Safety and Security. The Fraunhofer-Gesellschaft is a recognized non-profit organization that takes its name from Joseph von Fraunhofer (1787–1826), the illustrious Munich researcher, inventor and entrepreneur.
Fraunhofer has been active in India for a long time through its individual institutes. The objective was to concentrate its efforts to understand the Indian market and engage with industry, government and academia. Fraunhofer’s India Office in Bengaluru was inaugurated on 30 October 2012. It houses an experience theatre showcasing some of the latest technologies and the Fraunhofer Innovation and Technology (FIT) Academy which conducts workshops, bringing Fraunhofer experts from various institutes to connect with our clients and partners in India. The Fraunhofer Innovation Technology Platform is another exciting initiative and annual flagship event which focuses on different thematic fields and showcases cutting-edge technologies, innovation and solutions as never before. Fraunhofer works with 30 of the 50 leading companies in India and in the last five years, contracts worth more than EUR 10 million have been signed. Ms Anandi Iyer is presently the Director of the India Office and based on her network within Fraunhofer, she makes innovative technologies accessible to Indian clients and establishes strategic partnerships with Indian industry and research organisations.

Fraunhofer Office India

• is a strategic point of contact
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• proactively acquires clients
• liaises on behalf of all Fraunhofer Institutes
• supports project management, financial management & administration

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Freie Universität Berlin (FUB) is one of the leading German universities with a focus on internationality and social responsibility. It is a full university with 15 departments and central institutes offering over 150 degree programmes across a wide range of subjects. Ever since its foundation, the university has stood for an open, international outlook and socially responsible cross-border research and teaching activities. In addition to the university’s significant role within the region and in Germany, Freie Universität is also committed to these aims at the global level.

All of the research performed at Freie Universität is characterized by excellence within disciplines and interdisciplinary excellence, a wide range of academic and scientific networks, and focus areas that enjoy high international visibility and competitiveness. Providing generous and targeted support for researchers is also one of the central aims of the university.

The scholars and scientists at Freie Universität Berlin identify and work on socially relevant global issues that will affect our future. With this aim in mind, they are involved in academic and scientific networks, working together with regional, national, and international partners from academia, the business sector, politics, culture, and society.

The high quality of the research activities at Freie Universität is confirmed by the university’s outstanding place in various higher education rankings, such as the CHE University Ranking, the Funding Ranking of the German Research Foundation (DFG), and the QS World University Ranking.

Research focusing on topics such as biodiversity, the water and energy supplies of the future, central climate change, and high-performance technologies are a high priority at Freie Universität. It is the coordinating university for ten Collaborative Research Centers (CRC) and participates in ten others, in addition to its involvement in seven CRCs at Charité – University Medicine Berlin. Until 2014, it was a member of the research network running the DFG Research Center MATHEON Mathematics for Key Technologies, which became the Einstein Center for Mathematics Berlin in June 2014.
The university’s excellent research performance is reflected in the amount of external funding raised, which has been rising for years, and in the numerous major research awards and distinctions granted to members of the university faculty and research staff, including the Gottfried Wilhelm Leibniz Prize and Advanced Investigator Grants of the European Research Council.

Freie Universität Berlin’s institutional strategy builds on the strength of networks enhanced by interaction with first-class partners. Through global and regional networks, scientists and scholars have an opportunity to exchange ideas and advance their research, with a focus on interdisciplinary work and the search for solutions to global challenges. The key objectives of Freie Universität Berlin’s Internationalisation Strategy are:

• to strengthen the university’s research and raise its standards through international cooperation and complementary projects
• to recruit outstanding researchers and doctoral students from abroad
• to prepare students for a globalised world by giving them an international and intercultural perspective
• to support the specific regional foci of area studies in the humanities and social sciences at Freie Universität Berlin, in particular with regard to Latin America and North America, Asia, the Middle East, and Eastern Europe

In addition to the well-known (and well-worn) formats of international cooperation (student exchanges, traditional partnerships, individual contacts, delegation visits etc.), Freie Universität Berlin has developed two signature elements to support the objectives of its strategy: it established seven liaison offices in key target regions. They play a key role in recruiting young researchers for Berlin. The New Delhi Office, which was founded in 2008, is the second oldest amongst them.

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For over 60 years, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has been working jointly with partners in India for sustainable economic, ecological, and social development. Currently, GIZ has over 330 employees in India, of whom 85 per cent are national personnel.

India is fast emerging as an economic and industrial power. It is a member of the ‘Group of Twenty’ (G20) as well as one of the five major emerging national economies, namely Brazil, Russia, India, China and South Africa (BRICS). Despite the country’s rapidly growing economy, poverty and other socio-economic issues remain a challenge. The burgeoning population and accelerated urbanisation in the country have resulted in an environment at risk and greenhouse gas emissions that continue to spiral upwards.

The thematic areas of GIZ in India are:

• Energy;
• Environment and Management of Natural Resources;
• Sustainable Urban Development;
• Sustainable Economic Development.

The Federal Ministry for Economic Cooperation and Development (BMZ), the Federal Ministry for Environment, Nature Conservation, Building and Nuclear Safety (BMUB) as well as the Federal Ministry for Economic Affairs and Energy (BMWi) are the main commissioning parties of GIZ in India. Other clients include Indian public sector clients, the European Union and foundations.

The Government of India has launched numerous important initiatives to address the country’s economic, environmental and social challenges, and GIZ is contributing to some of the most significant ones. For example, it supports key initiatives such as Smart Cities, Clean India and Skill India. GIZ, in close cooperation with Indian partners, devises tailor-made, jointly-developed solutions to meet local needs and achieve sustainable and inclusive development.
GIZ provides high quality advice and capacity building. In India, it focuses on the following sectors:

- **Energy:**
  - Supporting energy efficiency in power generation and its consumption.
  - Exploring and main-streaming renewable energy options to mitigate carbon emissions.

- **Sustainable Urban Development:**
  - Support partners to build cleaner, liveable, and inclusive cities. Promote resource efficiency and reduced environmental impact in the growing industrial sector.

- **Environment and Management of Natural Resources:**
  - Foster public and private initiatives, improve natural resource base, minimise risks of climate change, and enhance productivity and income in rural areas.

- **Financial Systems Development:**
  - Improving Indian financial institutions’ outreach in rural areas, developing mechanisms for safe and rapid fund transfer and advancing consumer education on use of financial services.

- **Private Sector Development:**
  - Promoting Corporate Social Responsibility (CSR) in India, encouraging regional economic development in selected sectors and enabling small and medium-sized enterprises to increase their competitiveness.

- **Skills Development:**
  - Support the Indian Government in establishing a cooperative workshop-based system for vocational education and the inclusion of enterprises in the training process, thus strengthening the role of the private sector. Replicable models of cooperative vocational education will be implemented in three sectors in cooperation with the private sector.

- **Social Protection:**
  - Developing innovative social security solutions, particularly for the poor and disadvantaged, focusing on health and pensions.

- **Modernisation and Innovation in SMEs:**
  - Improving innovation capacity and sustainability of MSMEs by fostering cooperation between industry, academia and government.

- **Biodiversity:**
  - Supporting the Economics of Ecosystems and Biodiversity.

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The University of Göttingen (UoG) is one of the highest-ranked Germany, boasting 46 Nobel laureates. Established in 1737, UoG has 13 faculties, 180 institutes and over 31,456 students, 12.6 per cent of whom international. 28.7 per cent of the 3,791 PhD students currently enrolled are international. Georg-August Universität is further distinguished by being closely integrated into a network of first-class research establishments such as the Göttingen Academy of Sciences, the German Primate Center, the German Aerospace Center and five Max Planck Institutes. Together, these local partners form an alliance for collaboration in research and teaching with the university that is arguably unique in Germany.

India is a priority country in the University of Göttingen’s international strategy and academic cooperation activities. Göttingen India Office was established in 2008 at the University of Pune with a vision to build collaborative ties with institutions striving for excellence and encourage students and faculty in their research endeavours. UoG currently has 14 MoU and more than 10 Non-MoU academic partner institutions in India. Over the last five years, over 1,000 German students have studied in India and a record 7,000 Indian students in Germany. At the University of Göttingen 3rd largest group of international students is from India.
The India Office facilitates academic cooperation between institutions by promoting exchange of students and researchers. It coordinates several scholarship programmes to facilitate mobility amongst Master’s and Ph.D. students, as well as postdocs and staff. Erasmus Mundus Action II and Erasmus Key Action 107 are key mobility programmes to name but a few. Scientific research events such as summer/winter schools, public talks, seminars, conferences and symposiums in the humanities, social sciences and natural sciences are initiated and organised by the India Office in collaboration with other DWIH consortium members and Göttingen’s Indian academic partners.

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Founded in 1386, the Ruprecht-Karls-Universität is Germany’s oldest university. In the course of its more than 600 years’ history the university has established itself as a centre of excellent research and teaching, where many renowned scholars and scientists – among them eleven Nobel laureates – worked and still work.

The success in both rounds of the Excellence Initiative and in internationally recognized rankings prove that Heidelberg’s excellent reputation and leading role in scientific community are well deserved. In terms of educating students and promoting promising early-career academics, Heidelberg relies on its two strongest points: research-based teaching and an outstanding well-structured training for doctoral candidates.

Heidelberg University is a comprehensive university, offering the full spectrum of disciplines in the humanities, law and the social sciences alongside the natural and life sciences, including medicine. As a comprehensive university, Heidelberg aims to continue to strengthen the individual disciplines and to further interdisciplinary cooperation as well as to carry research results over into society and industry. Thanks to its continuous development of its international networks, the university is able to offer young researchers excellent qualification and development opportunities.

The Heidelberg Center South Asia (HCSA) was inaugurated by the University Rector, Professor Dr Bernhard Eitel, in November 2009. It originated in the Delhi Branch Office of Heidelberg University’s South Asia Institute (in India since 1962) and the Cluster of Excellence “Asia and Europe in a global context” Liaison Office (in India since 2009) which had initiated and maintained cooperation with numerous Indian research institutions in the Social Sciences and Humanities. Additionally, the South Asia Institute had branch offices in Islamabad, Colombo and Kathmandu. By establishing HCSA, Heidelberg University sought to enhance academic cooperation with South Asia to embrace all university faculties, including the Natural, Earth and Medical Sciences.
HCSA has five focus activities: acting as an information desk (i.e. central repository for information on studying and research opportunities, and offering practical support with regard to visa processing, travel and accommodation); initiating cooperation in research and teaching, including expertise in finding appropriate teaching and funding, providing support for initiating research cooperation and joint study/research and training programmes, which presupposes close cooperation with funding agencies in Germany, India as well as the European Union; mobility (i.e. providing support in facilitating student/researcher mobility as well as student assessment/recruitment and managing an internship platform, which enables students to gather work experience in Germany and India); increasing visibility by showcasing innovation at Heidelberg University and offering support in organising conferences, workshops, summer schools, Heidelberg Lecture Series etc. and networking (e.g. Alumni Network in South Asia and member of the German House of Research and Innovation).

HCSA thus supports existing research cooperation and the exchange of students and faculty between Heidelberg University and partner institutions in South Asia, facilitates the initiation of new collaborative endeavours, advises students from South Asia and Heidelberg who plan to study abroad, assists faculty in the assessment and recruitment of applicants, showcases excellence in research and teaching at Heidelberg University, and builds sustainable networks.

HCSA was the third regional centre to be established after the Heidelberg Center Latin America in Santiago de Chile and the Heidelberg University Association in New York. Heidelberg University opened its fourth centre in Kyoto, Japan, in 2015.

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The Indo-German Chamber of Commerce (IGCC) has been promoting Indo-German economic co-operation since January 1956. It celebrated its 60th anniversary last year only. Established under the Indian Companies’ Act VII of 1913, the IGCC has its offices in Mumbai, New Delhi, Kolkata, Chennai, Bengaluru, Pune and Düsseldorf in Germany, where one hundred professionals work to facilitate bi-lateral business. Through its innumerable events and comprehensive services, it plays a major role in advancing cooperation between the two countries.
The IGCC is part of a closely-knit network of Chambers of Commerce, delegate offices and representations in more than 90 countries and 130 locations; its head organization, the Association of German Chamber of Commerce and Industry (DIHK), is located in Berlin. The IGCC is the first contact point for German and Indian companies interested in doing business in India and Germany respectively. The IGCC membership consists of more than 6,000 German and Indian companies, which makes it the largest bi-national Chamber in India as well as abroad. It therefore has the necessary network, connections and expertise to promote cross-border business.

The IGCC is a founding member of the DWIH consortium.

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The Max-Planck-Gesellschaft (MPG) is Germany’s most successful research organisation. Under its umbrella, 84 Max Planck Institutes (MPIs) conduct basic research in natural sciences, life sciences, social sciences, and the humanities. Eighteen Nobel Laureates have emerged from the ranks of its scientists. In 2016 MPIs have offered more than 3,300 Ph.D. students from all over the world an international working environment and excellent research facilities. In addition, 2,700 young scientists have taken on post-doctoral positions at various MPIs.

India is a special focus of MPG in its international collaborations. In 2016, more than 830 visiting scientists from India worked at MPIs. In terms of the global exchange of young scientists, India is one of MPG’s major partner countries with 52 ongoing research collaborations with institutes in India.

MPG provides a raft of opportunities and programmes for scientists – from aspiring Ph.D. students to established researchers – to connect, collaborate and conduct research at MPIs in Germany.

The current 66 International Max Planck Research Schools (IMPRS – www.imprs.mpg.de), the MPG’s structured doctoral training programmes in collaboration with German universities, attract talented students from all over the world to pursue their Ph.D. at the world class facilities at MPIs. These schools offer junior scientists excellent research opportunities, providing them with extensive support and special programmes to foster their development. The doctoral students working at IMPRS come from a total of 85 countries; Indian participants are the largest group from abroad. As the head of an Independent Junior Research Group at an MPI, young researchers can lay the cornerstone for their future scientific career: they then have five years to pursue their own research goals on a limited but secure budget. These are highly coveted positions that are announced internationally and awarded in a competitive process.
MPG emphasizes brain circulation with partner countries through Max Planck Partner Groups. This prestigious programme supports Indian scientists who have previously worked at an MPI and who return to a leading laboratory in their home country to carry out research on a subject that is also in the interests of their previous host MPI (https://www.mpg.de/274644/Partner_Groups_in_India). Max Planck India Mobility Grants offer short-term travel grants for young Indian post-docs to establish initial research links with MPIs (https://www.mpg.de/274730/Max_Planck-India_Fellowships__MPIF_).

Another instrument frequently used to enhance scientific networking are Kick-off workshops. These enable scientists from Max Planck Institutes to acquaint themselves more closely with research conditions in India and to make initial contacts to Indian scientists. So far, 27 very successful workshops have been conducted.

Max Planck Centers take the quality of scientific cooperation with first-class international partners in pioneering areas of research to a completely new level. The cooperation goes far beyond bilateral partnerships: larger international research projects enjoy greater visibility and are more attractive. A strong focus lies on the training of excellent young researchers. Currently, 17 Max Planck Centers operate worldwide, one of them in India - at NCBS Bengaluru.

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With over 260 academic institutes in nine departments, RWTH Aachen University is one of the leading European institutions of higher education and scientific research. Currently, 44,500 students are enrolled in at least one of the 154 study programmes that the university offers, including 8,500 who have joined us from 130 different countries.

RWTH Aachen University sees its educational mission in preparing future leaders for society, higher education and business. We seek to accomplish this mission by combining a thorough grasp of theory with the ability to apply knowledge to real-world situations and challenges.

Our graduates – especially in the engineering sciences – are much sought-after as executives and leaders in business and industry. Several rankings and international assessments attest to RWTH graduates’ marked ability to handle complex tasks, to solve problems constructively in team work and to take on leadership roles.

Students at our university benefit from the advanced research facilities that RWTH Aachen University has to offer. The work of our research centres is strongly geared towards the current needs of society and industry. This leads to numerous inventions that are patented by our university and are marketed by international companies. RWTH Aachen University’s competence centres achieve very effective cross-subject, interdepartmental collaboration in interdisciplinary networks whilst maintaining a high level of specialisation and differentiation in their particular fields of expertise.

The University’s innovative capacity is further reflected in the high number of business start-ups resulting from research that was begun at RWTH Aachen University (currently more than 1,450).

Many new products and services originate in Aachen. In our research laboratories and testing facilities, for example, the first all-metal aircraft was developed, as was the diesel soot filter. The world’s first wind tunnel and the first particle accelerator were also constructed at our university. Furthermore, RWTH Aachen University is the largest employer and education provider in the region. It will continue to be a driving force in influencing and shaping the high-tech region of Northwest Germany in the future.
In order to maintain and strengthen the excellent position that RWTH Aachen University has in higher education and advanced scientific research the university has adopted a long-term institutional strategy. In this strategy six overarching goals for the future development of the university have been formulated. These are:

1. focusing on the most important research areas of our day, thereby sharpening the focus of research and enhancing the visibility of our scientific achievements
2. being and becoming even more attractive to the world’s best minds by creating an intellectually stimulating environment
3. encouraging and demanding top-level performance at all levels of our institution
4. using modern research and media to maintain and improve the quality of education
5. assuming a leading position in large-scale interdisciplinary projects
6. acquiring sufficient external funding to maintain the high level of quality in research and educational facilities

This long-term strategy was rewarded by success in the “Excellence Initiative”, a programme jointly run by the German Federal and Länder Governments as well as research funding organisations. Only eleven universities in the German higher education system were awarded the distinction of becoming “excellence universities”, based on their outstanding performance in the past combined with a convincing plan for their future development.

Indo-German Centre for Sustainability (IGCS) (www.igcs-chennai.org)
The Indo-German Centre for Sustainability is located at IIT Madras and is a joint project of IITM with the German TU9 universities and CAU Kiel. It is coordinated by Professor Rafiq Azzam, Head of the Department of Engineering Geology and Hydrogeology in Aachen and Professor S. Chella Rajan at IITM. IGCS initiates and intensifies the cooperation between German and Indian scientists in the fields of basic and application-based research, education and training, and serves as a platform for information exchange for sustainable development in the areas of energy, waste and water management, land use and urban development.

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As one of Europe’s leading technical universities, the Technical University of Munich (TUM) combines top-class facilities for cutting-edge research with unique learning opportunities for students. Ranked among the top 8 institutions worldwide for the employability of its graduates (according to the Global Employability University Ranking 2016), TUM aims at creating lasting value for its students and society through excellence in education and research, active support of diverse talents, and a strong entrepreneurial mindset.

TUM’s top-notch campuses are located in and around Munich, one of Germany’s strongest economic region. TUM is represented internationally with 6 international offices all over the world. In 2002, TUM became the first German university to open a campus abroad: TUM Asia. Its affiliated research project TUM CREATE is dedicated to innovative technologies for electro mobility transport systems in megacities.

In India TUM has maintained close corporations with some of the most prestigious universities since 2001. With the growing importance of the Indian subcontinent in research and education, TUM established a first representation in India in 2011, offering an initial contact point for students interested in obtaining a PhD or a Master’s degree at TUM as well as collaborating closely with Indian higher education and research institutions. Currently, more than 500 Indian students are studying at TUM, making them one of the largest and fastest growing international student groups at TUM.
TUM Mumbai
To further raise the visibility of TUM and to intensify the collaboration with Indian partners, a liaison office was established in November 2014 in Mumbai. In the premises of the Indo-German Chamber of Commerce, the office is run by TUM Liaison Officer Hanna Kriebel. The main goal of TUM Mumbai is consulting and recruiting outstanding scientists and students and expanding collaborations with Indian universities and companies. Another important task is intensifying alumni relations.

TUM & DWIH
Since its inauguration in fall 2012, TUM has been a member of the German House for Research and Innovation New Delhi. DWIH’s establishment marked a milestone regarding the presence and visibility of German research, technology and higher education in India. The created synergies and possibilities for TUM to showcase its academic research and to connect with interested students and scientists directly in India.

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Events Calendar

- **19 January**
  - New Delhi
  - DWIH New Year Reception

- **22 – 23 January**
  - Mumbai
  - Workshop on “Need of Sustainable Cities”

- **23 January**
  - Mumbai
  - Interactive-Session on Indo-German Academic and Research Cooperation

- **4 February**
  - New Delhi
  - SCL: “Science and Society – Infectious Diseases as an Example”

- **10 – 13 February**
  - Trivandrum & Kochi
  - Info Sessions on “Higher Education & Research Opportunities”

- **18 March**
  - Gautam Buddha Nagar – Greater Noida
  - Visit to Shiv Nadar University

- **11 April**
  - New Delhi
  - CityScapes in the light of texts

- **28 April**
  - New Delhi
  - DWIH Handover Ceremony

- **29 April**
  - Chandigarh
  - DWIH at EURAXESS Link India event

- **9, 11, 19 August and 16 September**
  - Kolkata, Kochi, Pune & Bengaluru
  - Smart Cities Workshop Series

- **1 – 3 September**
  - Udaipur
  - Strategy Planning and Board Meeting

- **24 September**
  - Pune
  - Falling Walls Lab India

- **26 September – 7 October and 23 – 25 November**
  - Coimbatore, Mumbai, Chennai, Delhi & Pune
  - Workshop on Engineering to Ingenieurwesen – bridging the skill gap
29 September – 1 October
New Delhi
Indo-German Conference: CityScapes

3 – 4 October
New Delhi
Indo-German Dialogue on Sustainable Water Resource Management

25 October
New Delhi
SCL: “Air Pollution, Climate Change and Health”

26 October
Chennai
SCL: “The paradigm of pediatric leukemia- a true success story of modern clinical Oncology”

26 – 28 October
Chennai
Indo-German Workshop on Childhood diseases

10 November
Pune
3rd Indo-German Dialogue on Excellence in Research and Education

26 – 27 November
Cochin
Indo-German Collaborative Summit on “Contemporary Challenges in Paediatric Heart Care”

29 – 30 November
Pune
Workshop on “HPC Architectures and Applications”

9 December
New Delhi
SCL: “Legal Transfer in the Common Law World”
The German House for Research and Innovation (DWIH New Delhi) organized its annual New Year Reception on 19 January 2016 at the German House, New Delhi. Hosted by the former Chairman of the Board of DWIH New Delhi together with the DWIH consortium members, the reception offered a pleasant networking platform to the people present.

The event brought together the representatives of diplomatic missions, Indian government officials, researchers and professors of leading institutions and universities amongst other representatives of the Indian academic and scientific communities and was attended by around 100 guests.
Recapitulating year 2015, former Chairman Dr Hansen in his welcome remarks spoke about the achievements and challenges of DWIH and congratulated the German and Indian partners for their ongoing and upcoming collaborative projects in the fields of science, research and innovation. Expressing his views on the program and the expectations from it for the New Year, he expressed confidence that in the year 2016 DWIH will perform activities with innovative ideas and new knowledge in order to continually raise awareness about Germany- the land of ideas!
The German House for Research and Innovation (DWIH New Delhi) organised a workshop on “Needs of Sustainable Cities” during the 12th Stuttgart meets Mumbai Festival on 22nd and 23rd January, 2016. Organized by the Indian Honorary Consulate in Stuttgart & Lapp group, this intercultural get-together and wine festival was hosted at Taj Land’s End, Mumbai.

The festival was jointly inaugurated by Mr Andreas Lapp (Honorary Consul of the Republic of India in Stuttgart), Mr Martin Schairer (Mayor of City of Stuttgart), Mr Walter Deffaa (Director General of DG REGIO of the European Commission), Mr Michael Siebert (General Consul of the republic of Germany in Mumbai), Dr Alexander P. Hansen (former Chairman of the Board of DWIH New Delhi and Director, DFG India Office), Mr Ajoy Mehta (Municipal Commissioner of Brihanmumbai Municipal Corporation) and other dignitaries from India and Germany. This event that serves as a meeting point for partners from politics, business, film & media, tourism, research and development and wine industries of both the countries, also acts a discussion forum for topics that are relevant to the society in general and with a strong potential for Indo-German cooperation. The focus area of 2016’s event was “Sustainable City Development” with emphasis on issues like Globality, Exchange and Partnerships.
On 22nd January 2016, the DWIH workshop on “Need of Sustainable Cities” was attended by nearly 50 participants. During this satellite activity, former chairman of the Board of DWIH New Delhi introduced the DWIH New Delhi consortium, its objectives and activities in India and emphasized its role in promoting Indo-German research collaborations and deliberations in the field of sustainability: the issue that concerns not only India but the rest of the world. The other key speakers at the event included Prof Dr Shamita Kumar, Vice Principal, Institute of Environment Education and Research, Bharati Vidyapeeth University; Dr Christoph Woiwode, Visiting Professor, Indo-German Centre for Sustainability, Indian Institute of Technology Madras; and Ms Aparna Das, Inclusive Cities Partnership Programme – ICPP, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, who addressed the audience with their informative talks. DWIH New Delhi also had an info-stand at the event to disseminate information and initiate individual interactions with students and researchers regarding their research careers in Germany. The stand was visited by interested scientists, researchers and students from various universities, research institutes and R&D organizations of Mumbai.
An Interactive-Session titled “Opportunities of Indo-German Academic and Research Cooperation” was organised by the German House for Research and Innovation (DWIH New Delhi) in collaboration with the Indian Institute of Technology, Bombay (IITB) on 23rd January, 2016 at the Industrial Research and Consultancy Centre (IRCC) of IITB Campus in Mumbai.

Prof Narayan Rangaraj, Dean, Academic Programme; Prof A.V. Mahajan, Associate Dean; Academic Programme; Prof Anil M Kulkarni, Associate Dean, R&D together with other senior faculty of IITB welcomed the DWIH New Delhi delegation and gave a brief insight of the education and research profile of their institute.

Attended by nearly 50 highly motivated students, young researchers and faculty members from IITB, this half day interactive session saw participation from 6 DWIH New Delhi members namely: German Research Foundation (DFG), Forschungszentrum Jülich GmbH, Freie Universität Berlin, Heidelberg Center South Asia (HCSA), Max Planck Society (MPG), and Technische Universität München (TUM).
The former Chairman of the board of DWIH New Delhi welcomed the faculty and provided them with an overview of the DWIH New Delhi, its members and discussed the possibilities of bilateral research co-operations. Following the faculty interactions, a panel discussion on “Opportunities of Higher Education in Germany” was organized at the P C Saxena Auditorium for students and young researchers. During this session, the consortium members responded to specific queries of the participants on application procedures, research opportunities and explained the fundamental building blocks for pursuing research in Germany.
The German House for Research and Innovation (DWIH New Delhi), the Embassy of Federal Republic of Germany in India and the German National Academy of Sciences- Leopoldina co-hosted a lecture on “Science and Society – Infectious Diseases as an Example”. Presented by Professor Dr h. c. mult. Jörg Hacker, President, German National Academy of Sciences Leopoldina, the lecture was organised under the banner of Science Circle Lecture Series on February 4, 2016.

Welcoming the audience, Mr Stephan Lanzinger, Counsellor and Head- Science and Technology Section, Embassy of the Federal Republic of Germany, New Delhi highlighted the significance of the “Science Circle Lecture” (SCL) series in providing a window into the diverse German research landscape and promoting bilateral cooperation. Moreover, as a part of his address he also focused on the objectives of DWIH New Delhi and acknowledged the German National Academy of Sciences – Leopoldina for joining hands with DWIH New Delhi in organising this event.

* Science Circle Lecture
The lecture was attended by senior scientists, faculty members, teachers and young research scholars from various universities and scientific institutes of Delhi-NCR and had a footfall of nearly 80 invited guests. During this lecture, Prof. Hacker emphasised on the delicate harmony between Science and Society and its implications on human population around the globe. He expressed his concerns over various emerging and re-emerging infectious diseases and their causes and discussed population-based approaches to prevent these and improve health. Furthermore, in order to achieve the vision of global health, Prof. Hacker stressed on increased orientation towards scientific excellence by ensuring globalisation of knowledge and modern sciences as well as establishment of new models of academic research. This well received lecture was also followed by an extensive Q&A session.
The German House for Research and Innovation - DWIH New Delhi organized “Info-sessions on German Higher Education and Research Opportunities” from 10th to 13th February 2016. Held in Trivandrum & Kochi, the event aimed at providing ample first-hand information on research and innovation in Germany and intensifying the existing Indo-German collaboration in the fields of science and higher education.

As a part of this 4-day event, Higher Education & Research Institutions from Germany offered information about their courses to their Indian counterparts and provided a broad overview of the scope and role of their respective organisations in promoting science and research in Germany. Alongside this, the representatives of these German institutions also availed the opportunity of interacting with the faculty members and prospective students and addressing their queries to enable them take the right decisions for their research careers in Germany.
Headed by the former Chairman of the Board of DWIH New Delhi, the German delegation included representatives of leading universities, research institutes and funding organisations namely: German Academic Exchange Service (DAAD), German Research Foundation (DFG), Freie Universität Berlin, University of Göttingen, Heidelberg Centre South Asia (HCSA), Max-Planck Gesellschaft (MPG) and Technical University of Munich (TUM). The representatives of these German organisations gave presentations to students of Master programmes, PhDs, Post-doctoral candidates and faculty members at Cochin University of Science & Technology (CUSAT); Rajiv Gandhi Centre for Biotechnology, Trivandrum; Kerala University (Karyavottam Campus) as well as IISER, Trivandrum.

Alongside this, a panel discussion on life in Germany, research and social experience also took place at the Goethe-Zentrum, Trivandrum on 12th February 2016. This discussion revolved around study topics, research and funding in Germany and was followed by one-on-one interactions where members disseminated necessary information to Indian students, scientists and researchers.
The German House for Research and Innovation (DWIH, New Delhi), with support from the Alexander von Humboldt Foundation (AvH), organised an “Interactive Session on Higher Education and Research in Germany” in Shiv Nadar University on 18 March 2016. A multi-disciplinary and research-focused institute, Shiv Nadar University offers a wide range of courses in humanities and social sciences, natural sciences, technology and engineering studies, and communication and management studies.

Welcoming a good participation from DWIH New Delhi, the delegation comprised of members namely: Alexander von Humboldt Foundation (AvH), University of Cologne, German Academic Exchange Service (DAAD), German Research Foundation (DFG), Forschungszentrum Jülich, Freie Universität Berlin, Heidelberg University - Heidelberg Center South Asia, Max Planck Society (MPG), and Technische Universität München (TUM). Dr Rupamani Ghosh, Vice Chancellor welcomed the DWIH New Delhi delegation and provided an overview of the education and research profile of Shiv Nadar University. Thereafter, Dr Vaibhav Agarwal, Senior Scientific Officer, DFG India Office, welcomed the audience and provided them with an overview of DWIH New Delhi, its members and the possibilities of bilateral research co-operations, while individual members highlighted the higher education and research profile of their respective organizations.
As a part of the panel discussion, SNU students got an opportunity to interact with the DWIH consortium representatives. During this time, they learnt about the various programs offered by German Universities and research organizations at different stages of an academic career from International Master’s Program to Ph.D. and Post-Doctoral opportunities and possibilities of scientific collaborations for established researchers. These lectures and panel discussion were attended by students and faculty of SNU with a total count of more than 150 participants.
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CityScapes in the light of texts
As a prelude to the CityScapes Conference, the German House for Research and Innovation (DWIH, New Delhi) in coordination with the Goethe Institut/Max Mueller Bhavan hosted a one of its kind ‘Book Reading’ event titled “CityScapes in the light of texts”. Hosted on 11 April 2016 at the Goethe Institut/Max Mueller Bhavan, the event was attended by representatives of a variety of Indian and German organizations and literary experts.

Urban challenges and possibilities also form the theme of literature with the city as the protagonist. Such city-centered literature is to be found both in the German as well as the Indian context. On this basis, readings by writers of such literature marked the first pre-event to the major DWIH CityScapes conference held in September-October 2016.

The event included readings by eminent authors Ulla Lenze “Die endlose Stadt” (The Endless City) and Amrita Shah “Ahmedabad: A City in the World”. The authors read excerpts from their books which described the “City” behind the central character or the narrator. The book reading followed a question & answer round to encourage exchange of ideas which continued as one on one interactions during the networking reception. The former Chairman of the Board of DWIH New Delhi thanked the authors and presented them a token of appreciation on behalf of the DWIH consortium.
Passing on the baton of consortium leadership from German Research Foundation – DFG India Office to the German Academic Exchange Services- DAAD, the German House for Research and Innovation- DWIH New Delhi celebrated its handover ceremony on 28th April 2016. Attended by more than 120 guests from the academic and scientific community in Delhi and representatives of various diplomatic missions to India, the event was organized at the German House, New Delhi.

Inaugurated in October 2012, DWIH New Delhi is a successful consortium of 15 German organizations comprising of funding institutions, research centres and universities. Set up with an aim of enhancing the outreach of German science and research landscape in India and exploring opportunities to synergize and stimulate cooperation between the German and Indian scientific communities, it is one of the strategic initiatives of the German Federal Foreign Office to internationalize science and research.
Administratively taken over by DAAD on June 1st 2016, DFG India Office remained the consortium leader of DWIH from the time of its inception in October 2012 till the end of May 2016. Under its leadership, a plethora of outreach activities were organized pan India to promote German science, research and education amongst young scientists, students, faculty members, industry representatives and many others. During the handover ceremony, Dr Alexander P Hansen, former Chairman of DWIH New Delhi and Director DFG India Office gave an overview of these activities and highlighted its significant contribution towards the increase in the number of Indian students in Germany.

Further, he introduced Ms Heike Mock, Director DAAD India as the new consortium leader and handed over a high-tech Translucent Concrete Tile manufactured by LUCEM GmbH, Stolberg, Germany, with optical fibers arranged to depict the name “DWIH”. Dr Hansen also launched the DWIH Annual Report 2015 before the evening finally led its way into a pleasant networking dinner reception.
EURAXESS Links India in association with the delegation of the European Union to India organized a day long information and networking event “Advancing Your Research Career in Europe: Funding and Fellowship Opportunities for Indian Researchers” in Chandigarh on 29th April 2016. This event gave a platform, not only to Master students, but also doctoral fellows, post-doctoral researchers, young scientists as well as representatives of universities and research institutes in and around Chandigarh region to meet the delegation of leading European research and funding agencies. It was an opportunity for the participants to know more about the programme of European commission, mechanisms of research mobility as well as first-hand information on the research collaborations opportunities available for them. The day’s proceedings commenced with the welcome address by Mr Denis Dambois, Research & Innovation Counsellor, EU delegation to India and Prof. Arun Kumar Grover, Vice-Chancellor, Panjab University, Chandigarh. This was followed by highly informative presentations on various European commission’s funding initiatives such as the Horizon 2020, an EU research and Innovation Framework programme; Marie Sklodowska-Curie fellowships (MCSA), European Research Council Grants, Erasmus+ Programe as well as testimonies of numerous grant awardees in the daylong event.
Representing DWIH New Delhi, Dr Vaibhav Agarwal (Senior Scientific Officer, DFG India Office) introduced DWIH New Delhi, its consortium members and its ongoing and upcoming activities to the audience. During one of the working group discussion, Dr Agarwal also acquainted young Ph.D. students, Postdoctoral fellows and faculty members with the research landscape in Germany, DFG funding programmes for Indo-German research collaboration and research careers in Germany.
The Heidelberg Centre South Asia carried out a series of four workshops titled ‘Smart Cities: Mobility and Infrastructure in the 21st Century’ in four cities of India, namely Kolkata, Kochi, Pune and Bengaluru on 9th, 11th and 19th August and 16th September 2016 respectively. Organised under the umbrella of the German House for Research and Innovation (DWIH) in New Delhi and supported by the Friedrich Naumann Foundation, these workshops were conducted as a prelude to the annual DWIH conference CityScapes that took place from September 29th to October 1st 2016 at the India Habitat Centre, New Delhi. The workshop in Bengaluru was jointly organized with partners from France (CNRS), UK (Indigo), EU Delegation and EU Science Technology and Innovation Platform.

The concept of smart cities has been well received in both research and policy practice and this idea cannot be realised without inter-disciplinary inputs and collective ideation. Towards this, the workshops intended to bring together experts from India and Germany to not only openly discuss opportunities and benefits of smart cities, but also critically look at the challenges that may arise. Focusing on resources, infrastructure, social and innovation aspects of a ‘Smart City’, the workshops helped to dwell on questions such as what makes a city ‘smart’? what potentials do cities have to achieve greater visibility, competitiveness and resilience when coping with less and more expensive resources and space? how can smaller and poorer cities incorporate aspects of the smart city concept that is often entangled with ideas of ‘global’ or ‘world-class cities’? amongst many others.
Moreover, a fifth workshop within the framework of ‘smart cities’, focusing on urbanisation, public health and air pollution, took place on October 26 at the German House for Research and Innovation. Professor Dr Sauerborn, Director Institute of Public Health, Heidelberg University together with colleagues from the Indian Institute of Tropical Meteorology, Public Health Foundation of India, GIZ, TERI Institute, etc. explored and analysed the challenges of both indoor and outdoor pollution and discussed the possibility of a joint collaborative research project, to be submitted during 2017.
Strategy Planning and Board Meeting

The Annual Strategy Planning Meeting (SPM) and 8th Governing Board Meeting of the German House for Research and Innovation (DWIH, New Delhi) was held in Udaipur from 1-3 September, 2016. This meeting was attended by Mr Stephan Lanzinger, Head and Councellor Science and Technology at the German Embassy, New Delhi and the Indian and German representatives of all the 15 DWIH consortium members namely: Alexander von Humboldt Foundation (AvH), Bavarian-Indian Centre for Business and University Cooperation (BayIND), German Academic Exchange Services (DAAD), German Research Foundation (DFG), Forschungszentrum Jülich GmbH (Research Centre Julich), Freie Universität Berlin, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), University of Heidelberg, University of Cologne, Max-Planck Society (MPG), Rheinisch-Westfälische Technische Hochschule Aachen (RWTH Aachen), Technische Universität München (Technical University of Munich), University of Göttingen, Fraunhofer Gesellschaft (FhG) and Indo-German Chamber of Commerce (IGCC).

Subject to increased relevance due to the change in the consortium leadership from Deutsche Forschungsgemeinschaft (DFG) to DAAD in June 2016, the SPM proved to be the ideal platform for
the consortium to discuss the objectives of individual DWIH members and their expectations from DWIH. Chaired by the German Academic Exchange Services (DAAD), the meeting began with the new consortium leader presenting the objectives, agendas, strategies, and activities for DWIH for the rest of the year. Based on the key motive of brainstorming, strategising and formulating plans for integrating industry interface, in the true essence of underlying DWIH objectives, the event saw members overwhelmingly pooling together their novel ideas and strategies to promote industry-academia linkages under the DWIH framework.

Furthermore, aimed at making improvements, members recapitulated year 2015 and reviewed and discussed aspects of DWIH New Delhi which have been successful apart from those that require modification such as institutional visits, DWIH’s digital outreach, alumni activities, frequency of member meetings, focus on research and innovation, involvement and networking with Indian organisations. Apart from this, new formats such as roundtables for policy makers, regular internal member meetings/themed quarterly meetings and webinars were also suggested during this annual meet.
The German House for Research and Innovation - DWIH, New Delhi hosted the first ever Falling Walls Lab in India on 24th September 2016 with the 2nd highest number of applications amongst all the national labs worldwide. Organised by the Information Centre of the German Academic Exchange Services (DAAD) along with IISER Pune, the event was held at the state-of-the-art Sir CV Raman Auditorium (IISER Pune). 11 participants from across the country were selected to present their research projects and business ideas aimed at breaking walls and barriers in scientifically and socially relevant fields.

Presentations based on a wide array of topics such as breakthroughs in preventing neonatal and maternal deaths, diagnostics of infectious diseases, technique to print flexible electronic circuits, poor crop yields in agriculture, drug discovery techniques for cryptosporidiosis, treating infections in the root canal, designing habitable refugee shelters, detailed advances in cancer detection, improvements in therapeutic insulin formulations, use of inexpensive spectrometer for food, water and milk testing and new methods to curb air pollution were all presented at the event. These presentations were judged by an eminent jury chaired by Ms Heike Mock, Director of the DAAD Regional Office in New Delhi and chairperson of the DWIH New Delhi. The jury consisted of Dr Abhay Jere, Vice-President Persistent Systems Ltd. and member of the Expert Committee for the “Swachh Bharat” campaign; Mr Frank Hoffmann, Regional Director of Indo-German Chamber of Commerce (IGCC) in Pune; Dr Arvind Natu, Senior Adviser at IISER Pune and DAAD Research Ambassador; Ms Gabriele Boner, Deputy Consul General of the German Consulate General in Mumbai and Dr Manohar Badiger, Chief Scientist at National Chemical Laboratory (NCL) and an Alexander von Humboldt fellow.
Following this inspiring session of presentations, the jury selected Mr Sudheesh A. P. and Mr Shubham Rathore as the runners-up and declared Mr Arun Agarwal as the winner for his presentation on breaking the walls of maternal and neonatal mortality. Later, as a reward for being the winner, Mr Agarwal was given an opportunity to present his monitoring device at the Falling Walls Lab finals in Berlin on the 8th of November 2016, along with the winners of all the regional sessions from around the world. Alongside this, he was also given the opportunity to take part in the Falling Walls Conference on the 9th of November, which commemorated the 27th anniversary of the fall of the Berlin Wall.
RWTH Aachen in cooperation with the university of Cologne hosted a number of workshops under the banner of “Engineering to Ingenieurwesen- Bridging the skill gap”. Funded by the German House for Research and Innovation (DWIH, New Delhi), workshops were conducted in Coimbatore, Mumbai, Chennai and Delhi from 26th September to 7th October (round-1) and in Mumbai and Pune (round-2) from 23rd to 25th November 2016.

The aim of this event was to identify the best practice examples from the German education model that are suitable for the Indian engineering education conditions and develop a recommended transfer action plan. The sector of textile engineering was used as a case study. Further, the session also laid emphasis on the challenges faced by Indian students in Germany, German Institutes and by employers during recruitment such as cultural differences and language barriers, lack of understanding of grading systems in colleges across India, lack of critical and analytical thinking amongst students, low rate of innovation at the Indian Industry level and lack of motivation for self-learning to just name a few.
Following this, sessions for discussing best practices and brainstorming sessions for deliberating on probable solutions to the challenges faced by the various players were also organized. These well-received brainstorming sessions were a highlight during each of the workshops as they led to the development of many implementation plans and concrete transfer measures for bridging such skill gaps. A few recommendations that came out as a result of this activity were implementation of outcome based learning, industry involvement in curriculum design, training students in intercultural competence amongst many others.
Initiating discussions around the global challenges of sustainable urbanisation, the German House for Research and Innovation (DWIH New Delhi) organised an Indo-German Conference on “CityScapes” from 29 September to 1 October 2016 at the India Habitat Centre, New Delhi. Attended by Indian and German academicians and scientists from the fields of energy, environment, cyber security and smart cities, the event had high-level stakeholders and senior leaders of the industry addressing the audience.

The conference was inaugurated by German Ambassador to India, Dr Martin Ney who in his inaugural address highlighted that, “Cities are the home for people with all their dreams and aspirations. Their development and design must be made with their best interests at heart.” Further, acknowledging India’s Smart Cities Mission and Germany’s interest in the development of Smart Cities in India he added, “Germany brings to the table not only decades of expertise and experience with city planning, but also the technological solutions that German companies have to offer in the area of energy, water, waste treatment, and traffic solutions.”

The conference was extremely well organized and well received by the experts who especially appreciated the interdisciplinary setup and found the different approaches quite fruitful as well as the themes identified for discussion as most relevant to India. All the sessions were well attended, with the number of total visitors exceeding 300 over the span of 3 days of the conference, comprising of students (54 per cent), faculty members (26 per cent) and other professionals (20 per cent).
The keynote addresses of the conference were delivered by Prof. Dr Frauke Kraas from University of Cologne on ‘The Transformative Power of Cities: Challenges and Opportunities for India’ and Prof. Dr AbdouMaliq Simone from Max-Planck Institute for the Study of Religious and Ethnic Diversity, Goettingen on ‘Popular Urbanism in the Global South: On the Make+Shift’. These were followed by a Public Lecture on ‘Privacy and Security in Online Social Media’ by Dr Ponnurangam Kumaraguru, IIT Delhi.

During the following two days, German and Indian experts threw light on several aspects of urban development such as smart energy and construction, impacts of urbanisation, future sustainable Peri-Urban India, industry perspective, cities and migration: perspectives of politics and economy, citizens’ participation and mapping human skills. Stirring interactions during the Q&A session at the end of each of the eight sessions indicated the intense involvement of the audience in the lectures and panel discussions.

The inaugural session of CityScapes also witnessed two award ceremonies where Ms Poonam Bir Kasturi was felicitated for having won the first prize in “City of the future”, a campaign run by the German Ministry for Science and Research; and Dr Arindam Biswas, IIT Roorkee and Ms Ritwika Basu, Indian Institute of Human Settlement Bengaluru were declared the winners of the DWIH Poster Competition organised ahead of the conference.
Indo-German Dialogue on Sustainable Water Resource Management

Funded by the German House for Research and Innovation (DWIH), Heidelberg Centre South Asia (HCSA) and TERI University, in partnership with the Indo-German Centre for Sustainability (IGCS), FU Berlin and Technical University Munich conducted the second Indo-German Dialogue on Sustainable Water Resource Management. The dialogue took place at TERI University, Delhi, between October 3 and 4, 2016 and was attended by over 150 participants.

Due to its innovative, interdisciplinary and transregional approach, the dialogue represented an intense exchange between Indian and German scholars, experts from both public and private sectors and academia and industry representatives. It consisted of four thematic sessions, including current approaches, benefits and challenges of water sharing; stakeholder engagement and capacity building for sustainable water management, urbanisation and water management as well as tools and techniques for managing water.
The event opened with a welcome address by Dr Rajiv Seth, Pro Vice Chancellor, TERI University, followed by a comprehensive overview held by Mr S. K. Sharma, Sr. Joint Commissioner (Policy and Planning), Ministry of Water Resources, River Development & Ganga Rejuvenation. Mr Sharma shared India’s challenges in water sector, particularly with regard to dying rivers and groundwater quality. Further, professor Dr Jayanta Bandyopadhyay (former head, Centre for Development and Environment Policy, IIM, Kolkata, presently Observer Research Foundation) in his keynote address spoke about the governance of Himalayan river system, particularly through political and ecological aspects. The technical session, besides this, included other renowned and distinguished scholars.

Moreover, within the framework of the dialogue, young researchers from across India, who participated in a poster competition, presented and defended ten short-listed innovative projects on water resource management. The winners of the poster competition were two young scholars affiliated with the Council on Energy, Environment and Water (CEEW), Delhi, whereas the runner-up was a project submitted by a group of scholars from Kerala.
A Science Circle lecture on “Air Pollution, Climate Change and Health” was organized by the German House for Research and Innovation (DWIH New Delhi) in association with the German Embassy, New Delhi and Heidelberg Centre South Asia on Tuesday, 25 October 2016. Hosted at the India Habitat Centre, the talk attracted the attention of both subject experts and discerning public.

The lecture was presented by Prof. Dr Sauerborn, Director of the institute of Public Health at Heidelberg University. A physician by training, he has conducted 15 years of extensive research on impacts of climate change on population health and adaption of household and health services to protect health. During his lecture, Dr Sauerborn gave a comprehensive overview of the role of climate
active pollutants and the health impacts of climate change in South Asia. Placing a strong focus on the issue of indoor air pollution, he also showed the audience a possible path forward for managing health and climate concerns effectively.

The lecture was followed by an extensive Q&A session and the evening concluded with Prof. Dr Sauerborn’s delightful piano performance. Stirring discussions over this very important topic continued during the DWIH networking dinner that followed the talk.
The paradigm of pediatric leukemia - a true success story of modern clinical oncology

by Prof. Dr. Andreas E. Kuluzik, MD, PhD
Professor of Pediatric Oncology, Hematology and Immunology, University of Heidelberg

Wednesday, 26th October 2016, 6:30 pm
Clive & Dupleix, Taj Coromandel, Chennai
Prof. Andreas Kulozik, Chair, Department of Pediatric Oncology, Hematology and Immunology, Heidelberg University delivered the Science Circle Lecture “The paradigm of pediatric leukemia – a true success story of modern clinical oncology” in Chennai on Wednesday, 26th October 2016. Initiated by the Embassy of the Federal Republic of Germany, the keynote was co-funded by the German General Consulate in Chennai, the German House for Research and Innovation (DWH), New Delhi and the Heidelberg Centre South Asia (HCSA).

In his lecture Prof. Kulozik stated that the progress in cure rates of children with cancer represent one of the true success stories of evidence-based medicine, in general, and of clinical oncology, in particular. According to Prof. Kulozik, this is best exemplified by acute lymphoblastic leukemia (ALL), which represents the most common malignant disorder in childhood, accounting for approximately 25-30 per cent of all pediatric cancer. Universally fatal at one point of time, the current treatment protocols for ALL involve a highly individualized strategy which depends upon the individual risk profile of the patient such as tumor load and response treatment, which further guide clinicians in treatment decisions. Patients on modern treatment protocols can thus expect a more than 90 per cent chance of permanent cure. The combination of high-end preclinical and clinical research is thus fundamentally changing the outlook of children with leukemia in a fashion that is paradigmatic for the entire field of clinical oncology.

This well received lecture was attended by scientists, researchers from universities, research institutes, national research institutes, corporate world, state government representatives and doctors from reputed hospitals working in this area and also attracted media attention.
Heidelberg Centre South Asia (HCSA) in cooperation with Technical University Munich organised an Indo-German workshop on child diseases from 26th to 28th October 2016 in Chennai. Funded by the German House for Research and Innovation (DWIH, New Delhi), the workshop aimed at providing a platform to scientists and doctors from India to engage in discussions around the topics of lymphoblastic leukaemia, myeloid leukaemia, osteosarcoma and iron metabolism disorders in children. Although not strictly within Cancer research, iron metabolism does influence the microenvironment. Additionally, the event also provided the participants with the opportunity to mutually collaborate with their counterparts.

This workshop ensured the participation of key scientists and clinicians from all over India. The clinical data from various parts of India on leukaemia, osteosarcoma and iron metabolism demonstrated the diversity within India and also its differences with the West particularly Germany. Moreover, the workshop not only had intense scientific discussions at regular intervals but also visits to the hospitals. The idea of interspersing field visits with the workshop was to give a better understanding of research atmosphere, infrastructure, laboratories and patient care models.
Furthermore, resulting out of this event was a consultation document prepared by Dr Andreas Kulozik for dialogue amongst Cancer Institutes, TATA and AIIMS, which has given way to discussions on a joint project. Dr Martina Muckenthaler and her colleagues from CMC, Vellore also greatly benefited from this workshop and plan to collaborate even more in the coming future. The teams at Heidelberg and CMC Vellore have initiated collaborations, including a scientific exchange programme.
The 3rd edition of Indo-German Dialogue was organised on 10th November 2016 in cooperation with Indian Institute of Science Education and Research, Pune with a focus on industry-academia cooperation to facilitate exchange of ideas and experiences with regard to the challenges and opportunities and to identify areas of mutual interest. The ‘Indo-German Dialogue on Excellence in Research and Education’, an initiative by DWIH New Delhi, aims at bringing together Indian and German decision makers, stakeholders and leading experts, to jointly and comprehensively discuss the multifaceted and all-encompassing aspects of excellence in research and education.

The event began with a Welcome Address by Heike Mock, Chairperson, DWIH New Delhi, and Director, DAAD New Delhi, and was followed by an address by Prof. Dr Ganesh, Director, IISER Pune. Ms Gabriele Boner, Deputy Consul General of Germany in Mumbai delivered the Inaugural Address which was followed by the keynote address on Industry Needs and Trends in Research delivered by Hubert Reilard, Past President of Indo-German Chamber of Commerce. After a networking break, Prof. Dr Dirk Pleiter from Forschungszentrum Jülich talked about Knowledge Transfer from Academia to Industry: Best Practice.
Thereafter, Prof. Dr M S Ananth, Ex-Director, Indian Institute of Technology (IIT) Madras shared his thoughts with the audience drawing from his vast experience at IIT Madras on The University Research Park as a Catalyst for Innovation and Entrepreneurship. Eileen Trenkmann from GIZ, threw light on Practice Cases of Academia-SME Linkages. Towards the end of the event, academician Prof. Dr Amitava Gupta from Jadavpur University and Anke Faller from Heidelberg University spoke about ‘From Services to Product Development - Partnering with Industry’ and ‘Research Funding – Possibilities for Indo-German Collaboration’ respectively.

These sessions were received well by the audience that included members of academia, representatives of the industry, NGOs and students. DAAD Research Ambassador Dr Arvind Natu from IISER Pune gave the closing remarks and drew the curtains on the 3rd edition of Indo-German Dialogue.
Indo-German Collaborative Summit on “Contemporary Challenges in Paediatric Heart Care”
University of Cologne, in association with Technical University Munich (TUM) and with funding support from the German House for Research and Innovation (DWIH, New Delhi), organised an Indo-German collaborative summit on “Contemporary Challenges in Paediatric Heart Care”. This 2-day event was held at the Amrita Institute of Medical Sciences and Research Centre, Cochin, (Kerala) on 26-27 November, 2016. The primary applicant from University of Cologne for this event was Prof. Dr Konrad Brockmeier (KinderKardiologie), Medical Faculty and the Indian partner was Prof. Krishna Kumar, Clinical Professor and Head, Paediatric Cardiology, Amrita University.

Topics such as management of the adult with congenital heart disease and multi-disciplinary approach, end-stage cardiomyopathy and pulmonary hypertension, MRI and 3D reconstruction with 3D printing, training the next generation of paediatric cardiologists, economics of congenital heart disease, care of patients with single ventricle physiology and paediatric interventional cardiology were discussed as a part of this occasion. The summit successfully resulted in the signing of a Memorandum of Understanding between the two parties in February 2017 for joint research and student/faculty exchange program. Also, a second series of the Summit is planned to be organised this year.
Forschungszentrum Jülich, in association with RWTH Aachen and Technical University Munich, organised an Indo-German workshop on “HPC Architectures and Applications” from 29th to 30th November 2016 at the Centre for Development of Advanced Computing (C-DAC) in Pune. The workshop was funded by the German House for Research and Innovation (DWIH, New Delhi) and was based on the realisation that high-performance computing has a great potential for enabling science and new innovation. Aimed at bringing together HPC experts who are actively involved in research and development of future HPC technologies; particularly those from relevant HPC solution providers as well as application experts, the event was attended by 40 Indian scientists in person. Additionally, the workshop was also streamed to the C-DAC branch in Bengaluru.

The sessions covered various topics during the workshop; such as accelerated HPC architectures and technologies, HPC applications in earth sciences, HPC programming models and performance tools, HPC in neuroscience, virtual reality and visualisation, Scalable mathematical methods and algorithms, HPC applications in turbulence and education in HPC. Apart from this, the agenda also comprised of an inaugural session, industrial session as well as a closing panel discussion.
The inaugural session was attended by Dr Vijay P. Bhatkar as Chief Guest and Dr Jürgen Morhard, German Consul in Mumbai, as Guest of Honor. Dr Bhatkar is one of the leading Indian scientists in the area of HPC and recently proposed the National Mission on Development of Exascale Supercomputing Capability, Capacity and Infrastructure on National Knowledge Network. Dr Morhard highlighted during the inaugural session the increasing number of collaborative relations between Germany and India and stressed that the German government recognises the potential of these relations with India.

The industrial session involved a number of key suppliers of supercomputing technologies like IBM, Intel, NVIDIA and Mellanox.
“How has the British Common Law affected India?” - this question was addressed during the Science Circle Lecture “Legal Transfer in the Common Law World” organised by the German House for Research and Innovation (DWIH New Delhi) on 9 December 2016. Co-hosted with the German Embassy and Max Planck Gesellschaft at the German House, the event was attended by a group of well-informed attendees from the field of law.

In his opening speech, Mr Stephan Lanzinger, Head of the Science and Technology Section, German Embassy, highlighted the role of Indo-German cooperation in the field of Science and Technology. This was followed by Ms Heike Mock, Chairperson, DWIH introducing Prof. Dr Stephan Vogenauer - Director of the Max Planck Institute for European Legal History.
During the talk, Prof. Vogenauer focused on the Common Law and its interactions with other regional/local laws in different parts of the world by giving examples such as that of the Indian constitution where the English law is so intensely rooted even after so many years. Further, alongside the local/regional laws, he vehemently stressed upon the need to abide by a transnational law which would provide an international regime for cross-border business, and not interfere with the local transactions.

This informative lecture was followed by an interactive Q&A session where participants asked some very interesting questions to Prof. Vogenauer and the evening ended in a pleasant networking reception.
In 2016, numerous scientific and educational events were conducted by the DWIH consortium members together with Indian partners in various constellations. Figure 1 presents a collage of Indian partners of DWIH New Delhi working together with the consortium members for the promotion of Indo-German collaboration. The distribution of these trans-regional and transdisciplinary projects are shown in Figure 2 (on the opposite page).

Figure 1

Indian Partners
Figure 2

DWIH Activities in India
Consortium Members of DWIH
New Delhi

www.humboldt-foundation.de
www.bayind.de

www.uni-koeln.de
www.daaddelhi.org

www.dfg.de
www.fz-juelich.de

www.fraunhofer.de
www.fu-berlin.de
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Image Sources

DWIH (Pages 1, 2, 10-11, 16-17, 48-49, 52-53, 54-55, 56-57, 58-59, 60-61, 62-63, 64-65, 66-67, 68-69, 72-73, 74-75, 78-79, 80-81, 84-85, 90-91, 96-97, 98-99); AvH (Pages 18-19); BayIIND (Pages 20-21); UoC (Pages 22-23, 92-93); DAAD (24-25); DFG (Pages 26-27); Forschungszentrum Jülich GmbH (Pages 28-29, 94-95); FhG (Pages 30-31); Freie Universität Berlin (Pages 32-33); GIZ (Pages 3, 34-35); UoG (Pages 36-37); HCSA (Pages 38-39, 70-71, 82-83, 86-87, 88-89); IGCC (Pages 40-41); MPG (Pages 42-43); RWTH (Pages 44-45, 76-77); TUM (Pages 46-47)