

**DAAD** 

Deutscher Akademischer Austauschdienst German Academic Exchange Service

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### Preface

Germany and India have successfully intensified their economic and scientific relations over the last few decades through successful academic cooperation. Today Germany is host to more than 25,000 Indian students and approximately 460 higher education cooperation partnerships between Indian and German universities have been established. During the 5th Inter-Governmental Consultation in 2019, the Indian and German governments expressed their willingness for a long standing and stronger higher education and research partnership between the two countries.

The BMBF-funded programme "A New Passage to India (ANPtl)" launched in 2009 has been playing a major role in strengthening the academic cooperation between the two countries. It is offering German universities the opportunity to cooperate with Indian institutions on a broad basis: initiation and intensification, research and teaching in all subject areas as well as exchange at all academic levels with the participation of all types of universities from Germany and India.

ANPtl aims to increase young German academics' understanding of India, to bring German and Indian students, graduates and doctoral candidates into contact with each other's world of work and research, and to strengthen mutual awareness of each country as a research destination.

The programme contributes towards the Indo-German academic collaboration, internationalisation of the German and Indian institutions through intensive partnerships at the institutional level, development of joint research projects, education and training of German and Indian students and scholars and upgrading study programmes.

A strategic institutional partnership remains a common objective and interest for the Indian as well as German Higher Education Ministries. That resulted in the co-funded Indo-German Partnerships in higher education programme, which is one of the 4 funding pillars under the "ANPtl" scheme jointly funded by the Federal Ministry of Education and Research, Germany (BMBF) and Ministry of Education, India.

The programme includes four funding components:

- The Indo-German Partnerships in Higher Education Cooperation Programme (IGP) that aims to promote the internationalisation of German and Indian universities by intensifying collaboration at an institutional level and developing and delivering innovative teaching and research profiles for master's and PhD programmes. The programme is jointly funded by the Federal Ministry of Education and Research, Germany (BMBF) and Ministry of Education, India and is being implemented by the German Academic Exchange Service (DAAD), and University Grants Commission (UGC), respectively.
- The programme German-Indian Higher Education Cooperations which is funded entirely by the DAAD, aims to increase young German academics' understanding of India through higher education cooperation and to conduct joint application-oriented research and teaching in Germany and India as part of this cooperation.
- The Working Internships in Science and Engineering (WISE) scholarship programme for individuals, where undergraduates from selected Indian universities are introduced to Germany as a destination for academic studies and research at an early stage by receiving the opportunity to support German doctoral students and university teachers in their work.
- The Indo-German Centre for Sustainability (IGCS) in Chennai, a cooperative project between RWTH Aachen and IIT Madras gives German and Indian researchers the opportunity to jointly carry out interdisciplinary teaching and research in the fields of energy, water, land use and waste management and build a German-Indian network in this area.

This brochure showcases highlights of selected cooperation projects which are funded by the "A New Passage to India" programme. We hope this will enable institutions in Germany and India, which are already engaged or interested in a cooperation to explore further collaborations as well as connect with other cooperation projects for a sustained dialogue for research collaborations in the near future.





### **Foreword**

It has given me immense pleasure to know that a brochure highlighting the achievements of Indo-German Partnerships in Higher Education (IGP) is being published. It is a matter of great satisfaction for both the Indian and German sides that IGP has successfully completed the first phase of the programme. The second phase of the programme has also commenced as per the pre-decided timeline.

Though IGP is only five years old, it has come a long way in establishing intensive and sustainable partnerships between the higher education institutions of both India and Germany. IGP has opened up new and innovative areas of cooperation in the fields of education and research.

In the recent years, India has taken various initiatives for internationalisation of its higher education system. Programmes like Scheme for Promotion of Academic and Research Collaboration (SPARC) and Global Initiative of Academic Networks (GIAN) have been introduced for improving the research ecosystem of our higher education institutions as well as for facilitating academic and research collaborations between Indian institutions and the best institutions in the world. Indo-German Partnerships in Higher Education (IGP) is one such programme which has strengthened our efforts towards internationalisation. Through a wide array of activities such as research collaboration, joint conferences/seminars/ workshops, lecture series, summer/winter schools and exchange of teachers/scholars/students/staff, IGP provides an excellent opportunity to the higher education institutions of both the countries to share the best practices with

I congratulate all those institutions that have been part of this prestigious programme. I hope, we shall be able to see many fruitful institutional partnerships in the coming years. I also take this opportunity to convey thanks and gratitude to my colleagues from UGC and DAAD for their efforts in making IGP a success.

Prof. D.P. Singh

Chairman University Grants Commission





### **Foreword**

How can we succeed in making India a more attractive destination for study and research for German academia and at the same time increase mutual awareness of the research traditions of our two countries? One answer to this question, jointly developed by the German Federal Ministry of Education and Research (BMBF) and the German Academic Exchange Service (DAAD), was the initiative "A New Passage to India", which was launched in 2009.

Looking back at the programme, we can confidently state that the aims of this initiative have been achieved. The number of German students and scientists studying and carrying out research in India has increased significantly. Between 2009 and 2019, DAAD funded more than 8,000 stays of German students and researchers in India. During this period, the number of Indian students enrolled in Bachelor, Master or PhD courses in Germany has increased by more than 12,000. Furthermore, DAAD is currently funding more than one hundred higher education cooperation projects between India and Germany.

The cooperation projects which have been realized so far under the umbrella of the programme constitute a strong foundation for future strategic partnerships between Indian and German Higher Education Institutions. A particular focus of "A New Passage to India" involves collaborative and intensive efforts to find answers to global challenges such as climate change, energy supply and water management. The success of the programme has led to a new funding period which will enable and foster Indo-German higher education cooperation and exchange until 2024.

In this brochure, we present selected examples of successful partnerships which have been established between Indian and German Higher Education Institutions. These projects present the diversity and the experiences of Indo-German cooperation in higher education and may serve as models for future collaboration.

We hope that this overview provides interesting insights into the variety of higher education projects, best practices and achieved results. Finally, we strongly believe that with this initiative as a common basis, the passages between Germany and India will continue to expand successfully in the future.

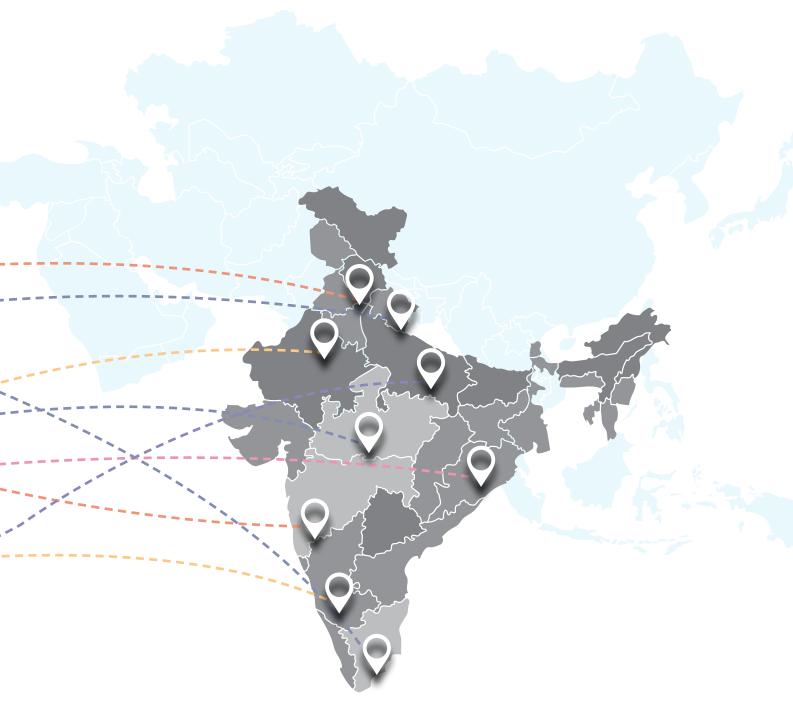
**Prof. Dr. Joybrato Mukherjee**President
DAAD



### Participating German Universities

- Q Leibniz University of Hanover
- ♀ RWTH Aachen University

- $oldsymbol{\mathsf{Q}}$  South Asia Institute, Heidelberg University
- ∇ Technical University of Munich
- ∇ Technische Universität Dresden
- **Q** University of Cologne
- University Hospital Heidelberg
- ♥ University of Heidelberg
- O University of Passau
- ♥ University of Potsdam
- University Regensburg



### Participating Indian Universities

- Panaras Hindu University
- P Bharati Vidyapeeth University
- Christian Medical College Vellore

- Indian Institute of Science Education and Research Pune

- Malaviya National Institute of Technology Jaipur
- National Institute of Technology Rourkela
- National Law School of India University Bangalore
- O.P. Jindal Global University

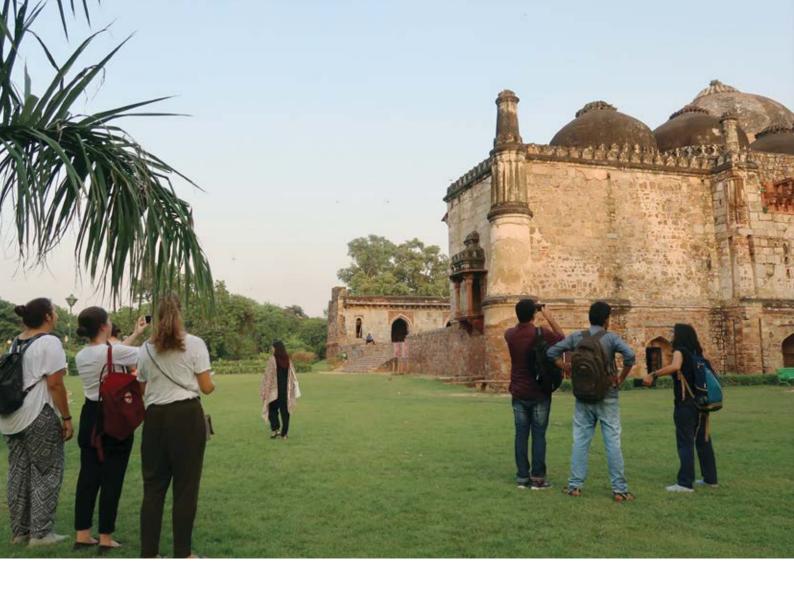


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## Adult and Lifelong Education: Indian and German Insights

Indo-German Partnership in Higher Education Phase I (2016-2020)

Partners: Julius Maximilian University of Würzburg (Faculty of Human Sciences Institute for Education) and Delhi University (Department for Adult Continuing Education & Extension)

Other participating institutions: Helmut Schmidt University/University of the Federal Armed Forces Hamburg (Germany); International Institute for Adult & Lifelong Education (India)

Project Coordinators: Prof. Dr. Regina Egetenmeyer (Germany), Prof. V.K. Dixit, Prof. J.P. Dubey, Prof. Rajesh (India)

Subject Field: Social Studies/Humanities

"Participating in the International Autumn School at Delhi University enabled me to engage in a new learning environment, which is very interesting to me, coming from adult education. I especially appreciated the great understanding of each other's different learning experiences that was constantly developed by both, Indian and German students."

Clara Kuhlen PhD Scholar, University of Würzburg, Germany

Number of exchanges

From India to Germany - 17 | From Germany to India - 34

The project Adult and Lifelong Education: Indian and German Insights intensifies the internationalisation between the University of Würzburg and the University of Delhi in the study of Adult Education/Continuing Education. The project focuses on a sustainable and research oriented as well as a curriculum-integrated student mobility in the Master program of Education as well as the doctoral program relevant for Adult and Continuing Education with the following specialisation: European policy on lifelong learning inside and outside

of the European Union. Offers and forms of continuing education and training at universities for educationally disadvantaged groups - academic professionalisation as an interrelation between academic knowledge and practical experience. The annual activities comprise a Winter School at Würzburg in February, a Summer School at Delhi in September as well as exchange programs over several months for students of the universities of Würzburg and Delhi. Furthermore, the two universities also maintain an exchange of teachers.

#### **Project Highlight**

This Indo-German Partnership comprised of four Winter Schools at Würzburg and three Autumn Schools at Delhi University, India. In these programmes, the students had the opportunity to meet each other in one's home country as well as in each other's country. Professors and teaching staff integrated in the teaching of the

partner university so that an internationalisation at home was supported for the students who could not travel to the other country. Furthermore, these intensive programme strengthened the internationalisation of the curriculum of both the universities.

"Winter School 2016 was a great event to participate. It was a delight to see such a well-organized program which gave a chance to explore (socially, culturally, etc.) with students from different nationalities. Discussing and sharing different ideas and thoughts on adult education was a new treasure to my learning. I think no other platform can give such an opportunity. The Winter School teacher's style of imparting knowledge is quite captivating. I'm really thankful to the Delhi & Würzburg University and even DAAD."

Shiva Srivastava MPhil Student, University of Delhi, India

## Contribution towards the internationalisation strategy of the partner institutions

This Indo-German partnership contributes to the internationalisation strategy. Seasonal schools and intensive modules not only strengthen the mobility of travelling students, but also of students from the hosting university. The integration of those modules and programmes (Winter School and Autumn School) in the curricula of Master programmes with a focus on adult education at both partner universities contributes towards the internationalisation of those study programmes. In a long-term perspective those integration processes of international modules contribute towards international and global learning processes of the students. In current societal changes those are especially pivotal for future adult educators who later cope with an international target group.

#### Future potential of the project

- The Indo-German partnership has a great potential and is very important due to societal changes such as internationalisation. Adult education students have the capability to improve their reflection on adult education in their own countries as well as in international contexts and also to improve their intercultural competencies
- In 2025, we hope to further cooperate and to offer mobilities to the students and the teaching staff
- Furthermore, we would like to point out the importance of including practice partners in this cooperation so that students not only learn about international adult education theories but also international adult education practices





## Centre for Modern Indian Studies (DE/IN CeMIS)

German Indian Higher Education Cooperation (DIHSK) 2019-2023

Partners: Georg August University of Göttingen (Centre for Modern Indian Studies) and O.P. Jindal Global University (Jindal School of Government and Public Policy)

Other participating Indian institutions/organisations: University of Agricultural Sciences Bangalore · Ambedkar University · Ashoka University · Azim Premji University · CSSSC · Delhi University · Hyderabad University · IIM Bangalore · IIT Gandhinagar · Jadavpur University · Jawaharlal Nehru University · O.P. Jindal Global University · Pondicherry University · IIM Kolkata

Project Coordinators: Dr. Karin Klenke (Germany) and Prof. Sumeet Mhaskar (India)

Subject Field: Social Studies/Humanities

The "DE/IN CeMIS" project fosters academic exchange and strengthens cooperation between 14 Indian institutions of Higher Education and the Centre for Modern Indian Studies at Göttingen University. Through the scholarship programme, M.A. and Doctoral Researchers from CeMIS have the opportunity to visit and attend partner institutions, and Doctoral Researchers

and guest professors from our partner institutions have the opportunity to spend time at CeMIS. In addition to a semester abroad, CeMIS M.A. students also have the opportunity to go on thematically focused excursions to India. "DE/IN" CeMIS builds upon earlier project phases from 2010–2017 and testifies to their success.

#### **Project Highlight**

Given the restricted mobility during the pandemic, we developed an online training seminar "Teaching and Learning in Intercultural and Digital Settings" with Göttingen University's Didactics Section. Currently, 35 teaching faculty from our 14 partner institutions and

CeMIS reflect on the challenges of digital teaching and expand their classroom competencies.

Prof. Mhaskar from O.P. Jindal Global University was an Alexander von Humboldt Fellow at CeMIS from 2014 - 2016 and is now the Principal Investigator in the "DE/IN CeMIS" project.

"My colleague and I spent three months in Madhepura (Bihar) with a DAAD PhD scholarship to conduct quite challenging fieldwork for our project on iron supplementation in Anganwadi Centres. The collaboration with the research staff and our colleague on the ground was great. We look forward to our further cooperation!"

Lisa Bogler
PhD Scholar, CeMIS research Group

Lisa is a Doctoral Researcher in the CeMIS research group "Indian Economic Development". With her colleague Ann-Charline Weber, she conducted fieldwork in Madhepura (Bihar) on iron supplementation in Anganwadi Centres in 2019-20. Lisa and Ann-Charline both received a DAAD scholarship.



## Contribution towards developing an international network

Within the first ten years of its existence, the Centre for Modern Indian Studies (CeMIS) at Göttingen University has developed into an international node of cutting-edge research on contemporary India from an interdisciplinary perspective, combining social sciences, humanities, and development economics. This development has been aided by four consecutive DAAD-funded "A New passage to India" projects, which strengthened our networks with Indian universities and inspired academic cooperation. Most of the contact persons at our current 14 Indian

partner institutions were previously research fellows at CeMIS - a testament to the sustainability of our multi-institutional network which is still growing.

#### Future potential of the project

Our coo peration will further strengthen through the exploration of digital formats, because mobilities will still be difficult for at least another 12 months. Digital formats will become an integral part of our academic partnerships in the post-pandemic world and will contribute to intensification and expansion of the cooperation.





## Chemical Innovations for a Sustainable Future

Indo-German Partnership in Higher Education Phase II (2020-2024)

**Partners:** University Regensburg (Institute for Organic Chemistry) and National Institute of Technology Rourkela (Department of Chemistry)

Project Coordinators: Prof. Dr. Burkhard König (Germany) and Dr. Debayan Sarkar (India)

Subject Field: Chemistry

#### **Expected Outcome**

The planned intensive collaboration is intended to strengthen and consolidate personal contacts at all levels between the two partner institutions involved in the project. Sustainability in chemistry is being developed into a teaching focus at both institutions. The importance of chemistry as an interdisciplinary science

for achieving the UN's "Sustainable Development Goals" is made visible by the project beyond the partners involved. The network of actors from research and industry in India and Germany is the ideal basis for knowledge transfer and the joint development of innovative teaching and research concepts.

The Department of Chemistry at NIT Rourkela and the Faculty of Chemistry and Pharmacy of the University of Regensburg team up for joint activities aiming for a better preparation of the next generation of chemistry to meet the challenges of the 21st century. The overall goal is to transform all technologies on earth into circular processes, which will require a fundamentally different mindset of scientists for which not only innovative training in science is necessary but also a better understanding between societies and cultures to create global awareness of the duties and responsibilities that lie ahead.

Institutional interest for Indo-German Cooperation

Initial contacts between the partner institutions have already been established. Prof. König (UR) gave a GIAN course in 2019 at NIT Rourkela and had the chance to interact with faculty and students during his visit. Dr. Sarkar is Associate Professor at NIT Rourkela and currently visiting professor at the faculty of chemistry and pharmacy in Regensburg for 2020 to establish research contacts in the area of sustainable chemistry, particular visible light driven organic synthesis and photo disinfection. Extending these initial collaborations, we aim to implement an intensive collaboration between both departments involving faculty and graduate students.

#### Future potential of the project

After the end of the funding period, joint applications should be submitted based on the experience of the first generation of exchanged students and doctoral candidates. In this way, a continuous exchange and intensive cooperation between the university partners,

but also the industrial companies and other research institutions involved, are established at the various qualification levels.

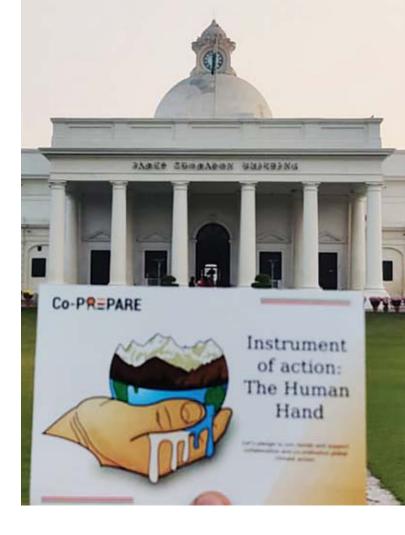
#### Activities 2020-21

- Working meeting for project coordination New Delhi October 2020
- Research stay of one Doctoral Researcher from NITR at UR Regensburg December 2020 - November 2021
- Research stay of one Post Doc from NITR at UR Regensburg March 2021 - February 2022



Collaborative Indo-German Project on estimating and predicting Natural Hazards in the Himalayan Region (Co-PREPARE)

Indo-German Partnership in Higher Education Phase II (2020-2024)



**Partners:** University of Potsdam (Institute for Environmental Sciences and Geography) and Indian Institute of Technology Roorkee (Department of Hydrology)

**Other participating German institutions**: Potsdam Institute for Climate Impact Research (PIK), German Research Centre for Geosciences (GFZ)

Other participating Indian institutions: National Institute of Hydrology (NIH), Central Building Research Institute (CSIR-CBRI), Wadia Institute for Himalayan Geology (WIHG)

Project Coordinators: Prof. Dr. Axel Bronstert (Germany) and Prof. Dr. Ankit Agarwal (India)

Subject Field: Environmental Sciences, Ecology

Natural hazards, such as extreme rainfalls, flash floods, and landslides are taking place more often these days, which is partly associated with climate change. Its impact on hazard-prone mountainous regions are particularly severe due to the physical terrain, geological or seismic fragility, and intense precipitation. The Himalayas region, both highlands and forelands, are particularly vulnerable, because of

regional danger of floods, land-slides and earthquakes. Such events have severe impacts on security of housing, infrastructure, livelihood and food supply. The project facilitates cooperation between the University of Potsdam, Indian Institute of Technology, Roorkee, and their partners to build capacity to engage in natural hazard research by sharing expertise and creating new insights together.

#### **Expected Outcome**

With a strategic partnership, we aspire

- To strengthen international research networks
- Enable transformative learning of students. With an uncompromised focus on nurturing young leaders through an interdisciplinary and international

exposure and building a university research culture that motivates faculty research engagement, collaboration, and cooperation, Co-PREPARE will facilitate (i) internationalisation, (ii) teaching, (iii) research, (iv) innovation, and (v) social contribution

#### Institutional interest for Indo-German Cooperation

We are aware of the needs and benefits of collaborative international projects. Through, Co-PREPARE, we target to co-raise cohorts of students (i.e., MTech/M.Sc., PhD) with expertise to address some of the most serious challenges and natural hazards and risks in steep terrain while creating a partnership at the institutional level.

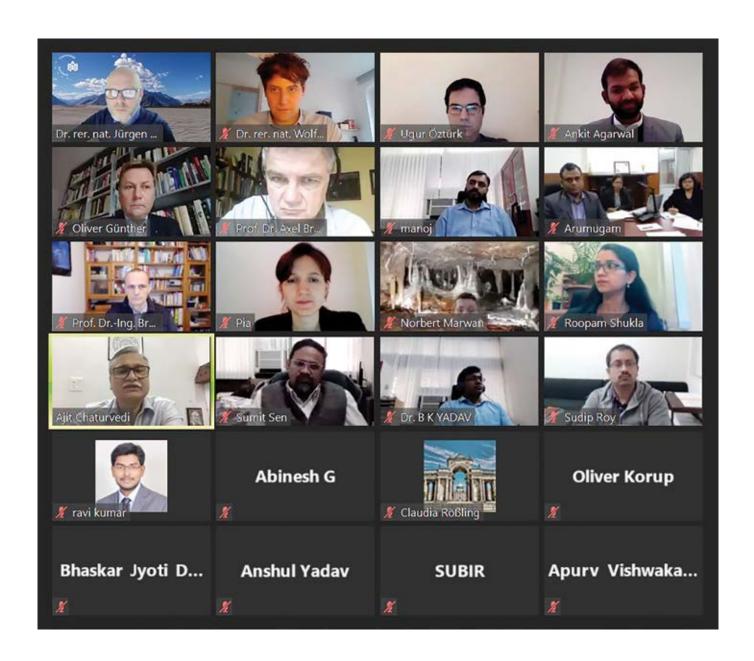
#### Future potential of the project

We would favour a continuing kind of routine, partnership in the areas of hydrology, climate sciences & natural hazard and risk research. This partnership might be underpinned by regular exchange of master students and/ or master thesis (and partly PhD-thesis) topics related

to the topics of the before mentioned disciplines and research fields, with case studies from both countries.

#### Activities 2020-21

- Kick-off the Co-PREPARE project and setting up the strategic roadmap
- Initiating cooperation between international offices and involved personnel of Indian Institute of Technology Roorkee and University of Potsdam
- Planning online lecture series of Understanding the Dynamics of the Natural Hazards in the Himalayas (UDAN)
- Initiating Joint degree program between IIT Roorkee and UP





# Combating environmental pollution through internationalisation of education in Germany and India

Indo-German Partnership in Higher Education Phase II (2020-2024)

Partners: Technical University of Dresden (Institute of Lightweight Engineering and Polymer Technology) and Indian Institute of Technology Delhi (Department of Mechanical Engineering)

Project Coordinators: Prof. Dr.-Ing. habil. Maik Gude (Germany) and Prof. Dr. Ashish K Darpe (India)

Subject Field: Engineering

#### **Expected Outcome**

The proposed project is a unique approach, where specialists from Germany and India are brought together to initialise measures for increasing the pollution awareness. The presented bottom-up initiative attempts to accommodate the understanding of pollution-minimising measures in research projects,

teaching programs and industry actions in the two involved countries. Considering the scale of the challenge and implications on future generations, the described approach is of vital importance and may be trendsetting for other countries and institutions.

The main vision of the planned project is a better understanding of the challenges, shortcomings and solutions regarding the pollution awareness in the two countries. Specifically, the environment protection initiatives are intensified by aiming at increasing the environment awareness among the students, scholars, and company employers. The joint initiative of DAAD (Deutscher Akademischer Austauschdienst German Academic Exchange Service) and UGC (University Grants Commission), allows organised exchange of problems and potential solutions between partners from Germany and India.

#### Institutional interest for Indo-German Cooperation

In the light of constantly increasing human population, minimising the impact of mankind's actions on the environment becomes a vital issue. Especially the noise, air or water pollution as well as waste management have become one of the greatest global challenges that humans have ever faced. The accomplishment of this task is particularly difficult considering the necessity of comprehensive cross-national cooperation of societies with their different development stages, language diversity and cultural backgrounds as well as their local problems and beliefs. India and Germany are important players in science. When they join forces, they have a greater impact on the challenges that can only be met by the global community.

#### Future potential of the project

The present project enables the TU Dresden and the IIT Delhi to institutionalise the long-standing cooperation conceptually and strategically, so that by 2025 we will have reliable and sustainable structures that enable permanent cooperation at all levels: student exchange, staff mobility, joint projects, joint publications and, above all, the anchoring of the topic of pollution awareness in teaching and research.

#### Activities 2020-21

- Forming a joint Indo-German team of professionals working towards a common goal of education and research which is directed towards pollution awareness
- Framing the UG and PG course content and floating the research topics to be pursued by graduate students
- Brainstorming on collaboration with the German team for a joint workshop
- Identifying research activities during the upcoming research stay in Summer 2021
- Building course material for noise pollution awareness short course for industry and academia





## Cultures of Learning in academic and nonacademic institutions in India and Germany

German Indian Higher Education Cooperation (DIHSK) 2019-2023

Partners: Julius Maximilian University of Würzburg (Chair of Indology, Institute of Cultural Studies of East and South Asia) and Banaras Hindu University (BHU) (Department of Library & Information Science)

Other participating German institutions/organisations: Classical Indology, South Asia Institute Heidelberg

Project Coordinators: Prof. Dr. Jörg Gengnagel (Germany) and Prof. Dr. Hari Nath Prasad (India)

Subject Field: Language and Cultural Studies

Our cooperation concentrates on the historically and culturally diverse "Cultures of Learning" in India and Germany. The project will be carried out in collaboration between BHU and IIT (BHU) in Varanasi, India and the German Universities of Heidelberg and Würzburg.

A whole range of activities will be addressed:

Scholarships, study and research stays in Germany and India

- Annual excursion "Campaigning for Hindi: The Nagari Movement at Banaras and BHU" to Varanasi
- Annual winter school "Lived Sanskrit Cultures" in Varanasi
- Short-term stays of German and Indian university professors
- Workshops in India and Germany on "Indo-German Encounters and the History of Indology"

#### **Project Highlight**

The International Workshop organised in Wuerzburg (Germany) was very successful in the sense that it provided opportunity to the participants to share their knowledge and experience of both the India and Germany counterparts. We had exposure to the latest technologies used in the museums to preserve the objects. The visit to the state museum in Wuerzburg was a lifelong experience and we could see and appreciate the art and culture of Germany and other countries

as well. We could see and learn the preservation and conservation techniques used in libraries to reserve the rare documents and manuscripts. The storage and retrieval technique used in Germany made us to have a comparative comprehension of the state-of-the-art technologies. Such workshops at regular interval of time will keep the scholars updated in their subject fields. I really congratulate the organisers for the grand success of the Workshop.

"Due to my stay in India, my textual studies were enriched by real life experience and personal encounters."

Andreas Würzberger Würzburg

"It was fascinating to study the lived practices of Sanskrit learning and expertise in academic and non-academic institutions in Varanasi."

Ignatz Hetzel Würzburg

## Contribution towards developing an international network

The project creates a multi-national network by bringing together Würzburg University, Heidelberg University and the two Indian partner universities Banaras Hindu University and Indian Institute of Technology, Department of Cultural Studies (BHU). This is a setting of collaborations that does not form part of the standard Indo-German university collaborations. Through the collaboration of Würzburg University in both the Merian Centre (ICAS:MP) and the activities of the Max Weber Foundation in India the project's framework has already

opened up to a wider academic framework, for example in the context of gender issues in academic institutions.

#### Future potential of the project

The cooperation has already become an important part of bi-lateral exchange in the academic lives of the universities involved. Students are eager to have the chance widen their intercultural understanding after their introductory studies. Doctoral Researchers profit from expert supervision and fellows are able to interact in the context of joint research projects. These activities should be consolidated and extended after the present funding period.





## Exploration: New Opportunities in Indo-German Academic Cooperation

Indo-German Partnership in Higher Education Phase II (2020-2024)

Partners: Technical University of Munich (TUM) (TUM School of Governance & TUM Department of Civil, Geo and Environmental Engineering) and Indian Institute of Technology Bombay, Indian Institute of Technology Kharagpur (Indo-German Collaborative Centre on Intelligent Transportation Systems, Climate Change)

**Project Coordinators:** Prof. Miranda Schreurs and Prof. Constantinos Antoniou (Germany) and Prof. Amit Agrawal (India)

Subject Field: Mobility and Transport and Climate, Energy and Environment

On an institutional level, our project focuses on exploring untapped potential opportunities with regards to certain target groups. It will do so by introducing new and sustainable engagement formats and funding programs on the institutional level, while also incentivising increased bottom-up dynamics to 'naturally' grow the partnerships



Prof. Miranda Schreurs



Prof. Constantinos Antoniou



Prof. Amit Agrawal

between TUM, IITB and IITKGP. Thereby, our project will develop two existing key partnerships of TUM in India into more strategic, holistic relationships that provide concrete

opportunities for members of TUM, IITB and IITKGP while also sharpening the specific profiles of these partnerships.

#### **Expected Outcome**

IITB and IITKGP are premier technical institutions in India and both share a long history of cooperation with TUM. Over the course of this project, these relationships will have transformed into true platforms of exploration – not only for the members of the three universities involved, but rather for their broader regional and national communities. Enhancing

opportunities for collaboration both on the level of senior scientists as well as young talent will produce new cooperation formats and tangible outcomes such as joint workshops and conferences, exploratory workshops, joint summer/winter schools in the thematic focus areas, research forums, student, and faculty mobility programs.

#### Institutional interest for Indo-German Cooperation

TUM is interested in exploring India's emerging market and opportunities to expand collaborations with its Indian partners in the broader areas of Science, Technology and Innovation. Our project is well aligned with the objective of this DAAD/UGC call to foster strategic institutional relationships in India to promote stronger engagement with external stakeholders while also reflecting TUM's new institutional priorities. Our joint project essentially tackles the 'twin challenges' of TUM's current engagement with India, i.e., the formation of holistic institutional partnerships which create transformative impact and a lack of opportunities, specifically for young talent, but also other university status groups, to benefit from, contribute to and help shape TUM's relationships in India.

#### Future potential of the project

By 2025, we hope to have expanded our cooperation in other research fields and developed stronger ties with India with more focused partnerships. Furthermore, we aim at having a more active exchange between researchers, university administration and students but also engaging with industry research via the Indian institutes.

#### Activities 2020-21

- The opportunity to learn about each partner University teaching and research interests
- The chance to share information and develop solutions to global issues like climate change, water management, and energy and transportation transition
- Making plans for future joint activities and opening opportunities for student and faculty exchange
- Virtual exchanges between the partners and exploration of virtual formats for a closer and sustainable collaboration to better align TUM's expectations for the project
- Definition of the exact challenges to be tackled within the project
- IITB is looking forward to the Kick-Off Workshop and Exploratory Research Workshop in 2020-21. These should be online as this involves a larger number of participant
- For the next phase, we look forward to student exchange and faculty exchange
- The online workshops to help us to define the details of the exchanges





## Exploring Cultures of Learning in India and Germany

German Indian Higher Education Cooperation (DIHSK) 2019-2023

**Partners:** South Asia Institute, Heidelberg University (Department of Cultural and Religious History of South Asia) and Indian Institute of Technology BHU (Department of Humanistic Studies)

Other participating Indian institutions/organisations: Department of Sanskrit/Central library, Banaras Hindu University

Project Coordinators: Prof. Dr. Ute Hüsken (Germany) and Dr. Vinita Chandra (India)

Subject Field: Language and Cultural Studies

As part of a constant endeavour to promote mutual understanding and international scientific research, our project "Exploring Cultures of Learning in India and Germany" enables academic exchange in the areas of cultural and religious studies, Sanskrit, and other languages of South Asia between the Department of Cultural and Religious History of South Asia, South Asia

Institute, Heidelberg University and the Department of Humanistic Studies, Indian Institute of Technology (BHU). This includes the exchange of researchers, teaching staff and students, conducting joint research projects, organisation of international colloquia and regular exchange of documentary publication and teaching materials.

"My interaction with the faculty as well as with the students at BHU has exposed me to the Indian academic sphere and taught me that my way of thinking, studying and doing research is not the only way or the right way of doing things. I've learnt that my process of proving facts might not be considered valid by another and that there is no hierarchy in the systems of thoughts. The very thinking that is self-consistent, whether it is academic, ethical, religious, philosophical, etc. has its own dignity and equal value."

Anna Scarabel
PhD Scholar, South Asia Institute, Heidelberg University

### Contribution towards developing an international network

Through financial grants which facilitate stays at the respective educational institution, both students and faculty members will get the opportunity to gain study and/or teaching experience with the other university. In this manner, academic competence with respect to India will be promoted among the participants from Germany and vice versa the participants from India will gain insight on the German academic spheres. Specifically, in the newly established Centre for Asian and Transcultural Studies (CATS) at Heidelberg University, through the exchange

possibilities with BHU India will attain a broader space within the programs of other constituting institutes of CATS i.e., the Heidelberg Centre for Transcultural Studies, the Centre for East Asia Studies, and the Institute for Cultural Anthropology.

#### Future potential of the project

We also aim at expanding this cooperation between BHU and Heidelberg University to the other institutes of CATS on one hand, and to further departments of BHU on the other.





## Hardware-aware Algorithms in Scientific Computing (HAASC)

Indo-German Partnership in Higher Education Phase II (2020-2024)

Partners: University of Heidelberg (Interdisciplinary Centre for Scientific Computing) and Indian Institute of Science Bangalore (Department of Computational and Data Sciences) (CDS)

Other participating Institutions: Jülich Supercomputing Centre, Forschungszentrum Jülich (Germany), Tata Institute of Fundamental Research Bangalore (India)

Project Coordinators: Prof. Dr. Peter Bastian (Germany) and Prof. Dr. Sashi Kumar Ganesan (India)

Subject Field: Computational Science

Algorithms in scientific computing, always eager for compute-power, need to adapt to the situation of everincreasing parallelism, corresponding structures and data locality. New algorithms and implementations need to be devised which are able to exploit and adapt to the new hardware architectures available in the future, despite the slowdown in Moore's law. The main objective of this initiative is to bring together research and teaching



Prof. Dr. Peter Bastian Germany



Prof. Dr. Sashi Kumar Ganesan

activities of the partners, on hardware-aware scientific computing and on future heterogeneous supercomputers, to develop young researchers and to initiate long term collaborative projects on this challenging field. The project is based on a core overlap in specific fields such as finite element methods and solvers and there is complementary

expertise, e.g. in uncertainty quantification, machine learning and computer architecture. The involved scientists are well-known in their respective fields. Moreover, the involvement of the industrial partner NVIDIA (India) is highly relevant to the topic of this program.

#### **Expected Outcome**

- To train a new generation of students at Master and PhD level, who are both fluent in state-of-theart efficient numerical methods, hardware-aware design and implementation of these algorithms
- To build a leading network of researchers in India and Germany in high- performance scientific computing
- To establish collaboration on joint research projects among the project partners, and in the long term perspective
- To establish a cotutelle PhD program between Heidelberg University and IISc

#### Institutional interest for Indo-German Cooperation

The Interdisciplinary Center for Scientific Computing has a long-standing tradition in cooperation with partners in south-east Asian countries. With the Department of Computational and Data Sciences at the Indian Institute of Science Bangalore, we have now found an ideal partner in the field of scientific computing on supercomputer architectures. Together we can establish strong ties at the level of teaching in the Master and PhD programmes as well as at the research level.

#### Future potential of the project

Ideally, after our four-year program we will have established sustainable ties between the involved institutions, research institutes and industry, that are visible as a place where hardware aware scientific computing is pushed forward. Master students, Doctoral Researchers and staff are regularly exchanging and doing research together.



#### Activities 2020-21

The planned activities from the Indian side during 2020-21:

- Organising and planning meeting and summer/winter schools
- Sharing existing courses and introducing joint courses
- Selecting students from both master's and research programme, for joint supervision
- Due to COVID, all these events will be online



## Indian Institute of Technology Indore and Leibniz University Hanover partnership

German Indian Higher Education Cooperation (DIHSK) 2019-2023

Partners: Leibniz University of Hanover (International Office) and Indian Institute of Technology Indore (Office of International Affairs)

Project Coordinators: Dr. Birgit Barden-Läufer (Germany) and Dr. Kapil Ahuja (India)

Subject Field: Physics, Organic Chemistry, Computational Science, Environmental Biotechnology

#### **Project Highlight**

Event Name - Indo-German Winter School 2020 (Feb 10-12, 2020) - A New Passage to India Title - "Optimization of Large & Dynamic Systems and Modelling, Discretisation, Optimisation, & Simulation of Multi-Physics Problems". Description - Prof. Dr. Marc C.

Steinbach (LUH), Prof. Dr. Thomas Wick (LUH), and Dr. Kapil Ahuja (IITI) were the organisers of this school, which was attended by about ten students. The lecture series for this winter school was divided into two modules, each presented by the two visiting professors from LUH.

"One-month accommodation in India as a new journey was a good chance for me to be more familiar with Indian culture. I met lovely people there, visited a lot of places, and enjoyed the beauty of the nature. I would like to appreciate DAAD for providing this opportunity for me."

#### Mr. Markus

LUH, Germany, during his visit at IIT Indore (Nov 2019), under the German Academic Exchange Service (DAAD) funded project LUH-IIT Indore Partnership (2019-2023) under the "A New Passage to India program."

At the beginning of the project in April 2019, the kickoff meeting was held in Hanover to coordinate the joint research of the various research institutions involved in the project. Furthermore, various professors, master's students, doctoral students and post-doctoral students travelled from Hanover to Indore and from Indore to Hanover to carry out their research projects in cooperation. Besides the research, special attention was paid to the increase of the India and Germany competence. Last year, the professors involved were able to inspire many interested students to support them in their research in Indore and/or in Hanover. The research groups are achieving promising results and are keeping to the schedule they set for themselves at the beginning of the cooperation. Further, joint publications are planned for the different research groups. A strong networking of the participating research institutions of the two universities can already be seen.

### Contribution towards developing international network

Already in the initial phase of the project there are promising cooperation between the different participating faculties of Leibniz university of Hanover and the Indian Institute of Technology Indore. Joint publications and even the application for a patent is planned. Especially the physical visits contribute to a sustainable multi-institutional international network, which will continue to exist after the end of the funding.

#### Future potential of the project

Even after the end of the project in 2023, we will continue to work closely with our partners. The further collaboration between the faculties will find new or continuing research content and we will be able to work on it interactively.





## Indo-German Centre for Sustainability (IGCS) Indian Institute of Technology Madras

Indo-German Partnership (2020-2021)

Partners: RWTH Aachen University (Neotectonics and Natural Hazards) and Indian Institute of Technology Madras (Department of Electrical Engineering)

Other participating German institutions/organisations/companies: Kiel University (Prof. Dr. Nicola Fohrer); University of Stuttgart (Prof. Dr. Martin Kranert); TU Berlin (Prof. Dr. Frank Behrendt); Maschinenfabrik Reinhausen/Highvolt (Dr. Uwe Kaltenborn), at RWTH also Prof. Dr. Martin Formhold-Eisebith and Dr. Carmella Pfaffenbach

Other participating Indian institutions/organisations/companies: Indian Department of Science and Technology (DST), at IIT Madras also Department of Engineering (Prof. Dr. R. Vinu); Department of Civil Engineering (Prof. Dr. Ashwin Mahalingam); Department of Ocean Engineering (Prof. Dr. S.A. Sannasiraj)

Project Coordinators: Prof. Dr. Klaus Reicherter (Germany) & Prof. Dr. Krishna Vasudevan (India)

Subject Field: Interdisciplinary Field of Studies

"IGCS at IIT Madras is tailor-made for my professional and personal background. It allows me to be right where my research sites are while facilitating mobility of students and researchers. This interface provides me with excellent opportunities to work closely with our Indian research partners and be part of the faculty."

Dr. Christoph Woiwode German Post Doc, IGCS, IIT Madras



#### Number of exchanges

From Germany to India - 385

The IGCS conducts research on current sustainability challenges and disseminates the generated knowledge. In order to achieve that, IGCS offers funding opportunities for individual research exchange between junior and senior researchers from both India and Germany. Another

focus of IGCS is knowledge transfer through Summer and Winter Schools carried out in both countries as well as research programs. IGCS premises are located at the Indian Institute of Technology Madras in Chennai, India, however research takes place all over Germany and India.

#### **Project Highlight**

The establishment of a research program at IITM by Maschinenfabrik Reinhausen (MR) is a very good example for the cooperation in the area of sustainable power grid operation. Under this, MR has sponsored three projects in the area of sustainable grid management. One, in the area of islanded operation of PV grids, that specifically addresses cases where grid connected renewable sources become inoperative or when grids fail as it happens in weaker grids. It is also relevant for

grids with high penetration of renewables where instability can result in grid break up. The work explores ways for sustainable, resilient grid operation that results in two patent filings and further applications for funding. In another project, power electronic systems aimed at the development of a solid-state transformer, touted as the transformers of the future are being developed. In a third project, methods of power flow control in the Indian grid is being investigated.

"Germany is a country that puts special emphasis on sustainable development. IGCS is an Indo-German Knowledge Hub providing a platform for conducting interdisciplinary research. With a vast network of researchers IGCS aims to provide solutions for global challenges. It also conducts Summer and Winter Schools in both countries to share knowledge and educate students about sustainability topics."

Prof. S.A. Sannasiraj Indian Area Coordinator, IGCS, India



#### Contribution in the area of sustainability

India and Germany are committed to promote and implement sustainability. The essence of sustainability is a stable relationship between human activities and the natural world. There is an evident need for further, coherent reform towards full integration of sustainability and environmental concerns in mainstream sociotechno-economic development, especially in securing and protecting our resources such as water and energy, and in infrastructure development considering land use and waste management. With its vast network of scientists and practitioners and its activities, IGCS is a source of inspiration and skills, conceptual models and standards, as well as best-practice examples for proactive

transformation. It offers high esteemed human capital and solutions for various global challenges affecting India, Germany and other countries.

#### Future potential of the project

The activities over the last decade and the present focused on research activities in coastal management and power grid management are posed to make IGCS a highly vibrant and visible cooperation by 2025. The work in the current phase has intensified with the formal introduction of long-term German post-docs and will help place IGCS as a forerunner by 2025.





## Indo-German Applied Science Collaboration (IG-ASC)

Indo-German Partnership in Higher Education Phase II (2020-2024)

Partners: East Bavarian Technical University of Applied Sciences Amberg-Weiden (OTH-AW Faculty of Mechanical Engineering/Environmental Technology) and Malaviya National Institute of Technology Jaipur (MNIT) (Centre of Energy & Environment (CEE))

Project Coordinators: Prof. Frank Späte (Germany) and Prof. Dr.-Ing. Jyotirmay Mathur (India)

Subject Field: Engineering



Prof. Frank Späte Germany



Dr.-Ing. Jyotirmay Mathur

Development, implementation and conduction of a master's programme "International Master of Applied Research": it will offer possibilities of exchange for students and staff.

The conduction of several "Indo-German Summer-Winter Schools" on applications of renewable energy in buildings

with low energy cooling and heating in India and Germany.

Regular research visits to emphasise international research activities of each of the partners and create joint projects by intensifying already existing cooperations with other science organisations and the industry in India and Germany around sustainable engineering.

#### **Expected Outcome**

- The establishment of an International Master's programme in Applied Research with a regular exchange of students and staff
- The establishment and conduction of joint research projects and activities in the area of sustainable engineering
- Intercultural exchange of students and staff

#### Institutional interest for Indo-German Cooperation

#### OTH-AW, Germany:

- Intensify and enhance the existing cooperation on institutional-level and beyond
- Intensify and enhance joint research activities in environmental and other sustainable technologies
- Intensify and enhance the internationalisation of our University and the intercultural exchange

#### MNIT, India:

- Enhance the level of cooperation between MNIT and OTH through increasing the width and depth of collaboration
- International exposure to Indian students
- Facilitate knowledge and cultural exchange among faculty and students

#### Future potential of the project

The outcomes of the project will be reaching far beyond the project time. Particularly, the new international Master's programme and the joint research projects will be sustainable and strengthen the cooperation between the two participating institutions on a long term

#### Activities 2020-21

- Summer-winter school on Sustainable buildings in India and Germany, covering sustainable design of buildings in cold and hot climates, low energy cooling and heating systems, and use of on-site renewable energy sources
- Faculty visits to explore joint collaborative research areas, joint supervision of PG and PhD theses





## Indo-German Network of Environmental Systems-Hydrology (INGENIoS)

Indo-German Partnership in Higher Education Phase II (2020-2024)

**Partners:** University of Cologne (Geographical Institute) and Indian Institute of Science, Bangalore (Department of Civil Engineering)

Other participating German institutions: Forschungszentrum Jülich, University of Bonn

Other participating Indian institutions: National Law School of India University, Bangalore

Project Coordinators: Prof. Dr. Karl Schneider (Germany) and Prof. Sekhar Muddu (India)

Subject Field: Environmental Sciences, Ecology

The primary goal of INGENIoS is to establish integrated and multidisciplinary institutional relationships between

the University of Cologne (UoC) and the Indian Institute of Science (IISc) Bangalore. Based upon previous



Prof. Dr. Karl Schneider



Prof. Sekhar Muddu

collaboration experience and workshops between UoC and IISc faculty, we identified the common core theme of implementing the Indo-German Network of Environmental Systems-Hydrology, which integrates environmental science, social science, law and computational sciences,

thus bringing together the different disciplinary strength of the participating PI's and institutions. While the coherent thematic theme provides a focus for fostering institutional collaboration, bilateral partnerships between individual faculty and disciplines are equally important and supported.

#### **Expected Outcome**

Building upon mutual visits, student exchange and workshops, we plan to establish bilateral and coordinated research programmes. One concrete plan is to develop an IRTG on "Coupling and Decoupling Mechanisms of Surface and Groundwater in Semi-arid Monsoon Climates of India". This DAAD funded projects helps to do the needed preparatory work. Also, a

common education platform with particular emphasis on integrative approaches and interdisciplinary research will be developed. The current corona crisis makes traveling difficult. However, the development of distant cooperation and learning techniques is accelerated as a result, which provides the opportunity to expand the number of participants.

#### Institutional interest for Indo-German Cooperation

Both institutions are leaders in their respective countries. Strengthening the collaboration will be of mutual benefit, particularly against the background of a similar research focus and development perspective. Understanding the role of critical zones (such as the Western Ghats) by integrating ground-based observatories, remote sensing and modelling techniques is a key approach utilised by both partners. Strong computational expertise, expertise in material sciences and international law augments the research strength. Thus based upon this common ground, key research issues such as investigating pathways to sustainable development (e.g. use of water resources) shall be addressed though common research and education.

#### Future potential of the project

- Bilateral and cooperative research projects are established
- A mutual education platform is established and online courses with interactive and cooperative teaching methods using augmented and assisted reality methods is established
- Research thesis (M.Sc. and PhD) are tutored commonly and possibly a Cotutelle procedure for joined degrees is established

#### Activities 2020-21

Starting the collaboration in person and through virtual cooperation

- Starting the common education and teaching platform
- Exploring the possibility of joint PhD projects and degrees
- Expanding the cooperation to additional disciplines
- Joint publications





## Indo-German Partnership between Freie University Berlin and Jawaharlal Nehru University Delhi

Indo-German Partnership in Higher Education Phase I (2016-2020)

Partners: Freie University Berlin (Central administration) and Jawaharlal Nehru University Delhi (European Studies and Theatre Studies)

Project Coordinators: Dr. Herbert Grieshop (Germany); Prof. Bishnupriya Dutt and Prof. Salma Bava (India)

Subject Field: Interdisciplinary Field of Studies

During the first phase of the IGP, Freie University Berlin (FUB) and Jawaharlal Nehru University (JNU) committed themselves to extending the institutional partnership between the two universities, which has been established since 2003. The cooperation ties on both scientific as well as administrative level could be strengthened through

the mutual exchange of academics and administrative staff. Within four years, several dozens of visits, joint workshops, and conferences were conducted. A particularly dynamic, topic-related development took place in the areas of Political Science/European Studies as well as Theatre Studies.

#### Number of exchanges

From India to Germany - 16

From Germany to India - 16

#### **Project Highlight**

During the first IGP phase, JNU has taken a central role in two of FUB's clusters of excellence which officially launched in 2019/20. Firstly, JNU is acting as an international cooperation partner of the cluster "Contestations of the Liberal Script". Secondly, JNU's professor at the School of Arts and Aesthetics,

Bishnupriya Dutt, is a member of the steering committee of the cluster "Temporal Communities" at FUB. Both memberships encompass active contributions to the clusters' research and outreach activities and stand for the sustainable institutional exchange between both universities during the IGP funding period and beyond.

"I was in Delhi at JNU for five days in February 2020 (23-28 Feb.) as part of the India-German programme. The schedule set up by my host, Professor Ummu Salma Bava, was full of interesting and fruitful meetings with students, professors, and experts. To mention only one of the meetings, I had the pleasure to participate in a research workshop for discussing exposés for an edited volume ("The EU as Security Actor in a Changing World") on which I could also give my input. Simultaneously, I was delighted that knowing all the participants since they all had been on exchange with Freie University Berlin. We had time for socialising and I realized that all the former students – ladies and gentlemen alike – are striving at different institutions, universities, think tanks, or otherwise. I delivered three lectures, which were well attended by professors and students and resulted in lively discussions. I consider my stay at JNU an outstanding success and pleasure. The week was rich and substantial as an Indian menu."



#### Dr. Ingo Peters

Associate Professor of Political Science, Executive Director of the Otto-Suhr-Institute for Political Science, Center for Transnational Relations, Freie University Berlin

#### Contribution in the internationalisation strategy of the partner institutions

An extension of international networks is a clearly defined goal of FUB's internationalisation strategy. Alongside the implementation of new approaches, the further development of already existing concepts is equally part of the university's policies. Strengthening multilateral, topic-related networks is another target in the internationalisation strategy of FUB. Anchoring JNU in two of FUB's clusters of excellence coincides exactly with these goals. Moreover, it is FUB's target to provide a broad variety of people studying and working on the campus with the opportunity to participate in internationalisation processes. Exchanging not only academics but also administrative staff within the framework of the IGP matches brilliantly with the universities' internationalisation policies and contributes in this way to an increased mutual institutional entanglement.

#### Future potential of the Project

- Well implemented partnership with over 20 years of cooperation experience
- Continued exchange of academics and staff
- IGP is considered not as the final level of the partnership but as a catalyst to further extend the partnership





# Indo-German Partnership between Freie University Berlin and the Indian Institute of Technology Bombay

Indo German Partnership in Higher Education Phase I (2016-2020)

**Partners:** Freie University Berlin (Central administration) and Indian Institute of Technology Bombay (Department of Humanities and Social Science)

Project Coordinators: Dr. Herbert Grieshop (Germany); Prof. D. Parthasarathy (India)

Subject Field: Interdisciplinary Field of Study

"My main takeaway is twofold. On the one hand, I was very impressed by the enormous complexity that arises in Indian society and Indian universities with regard to the topic of diversity – one of the shared interests in the cooperation. Even though we talk about diversity here and there, we are facing a very different kind of diversity. On the other hand, and despite all the differences between the two countries, the resulting challenges and problems are very similar and therefore the exchange on these issues was beneficial for both sides. The cooperation with the colleagues from IIT Bombay was overall an extremely profitable and very enriching experience."



Dr. Heike Pantelmann

Project Director, Margherita-von-Brentano-Zentrum, Freie University Berlin

Freie University Berlin (FUB) and the Indian Institute of Technology (IITB) have been partners since 2015 and were able to establish sustainable fields of cooperation over the course of the first IGP phase. Especially the subject areas of Chemistry, Mathematics and Gender Studies proved to be of great potential for cooperation. During the four-year

funding period, various cooperation formats such as joint conferences, workshops, research stays, and exchanges took place in which members of all the universities' status groups (students, junior and senior researchers, administrative staff etc.) participated and contributed in this way to the diverse portfolio of partnership activities.

#### Number of exchanges

From India to Germany - 30 | From Germany to India - 34

#### **Project Highlight**

Over the course of the first IGP phase, FUB and IITB managed to establish fruitful cooperation ties between FUB's Margherita von Brentano Centre for Gender Studies and IITB's Department of Humanities and Social Sciences. Over the years, IITB became a partner in a broad international research project coordinated by FUB on sexual harassment in higher education institutions.

In cooperation with partners from Latin America, IITB and FUB conducted surveys and case studies about the respective situations at the participating universities. The findings will be published in joint publications and an ongoing cooperation between both institutions after the first IGP phase is to be expected.

"The time of more than three months as a guest researcher at IITB gave me the opportunity to connect and collaborate with Indian scholars more closely than via E-mail communication and conference calls. The personal exchange-built trust and foundations for collaborating on different levels. We learned from each other in joint field visits and are currently working on a joint publication. Being associated with IITB was also helpful for approaching interview partners from local and national authorities. Through the participation in several conferences and thematic events in Mumbai and Delhi I gained further insights regarding my research matter and could network with researchers, officials, and other experts. Overall, the research stay enabled much more than collecting data for my PhD project: it enabled the exchange of ideas and theory, research approaches, and findings. Therefore, one of my main takeaways from my stay in Mumbai is the value of connecting across countries and cultures, not only for deeply exploring a research question, but also for learning about one's own cultural and academic imprint, reflecting on research ethics and experiencing other research cultures and forms of collaboration."



Theresa Zimmermann

Research Associate, Disaster Research Unit (DRU), Freie University Berlin

## Contribution towards the internationalisation strategy of the partner institutions

FUB stipulates the extension of international networks as a distinguished goal within its internationalisation strategy. Investing in already established structures is equally a part of the university's policies as well as developing new international cooperation approaches. Moreover, FUB particularly strives for diversity in its internationalisation processes and an integration of a broad group of students and employees into them. Providing all students, academics, and employees with the possibility to be part of an exchange with IITB is a unique opportunity

for all participants and an outstanding example of the implementation of FUB's internationalisation strategy.

#### Future potential of the project

- Consolidation of the established cooperation fields
- Further exchange of all academic and administrative status groups with a particular focus on junior academics
- New cooperation fields and opportunities for joint innovation to be identified

"I had three trips to the Freie Universitat, Berlin as part of the IGP project during the period 2017-19. Each of the trips were notable in how well they were planned, the interesting conversations I had with my collaborators at FUB, and the advances we made on our collaboration. For me, the visit to participate in the conference on Sexual Harassment and Violence in Higher Education Contexts, was particularly memorable. During this visit, I had the opportunity to meet and listen to some extraordinary researchers and activists from different parts of the world, participate in very insightful discussions on the gender and violence, and enhance our collaboration by getting to be part of a global research project. I will always cherish and value the collegiality, learning and friendships that were formed during my visits with the researchers and staff at the Margherita-von-Brentano-Zentrum and the Zentrale Frauenbeauftragte der Freien University."



Prof. D. Parthasarathy

Department of Humanities and Social Science, IIT Bombay



## Indo-German Partnership in Climate and Water Research (IGCaWR)

Indo-German Partnership in Higher Education Phase II (2020-2024)

**Partners:** Freie University Berlin (Hydrogeology Group, Institute of Geological Sciences) and Anna University (Centre for Climate Change and Disaster Management)

Project Coordinators: Dr. Brindha Karthikeyan (Germany) and Dr. Palanivelu Kandasamy (India)

Subject Field: Environmental Sciences, Ecology

The collaborative project 'Indo German Partnership in Climate and Water Research (IGCaWR)' between the Freie University Berlin (FUB) and Anna University (AU) aims to intensify research, exchange knowledge, and share modern best practices in teaching. This partnership will foster the next generation of global citizens by providing international



Dr. Brindha Karthikeyan Germany



Dr. Palanivelu Kandasamy

exposure in diverse fields. Project activities include lectures, seminars, workshops, and training programs. Support will be provided for visits by students and

professors interested in conducting research and teaching. This IGCaWR project will deepen the academic relations between the universities and initiate new projects.

#### **Expected Outcome**

- Developing and implementing novel teaching and research methods
- Capacity building of young researchers with competencies to tackle future water and climate change challenges
- Professional development of graduates through international experiences
- Expand the network to include other universities, industrial partners, governmental and nongovernmental organisations

#### Institutional interest for Indo-German Cooperation

Building upon the long-standing relationship between the Freie University Berlin and Anna University, both universities will strengthen the cooperation within the framework of the Indo-German Partnership in Higher Education. The partnering universities have extensive knowledge and experience in water and climate change research that complement one another. This IGCaWR project will now provide a way for more close collaboration at the university level in research and education.

#### Future potential of the project

 Sustained seamless collaboration among Institutes/ Centres/Departments of both Universities in various research disciplines and through student exchange programs

- Jointly developed Masters' and PhD degrees
- Annually recurring training programs for students, professionals, and stakeholders
- Established professional alumni network and rapport beyond the course of this project

#### Activities 2020-21

- Developing innovative tools for teaching through digital platforms
- Borderless remote research exchange to address common goals
- Student exchange activities between the two universities





## Indo-German Partnerships - Environmental Interactions in Focus

German Indian Higher Education Cooperation (DIHSK) 2019-2023

**Partners:** University of Cologne (International Office) and Bharati Vidyapeeth University (Institute of Environmental Education and Research)

Project Coordinators: Prof. Dr. Karl Schneider (Germany) and Prof. Dr. Shamita Kumar (India)

Subject Field: Environmental Sciences and Ecology

"I really had a great time in summer school, coping up with the instructions and teaching was very easy and elaborated in a very simpler way. I just wish it could have conducted for three weeks, then we could have implied more on the modelling techniques and mistakes could have identified and doubts could have been cleared."

German student from University of Cologne

The University of Cologne (UoC) has been active in several research fields in India since 2007. Due to the establishment of the Centre for Modern Indian Studies, funded by the "A New Passage to India (ANPtI)" program line, the scientific exchange was intensified and a long-term cooperation with renowned partner institutions could be established. Our project "IGP - Environmental Interactions in Focus" will help to continue the successful collaboration between the University of Cologne and the Bharati Vidyapeeth University (BVU) in Pune in the 2019-2023 funding period. The thematic focus of the project

results from the research areas of the involved chairs and working groups, both at the UoC and at the BVU. Both institutions can refer to internationally recognised expertise in the field of Environmental Sciences, such as Biodiversity, Environmental Law, Hydrology, Human-Environment Interactions, and Urbanisation and Urban Development. The cooperation between the two institutions aims at developing an integrated teaching and research program for both institutions in the field of Environmental Sciences. The similarity of the existing program objectives of the UoC and BVU forms an

excellent platform for a coordinated exchange program that strengthens learning and research. A common focus is on increasing the soft and hard skills of the UoC project partners for India and the BVU project partners for

Germany - culturally and scientifically. The target group therefore extends across the entire academic landscape of the university, from graduates to doctoral candidates to university administrative and teaching staff.

#### **Project Highlight**

A key highlight was the Summer Schools that were organised to explore similar environmental issues in India and Germany enabling students to compare the problem, its drivers, solutions and governance mechanisms in the two countries. The sessions included lectures, a

large number of field visits and interviews with key actors in both countries adding to the learning quotient and enabling students to design their Master's or doctoral thesis setting the base for future collaboration.

"A great experience overall, the opportunity to complete the tutorials before arriving and focus more on field excursions, fine-tuning the models, and cultural exchange would be appreciated. However, the summer school was fantastic nonetheless."

German student from University of Cologne

### Contribution towards developing an international network

The cooperation with BVIEER has resulted in an increasing breadth and depth of cooperative actions. Besides mutual support of PhD and habilitation candidates working mostly in the fields of hydrology and remote sensing, we are currently in the process of expanding the cooperation to the field of environmental education. Education is key to facilitate adaptation and mitigation. Kim Colaco is a new PhD candidate, who will address these issues, building a link to the PULCHRA project, a H2020 funded project with 10 European

countries. In addition, this cooperation was the seed to develop new cooperation in India (e.g., IISc, IIT Madras).

#### Future potential of the project

Expanding our cooperation to education and further developing the links to the IMES program builds a basis to develop a graduate school for integrative environmental research. This topic is essential to build the competence needed to pressure issues through interdisciplinary integration of natural science, social science, law, and technology.





Iron supply in pregnancy - a model to establish research exchange, high level education and cooperation with India German Indian Higher Education Cooperation (DIHSK) 2019-2023

Partners: University Hospital Heidelberg (Child and Youth centre) and Christian Medical College Vellore (Department of Biochemistry)

Project Coordinators: Prof. Martina Muckenthaler (Germany) and Prof. Molly Jacob (India)

Subject Field: Medicine

In this project, we want to find out how iron homeostasis is maintained during pregnancy. We do not yet understand the mechanisms by which maternal hepcidin levels are reduced and whether fetal hepcidin is able to control iron export into the fetal bloodstream. In this context, we want to clarify the following questions:

- How are hepcidin and its receptor ferroportin (in the fetus and in the mother) regulated during a normal pregnancy?
- How is iron transferred via the placenta to the fetus affected by maternal inflammation and maternal iron replacement?

#### **Project Highlight**

A highlight over the last year was the study of ironrelated parameters in the blood of pregnant women. Pregnant women have been recruited in their first trimester and are now being followed up periodically through their pregnancy. Placental samples will be obtained at the time of delivery.

### Contribution towards developing an international network

We expect this project to be the start of an international project that will lay the foundation for an application for a multi-institutional network grant.

#### Future potential of the project

We expect to acquire additional funding to proceed with this wonderful collaboration between the University of Heidelberg and the Department of Biochemistry from the Christian Medical College Vellore, India.





## Law and Transformation: Opening Conversations between India and Germany

Humboldt University Berlin Indo-German Partnership in Higher Education Phase II (2020-2024)

Partners: Humboldt University Berlin and National Law School of India University Bangalore

**Project Coordinators:** Prof. Dr. Philipp Dann, LL.M. (Harvard) (Project Coordinator) and Dr. Tanja Herklotz, LL.M. (SOAS) (Project Coordinator)

The law equally controls social change and must adapt to it. The challenges of the 21st century, from globalization, digitalization and technological progress to climate change, migration movements, civil protest and global pandemics, also call for changes in the law.

#### Institutional interest for Indo-German Cooperation

The project aims to encourage legal scholars to leave the traditional academic paths by looking at legal systems beyond the usual suspects. For German researchers this means leaving Eurocentricism behind and turning their attention to India and more broadly to the global South. Indian academics are encouraged to consider not only the USA and other Commonwealth countries as objects of

legal comparison and as places for potential research and study visits, but to see German and European law as an interesting field of research. The project further seeks to produce innovative research through its interdisciplinary approach and a transnational dialogue. We encourage German and Indian researchers to not only deal with the respective foreign legal system but to also reflect critically on their own legal system.

#### Future potential of the project

To achieve these goals, the project is based on three central pillars. On the one hand, exchange projects for students, doctoral candidates, Post Doc and teachers between Berlin and Bangalore are organised on a

#### **Expected Outcome**

This project – a collaboration between the Chair of Public Law and Comparative Law (Prof. Dr. Philipp Dann) at Humboldt University's law faculty and the National Law School of India University (NLSIU) in Bangalore which began in July 2020 – aims to address the many questions concerning the transformation of

the law and through the law. In its interdisciplinary and comparative examination of the law in India, Germany and Europe, the project allows to focus on very different areas of law – from business law, competition and regulatory law, environmental law to questions of democracy, federalism and human rights.



regular basis. Secondly, the project plans to expand the range of courses on Indian law at Humboldt-University. Thirdly, 'young scholars workshops' offer doctoral and

post-doctoral researchers an opportunity to present and discuss their comparative research projects among an interdisciplinary German-Indian audience.



# Literature in a Globalised World: Creative and Critical Perspectives

Indo-German Partnership in Higher Education Phase I (2016-2020)

Partners: Julius Maximilian University of Würzburg (Department for English Literature and British Cultural Studies) and Jawaharlal Nehru University Delhi (Centre for English Studies, School of Language, Literature and Culture Studies)

**Project Coordinators:** Prof. Dr. Isabel Karremann, Prof. Dr. Zeno Ackermann (Germany); Prof. Saugata Bhaduri (India)

Subject Field: Language and Cultural Studies

"Under the aegis of the DAAD-funded project "Literature in a Globalised World", two students from the Department of English Literature at the Julius-Maximilians-University Würzburg, were offered the opportunity of studying at the renowned Jawaharlal Nehru University (JNU) in Delhi. As a master's degree student of the interdisciplinary degree course "Neuere Literaturen" focusing on discourses of globalisation, my interest was aroused – especially, as I am looking into soundscapes of the so-called "Global South". Therefore, the project would be a unique opportunity for me to spend two months in Delhi doing in-depth research. Ranked one of India's best universities, it is no surprise that for anyone interested in "post-colonial" and "globalisation" studies, JNU is somewhat of a small-scale utopia. Within the university's vibrant student life, the exceptional enmeshment of every-day life with student politics becomes conspicuous not only when talking to students and supervisors but also when considering the "Painting Resistance" movement that has emerged at JNU - a movement that relocates politics to site-specific art. Apart from the obvious allure of a campus as politically active as JNU, the research opportunities were unparalleled. As my master's thesis seeks to look at the way in which sound is articulated in a globalised, "postcolonial" setting, and at the workings of an Anglo-American hegemony within the study of sound, JNU offered me decentred ways of looking at such discourses. As an arts and humanities student, I was able to visit a range of academic and cultural events on a day-to-day basis. For instance, I had the chance to attend a seminar that was explicitly dedicated to music in the "Global South". Not only did this seminar make it possible for me to broaden my academic horizon but also to make valuable contacts – ranging from students to lecturers. My prolonged stay at JNU was then a means of engaging with "post-colonial" and "globalisation" studies in a way that, as articulated by literary critic Édouard Glissant,

Anna Frieda Kammies

Master Student, Julius Maximilian University of Würzburg

abolished "the very notion of centre and periphery."

Number of exchanges

From India to Germany - 13 | From Germany to India - 11

The teaching and research project is in the innovative field of Literature and Globalisation Studies. This programme allowed students and early career researchers to build a profile in literature and globalisation studies. A field that is new and expanding and engages with the creative and critical perspectives that literary texts provide on

the processes of globalisation. The measures in this programme included seminars, workshops, lectures as well as a Winter School and a Summer School taught jointly by lecturers of Würzburg University, JNU Delhi and other international guest professors.

#### **Project Highlight**

Winter School 2017, Workshop "Environmental Writing from India": The workshop by Sumana Roy, in which she read from her latest book How I Became a Tree, had every participant reading, discussing, or showing examples of how literature and art may work with or against nature, and more specifically of the many instances of the narrator or poet sitting under a tree. The presentations range from Sylvia Plath's fig tree metaphor in The Bell Jar to the Native American writer Allison Hedge Coke and her

poem "Pando/Pando". And it is here that the global relates to the local in creative and productive ways. Students from both Germany and India speak about poems, novels, films, art, and other forms of representation and disseminate and exchange ideas about nature, ecosystems, and ecocriticism while continuously connecting them with the private, individual, and intimate. The workshop thus creates a shared environment and shows how literature can move across the globe to find nodal points of interconnection.

"During the summer term 2016, Anurima Chanda completed a two-month research stay at the chair of English Literature and Cultural Studies. She studied for her dissertation project "Twenty-first Century Indian-English Children's Literature" under the supervision of Prof. Dr. Isabel Karremann. "One of the most crucial questions that I had to face at my interview for the two-month DAAD exchange programme to the Julius Maximilian University of Würzburg was "Why Würzburg?" Because the university library has an amazing collection especially with regards to my research area and because I have heard that its inter-library loan is one of the most efficient system ever - I had replied. Little did I know that Würzburg would turn out to be much more for me. My very first interaction with the entire English department at the University of Würzburg was at their Semester-End dinner and it was an experience I will never forget. I sat there chatting about varied things with a group I was meeting for the first time - but it felt like I was at my own university. That's what the University of Würzburg became for me - a home away from home. This has been an experience of a lifetime for me - not just because of the research material I accumulated but also because of the people I met. With them I have had the most fruitful academic conversations and in them I have found friends for life. Coming from JNU, which as one of my professors say "is a Way of Life" - where teachers are more like friends and friends are more like companions, Würzburg has been the best place where I could have landed next. Ever helpful people, a picturesque campus and efficient resources - life at the University of Würzburg means these and



Anurima Chanda

much more!"

PhD Scholar, Jawaharlal Nehru University, India

### Contribution towards the internationalisation strategy of the partner institutions

- Intensified the partnerships at institutional level
- Educated a substantial number of advanced students and young scholars as experts and future carriers of enhanced interactions between Germany, Europe and India and
- Sharpened the profile of both JMU and JNU as centres of excellence for research
- The project through joint Summer/Winter Schools; through faculty, researchers and students spending significant time at each other's universities; and through joint measures evolved innovative pedagogic methods and research concerns. One of the most important outcomes of this cooperation has been the ongoing internationalisation of both partner institutions. The long-term mutual benefits in research and education can be measured and evaluated by parameters such as qualitative research output and the successful and lasting establishment of international research partnerships

#### Future potential of the Project

- It still upholds standard for innovative teaching formats in an international setting
- It has resulted in impulses for developing original research
- It continues to establish structures of excellence, research and supervision
- It has been successful in completion of PhD-projects, and publications
- It ensures continuation of collaborations that have been a result of the project
- It has a long-term impact on pedagogic and research practices
- It has managed to have an impact on the general terrain of literary studies today
- It has established a blueprint on how to approach literature in today's globalised world
- JNU Delhi and JMU Würzburg have becomes the leading experts and models for best practice in international teaching



## ...where tomorrow's science begins too



## NAMASTE + "A New Passage to India – Indo-German HEI Cooperation"

German Indian Higher Education Cooperation (DIHSK) 2019-2023

Partners: Georg August University of Göttingen (International Office) and Indian Institute of Science, Education and Research Pune (International Office)

Other participating Indian institutions/organisations: Forest Research Institute (FRI) Dehradun, Gokhale Institute of Politics and Economics (GIPE), Indian Institute of Science Education and Research (IISER) Kolkata, Indian Institute of Technology Guwahati (IITG), Indian Institute of Technology Kanpur (IITK), Jawaharlal Nehru University (JNU), Savitribai Phule Pune University (SPPU), Tata Institute of Social Sciences (TISS) Mumbai, University of Agricultural Sciences Bangalore (UASB), University of Delhi (DU), University of Hyderabad (UoH)

Project Coordinators: Dr. Uwe Muuss (Germany) and Dr. Naresh Sharma (India)

Subject Field: Interdisciplinary Field of Studies

NAMASTE+ is a mobility and research project aiming at reinforcing a long-term cooperation with the participating Indian institutions, contributing to the promotion of Indo-German dialogue in research and higher education through mobility of researchers and students. NAMASTE+ offers an innovative framework for the capacity development of junior faculty, undergraduates,

master's, PhD, and Post Doc researchers by strengthening their skills in specified fields of study as well as improve their India/Germany competence to enhance their career perspectives. It will also enhance the capacity of the participating coordinators from India to their procedures and strategies in higher education management.

#### **Project Highlight**

A public lecture by Prof. Stefan Tetzlaff from Göttingen University was organised at IISER Pune on 20th November 2019. The lecture was titled "Local Prerogatives and Foreign Assistance: Technical Training for Workers and Indian Industry between WWII and the Present".

"My 6 months stay as a doctoral student at the SPPU in Pune was incredibly enriching. The knowledge I gained at the Department of Pali and Buddhism has promoted my academic career. I was also able to gain valuable insights into Indian culture and way of life. I am very grateful."

Aspasia Werner
PhD Scholar, University of Göttingen



### Contribution towards developing an international network

One of the main objectives of NAMASTE+ is to promote Indo-German dialogue in research and higher education and to strengthen the existing collaboration between the University of Göttingen and the Indian partner universities by exchanging best practices, knowledge sharing and innovation, and reinforcing the individual capacities of the students, junior researchers, and administrative staff. This is only possible through the consortium platform which is the basis for the Namaste+ network.

#### Future potential of the project

Through the implementation of the project's activities until 2023, we aim at a stronger collaboration between the 12 Indian partner universities and the university of Göttingen, not only in the existing joint collaboration areas but to have expanded the research areas of collaboration. Likewise, we aim to have administrative staff at the UGOE and Indian universities with enhanced intercultural capacities.





## New Directions in 'Active Ageing' and 'Age-friendly Culture' in India and Germany

Indo-German Partnership in Higher Education Phase I (2016-2020)

Partners: University of Heidelberg (Institute of Gerontology; South Asia Institute; Heidelberg Centre for Transcultural Studies) and Jawaharlal Nehru University Delhi (The Zakir Husain Centre for Educational Studies; The Centre for the Study of Social Systems; The Centre of Social Medicine and Community Health)

Project Coordinators: Prof. Dr. Andreas Kruse; Prof. Dr. William Sax; Prof. Dr. Christiane Brosius; Dr. Martin Gieselmann; Dr. Michael Doh (Germany); Prof. Minati Panda; Prof. Surinder Jodhka; Prof. Mohan Rao (India)

Subject Field: Interdisciplinary Field of Studies

"The events developed in the framework of the programmes "New Directions in 'Active Ageing' and 'Age-friendly culture' in India and Germany" followed strong transcultural and interdisciplinary approaches. Beyond the fruitful theoretical debates, we got the chance to share methodologies with students from other disciplines. We came together from different interests to debate and discuss about ageing, both in India and Germany. However, the most enriching aspect of this exchange was the possibility to open our minds to the ways in which perceptions and ideas of ageing change from one cultural setting to another. Having the opportunity to have these discussions from different cultural upbringings, and to participate actively in transcultural contexts through fieldwork, allowed us to develop more sensitive, empathetic, and caring ways to look at ageing. It strengthens our sense of responsibility in these processes and the countless possibilities to work together towards these aims."



Lizeth Ortiz University of Heidelberg, Germany

#### Number of exchanges

From India to Germany - 3

From Germany to India - 9

The cooperation project "New Directions in 'Active Ageing' and 'Age-friendly Culture' in India and Germany" between Heidelberg University, Germany, and Jawaharlal Nehru University, India offers a multifaceted program for an interdisciplinary knowledge exchange. The programme aims at connecting faculty, M.A. students, doctoral candidates, and post-doctoral fellows. It is after relying on a mix of research, teaching, and discussion that ensures the new trends and critical ideas about active ageing and age-friendly culture come into focus. The program not only

develops research profiles on themes related to "Active Ageing" and "Age Friendly Culture" through pilot projects and PhD research, but also develops and implements an innovative teaching profile through a series of prominent lectures, spring and summer schools, and the incorporation of the "Film Festival for Generations". The interdisciplinary approach is represented by researchers from the fields of anthropology, gerontology, psychology, sociology, and medical science.

#### **Project Highlight**

The events of the exchange programme "New Directions in 'Active Ageing' and 'Age friendly Culture' in India and Germany" that took place in New Delhi, September 2018, dealt from an interdisciplinary perspective with different themes related to the project's topic. The Film Festival for Generations under the patronage of Prof. Dr. Andreas Kruse being launched for the first time in India, New Delhi introduced Indian and German fiction and documentary films with a particular focus on age-relevant themes. The Festival was very well attended and clarified not only with culture specific perspectives on age and ageing but stimulated and contributed also to

the public discourse about demographic change in India. The workshop "Caring relations, caring for ageing" by Prof. Christiane Brosius discussed and reflected upon different concepts of care, caring relations, and ageing in urban India including fieldwork in a senior care centre. Indian Models of Ageing and in particular widowhood in North India were the focus of the Autumn School "Ageing and Gender" by Prof. William Sax complemented by an excursion to a widow home. The events offered through their theoretical and methodological approaches by examining differing topics new insights into the core theme.

The DAAD-UGC project "New Directions in 'Active Ageing' and 'Age friendly Culture' in India and Germany" laid the foundation of my PhD thesis "Lifelong learning amongst the Elderly of Baden-Württemberg: An Ethnographic Study on Active Ageing". The student exchange at Germany and India embarked us on an interactive journey to discuss, present and observe different theoretical perspectives and anthropological studies across the globe. On the one hand, the contrast between the Indian and German society experienced through field visits to care homes, health security/insurance system and hospitals were astonishing. On the other, the opportunity to meet filmmakers, social workers, policymakers, and bureaucrats at Berlin highlighted the pressing need to come together. More importantly, the encounters to the narratives and the lived experiences of older adults in Germany have given insights to our concern. The exposure to multidisciplinary and cross-cultural interactions was personally remarkable."



Vandana Vyas PhD Scholar, Jawaharlal Nehru University, India

## Contribution towards the internationalisation strategy of the partner institutions

It increased the exchange of students and academic staff significantly - the topic "Active Ageing" opened new cooperation between previously not too much connected fields such as anthropology and gerontology on the one side and psychology, health studies and sociology on the other - while Heidelberg University was the main and foremost partner for internationalisation. Indian professors and students were also encountering and interacting with experts from Universities stemming from different locations in Germany (e.g. Berlin, Freiburg, Bochum).

#### Future potential of the project

- Continuation of the partnership and cooperation between Heidelberg University (Institute of Gerontology, South Asia Institute and Heidelberg Centre for Transcultural Studies) and Jawaharlal Nehru University (Zakir Hussain Centre for Educational Studies, Centre for the Study of Social Systems and Centre of Social Medicine and Community Health)
- Continuation of exchange of students and academic staff between HU and JNU
- Pilot projects and PhD research on "Active Ageing" and "Age-friendly culture in India and Germany"



## Scientific cooperation with the Indian Institute of Technology Madras

German Indian Higher Education Cooperation (DIHSK) 2019-2023

**Partners:** University of Passau (School of Management, Economics and Information Systems) and Indian Institute of Technology Madras (Department of Management Studies)

**Project Coordinators:** Prof. Dr. Hans Ziegler and Prof. Dr. Franz Lehner (Germany) & Prof. Dr. Dr. H. C. Chandrasekharan Rajendran and Prof. Dr. Saji Mathew (India)

Subject Field: Business Management and Information Systems

The long-standing cooperation in research and teaching will be further intensified and sustained in the long term. German and Indian doctoral students spend research stays at the partner institution within the Joint Doctoral Degree Programme. Annual Indo-German Doctoral Seminars and Information Systems Workshops at IIT Madras enable exchange of ideas and promote joint research work. Lectures by visiting professors from IIT

Madras complement the lectures offered in Passau. Students and young researchers from Passau interact with the Indian professors and gain insight into research and teaching at IIT Madras. Master's students study at the partner institution and can obtain a Master of Science double degree through the Joint Master's Degree Programme.



Prof. Dr. Saji Mathew

#### **Project Highlight**

Association for Information Systems India Chapter (INAIS) Author Development Workshop for Information Systems scholars during November 29-30, 2019, co-hosted by Department of Management Studies, IIT Madras, and University of Passau, Germany, held

in IIT Madras. Highlights of the event: Personalised feedback on research papers by panels of accomplished IS faculty, Expert talks from Senior Editors of leading IS journals, and publishers, Roundtable on paper development, Networking and connecting.

"Even if you try to be prepared for cultural differences and new experiences, nothing can substitute for the actual experience of working in a multi-cultural group of students and living in a country abroad. I got to know my own character and values better, just as I got to know the wonderful Indian culture and its warm and welcoming people!"

Julia Teufel University of Passau, Germany



### Contribution towards developing an international network

The project broadens and deepens the collaborative network between the School of Business, Economics and Information Systems and the Department of Management Studies by carrying out collaborative research projects, organising Indo-German Doctoral Seminars and Workshops, guiding doctoral students in their research within the Joint Doctoral Degree Programme, guiding master's students in the Joint Master's Degree Programme and enabling visiting professors to teach and do research at the other institution. The network comprises researchers from different areas of

management and information systems studies of both institutions, and researchers from other institutions who participate in the doctoral seminars and workshops.

#### Future potential of the project

We expect that in 2025 there is a broad and stable research and teaching collaboration between the School of Business, Economics and Information Systems of the University of Passau and the Department of Management Studies of IIT Madras, including joint research project proposals, comprising different areas of management and information systems studies.





## Strategic Partnership RWTH Aachen - Indian Institute of Technology Madras

Indo-German Partnership in Higher Education Phase I (2016-2020)

Partners: RWTH Aachen University (International Office), Indian Institute of Technology Madras (Office of Global Engagement)

Other participating institutions: External partners in science and industry

Project Coordinators: Dr. Henriette Finsterbusch (Germany); Prof. Raghunathan Rengaswamy (India)

Subject Field: Interdisciplinary Field of Studies

"The Strategic Partnership has provided me a great opportunity to work with renowned academicians and industrial partners from India. I have already been two times at IIT Madras, and we have discussed current and upcoming challenges that need to be addressed at a global level in the field of textile-reinforced composites."

Gözdem Dittel

PhD Scholar, Institut für Textiltechnik der RWTH Aachen University, Germany



#### Number of exchanges

From India to Germany - 66

From Germany to India - 65

The DAAD-UGC joint programme Indo-German Partnerships in Higher Education enables RWTH Aachen University and IIT Madras to build the solid foundation of a long-standing, organically grown relationship, and the structures of an enhanced strategic partnership. It encompasses both partners in their entirety and generates reciprocal benefit for both institutions, their scientists,

students, and staff. The key goals are to institutionalise, deepen and expand relations at all levels. By sharing core institutional values and objectives, the partners are joining forces in research, teaching, industry cooperation, and entrepreneurship to the end of delivering sophisticated technology and scientific advancement for the benefit of the society.

#### **Project Highlight**

Research team missions have proven to be particularly successful, as they have led to concrete follow-up activities, third-party funded research projects and joint publications. Senior researchers were invited to apply for grants from the programme budget and conduct research team visits of up to one month with a collaborator from the partner institution. A research team consisted of a Principal Investigator, a Postdoc, and a

Doctoral Researcher (or a Master student). Researchers from RWTH Aachen University and IIT Madras were successful in a broad range of German, Indian, and European scientific funding schemes, thus elevating the Strategic Partnership and involving a growing number of young researchers and students. Research team missions have also helped to include external actors from the industry and civil society.

"I enjoyed the entirety of my stay in Germany. Looking back, I am glad that I chose to pursue the joint doctoral program between IIT Madras and RWTH. Both my supervisors were very supportive. I am in the fourth and final year of my PhD and look forward to its successful completion."

Vijaya Kumar PhD Scholar, Applied Mechanics, IIT Madras, India



## Contribution towards the internationalisation strategy of the partner institutions

The Strategic Partnership between RWTH Aachen University and IIT Madras is an essential part of each institution's internationalisation strategy as it increases the quality of international research and teaching through targeted measures and builds important bridges between India and Germany. Both institutions prioritise this relationship, encompassing the leadership level, several important institutes and departments, a growing number of young researchers and students as well as the administration. An ongoing effort within the Strategic Partnership, in the spirit of the original concept of "Sister Universities" is to facilitate the integration of internationalisation strategies

of IIT Madras and RWTH Aachen University through a new format "Strategic Summits in Internationalisation" which is to be organised from 2021 onwards.

#### Future potential of the project

- Building a relationship that has grown over half a century, IIT Madras and RWTH Aachen University will be a leading Indo-German science and innovation hub
- The Strategic Partnership will act as an interdisciplinary platform for excellent actors in science, industry, and entrepreneurship to accelerate innovation and to meet global challenges



## Technologies for Sustainable Transportation (Verkehr-SuTra)

German Indian Higher Education Cooperation (DIHSK) 2019-2023

**Partners:** Technical University of Munich (Department of Civil, Geo and Environmental Engineering) and Indian Institute of Technology Kharagpur (Indo-German Intelligent Transportation Centre)

Project Coordinators: Prof. Dr. Constantinos Antoniou (Germany) and Prof. Dr. Siddhartha Mukhopadhyay (India)

Subject Field: Engineering



Prof. Constantinos Antoniou Germany



Prof. Dr. Siddhartha Mukhopadhyay

"Verkehr" is the German word for traffic and here refers to the traffic congestion and the resulting environmental concerns in India. "SuTra" on the other hand is a Sanskrit word that refers to Indian religious texts containing rules or teachings on various aspects of life like arts, law, or social ethics. In the context of this project, SuTra, in addition to the reference on Sustainable Transportation, refers to the principles that should be developed and taught to young students and researchers for enabling sustainable transportation in the future. The combination of a German and an Indian word stresses the importance of an Indo-German collaboration in this topic.

### Contribution towards developing an international network

While Germany is known for its advanced engineering, India has developed into a major software engineering hub during the past years. Today, already more than 90% of the innovation in a modern car is in the domain of electronics and software. In the future, as we move towards EVs and autonomous cars, the volume and complexity of software in a car is going to increase. Hence, a cooperation that combines German engineering with Indian software engineering expertise will benefit both the countries and lead to solutions that will be useful across the world. For this, cooperation among students and young researchers from the two countries from early on will help in overcoming stereotypes that might exist and enable a better understanding of the strengths and qualities that exist in both the countries. The project partners also have other funding sources to strengthen their collaboration, e.g., the BMBF funded joint Indo-German Centre on Intelligent Transportation Systems, which is physically located at IIT Kharagpur, and aims to



extend into a broader collaboration, including e.g., TU Berlin, TU Chemnitz, TH Ingolstadt, and the University of Heidelberg, as well as several industrial actors in Germany and India. Furthermore, in August 2020 a new project, entitled: "Exploration: New Opportunities in Indo-German Academic Cooperation," has been approved for 3-way institutional interaction among TUM, IIT Bombay and IIT Kharagpur for the period of 2020-2024.

#### Future potential of the project

We expect that by 2025, there will be a strong and constant collaboration between the Indian and German entities. This will make the understanding between the partners smooth through exchange of researchers at all levels and through their collaboration in several different project types.





## Towards an Indo-German Centre for Experimental Architecture and Material Culture (EAMC)

German Indian Higher Education Cooperation (DIHSK) 2019-2023

Partners: RWTH Aachen University (Department of Architecture) and Indian Institute of Technology Roorkee (Department of Architecture and Planning)

Project Coordinators: Prof. Axel Sowa (German) and Smriti Saraswat (India)

Subject Field: Architecture

The Summer school took place from August 10<sup>th</sup> to 20<sup>th</sup>, 2020 in the monastery of Hoogcruts near the Dutch community of Gulpen. It was organised by the Department of Architectural Theory at RWTH Aachen University under the direction of Prof. Axel Sowa. 20 students experimented with rammed earth techniques and built the load-bearing walls of a future garden pavilion. The event was part of the DAAD-funded university cooperation with the IIT Roorkee in India. The exchange of knowledge and experience for the further development

of sustainable construction techniques with the Indian partners is to be continued in the coming semesters. The material and energy budget of building processes will be of particular importance. The Chair of Architecture Theory is in close exchange with the 'Sitchting het Limburgs Landschap'. The Dutch foundation intends to transform the monastery complex into a workshop for the future, where the building and living of tomorrow will be reflected, discussed, and practiced.

#### **Project Highlight**

The Summer school took place from August 10<sup>th</sup> to 20<sup>th</sup>, 2020 in the monastery of Hoogcruts near the Dutch community of Gulpen. It was organised by the Department of Architectural Theory at RWTH Aachen University

under the direction of Prof. Axel Sowa. 20 students experimented with rammed earth techniques and built the load-bearing walls of a future garden pavilion.

"We discovered that the knowledge and the experience we gathered in India, including the visit to Auroville and the talk with practising people, were very useful regarding the process of building with the natural material mud. During the summer school in Hoogcruts, where we built the rammed earth pavilion, we were able to apply the theoretical knowledge and share the experience with other participants."

A German student

### Contribution towards developing an international network

It is our common ambition to create the new Indo-German centre as a platform where architects, designers, artists, craftspersons and industrial makers can engage with each other to create an understanding for the existing heritage and lead to synergies for innovation. The new Indo-German centre will allow us to coordinate both teaching and research projects with a common focus on sustainable design-build-procedures, through which

experimental architecture is thought, conceived, and manufactured.

#### Future potential of the project

The findings and descriptions were gathered on our EAMC website, conceived as a steadily growing encyclopaedia. The inventory, providing a support for all further steps, is already in use as communication platform for the project teams working in India and Germany.







## Writing the cosmopolitan imagination: Genre transactions in world-literary space

Indo German Partnership in Higher Education Phase I (2016-2020)

Partners: University of Potsdam (English and American Studies | German Studies) and Delhi University (English | Germanic and Romance Studies)

Project Coordinators: Prof. Dr. Habil. Dirk Wiemann (Germany) and Prof. Dr. Christel Devadawson (India)

Subject Field: Language and Cultural Studies

Number of exchanges including mobility, workshops, meetings, summer schools, etc. that have taken place so far

From India to Germany - 25 | From Germany to India - 61

The project conjoins three research themes that are crucially relevant in current literary, visual and cultural studies: It links the discussion of an emergent transnational 'world literature' or even 'world culture' with contemporary debates over cosmopolitanism, planetarity and global citizenship as well as with the recent turn towards genre as

an inherently social aspect of literature, film, visual culture and other areas. By bringing these three dimensions together, the project aims to reassess and productively investigate the ways in which culture contributes to the making and remaking of identities in the globalization process in a sustained bilateral dialogue.

#### **Project Highlight**

Next to reciprocal exchange visits, full semesters abroad and students' research excursions of four weeks, the project generated a highly successful international conference on postcolonial perspectives on world literature with more than eighty papers and

keynotes from highly renowned scholars including Arjun Appadurai, Emily Apter and Alexander Beecroft. A selection of conference contributions will be published as a special issue of Thesis Eleven in early 2021.

#### Statement of one of the participating Indian graduates, PhD or Post Doc

"The University of Potsdam provided me with the opportunity to witness and take part in the study and research culture of the Department of English Studies there. The faculty and researchers, especially Prof. Dirk Wiemann, Prof Anja Schwarz, Sara Morais, and Irene Hilden extended their full support and provided interesting insights in helping me reformulate and articulate part of my research, i.e., postcolonial museumization. The postgraduate colloquium at the Department gave me the opportunity to hear about doctoral work in many exciting new areas. Overall, it was a productive and enriching experience."



Saumya Garima Jaipuriar PhD Scholar, Delhi University, India



### Statement of one of the participating German graduates, PhD or Post Doc

"My exchange semester in Delhi allowed me to study cosmopolitanisms and Dalit literature outside of a European academic framework. My interest in these topics deepened, which set me up with a line of research for my MA thesis, Dalit Cosmopolitanisms. Moreover, the Delhi experience inspired my ongoing dissertation project Dalitisms."

Florian Schybilski University Potsdam, Germany

## Contribution towards the internationalisation strategy of the partner institutions

Both universities have developed strategies for further cooperation, including collaborative research projects, the cooperation in DFG-funded research training groups and visiting chairs.

#### Future potential of the Project

Research collaboration will continue based on a wide range of shared interests and third-party funding; in general, however, everything depends upon whether or not our Indian colleagues will in future be able to again pursue their academic work in a climate free of policing, interference and intimidation.

