

JULY–SEPTEMBER 2023

VOL 7 (1)

ISSN : 2456-5318

Science Diplomacy

India's Global Digest of Multidisciplinary Science



Scan to read
the latest issue



Science Diplomacy

VOL 7(1) JULY-SEPTEMBER 2023

Director
Dr Ranjana Aggarwal

Editor
Dr Monika Jaggi

Design and Layout
Manender Singh

Published by

CSIR – National Institute of Science
Communication & Policy Research
(NIScPR)

Council of Scientific & Industrial
Research (CSIR)

Vigyan Sanchar Bhawan,
Dr K.S. Krishnan Marg, New
Delhi-110012, India



+91-11-25846301 Extn 302



scidip@niscpr.res.in



www.niscpr.res.in



[csir_niscpr](https://twitter.com/csir_niscpr)



[niscprcsir](https://www.facebook.com/niscprcsir)



[CSIR NIScPR](https://www.youtube.com/channel/UCv8v8v8v8v8v8v8v8v8v8v8)



[csir_niscpr](https://www.instagram.com/csir_niscpr)

This Science Digest is open to new ideas, valid criticism and constructive feedback. If there is any science diplomacy/ policy related event which requires wider outreach, please share it with us. We welcome your articles/ feedback/ suggestions at scidip@niscpr.res.in

Contents //

Editorial	1
Unlocking Success: How the TWAS-CSIR Fellowship Shaped My Professional Journey Iyabo Christianah Oladipo	2-5
Science Diplomacy through International Fellowships – A Reflection Funmilayo Itunu Adeniyi	6-8
From Aspirations to Achievements through TWAS-CSIR Fellowship Koffi Arnaud Kamenan	9-10
Change by Exchange: An Academic Diplomacy Model for the International Student Mobility Programme Arnab Chatterjee	11-16
International Fellowships – The Journey of a DAAD Doctoral Scholar Amrita Kaur Slatch	17-18
Science Policy & Diplomacy Meet: Key Takeaways Pramila Majumdar, Nitin Bayal	19-22
News	23
Announcements	23
MoUs	24-25
New Publications	25-27
Call for Proposals	27
Forthcoming Events	27-28

Disclaimer

The opinions expressed in this publication are those of the authors. CSIR-NIScPR assumes no responsibility for statements and opinions advanced by the authors.

Editorial //////////////////////////////////////

In a world where knowledge transcends borders, international science fellowships have emerged as indispensable catalysts for the progression of science and technology. These transformative programs not only nurture the talents of researchers and innovators but also break down the barriers that often restrict the flow of expertise and ideas. In this issue of the *Science Diplomacy Digest*, we delve into the remarkable impact of international science fellowships and explore the journeys of individuals whose lives have been forever changed by these opportunities.

Fellowships, at their core, serve as conduits for global collaboration. They create dynamic environments where individuals from diverse backgrounds converge to exchange ideas, share knowledge, and access invaluable resources. The result? A fertile ground for innovation that transcends geographic boundaries. Through fellowships, we witness the melding of minds and the fusion of perspectives, leading to groundbreaking discoveries that propel science and technology.

Within the pages of this issue, we highlight the experiences of scholars from diverse backgrounds, including TWAS-CSIR and DAAD awardees. They share the invaluable impact of their fellowships, from access to world-class research infrastructure to fostering open-minded research communities. These stories bear testament to the power of international fellowships in shaping not only careers but also the broader scientific landscape.

One of the inspiring stories we feature is that of Koffi, an African scholar who embarked on a transformative journey to India with a CSIR-NIIST laboratory through the TWAS-CSIR Postgraduate Sandwich Fellowship. Koffi's experience underscores the challenges and triumphs faced by many international fellows. From navigating administrative hurdles to immersing in a new culture and language, his journey was marked by resilience and growth. Today, Koffi is an Assistant Professor in Ivory Coast, sharing his knowledge and mentoring the next generation of scholars. His story resonates with the countless individuals whose lives have been similarly enriched through international science fellowships.

Yet, as we applaud these remarkable achievements, we must also consider areas for improvement. The challenges international fellows face, such as acquiring residency permits and addressing the specific needs of foreign students, should not go unheeded. Suggestions for enhancing outreach campaigns, mentoring programs, and collaborations at the local level are crucial steps toward fostering inclusivity. We must also explore ways to extend support to fellows' families, recognising that their well-being can profoundly influence the scholars' ability to excel.

In conclusion, international science fellowships can potentially transform lives, communities, and the world at large. They stand as beacons of collaboration, innovation, and progress. As we continue to champion these programs, let us heed the stories and recommendations of our fellows, ensuring that the pathway to knowledge remains open and accessible to all. In doing so, we not only advance science diplomacy but also contribute to a brighter, more interconnected future for all.

Lastly, we present a report on the Science Policy and Diplomacy Meet organised by CSIR-NIScPR with the theme "Science Diplomacy for Sustainable Development." This event served as a robust platform for discussions on science diplomacy, science policy, and international collaborations—all vital in advancing scientific knowledge and achieving sustainable development goals.

We hope you find this issue insightful and inspiring.

Monika Jaggi

Unlocking Success: How the TWAS-CSIR Fellowship Shaped My Professional Journey

Iyabo Christianah Oladipo

Department of Science Laboratory Technology, Ladoke Akintola University of Technology,
Oyo State, Nigeria

E-mail: xtiecoker@gmail.com, icoladipo@lautech.edu.ng



My journey as a professor of Food and Industrial Microbiology has significantly been influenced by the transformative opportunities I received through the TWAS-CSIR fellowship in 2009. This fellowship proved to be a pivotal moment in my professional development, providing me with valuable experiences that shaped my success story.

I commenced my PhD at the University of Ibadan, Nigeria. After gaining approval for my proposal, I initiated my bench work. However, I encountered limitations in conducting crucial segments due to insufficient funds and equipment. My home institute supervisor, Prof. Abiodun Sanni, suggested proactively seeking opportunities to overcome these challenges.

On a fateful day, as I navigated the vast expanse of the internet in search of opportunities, destiny intervened and led me to the TWAS-CSIR PhD Fellowship—a beacon of hope for ambitious researchers from developing nations. With every click, I discovered a program that held the promise of realising the dreams of budding scientists. The program's resolute mission to bolster young minds' aspirations in pursuing doctoral studies abroad spoke directly to the fervour within me.

With bated breath, I delved into the details, absorbing the essence of the fellowship's purpose. It was an endeavour dedicated to fostering the growth of inquisitive minds, guiding them toward the vast realms of knowledge that lay beyond their borders. Fuelled by excitement and an unwavering determination, I steered my resolve and took the monumental decision to apply. Little did I know that this single act would chart the course of my life in ways beyond imagination.

The day the acceptance letter from TWAS materialised in my inbox marked a turning point—an unforgettable moment etched into the fabric of my existence. The weight of its implications was monumental; it signified an opportunity that transcended geographical confines. With the fellowship's endorsement, I found myself holding not just a letter but a key to a realm of possibilities.

The ensuing days were a whirlwind of preparations. Visa processes, documentation, and logistical arrangements—each step was a testament to my commitment and desire to seize this chance. As the final puzzle pieces slid into place, I stood at the precipice of an unfamiliar chapter. It was a moment of poignant farewells as I bid adieu to the embrace of family and the familiarity of my homeland.

Stepping onto foreign soil, I embarked on an odyssey of research and personal growth. The CSIR-Indian Institute of Chemical Biology ([IICB](#)), where the fellowship was to take root, welcomed me with open arms. The warmth of my reception surpassed mere politeness; a genuine embrace set the tone for my journey ahead. In an extraordinary display of hospitality, two laboratory members I was destined to join ventured to the airport in the institute's car, extending a gesture of welcome that transcended customary norms.

My host, a pillar of support and guidance, had meticulously arranged my accommodation, ensuring my transition was seamless. This thoughtful preparation was a testament to the institute's commitment to nurturing a conducive environment for exploration and innovation. As I settled into my new surroundings, the promise of discovery hung in the air—an intangible force that fuelled my determination to delve into the uncharted territories of knowledge.

In retrospect, my encounter with the TWAS-CSIR PhD Fellowship was more than a stroke of luck; it was a convergence of aspirations, an alignment of stars that illuminated a path previously obscured. This narrative of mine is one among many, each weaving a tapestry of ambition, dedication, and transformation. The pages that follow in this chronicle will recount the challenges, triumphs, and epiphanies that have become the cornerstone of my academic pursuit—one that continues to unfold against the backdrop of collaboration, cultural exchange, and the relentless pursuit of knowledge.

During my time at the CSIR-IICB, I had the privilege of being mentored by Prof. Snehasikta Swarnakar, who was then the Head of the Department of Physiology, Drug Development Diagnostics, and Biotechnology Division. Her guidance, valuable insights, and support were instrumental in refining my research ideas, experimental design, and data analysis. The mentorship from Prof. Swarnakar nurtured my critical thinking and problem-solving skills, contributing significantly to my professional growth.

The initial days were overwhelming—new culture, new people, and the daunting challenge of pushing my boundaries academically. The path was not without obstacles. There were moments of self-doubt, experiments went awry, and long nights grappling with research questions. Yet, amid these challenges, I had the unwavering support of my fellow scholars at the institute and my mentor. They were my pillars of strength during my stay at the CSIR-IICB.

The TWAS-CSIR PhD fellowship opened doors to cutting-edge research projects and methodologies, allowing me to work alongside experienced researchers and engage in innovative research. This exposure enhanced my research skills and expanded my knowledge base, exposing me to advanced techniques, data analysis methods, and experimental design.

Financial support from the TWAS-CSIR fellowship relieved me of financial burdens, enabling me to focus wholeheartedly on my research pursuits. Additionally, the fellowship provided me with opportunities to attend fully sponsored conferences, workshops, and training events, which otherwise would have been challenging. These conference experiences allowed me to interact with experts, researchers, and peers in my field, presenting my research findings and establishing professional connections. Being a TWAS-CSIR PhD fellow brought me recognition and prestige within the scientific community.

One of the most enriching aspects of my fellowship was the collaboration with Prof. Ratan Gacchui (who was introduced to me by Prof. Swarnakar) of the Department of Life Science and Biotechnology, Jadavpur University, Kolkata. Through this collaboration, we published several journal articles, expanding my horizons and introducing me to new methodologies and innovative solutions to complex research problems. The research network I built during this time has been enduring and valuable throughout my career.

Upon concluding my research endeavours, I returned to my native land, seamlessly reintegrating myself into the folds of my home institute. With determination and diligence, I successfully defended my meticulously prepared thesis, a monumental feat that bestowed upon me the esteemed title of Doctor of Philosophy. Armed with an arsenal of advanced knowledge and refined skills acquired during my international academic journey, I embarked on a transformative path.

In the present day, I stand proudly as a revered professor in my specialised field, a position that would have remained an elusive dream were it not for the invaluable support of the TWAS-CSIR fellowship. Notably, my compatriots and colleagues who tread the hallowed halls of my home institute have also reaped the rewards of TWAS and kindred fellowship initiatives. This collective success story is a testament to the unparalleled benefits these fellowships bestow.

In academia, as in life, progress is the lifeblood that sustains growth. With this undeniable truth in mind, I passionately advocate for the unwavering investment in the TWAS fellowship program and its counterparts. Continued investment in fellowship programs is vital for sustaining and strengthening

scientific collaborations. By supporting fellowship programs, policymakers can nurture scientific talent, foster international cooperation, and address global challenges, ultimately driving societal and economic progress.

Furthermore, promoting greater participation and inclusivity in international science fellowships is crucial for fostering diversity, collaboration, and innovation in the scientific community. Below are some potential strategies to achieve this goal:

- Targeted outreach campaigns to raise awareness about international science fellowships among underrepresented communities, including women, ethnic minorities, individuals from developing countries, and individuals with disabilities, can be developed. Various communication channels, such as social media, websites, and collaborations with local organisations, can be utilised to reach a wider audience.
- Establish mentoring programs to offer guidance and support for potential fellowship applicants. Experienced researchers can mentor and assist applicants in preparing applications, identifying suitable fellowship opportunities, and navigating the international scientific community.
- Foster collaborations between international science fellowship organisations and local research institutions, universities, and non-profit organisations. These partnerships can help identify talented researchers from diverse backgrounds, create networking opportunities, and provide access to research facilities and resources.
- Review and modify eligibility criteria for international science fellowships to ensure inclusivity. Additionally, consider allowing flexible career stages to accommodate early-career researchers, mid-career and established scientists.
- Provide cultural competency training for fellowship organisers, selection committees, and host institutions. This training can promote a more inclusive and welcoming environment for international fellows by enhancing understanding and addressing cultural differences and biases.
- Set up feedback mechanisms to collect input from former fellows about their experiences and improvement ideas. Regularly assess fellowship programs to detect and address biases and obstacles. Conduct systematic evaluations to uncover best practices and refine strategies over time.
- Highlight success stories and accomplishments of diverse international fellowship recipients. This can inspire and motivate aspiring researchers while showcasing the value of diversity and inclusion in scientific pursuits.

In summation, my journey from completing my academic odyssey to the distinguished professorship I now hold has been illuminated by the guiding light of the TWAS-CSIR PhD fellowship. I am a living testament to the program's efficacy and stand shoulder-to-shoulder with my colleagues as we herald the virtues of such fellowships. I beseech decision-makers to recognise the indomitable value of sustained investment in fellowship programs. By doing so, we ensure the continuity of scientific triumphs, the reinforcement of collaborative bridges, and the emergence of a brighter, more prosperous global future.



Some of my undergraduate research students



Some of my postgraduate research students

Science Diplomacy through International Fellowships - A Reflection

Funmilayo Itunu Adeniyi

Department of Chemistry, University of Ibadan, Nigeria

E-mail: fiadeniyi@gmail.com

Imagine stepping out of your comfort zone and entering a realm of exciting scientific possibilities. This was my reality when my TWAS-CSIR fellowship journey kicked off in 2016. As a PhD student in Analytical Chemistry specialising in materials chemistry, which focused on geopolymers, I knew that collaboration was imperative.

I was immersed in my laboratory, grappling with intricate experiments that demanded cutting-edge instruments, some of which were unavailable in my country. Hence, I applied for a six-month sandwich programme to collaborate with an engineering Institute in India to carry out the experimental aspects of my PhD research.

The journey to securing this opportunity was no walk in the park. After rigorous proposal writing, document submissions and screening, I received the prestigious The World Academy of Sciences and Council of Scientific and Industrial Research (TWAS-CSIR) Sandwich Postgraduate Fellowship. My destination? The CSIR-Structural Engineering Research Centre ([SERC](#)) in Chennai, India.

It was a moment of joy as I prepared to leave my country for the first time. The thought of international collaboration brimming with potential benefits for me, my supervisor, and my home university was electrifying.

My stay at CSIR-SERC, Chennai, opened me to a new world of experimental possibilities. I got hands-on experience with cutting-edge instruments and software, which elevated my analytical, problem-solving, and





critical thinking skills. These tools weren't just abstract concepts from papers or the internet anymore – I was interacting with them directly.

But it wasn't just about equipment. I found myself embraced by a community of structural engineers and fellow researchers. Guided by mentors like Prof. Santosh Kapuria, Dr Bharatkumar BH and Dr Hemalatha T, I delved into PhD experiments with zest. I was operating the instruments and interpreting the results. Interacting with the institute's Post-doctoral, PhD and MSc students broadened my research network. Attending seminars provided an insight into how academics from developed countries carry out cutting-edge research, which CSIR-SERC had keyed in to make India stand among global giants in research.

But it didn't stop there. My paper-writing skills blossomed during my time at the Institute, leading to a research article in a Springer journal. It further enabled me to improve the capacity of my colleagues back at my university.

The TWAS-CSIR fellowship added another feather to my cap – the chance to peer-review for an International journal. This opportunity aligned with my material chemistry expertise,

demonstrating how international science fellowships amplify one's professional reach.

As I touched Chennai International Airport, my arrival in India was filled with excitement. I experienced a cultural shock relating to the vegetarian diet at the Institute and took some time to acclimate to an unfamiliar environment. Thankfully, a guiding hand was there to assist me, helping me bridge the cultural gap.

Though it took a few weeks to register my research visa at the Foreign Regional Registration Office (FRRO), Chennai, eventually, it got sorted out. Reflecting on my experience, I see opportunities for improvement. The FRRO can address the visa challenges experienced by foreign students in India by raising awareness among all CSIR Institutes. This way, when new international students arrive, they will be well-informed about the appropriate steps to follow upon arrival in the country.

A few critical strategies, as mentioned below, can be enacted to ensure a more inclusive landscape in international science fellowships:

- Generating greater awareness about the importance of these fellowships in developing countries.
- Implementing university programs dedicated to honing proposal and grant writing skills among aspiring participants.
- Fostering research collaboration by increasing quotas for developing countries. To enhance gender parity, increasing award quotas for women from developing nations may be included.
- Providing relocation support to their families throughout the fellowship can enhance greater participation and inclusivity for women in science.

Investing in international fellowship programs isn't just about sending students abroad; it's about fostering lasting collaborations that enrich the scientific community. Continued investment in these programs is vital, strengthening scientific collaborations and enabling scientists from developing nations to conduct research of international standards through hands-on experiences and transfer the acquired knowledge back home.¹ Research excellence and innovation thrive through international collaboration, sustaining access to advanced equipment and expert researchers across various fields. Furthermore, the link between the citation impact of publications and international collaborations suggests that providing broader access to international science fellowships enhances individuals' capacity to publish papers with increased citation levels.²

Studies reveal that impactful research often emerges from cross-border collaborations and internationally

co-authored papers. Chances for multidisciplinary research, as in my case, are easily achieved when international science fellowship programs are sustained.³ To cap it all, international science fellowships can serve as catalysts for science diplomacy, uniting students and experts from different countries to address common problems, thereby nurturing global relationships collaboratively.⁴ As I look back on my journey, I see not only personal growth but also the potential for scientific harmony on a global scale.

References

1. OECD Global Science Forum (2011) Opportunities, Challenges and Good Practices in International Research Cooperation between Developed and Developing Countries. <https://www.oecd.org/sti/inno/47737209.pdf>
2. Rodrigues ML, Nimrichter L, Cordero RJB (2016) The benefits of scientific mobility and international collaboration. *FEMS Microbiology Letters*, 363(21): fnw247. <https://doi.org/10.1093/femsle/fnw247>
3. Dusdal J, Powell JJW (2021) Benefits, Motivations, and Challenges of International Collaborative Research: A Sociology of Science Case Study. *Science and Public Policy*, 48(2): 235–245. <https://doi.org/10.1093/scipol/scab010>
4. Treacy S (2023) The impact of science diplomacy training. <https://twas.org/article/impact-science-diplomacy-training>

From Aspirations to Achievements through TWAS-CSIR Fellowship

Koffi Arnaud Kamenan

Assistant Professor, University Peleforo Gon Coulibaly, Korhogo, Ivory Coast

E-mail: arnaudkamenan@rocketmail.com, arnodkamenan@upgc.edu.ci



My story begins as a physics enthusiast from Ivory Coast, where I pursued my master's degree in physics at Nangui Abrogoua University in Abidjan. Little did I know that my academic journey would soon lead me on an extraordinary adventure of research and cultural discovery.

My academic path took an unexpected turn when I decided to delve into the challenges facing the rubber industry in my homeland. *Hevea brasiliensis*, the rubber tree, had long been a cornerstone of Ivory Coast's economy, but its profitability was dwindling. Driven to explore innovative solutions beyond conventional rubber production, I embarked on my thesis.

The turning point arrived when Dr Assanvo Edja, a mentor and scholar, approached me. Dr Edja had received a prestigious scholarship for a four-year doctoral internship at the CSIR laboratory and encouraged me to explore the TWAS-CSIR Postgraduate Fellowship. This opportunity opened a door to possibilities I had never imagined.

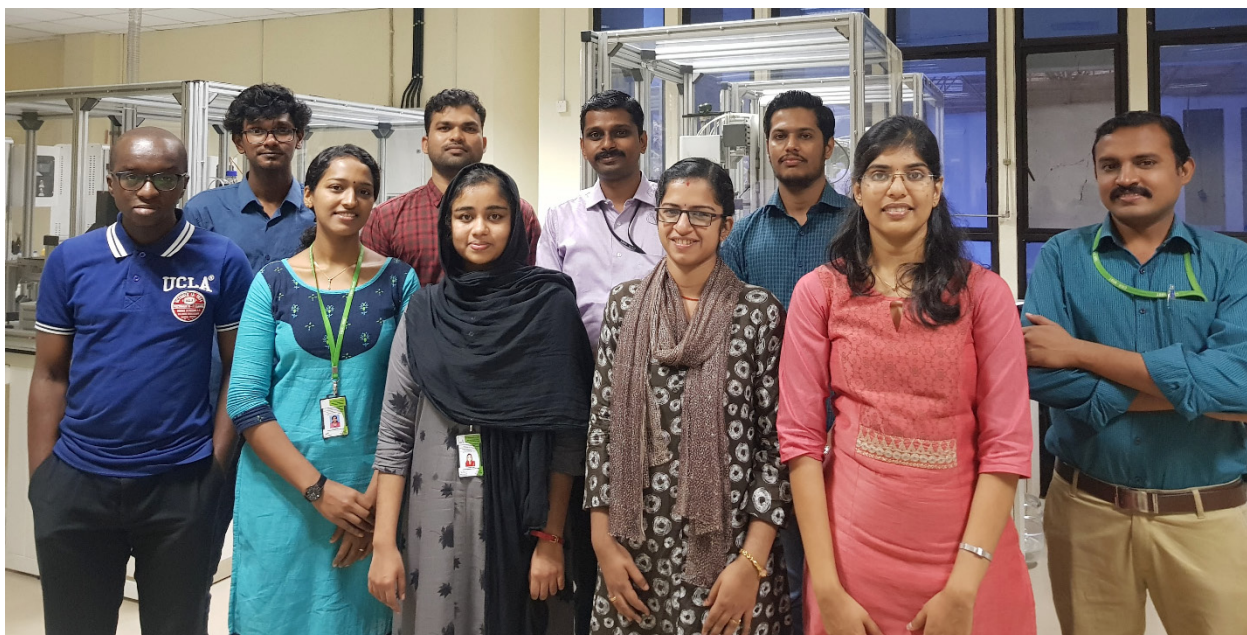
I contacted various CSIR laboratories, and the National Institute for Interdisciplinary Science and Technology (CSIR-NIIST) in Kerala, India, welcomed me enthusiastically. Under the mentorship of Dr K. Narayanan Unni, my application for the scholarship was accepted in March 2019, setting the stage for a transformative journey.

As I set foot in Kerala, India, I was not only entering a new realm of research but also immersing myself in a rich tapestry of culture and diversity. My perception of India, influenced by stereotypes, was soon dispelled as I encountered the warm and helpful Malayalam people. With its vast cultural heritage and diverse languages, India revealed itself as a land of endless fascination.

CSIR laboratories starkly contrasted the limitations I had encountered in my home country. Equipped with state-of-the-art instruments and resources, they offered an unparalleled research environment. However, my initial challenges included securing a residence permit - a process that extended over two months and establishing a bank account to receive my monthly stipend.

Despite these hurdles, I was fortunate to work alongside a dedicated team, with guidance from Dr Suraj Soman and Dr Narayanan Unni and the unwavering support of Dr Ajayaghosh, then Director, CSIR-NIIST. These interactions and collaborations led to significant research achievements.

Interactions with fellow students, not only from India but also from countries like Japan, Cameroon, and Nigeria, expanded my horizons and enriched my academic and personal growth. I honed invaluable research skills in thin-film design and dye-sensitised solar cells (DSSCs) while benefiting from comprehensive training seminars.



Today, as an Assistant at Peleforo Gon Coulibaly University (UPGC) in Physics, my CSIR experience has profoundly influenced my professional career. I now teach courses on solar cell functioning, construction, and characterisation. I also contribute to ongoing research in organic semiconductors and natural dyes for solar devices and light-emitting diodes.

Reflecting on my journey, I propose several improvements to ease the transition for future international students. These include facilitating the process of obtaining a bank account upon arrival, offering diverse dining options for international students, and enhancing laboratory equipment and data processing capabilities.

Moreover, language barriers can be addressed through language learning programs, promoting better South-South cooperation. I advocate for establishing CSIR and TWAS offices in African universities to raise awareness about these scholarships among West African Francophone countries.

In conclusion, I thank the TWAS-CSIR fellowship for supporting students from African nations. This support enables us to pursue our research ambitions under the best conditions and achieve doctoral success. My journey from Ivory Coast to India has been a deeply personal and transformative experience. It has not only broadened my horizons in terms of knowledge and research but also enriched my understanding of diverse cultures and perspectives.

As we move forward, let us embrace the spirit of cooperation, cultural exchange, and shared knowledge that transcends borders and fosters innovation for a brighter future.

Change by Exchange: An Academic Diplomacy Model for the International Student Mobility Programme

Arnab Chatterjee

Doctoral Student, Friedrich Schiller University Jena, Germany

Research Affiliate, Wildlife Institute of India

DAAD Young Ambassador 2022/2023

E-mail: arnab.chatterjee@uni-jena.de, arnabchatterjee1994@gmail.com

Introduction

Imagine a magical key that not only opens doors to the world of education but also lets you discover a wealth of cultural exchange and soft power. This unique key, in my case, is represented by the international academic mobility program DAAD (Deutscher Akademischer Austauschdienst). International scholarships have been shaping the minds of foreign students for decades by fostering interactions with the host country's citizens.¹ It leads to soft power transition through cultures, values and policies that are essential for the relationship with the strategically important partner countries.² This type of public diplomacy helps to 'build and manage relationships' that can influence long-term decisions and opinions.^{2,3}

DAAD is one of the largest funding agencies in the world, with an estimated 775 million Euros annual budget in 2022. It has supported approximately three million academics through the student mobility programme globally since its inception in 1950.^{4,5} The organisation, born in 1925 and reestablished in 1950, aims to internationalise higher education by strengthening a worldwide network of scholars and institutions with 57 DAAD offices comprising 19 regional offices and 38 information centres.^{4,5} Its roots in India date back to 1960, operating officially since 1969.⁶ The regional office in Delhi is responsible for India, Bangladesh, Nepal, Bhutan and Sri Lanka and operates through seven information points.⁶

According to the DAAD annual report (2022), the agency funded over 140,000 academics in 2022 in various subjects, including engineering, natural sciences, language, economics and music.⁵ In 2022, 1998 Indian nationals studied in Germany with DAAD's support, while 335 German citizens received DAAD fellowship to study in the Indian higher education system.⁵

What's particularly noteworthy is the rapid growth of the Indian student community in Germany. In 2022, this community became the largest foreign student group, with approximately 43000 individuals. This 25% increase from the previous year and a doubling of numbers over the past five years demonstrates the increasing appeal of Germany as an educational destination for Indian students.⁷ Dr Philipp Ackermann, the German Ambassador to India, acknowledged this trend, stating, "German universities are very keen on having Indian students. They have a very good reputation in Germany."⁸ This sentiment reflects the strong bonds between Indian students and German institutions, further emphasising the significance of international academic mobility programs like DAAD for endorsing global education partnerships.

Germany: A Popular Destination for International Students

'Zero-tuition fees' for higher education in maximum German universities, 'innovative teaching formats and

concepts', experienced open-minded researcher communities, and world-class research infrastructure make Germany one of the most desirable destinations for foreign students.^{9,10} Germany now stands as the third most popular destination for international students globally and first as a non-English speaking country.¹¹ Over the past decade, there has been a remarkable 75% increase in international students' enrollment in Germany.¹¹ International PhD students comprise one-fourth of the total doctoral students in Germany.¹¹ Besides, the residents of Germany have welcoming behaviour towards the immigrants and their cultures, making Germany a safe country for foreigners.



Figure 1. Organisation and funding of DAAD at a glance (Source: DAAD Annual Report 2022)

DAAD Scholarship for the Professional Development

International scholarship, like DAAD, aims to secure trustworthy global partners for future collaborations.¹² A survey by the DAAD revealed that international Master's students funded by the DAAD scholarship show a positive attitude towards future relations with Germany or German institutions, such as 95% of the respondents desired close communication with German nationals, 96% agreed for future cooperation with German organisations, and 83% would like to work in German institutions in their home countries.^{12,13}

This scholarship has a transformative effect on the careers of its recipients. Many DAAD scholarship holders reported significant improvements in their professional positions due to their exposure to the German education system.¹²⁻¹⁴ This improvement is also reflected in those who studied management at the postgraduate level; for instance, 70% of DAAD alums holding management responsibilities compared to 59% self-funded peers.^{12,13} Additionally, more than 75% of former DAAD fellows found similarities between their current professions and the courses they availed, contrasting with 63% of the self-supported individuals.^{12,13} This implies that the DAAD's neutral selection system helps students find the right career path and secure a job.

The DAAD extends support to universities in developing countries to internationalise the higher education system and reform academic institutions. For example, 50% of the College of Basic Sciences, University of

Nairobi, staff passed through the DAAD qualification system, which results in collaborative work among the alums for a productive cause.^{12,13}

My Journey with the DAAD Scholarship

I received a DAAD scholarship, 'Research Grants – Doctoral Programmes in Germany'¹⁵, in 2020, during the COVID-19 pandemic and started my doctoral studies in 2021 at the Friedrich Schiller University (FSU) Jena, a university city often hailed as a 'science city'. A student-friendly atmosphere, high-tech research facilities and an affordable lifestyle make Jena a 'student paradise'. For these reasons, almost 25% of residents of Jena belong to the student community.

My research project, titled 'Impacts of land use and cover changes on the demography and behaviour of Indian desert gerbil *Meriones hurrianae* in Thar desert, India', aligns with three United Nations [Sustainable Development Goals](#), viz. 'Goal 12: Responsible consumption and production', 'Goal 15: Life on land' and 'Goal 17: Partnerships for the goals'. The project aims to understand the impacts of unsustainable agriculture¹⁶ and unrestrained grazing¹⁶ on the ecologically important prey species, the Indian desert gerbil (*Meriones hurrianae*), in the Great Indian desert.

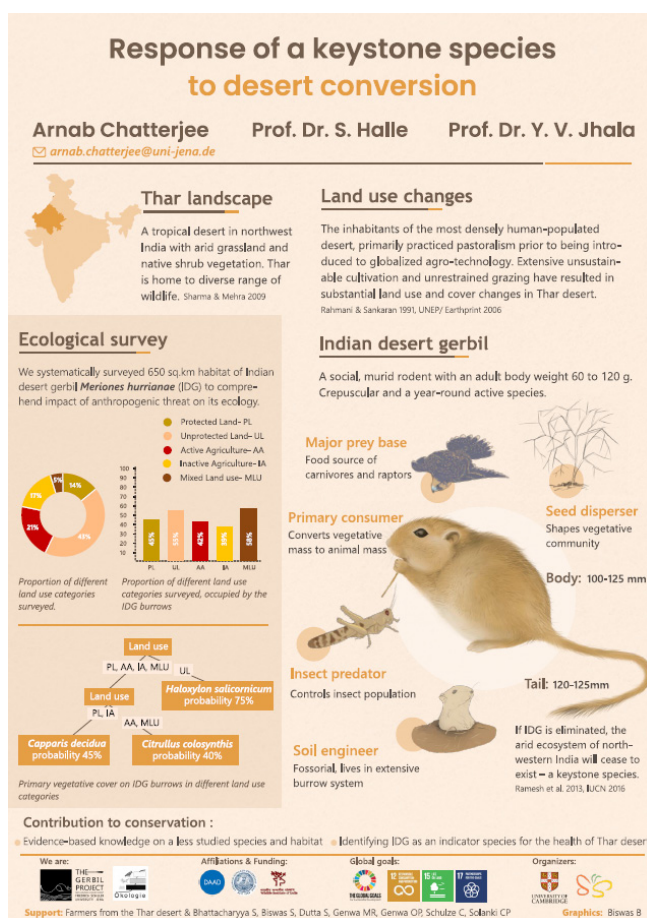


Figure 2. Research Poster at the Student Conference on Conservation Science Cambridge 2023

My project involves collaboration between the FSU and the Wildlife Institute of India (WII), Dehradun. FSU is responsible for providing the necessary funds for the project while WII is hosting the doctoral candidate (me) and applying for the required permission to conduct the fieldwork at the State Forest Department of Rajasthan, India. The DAAD scholarship has been instrumental in supporting me throughout my journey, providing a monthly stipend, insurance, and airfare for my fieldwork in India.

Besides, we have collaborated with the Institute for Stem Cell Biology and Regenerative Medicine (inStem), Bangalore and the Indian Institutes of Science Education and Research, Kolkata (IISERK), to complete the



Figure 3. Training facility of 'Small mammal ecology group' at Jena

project objectives within the proposed schedule. The local people of Jaisalmer, Rajasthan, worked in this project as drivers, interpreters of the local languages, field assistants and student trainees, which helped to gather essential data for the project. On the other hand, those people received temporary employment, which improved their livelihood. This project bridges the 'land of diversity' (India) and the 'land of ideas' (Germany), fulfilling the conditions for 'Goal 17: Partnerships for the goals'.



Figure 4. Conducting field ecological studies in the Thar desert, India

Moreover, FSU supports me by providing theoretical and practical knowledge. For example, I have received training on capturing small mammals and collecting biological samples from them in the facility situated in Jena. I am applying those advanced techniques to the Indian desert gerbil in the Thar desert. The University of Jena also provided me with training on lab animal experiments, which ensures ethical animal handling with less stress and the least injury to the experimental subject. The certificate courses on 'Good Scientific Practices'¹⁷ and 'Research Data Management'¹⁸ helped me understand that following scientific studies rules and regulations is as necessary as a seatbelt in a moving car. Besides, the courses on behavioural ecology and ecological modelling helped me design and collect data during the fieldwork.

Designing and conducting studies in the Thar desert, managing the funds for the project, collaborating and communicating with scientists and working with people from rural India are offering me partial autonomy and early-stage independence for my scientific career, which will help me in future to conduct studies in India with greater responsibilities.



Figure 5. Communication with the local people of Jaisalmer, Rajasthan

Acknowledgements

I extend my heartfelt gratitude to my PhD supervisors, Prof. S. Halle (FSU) and Prof. Y. V. Jhala (WII), as well as my collaborators, Dr S. Dutta (WII), Dr S. Bhattacharyya (inStem) and Prof. P Bhadury (IISERK). Special thanks go to the Rajasthan Forest Department for their support in fieldwork and the local people of Jaisalmer, India, who helped to conduct the field ecological survey.

References

1. Ayhan KJ, Gouda M, Lee H (2022) Exploring global Korea scholarship as a public diplomacy tool. *Journal of Asian and African Studies*, 57(4): 872-893. <https://doi.org/10.1177/00219096211035800>
2. Gregory B (2008) Public diplomacy: Sunrise of an academic field. *The Annals of the American Academy of Political and Social Science*, 616(1): 274-290. <https://doi.org/10.1177/0002716207311723>
3. Nye JS (2008) Public diplomacy and soft power. *The Annals of the American Academy of Political and Social Science*, 616(1): 94-109. <https://doi.org/10.1177/0002716207311699>
4. Roeloffs K (1986) Deutscher Akademischer Austauschdienst (DAAD): German Academic Exchange Service: Profile and programmes. *Higher Education in Europe*, 11(1): 43-50.
5. DAAD (2022) Annual Report, Bonn: Deutscher Akademischer Austauschdienst e.V.. https://static.daad.de/media/daad_de/pdfs_nicht_barrierefrei/web_jb_2022_en.pdf
6. <https://www.daad.in/en/about-us/daad-in-india/daad-regional-office-new-delhi>
7. <https://www.daad.in/en/2023/08/11/indian-student-numbers-touch-a-record-high-in-germany>
8. <https://www.aninews.in/news/world/asia/india-has-highest-number-of-students-in-germany-ambassador->

philipp-ackermann20230810140825/

9. <https://www.daad.de/en/study-and-research-in-germany/scholarships/important-information-for-scholarship-applicants/>
10. <https://www.study-in-germany.de/en/why-germany/>
11. https://www.daad.de/en/the-daad/communication-publications/press/press_releases/wissenschaft-weltoffen-2022/
12. Mawer M (2018) Magnitudes of impact: A three-level review of evidence from scholarship evaluation. In: Dassin J, Marsh R, Mawer M (eds) *International Scholarships in Higher Education*. Palgrave Macmillan, Cham., 257-280. https://doi.org/10.1007/978-3-319-62734-2_13
13. DAAD (2013) Knowledge – Action – Change Three alumni surveys in review 25 years of DAAD postgraduate courses, Bonn: Deutscher Akademischer Austauschdienst [DAAD].
14. Raetzell L, Stern T, Plutta K, Krämer M (2013) Programme area evaluation: Educational Cooperation with Developing Countries, Bonn: Deutscher Akademischer Austauschdienst [DAAD].
15. <https://www2.daad.de/deutschland/stipendium/datenbank/en/21148-scholarship-database/?detail=57135739>
16. Rahmani AR, Sankaran R (1991) Blackbuck and Chinkara in the Thar Desert: a changing scenario. *Journal of Arid Environments*, 21(3): 379-391. [https://doi.org/10.1016/S0140-1963\(18\)30676-1](https://doi.org/10.1016/S0140-1963(18)30676-1)
17. <https://www.uni-jena.de/en/good-scientific-practice/>
18. <https://www.researchdata.uni-jena.de/en>

International Fellowships - The Journey of a DAAD Doctoral Scholar

Amrita Kaur Slatch

DAAD Doctoral Scholar (2021-25)

RWTH Aachen University, Templergraben 55, 52062 Aachen, Germany

E-mail: amrita.slatch@rwth-aachen.de

"Education is the most powerful weapon we can use to change the world."

NELSON MANDELA (2003)

The World Development Report (2018) documented the realities of the education system across several countries. It pointed out that the biggest conundrum in education is that "Learning" is equivalent to "Schooling". The report argued that true education primarily arises from experiences, moulding professional skills and leadership qualities. I want to share this idea through pages of my own stories.

I will begin by acknowledging how very fortunate I have been in my educational journey at the various institutions I was affiliated with. They have crafted my identity by shaping my thoughts, ideas and opinions. I was a student with average calibre, but what was integral to my personality even then was the curious nature of any child-like mind. In hindsight, I realise that during the primitive years of my schooling, teachers and educators encouraged this curiosity. As I progressed through middle school, high school and university, my skills developed through interactions with peers. This informal learning process instilled the confidence I still hold today. University opened a world where questioning norms and reading books were encouraged, honing my critical thinking. When I finished my post-graduation, it dawned on me that learning is a never-ending journey.

Studying in Germany was a decision influenced by extensive reading during my undergraduate years. Firstly, the absence of tuition fees was a game changer. Although, as a female child in India, my initial education was subsidised in the public schools, the idea of government-funded university education fascinated me. Moreover, the economic restructuring work following the German unification was another compelling factor.

A lot was also shaped by how I wanted my professional trajectory to grow. Unsatisfied with working in the industry, I yearned to transition into academia. Hence, the decision to pursue doctorate studies in Germany was taken. Given that my research would be independent and supervised in Germany, I had to secure external funding. It was during this quest that I discovered the esteemed DAAD scholarship.

The DAAD scholarship provided an unparalleled opportunity. It was not just financial support but also an organisation that eased international students into the German culture. This comprehensive scholarship structure guided me with my very first steps in Germany. It is said that you can't understand a culture without first learning the language. The scholarship provided a language course at the beginning of the program, helping me adapt to a foreign land and language. It is one of the best things the scholarship offers, as I observed many other international PhD students who did not come through DAAD struggled with learning the language in the initial months.

Another significant aspect of the DAAD scholarship is the various meetings and events organised by the Regional Freundeskreis (DAAD circle of friends), an independent initiative by DAAD alums. These gatherings allowed me to interact with peers and explore different avenues the scholarship could offer. During one such meeting, I learned about funding for research-related work, which enabled me to present my paper in Australia, combining DAAD and institute funding.

The scholarship also supports research visits to the home country if it is a part of the research methodology and approved by the supervisor. This aspect of the scholarship makes it worth acknowledging as it fosters partnerships between German and Indian research institutes, enhancing cross-cultural competency and awareness.

One of the only challenges that scholarship recipients have encountered is the high cost of living in certain German cities such as Munich and Frankfurt. Although DAAD offers rent subsidies in these cities, surviving on the limited stipend is difficult. But I hope this issue will be addressed in the future.

Through my two years as a DAAD Doctoral scholar, I have realised my potential to make a meaningful impact on society. This independent mindset has been shaped by the challenges of working in an international environment, fostering accountability and self-reflection. My journey has taught me that I don't need to choose a predefined career path; I can design my own. It stems from a solid learning foundation with teachers in my school nurturing my curiosity and university professors encouraging me to question the norm. Often, teachers limit understanding in schools to whatever is taught in classrooms. One needs to allow students to ask and think to build confidence in students. My experiences in school were constantly not just shaped by my teachers but also by constant engagement with peers who played an active role in enhancing my knowledge and skills.

Today, as India strives to elevate its education standards to a global level with the National Education Policy, I propose introducing international fellowships at a younger age, perhaps between 18-20. Such fellowships offer invaluable real-life experiences beyond the classroom, helping young individuals gain clarity about their future roles as global leaders. These international fellowships create a platform for scientific awareness through a robust professional network, benefiting individuals and contributing to the country's intellectual growth. In an era of evolving multilateralism, international fellowships become essential in empowering and shaping the "world order".

Report //////////////////////////////////////

Science Policy & Diplomacy Meet: Key Takeaways

Pramila Majumdar^{a,*}, Nitin Bayal^b

^aPrincipal Scientist, ^bSenior Project Associate, Innovation, Entrepreneurship and Diffusion Research Division, CSIR-National Institute of Science Communication and Policy Research, New Delhi, India

*Corresponding author: pramila@niscpr.res.in

Introduction

A “Science Policy and Diplomacy Meet” was organised on 16 September 2023 as a significant component of the One Week One Lab (OWOL) Programme of CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), New Delhi, India. The hybrid event, live-streamed on Facebook and YouTube, aimed to strengthen networks between different science policy and diplomacy stakeholders and professionals in a multicultural and multidimensional space.

In her inaugural address, Prof. Ranjana Aggarwal, Director, CSIR-NIScPR, underscored the importance of the OWOL Programme in fostering connections and stimulating discussions on critical topics such as science



First Session of the Event. From left: Dr Bhaskar Balakrishnan, Prof. Ranjana Aggarwal, Dr Philipp Ackermann, Dr Rama Swami Bansal

communication, science policy, knowledge-sharing, and science diplomacy, all essential for sustainable development. She highlighted CSIR-NIScPR's expertise in science communication, evidence-based science and technology studies, and its commitment to addressing socio-economic impact and strategic research areas. Mentioning that CSIR-NIScPR is bringing out a unique digest, "[Science Diplomacy](#)", since 2017, Prof. Aggarwal expressed eagerness to collaborate with policymakers and researchers to pursue sustainable development goals (SDGs) and other strategic research areas.

Dr Rama Swami Bansal, Head of the International S&T Affairs Directorate at CSIR, New Delhi, talking on "CSIR India and its global linkages", emphasised that presently, sustainable entrepreneurship needs to become the foundation for growth and here, science diplomacy can play a central role focusing on the global partnerships with a human-centric focus.

Dr Bhaskar Balakrishnan, former Ambassador of India and Science Diplomacy Fellow of Research and Information System for Developing Countries (RIS), New Delhi, stressed the importance of sustainability regarding technologies and innovations. He articulated that science policies seek to support S&T developments to cater to the nation's needs. Dr Balakrishnan outlined critical aspects for scientific development, including increasing higher educational institutes and R&D funding by the government as well as the private sector, strengthening R&D infrastructure and workforce/human resource enhancement, and improving the ease of doing R&D. Further, he discussed the three pillars of science diplomacy as defined by the Royal Society and the American Association for the Advancement of Science (AAAS): science in diplomacy, diplomacy for science, and science for diplomacy. He highlighted that global diplomacy for science should include capacity building of the national ecosystem, engagement with the STEM diaspora, and applying STI to achieve SDGs. Towards this, India needs to increase its Science Counsellor networks, and additionally, Foreign Service officers should also learn to handle S&T collaboration activities. Dr Balakrishnan emphasised that we must strengthen science in diplomacy by promoting collaborations between diplomats and the scientific fraternity, which is critical for international negotiations.

During the "Science Diplomacy for Sustainable Development" address, Dr Philipp Ackermann, German Ambassador to India and Bhutan, German Embassy, New Delhi, shared his deep admiration for India's scientific achievements and robust relationship with Germany. Commending CSIR's science communication programs, Dr Ackermann also applauded India's swift S&T involvement and response to the COVID-19 pandemic. He highlighted a growing scepticism of S&T globally, especially during the pandemic and stressed the vital role of policy research and effective communication in shaping responses to global challenges. He advocated for international cooperation in scientific development and called for the firm implementation of G20 declarations.



Dr Philipp Ackermann, German Ambassador to India and Bhutan

The discussion session on “Science Diplomacy for Sustainable Development” was chaired by Prof. Madhav Govind, Chairperson, Centre for Studies in Science Policy, Jawaharlal Nehru University, New Delhi. The panellists included Mr R. Madhan, Director, Indo-German Science & Technology Centre, New Delhi; Dr Purnima Rupal, Former Director, Indo-French Centre for the Promotion of Advanced Research (IFCPAR/ CEFIPRA) and Dr Dhoya Snijders, Innovation Counsellor for India, Embassy of the Kingdom of the Netherlands, New Delhi.



Panel Discussion. From left: Mr R. Madhan, Prof. Madhav Govind, Dr Dhoya Snijders, Dr Purnima Rupal

Prof. Govind facilitated conversations on India's achievements and challenges in the realm of sustainable development, particularly through Science and Technology. Prof. Govind pointed out that international collaborations are pushing towards basic research rather than applied research, recognising the broad-reaching benefits it can bring. He emphasised that science diplomacy can bring all the countries on the same platform and evolve an executable strategy.

Mr Madhan touched upon the distinctive rules and regulations that govern science diplomacy in various countries. He then underscored the striking similarities in the research landscape between India and Germany in the context of Ministries, R&D institutions, startup ecosystems, and funding mechanisms. He highlighted that science diplomacy needs networking as it enables sharing costs, infrastructure and human resources like India and Germany shared synchrotron facility through science diplomacy. Mr Madhan also emphasised the need for specialised programs aimed at enhancing networking capacity, fostering joint R&D efforts, promoting innovation, and facilitating the sharing of both workforce and infrastructure. Further, he acknowledged that one of the biggest challenges in science diplomacy lies in quantifying the outcomes of scientific collaborations.



- Collaborative research becomes a reality, establishes quality.
- Various initiatives strive for a learning.
- Sharing of knowledge has enhanced facilitating products & services.
- This engages research, innovation, and comes to national level.

Mr R. Madhan, Director, Indo-German Science & Technology Centre

Dr Snijders mentioned that the Netherlands has the biggest Indian diaspora in Europe. He highlighted that science diplomacy is facilitating the resources for fundamental research to support not any specific country but the whole global scientific community. There are many good opportunities available to everyone. Dr Snijders explained that his country now focuses on societal impact, science diplomacy, and multi-national scientific collaborations. He remarked that although both India and the Netherlands have bilateral associations of various scientific ministries, there is a need to include civil societies and the private sector.



Dr Dhoya Snijders, Innovation Counsellor for India, Embassy of the Kingdom of the Netherlands

Dr Rupal said that for science diplomacy, having science ministries on both sides is always an advantage for smooth operations in collaborative activities that impact international collaborations. India has been advocating science diplomacy for a very long time.

The thought-provoking talks led to an enthusiastic interaction between the panellists and the participants, covering topics such as science diplomacy's role in rare disease treatment, the impact of science communication, the difference between having scientists or economists/social scientists as science diplomats, and Netherlands' decision to appoint Innovation Counsellors instead of Science Counsellors. The event served as a platform for robust discussions on science diplomacy, science policy, and international collaborations, all contributing to advancing scientific knowledge and achieving SDGs.

Key learnings

- *Comprehensive and collaborative partnerships are required to tackle global issues like climate change, pollution, biodiversity conservation, and sustainable development to ensure knowledge and technology sharing*
- *For synergistic global scientific development and advancements, there is a need for an equal exchange of scientists and researchers among nations*
- *Science diplomacy has a critical role in realising international collaborative scientific research projects and initiatives*
- *Engagements and interactions at the level of ministries of different nations make science diplomacy easier*
- *Strengthening global science counsellor networks is of utmost importance for promoting and facilitating science diplomacy*
- *For science diplomacy to be effective, it is essential to understand a nation's STI ecosystem*
- *Intense discussions and deliberations on science diplomacy and its functionalities are required to forge meaningful national and international scientific collaborations*

News //////////////////////////////////////

UCSI University launches International Institute for Science Diplomacy and Sustainability

On August 29, UCSI University in Malaysia inaugurated the International Institute of Science Diplomacy and Sustainability (IISDS), signifying a pivotal step in their commitment to advancing science diplomacy and sustainability. This endeavour aims to position the university as a trailblazer in these fields, serving the best interests not only of Malaysia but also those of ASEAN and the Global South.

Notably, such institutes typically find their presence in the Global North, where the understanding and readiness to bridge the gap between the scientific community and policymakers are more pronounced.

The establishment of IISDS in Malaysia underscores the university's dedication to contributing to the broader discourse on science diplomacy and sustainability.

The inauguration of this institute received the esteemed presence of Datuk Seri Zambry Abdul Kadir, Minister of Foreign Affairs, Malaysia, who extended his endorsement to its mission of educating and nurturing "young diplomats, government officials, corporate figures, and students in the intricacies of science diplomacy."

Announcements //////////////////////////////////////

Khorana Program for Scholars

Submission deadline: 31 October 2023

Further information at:

<https://iusstf.org/khorana-program-for-scholars>

Call for Applications for the Swiss Government Excellence Scholarships 2024-2025

Submission deadline: 11 November 2023

Further information at:

<https://www.sbf.admin.ch/sbf/en/home/education/scholarships-and-grants/swiss-government-excellence-scholarships.html>

DST-DAAD Personnel Exchange Program

Submission deadline: 20 November 2023

Further information at:

<https://dst.gov.in/callforproposals/dst-daad-call-2023>

MoUs Signed //////////////////////////////////////

MoU for setting up of campus of IIT Madras in Zanzibar-Tanzania signed

An MoU for setting up the campus of IIT Madras in Zanzibar- Tanzania was signed on 6 July 2023 between the Ministry of Education (MoE), Govt. of India, IIT Madras and Ministry of Education and Vocational Training (MoEVT) Zanzibar- Tanzania. This is the first ever IIT campus to be set up outside India. The academic programs, curricula, student selection aspects and pedagogical details will be by

IIT Madras, whereas the government of Zanzibar-Tanzania will meet the capital and operating expenditure. IIT Madras degrees will be awarded to the students enrolled in this campus. IIT campus in Zanzibar- Tanzania will serve as an example to the world of the aspirational qualities of Indian higher education and innovation.

MoU signed to establish 1st campus of IIT Delhi in Abu Dhabi

An MoU was signed on 15 July 2023 between the Ministry of Education and the Abu Dhabi Department of Education and Knowledge (ADEK), and the Indian Institute of Technology Delhi (IIT Delhi) to establish first campus of IIT Delhi in Abu Dhabi. The MoU reflects the shared vision of both nations to prioritise educational excellence, innovation, knowledge exchange, and investments in human capital as the foundations for future prosperity and enablers of long-term economic growth and sustainable

development. The IIT Delhi - Abu Dhabi campus is expected to launch its academic programs in 2024 and a host of bachelor's, master's and PhD programs, and operate research centres related to sustainable energy and climate studies, as well as computing and data sciences. It is expected to offer a diverse range of programs covering Energy and Sustainability, Artificial Intelligence, Computer Science and Engineering, Mathematics and Computing and other engineering, sciences, and humanities disciplines.

NITI Aayog and UNDP sign Memorandum of Understanding on fast tracking SDGs

On 29 August 2023, NITI Aayog and UNDP India signed an MoU to formalise a cooperation framework on various areas, including SDG localisation, data-driven monitoring, Aspirational Districts and Blocks, among others. UNDP will support NITI Aayog's work on women's livelihoods, innovation, and Mission LiFE. NITI Aayog is the nodal Institution for coordinating

the adoption and monitoring of SDGs at the national and sub-national levels. UNDP plays the integrator role in coordinating efforts to fast-track SDGs progress within the UN system.

India and Saudi Arabia sign Agreement on Cooperation in Energy Sector

India and Saudi Arabia signed an MoU on cooperation in the field of energy on 10 September 2023. The MoU will support India's efforts for energy transition and transformation of the global energy system towards combating climate change. According to the MoU, India and Saudi Arabia will cooperate in the following areas: (i) Renewable Energy, Energy Efficiency, Hydrogen, Electricity and Grid Interconnection between the two countries, Petroleum, Natural Gas, Strategic Petroleum Reserves and Energy Security, (ii) Encouraging bilateral investment in the field of Renewable Energy, Electricity, Hydrogen and Storage; and Oil & Gas, (iii) Circular Economy and its

technologies to reduce the effects of climate change, such as: carbon capture, utilisation and storage, (iv) Promoting digital transformation, innovation and cyber-security and artificial intelligence in the field of Energy, (v) Working on developing qualitative partnerships between the two countries to localise materials, products and services related to all sectors of energy, supply chains and its technologies, (vi) Strengthening the cooperation with companies specialised in the field of energy, and (vii) Any other fields related to the energy field that the two countries agree upon.

New Publications //////////////////////////////////////

Arnaldi S (2023) **Science Diplomacy: Foundations and Practice**. Central European Initiative. eISBN 978-88-5511-403-5. <https://www.openstarts.units.it/server/api/core/bitstreams/71b32984-3958-4286-b5cb-a26cc28060f3/content>

Beltran M, Tjahjono B, Suoneto TN, Tanjung R, Julião J (2023) **Rethinking Marine Plastics Pollution: Science Diplomacy and Multi-Level Governance**. *International Review of Administrative Sciences*. <https://doi.org/10.1177/00208523231183909>

Campisi J, Hird-Younger M, Morton E, Hamangai P, Pataxó H, Quispe FR, Nina SRR, Sandroni LT (2023) **Overlooked No More: Empowering Youth Voices in Global Climate-Change Negotiations**. *Journal of Science Policy & Governance*, 22(2). <https://doi.org/10.38126/JSPG220203>

Eigner L (2023) **The Promise and Paradox of Science Diplomacy**. *CSS Analyses in Security Policy*, 326. <https://css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/CSSAnalyse326-EN.pdf>

Gehrke C (2023) **Wild Polar Bear Conservation: A Case of Successful Arctic Science Diplomacy?** *Marine Policy*, 155: 105783. <https://doi.org/10.1016/j.marpol.2023.105783>

Grossman A, Mastrangelo M, Riós CDL, Jiménez-Córdova M (2023) **Environmental Justice Across the Lithium Supply Chain: A Role for Science Diplomacy in the Americas**. *Journal of Science Policy & Governance*. <https://doi.org/10.38126/JSPG220205>

Hardenbroek VM, Edwards M, Blyakharchuk T, Lozhkin A, Bezrukova E, Grenaderova A, Ryabogina N, Antipina T, Cherepanova M, Anderson P (2003) **The DIMA Network: Bridging Boundaries via Shared Scientific Interests**. *Polar Record*, 59. <http://doi.org/10.1017/S0032247423000116>

Jobin P, Chen TW (2023) **Toward an Upgrade of Gaia-politics: A View from the East Asian Critical Zone.** *Science, Technology, & Human Values*. <https://doi.org/10.1177/01622439231191602>

John T, Cordova KE, Jackson CT, Hernández-Mondragón AC, Davids BL, Raheja L, Milić JV, Borges J (2023) **Engaging Early-Career Scientists in Global Policy-Making.** *Angewandte Chemie International Edition*, 62(34): e202217841. <https://doi.org/10.1002/anie.202217841>

Lacerda LM, Heitor M, Mauduit JC (2023) **New Architectures for Bottom-Up Science Diplomacy: Learning from the Evolving Portuguese Diaspora in the UK.** *Global Policy*. <https://doi.org/10.1111/1758-5899.13256>

Liu X (2023) **Understanding Sovereignty Through Meteorology: China, Japan, and the Dispute Over the Qingdao Observatory, 1918-1931.** *Annals of Science*, 1–20. <https://doi.org/10.1080/00033790.2023.2231465>

Lutz W, Pachauri S (2023) **Systems Analysis for Sustainable Wellbeing. 50 years of IIASA research, 40 years after the Brundtland Commission, contributing to the post-2030 Global Agenda.** International Institute for Applied Systems Analysis (IIASA). <https://doi.org/10.5281/zenodo.8214208>

Peterson S (2023) **Science Diplomacy To Address LGBTQ+ Exclusion, Harassment, And Career Limitations In STEM.** *Penne Science Policy and Diplomacy Group*.

Prince J, Wang X, Lin K, Suryanti A, Jamon S, Santos MD, Torres FSB, Flores NAL, Ha VV, Anh TTN (2023) **Supporting Regional Co-Operation in the South China Sea with an Initial Assessment of the Data-Limited Skipjack Tuna Fishery.** *Marine Policy*, 155: 105711.

Raji M, Stewart I (2023) **Geoscience Diplomacy.** GEOSCIENTIST. <https://geoscientist.online/sections/unearthed/geoscience-diplomacy/>

Sarker NM, Ghosh S (2023) **A Study on the Key Elements of Bangladesh's Vaccine Diplomacy during COVID-19.** *Journal of Asian and African studies*. <https://doi.org/10.1177/00219096231179659>

Šime Z (2023) **Participation of Morocco and Tunisia in the European Research Area: Research-intensive Collaborative Patterns Across the European Southern Neighbourhood.** *European Integration Studies*, No. 17: 53-70. <https://doi.org/10.5755/j01.eis.117.33909>

Sorokina T, Zarubina L, Gutenev M, Kudryashova E (2023) **International Interdisciplinary Arctic research: Case study of the Russian Arctic Biomonitoring Mega-Grant Project.** *Polar Record*, 59: E28. <https://doi.org/10.1017/S0032247423000190>

Turchetti S, Adamson M (2023) **Introduction: Power to the Image! Science, Technology and Visual Diplomacy.** *British Journal for the History of Science*, 56(2): 135–146. <https://doi.org/10.1017/S0007087423000146>

Wagner CS, Simon DF (2023) **China's use of Formal Science and Technology Agreements as a Tool of Diplomacy.** *Science and Public Policy*, scad022. <https://doi.org/10.1093/scipol/scad022>

Wernli D (2023) **Fostering Interdisciplinary Collaboration in Computational Diplomacy: A Multi-Layered Network Approach to Improve Our Understanding of Institutional Complexity and Effective Governance Design.** *Journal of Computational Science*, 72: 102096. <https://doi.org/10.1016/j.jocs.2023.102096>.

Wood-Donnelly C (2023) **Evaluating Normative Capacity through Arctic Environmental Governance.** *Climatic Change*, 176: 127. <https://doi.org/10.1007/s10584-023-03603-3>

Zaika Y, Lagutina M (2023) **Arctic Science Diplomacy in New Geopolitical Conditions: From "Soft" Power to "Hard" Dialogue?** *Polar Record*, 59: E23. <https://doi.org/10.1017/S0032247423000141>

Call for Proposals //////////////////////////////////////

BRICS 6th Call for proposal-2023

Last Date: October 31, 2023

Further information at: <https://dst.gov.in/callforproposals/brics-6th-call-proposal-2023>

India-U.S. Collaborative Vision Research Program

Last Date: November 8, 2023

Further information at: <https://dbtindia.gov.in/sites/default/files/DBT-NIH%20Indo-US%20FoA%20on%20Vision%20Research.pdf>

DST CETP Call Module 04 (CCUS) Pre- proposal Submission

Last Date: November 22, 2023

Further information at: <https://dst.gov.in/callforproposals/dst-cetp-call-module-04-ccus-pre-proposal-submission>

EU-India/MoES Research & Innovation Cooperation Horizon Europe 2023

Last Date: March 5, 2024

Further information at: <https://www.csir.res.in/news-calls-and-events/eu-indiamoes-research-innovation-cooperation-horizon-europe-2023-funding>

Forthcoming Events //////////////////////////////////////

Communicating Like a Science Diplomat

Date: November 02, 2023

Further information at:

<https://www.scipolnetwork.org/event-details?recordId=recHINI7Bs5BhCmjO>

1st European Science Diplomacy Conference

Date: December 18-19, 2023

Further information at:

<https://www.science-diplomacy.eu/1st-european-science-diplomacy-conference-in-madrid-open-for-registration/>

Conference on Science Diplomacy

Date: December 18-19, 2023

Further information at:

<https://spanish-presidency.consilium.europa.eu/en/events/conference-on-science-diplomacy/>

2024 Ocean Decade Conference

Date: April 10-12, 2024

Further information at:

<https://oceandecade-conference.com/home.php>

National Science Policy Symposium

Date: April 12-14, 2024

Further information at:

<https://www.scipolsymposium.org/>