

GRANTEE EXPERIENCE REPORT

Indo-German Centre for Sustainability (IGCS)
IGCS Research Exchange, Grant Period 2024

experience report

Nhyiraba Yeboabah Ato-Burns



IGCS Grantee

Nhyiraba Yeboabah Ato-Burns

Home Institute

Institute of Sanitary Engineering and Waste Management (ISAH), Leibniz University, Hannover

Home Supervisor

PD Dr.-Ing. Habil. Dirk Weichgrebe

Host Institute

Chemical Engineering, IIT Madras, Chennai

Host Supervisor

Prof. R. Vinu

Research Topic

Carbon Footprint Analysis for the Environmental Sustainability of Leather Industry Using Umberto Tool

Focus Area

Waste Management

Starting/End date of the student exchange period

15/02/2024 – 15/05/2024



The poster features a smiling woman with a backpack on the left side. The background is dark red with a white mandala pattern behind the woman. On the right side, the IGCS logo is at the top right. Below it, the text reads: "Grants For Students and Researchers", "Conduct Research on sustainability topics in India or Germany", "APPLICATION OPEN", and "Floating deadline for the year 2024". At the bottom right, there is a URL: "For more information: <https://www.igcs-chennai.org/grants/>". At the bottom of the poster, there are logos for funding and association partners: DAAD, German Government, Federal Ministry of Education and Research, RWTH Aachen University, CIAU, and TUP.

As part of the IGCS scholarship grantees have agreed to provide an experience report to help IGCS evaluate their program. This experience report consists of two parts:

Part I: Written Testimonial

I first heard about the IGCS during a recycling and circular economy class with Prof. Weichgrebe, when we were informed about the summer school 2023. I have always believed that immersion in diverse academic environments can significantly enhance one's research capabilities and broaden perspectives. I learned about the availability of research grants from Dr Velusamy, when I signed to begin my master thesis under her supervision. As my master thesis topic was centred on the leather industry, and with the vastness of the Indian leather industry and the wide range of technological and technical advancements, as well as boundless human expertise it comes with, I found this a great opportunity to collect real life data and to experience the industry for myself in this regard under an IGCS scholarship. Furthermore, the potential to contribute to cutting-edge research projects and to be part of an international academic community motivated me to seize this opportunity, aiming to both learn from and contribute to the global research landscape.

My primary expectation from this IGCS research grant was to gain exposure to the leather processing methodologies, technologies, and to understand the intricacies of leather processing. Additionally, I wanted to experience the academic culture in India. My move to Germany for my master's degree after my bachelor's in Ghana was partly fuelled by a desire to experience the academic culture in a different country. I therefore hoped to, in part, further fulfil this desire while at IIT Madras. I anticipated that this experience would deepen my understanding of my research area and provide me with fresh insights that I could not obtain at my home institution. Additionally, I looked forward to building a network of professional contacts, including mentors, peers, and collaborators, which would be invaluable for future research endeavours. Ultimately, I hoped that the exchange would not only enhance my academic skills but also inspire new research questions and approaches.

With the experience gained from this 3-month study exchange, I intended to significantly enhance my research and professional trajectory. The new skills and knowledge acquired in data collection, were intended to be integrated into my master thesis, allowing me to employ more sophisticated techniques and approaches. Furthermore, I aimed to disseminate these learnings through publications and presentations, contributing to the broader academic community. The professional relationships developed during the exchange were expected to open doors for future collaborations and joint research initiatives. Ultimately, the experience was envisioned as a stepping stone to establishing myself as an expert in my field and advancing my future career, be it in academia or industry.

My stay in India was sprinkled with random yet poignant moments of learning. One of my most memorable experiences was at the beginning of my stay in India where I participated in the IGCS workshop on MSW treatment options and challenges towards circular economy, organised in IIT Madras. At this workshop, I had the opportunity to hear from different top industry experts on solid

waste management. The insightful panel discussions that followed were incredibly enriching and helped refine my research focus. Another unforgettable moment happened during my visit to tanneries in Ranipet. I had underestimated how much of a language barrier there would be communicating with the tanners, as most of them were more comfortable speaking in Tamil. With the help of Ms Revathy, a contact of Dr Velusamy's who took time off to take me to different tanneries on the day, we were able to overcome the barrier and collect all the data needed. This initial challenge did not deter me but added a unique dimension to my stay. While I faced this very challenge with the other tanneries I visited in Erode and Chennai, I anticipated it after the initial experience and was always prepared to forge through. Throughout my stay at IIT Madras, however, the cultural and academic exchange with other students in the hostels as well as in the laboratory, my overall experience of the general campus atmosphere made my experience both academically and personally rewarding.

To future research grantees, I would say embrace this opportunity with an open mind and a willingness to step out of your comfort zone. Take full advantage of the resources and expertise available at the host institution, and actively engage with the academic community. Be prepared to learn from both successes and challenges, as they are both valuable experiences. Cultivate relationships with mentors and peers, as these connections can provide support and collaboration opportunities long after the exchange is over. Lastly, remember to enjoy the journey, as it is not just about academic growth but also personal and cultural enrichment.

Part II: Digital Media

Share your experience in digital media- maybe photographs, illustration, or graphics. Share them in the space below.



