

DAAD Scholarship Experience Report
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As a Ukrainian researcher, receiving the DAAD scholarship during these challenging times has been an invaluable opportunity. My research stay at the Institute of Quantum Optics, Leibniz University Hannover as part of the "Ostpartnerschaften" program allowed me to engage in cutting-edge scientific work while also experiencing the strength of international collaboration.

Research and Learning Experience

My research focused on the synthesis of luminescent nanoparticles using laser ablation techniques, which have potential applications in electrochemical sensing. The stay provided access to state-of-the-art equipment, allowing me to carry out laser ablation experiments and fluorescence spectroscopy studies on newly generated nanoparticles. The results were promising and will contribute to further advancements in this field.

Beyond the technical aspects, working in Hannover broadened my scientific perspective. Discussions with colleagues from diverse backgrounds enriched my understanding of nanomaterials and their applications, and I gained valuable skills in experimental design, data analysis, and interdisciplinary collaboration.

Challenges and Support

Coming from Ukraine, a country currently at war, this opportunity was more than just a scientific exchange—it was a chance to continue meaningful work despite the uncertainties at home. The support from my German colleagues was overwhelming, both professionally and personally. The collaborative atmosphere helped overcome technical challenges, and the guidance of Prof. Boris Chichkov and his team ensured smooth progress in my research.

Impact of the Scholarship

The DAAD scholarship played a crucial role in:

- Providing access to advanced research facilities, enabling experiments that would not have been possible at home.
- Expanding my international network, which will lead to future collaborations and joint publications.
- Enhancing my expertise in laser-based nanoparticle synthesis, a field with growing applications in medicine, environmental monitoring, and sensing technologies.
- Giving me hope and motivation, knowing that despite the difficulties in Ukraine, science remains a bridge that connects people across borders.

Future Prospects

This experience has laid the foundation for ongoing research collaborations between our institutions. We are already planning further studies to improve the fluorescence efficiency of nanoparticles and explore new electroanalytical applications. I also hope to mentor young Ukrainian researchers, sharing the knowledge gained and encouraging them to seek similar international opportunities.

I sincerely thank DAAD and my German colleagues for making this research stay possible. Scientific exchange is not just about experiments; it is about fostering connections, sharing knowledge, and finding strength in collaboration. Even in difficult times, opportunities like this prove that research knows no borders.

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