

**Bericht zum Reisestipendium Nr. 3900 der Max-Buchner-Forschungstiftung**

***„Investigation of Protein Solvation Dynamics by Nonlinear Terahertz Transmission “***

*The 49<sup>th</sup> International Conference on Infrared, Millimeter, and Terahertz Waves (IRRMW-THz)  
(September 1-6, 2024)*

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The 49th International Conference on Infrared, Millimeter, and Terahertz Waves was held at the University of Western Australia, in Perth, Australia from September 1-6. The conference consisted of plenary, invited, and contributed talks, as well as poster sessions.

The first day of the conference opened with a welcome reception, allowing participants to network and socialize. Talks were kicked off by a plenary session that focused on how radiation in the infrared to millimeter range can be utilized in astronomy. Invited and contributed talks were run in four parallel sessions throughout the day, allowing me to sample topics ranging from magnetism to optics to ultra-fast laser spectroscopy. The broad range of topics offered was really the highlight of the conference for me, as it gave the opportunity to learn new techniques and create new connections to other research fields.

I gave a contributed talk on the fourth day of the conference in the Biophysics and Soft Matter session, where I presented my research group's recent results on the use of nonlinear THz transmission spectroscopy to look at the solvation dynamics of proteins. I received useful feedback from the presentation, and was able to make new connections with possible collaborators.

Overall, the conference was a great experience and allowed me to make new connections in the THz field. I thank the Max Buchner Foundation for awarding me the travel grant to present my work and exchange with this scientific community.