

EUROMAR 2023 Participation Report

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Report on the participation in the 19th European Magnetic Resonance Congress funded by Young research travel grant Provided by Japan NMR society.

Myself Dr.P.M.Sayeesh, postdoctoral fellow working under the guidance of Prof. Yutaka Ito, Department of Chemistry, Tokyo Metropolitan University, Japan.

I participated in the 19th European Magnetic Resonance Congress, which was held in Glasgow, Scotland, from July 9th to 13th. I was fortunate to succeed in my application for the Young Researcher Travel Grant provided by the Japan NMR Society, which partially covered my travel expenses. I would like to thank Prof. Toshimichi Fujiwara, the Chairman of the Japan NMR Society, and the selection committee for their consistent support in the arrangement of this travel grant.

The conference was hosted in the heart of Glasgow, Scotland's cultural and commercial capital at the Scottish Events Campus (SEC), a splendid venue conveniently located near Glasgow Airport. The opening ceremony started on the 9th of July with a welcome reception in the Glasgow city center. The conference program was thoughtfully organised, featuring plenary sessions as well as parallel sessions and tutorials. The tutorial section included best practices in scientific publishing and artificial intelligence applied to magnetic resonance and foundations of machine learning. During the plenary section, I could learn about the new trending ideas and topics. During the parallel sessions, my focus was directed toward topics based on Solution NMR methods. Additionally, the poster presentations spanned three days, from July 10th to 12th between 3:45 pm to 5:45 pm and more than 400 posters were presented.

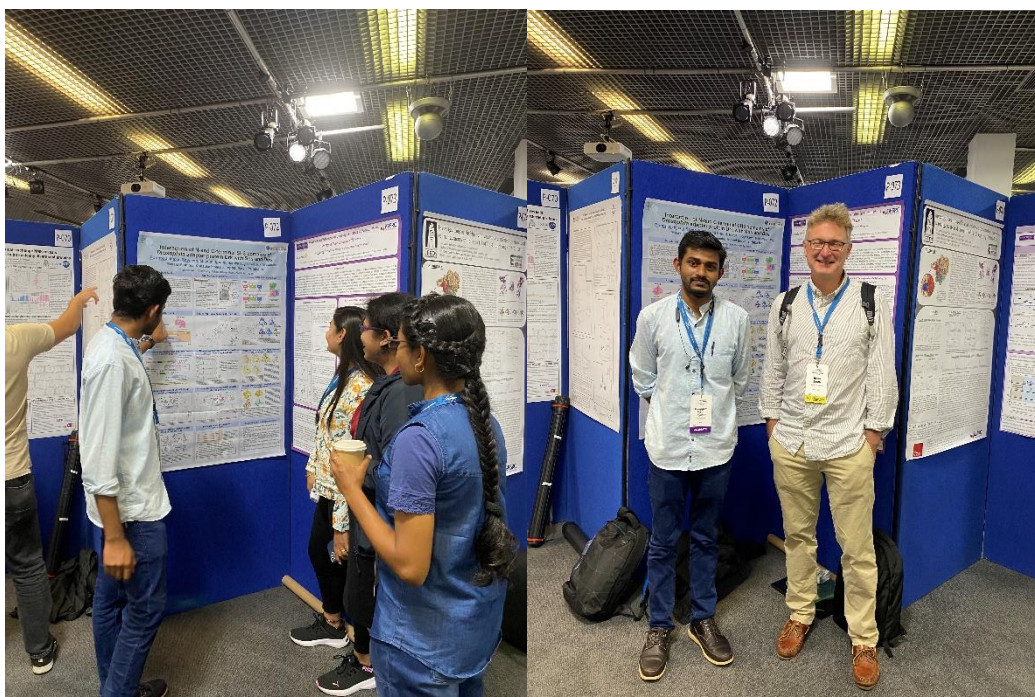
In this opportunity, I presented a poster entitled "Interaction of N- and C-terminal SH3 domains of *Drosophila* adapter protein Drk" (Poster No- 072). My poster is mainly based on the NMR studies of Src homology domains of adapter protein Drk. In a brief: Drk, a *Drosophila* homologue of human GRB2, binds towards the phosphotyrosine residue of Sev via its SH2 domain, while the N- and C-terminal SH3 domains (Drk-NSH3 and Drk-CSH3, respectively) are responsible for the interaction with proline-rich motifs of Son of sevenless (Sos) or Daughter of Sevenless (Dos). Isolated Drk-NSH3 is in a conformational equilibrium between the fold and unfolded states, and it interacts with the PxxPxR motifs in Sos. Drk-CSH3 is supposed to bind the PxxxRxxKP motifs in Dos. To identify the functional differences between the two SH3 domains, structure determination of Drk-CSH3 as well as the NMR titration experiments with Sos- and Dos-derived peptides were performed.

During the conference, I actively participated in discussions with numerous delegates, and I also had the opportunity to receive insightful comments and suggestions during my poster presentation. This interaction left me feeling highly motivated, and I'm eager to delve into the new ideas and perspectives that I gained from the conference. I would like to take this moment

to express my gratitude to the Japan NMR Society for their generous support through the Young Research Travel Grant. This support played a crucial role in enabling me to attend and participate in such a fruitful and enriching event.



Venue- Scottish event campus



During the poster presentation

Reference

[1] Sayeesh, P.M. et al. *Biochem. Biophys. Res. Commun.* 625, 87-93 (2022).