



Open Position: PhD studentship in Single Molecule Imaging of Glycoconjugates

Aim: Determine the entire structures of complex glycoconjugates by imaging them one-at-a-time.

Fields: Single molecule chemistry, Glycoscience, Physical analytical chemistry.

Techniques: Electrospray ion beam deposition (ESIBD), Low temperature scanning tunnelling microscopy (LT STM), Density functional theory (DFT), Nanoelectrospray, Molecular model building.

We offer:

1. A **PhD position** at the International Max Planck Research School for Condensed Matter Science (IMPRS-CMS) with work contract including full social security benefits, funded by ERC Starting Grant Project GlycoX, and PhD degree awarded by the University of Stuttgart.
2. Access to cutting-edge research infrastructure and supercomputers in the Max Planck Society to support *your* scientific goals.
3. Opportunities to collaborate with the Nanoscale Science Department and external groups to furnish *you* with unique interdisciplinary scientific challenges.
4. Training in *both* experimental and computational techniques to finesse *your* scientific profile.
5. Engaging environment to nourish *your* scientific independence.
6. Support to attend workshops and conferences to develop *your* scientific network.
7. Mentorship in proposal writing, management, and communication skills to equip *you* with transferable skills.

Your project: Unveil structures of complex glycoproteins and glycolipids to understand how their biochemical properties emerge by: (a) soft landing them on surface by ESIBD technique, (b) imaging them one-at-a-time using LT STM, and (c) solving their structures by computational methods.

We seek someone who is:

Curious, enthusiastic, team oriented, fluent and articulate in oral and written English, a holder of MSc in Chemistry (Physical-, Bio-, Organic-), Nanoscience, Physics, or equivalent (applications with BSc with Honors are also considered). Knowledge in physical chemistry and/or biochemistry; and/or experience in electrospray, scanning probe microscopy, ultrahigh vacuum systems, and/or *ab initio* calculations are advantageous.

To apply:

Please email Dr. Kelvin Anggara (k.anggara@fkf.mpg.de) using the title 'GlycoX_PHD' and submit as a single PDF: (i) *one-page* motivation letter (explain *in specifics* why this lab and how this position further your career) and (ii) CV (include publication list, research description, and contacts of two referees).

Earliest possible starting date is 1st May, 2023. Review of applications begins immediately and will continue until the position is filled. The Max Planck Society endeavors to achieve gender equality and diversity. We seek to increase the number of women in areas where they are underrepresented and therefore explicitly encourage women to apply. The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from individuals with disabilities.

Anggara Group

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