PhD position – Super-resolution imaging of cellular mRNA

We currently offer a PhD position to develop fluorescent probes for single-molecule super-resolution imaging of messenger RNA. The project aims to use photophysical/photochemical concepts such as reversible photoswitching, photo-uncaging, multi-step photobleaching and single-molecule FRET in combination with intelligent design of oligonucleotide probes. These "intelligent probes" shall be applied to target systems of different complexity, ranging from single mRNA templates to eukaryotic cells.

Our interdisciplinary research group of chemists, biologists and physicists is located in the Chemistry Department, Institute for Physical and Theoretical Chemistry, at the Johann Wolfgang Goethe University in Frankfurt am Main. We work at the interface between biology, chemistry and physics, further developing single-molecule and super-resolution techniques and applying these to answer biological questions (further information at www.smb.uni-frankfurt.de).

We seek for candidates with a strong background in chemistry or biochemistry, and ideally with some experience in advanced microscopy techniques.

Please send your application by email to

Prof. Dr. Mike Heilemann
Institute of Physical and Theoretical Chemistry
Johann Wolfgang Goethe University
Max-von-Laue-Str. 7
60438 Frankfurt, Germany
Email: **Heilemann@chemie.uni-frankfurt.de**

References

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