In the cryostat (left), physicists work with the coldest liquid in the world, a special mixture of liquid helium, that reaches temperatures down to -273.14°C, almost absolute zero. In these conditions atoms nearly stand still. This also applies to the dye molecules embedded in the thin crystal layer (right). The researchers can then use laser light to excite vibrations of individual molecules in order to transfer information from the light to them. That way these quantum emitters could be used for photonic circuits or quantum information processing.