Unique experiments on MR:

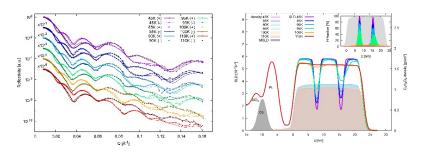
PNR experiments on Spontelectric films - new class of spontaneously polarized molecular solids grown *in situ* on magnetic reference layer



- Dedicated PNR setup to study molecular diffusion in layered spontelectric solids
- ☐ growth *in situ*, under clean high vacuum conditions at cryotemperatures

- 'Spontelectric solids' a new form of molecular solid which spontaneously harbor electric fields of 10⁸ Vm⁻¹
- Potential applications: in molecular optoelectronics, quantum well formation, solid-state q-bits, and nano-ion traps
- The implications of this phenomenon range from understanding VUV spectra for condensed molecular solids to models of star formation

Methyl formate



A. Cassidy et al, ChemCom, 2021

