

Working Group	Main or Emerging Topics	Challenges & Needs	Opportunities
Quantum Materials	big topic: frustrated systems, new topic: alter magnets	neutron-compatible samples require special competence (crystal growth, multi crystals, alignment instruments) similar to deuteration and corresponding hubs / platforms e.g. Deunet. Data challenges include handling large data sets but also obtaining normalisation / absolute units consistently (quality label); improving neutron availability ('training student instrument time', digital twin), access and providing diffraction experiments first. in-situ, in-vivo, extreme conditions; multi-probe experiments; structure and dynamics (obtained in consistent workflow); multi-stakeholder (facilities, universities, industry), but topical expert-driven; instrument-specific needs must be clear.	profit from available funding scheme (such as 'nephews').
Soft Matter, Life Science, Health	food science (industry)		custom-made sample environment ; multi-source required (small, big); bring experts together; create networks / hubs to tackle big problems efficiently
Materials	applied materials, complex systems	dedicated resources for applied research (with industry, KPI for societal impact); complex in-operandi experiments and combination of methods.	database of staff expertise and open positions; mobility and sustainable careers; tailored instrument set-up and sample environment; resources for 'full' (big) data handling and analysis; community willing to share software and AI tools
Universe Essentials and Society	WG covers very broad scientific topics	increasing need for data analysis/interpretation done by neutron facilities (full service by facility scientists); scientifically diverse review panels to balance applied and fundamental science; visibility of available infrastructure; stable long-term RI strategy.	RI Actions: reinforce PhD and PostDoc programs; open-mindedness for new ideas/groups; help building own groups; reinforce education programs; travel support for young researchers. University Actions: fight decrease of neutron-related posts; reinforce neutron scattering teaching; strengthen link to students. Strategy Actions: ensure RI availability (ILL, ESS, small university sources); benefit from NuPECC network