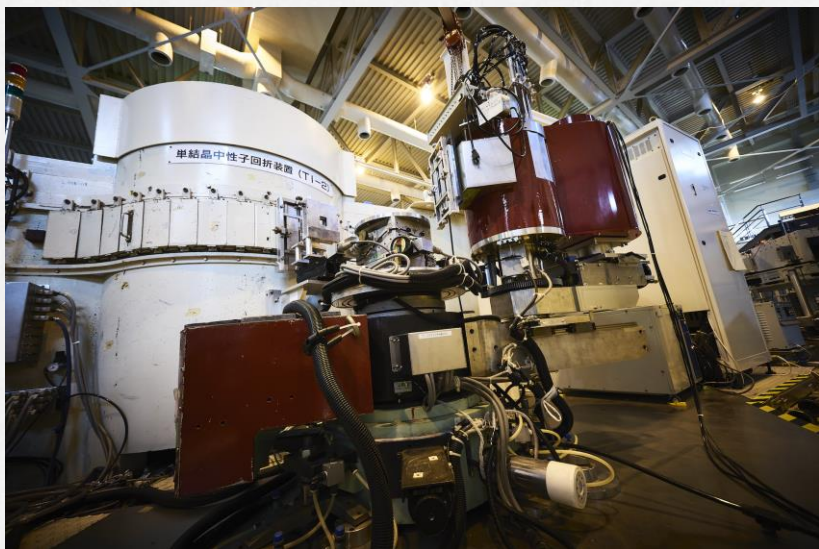


# Advanced KINKEN Triple-Axis Neutron Spectrometer

AKANE

Development of equipment · trial use · education



- Development of some device and methods
- Determination of the crystal structure
- Determination of the magnetic structure
- Temperature dependence of the OP
- Observation of the excited states
- Determination of the crystal field states

Monochromator	Ge(311) vert. focused Height: 20 cm, mosaic: 10' - 15'
Analyzer	PG(002) (30' - 40')
Collimations	1st: guide (20') 2nd, 3rd, 4th: 15', 30', 60', blank
Angle range	Ge(311): $2\vartheta_M = 72.6^\circ$ (fixed, $2.02 \text{ \AA}$ ), $Q_{\max} \sim 5.1 \text{ \AA}^{-1}$ , $-10 \leq 2\vartheta_S \leq +100$ (+/- 0.01), $-90 \leq 2\vartheta_A \leq +90$ (+/- 0.01),
Beam size	20mm-w x 50mm-h
Detector	$^3\text{He}$ -type tube detector $\phi 25\text{mm}$
Temperature range	CTI (10 K – RT), high-T refrigerator (10 – 700 K)
Software	SPICE, Lakeshore

- Joint research with IMR
- Development, trial, and education
- Consideration for long-term use