

Experimental Activity in Japan

1. Low Energy Region (En<0.5 MeV)

Institute	Facility & Apparatus	Quantities, Nuclides
Kyoto Univ. Reactor (KUR)	Reactor, Linac, Pb Slowing-down spectrometer (KULS)	$\sigma_c, \sigma_f, \sigma_t$ of higher actinides, FP ^{237}Np $\sigma_c: E < 10\text{keV}$, Dy, Hf $\sigma_t: 0.002 - 100\text{ eV}$
Tokyo Institute Technology (TIT)	3.2 MV Pelletron, Hig- ϵ γ spectrometer	Capture cross section, γ -ray spectra ^{140}Ce , ^{141}Pr , ^{167}Er
Japan Nuclear Cycle Development Inst.	Reactor	FP Capture cross sections: $^{166\text{m}}\text{Ho}$, ^{137}Cs Integral decay heat measurement

2. Fast Neutron Region ($0.5 < E_n < 20 \text{ MeV}$)

Institute	Facility & Apparatus	Quantities, Nuclides
JAERI, FNS	Intense 14 MeV source 3 Beam Lines, TOF spectrometer	Benchmark experiment; n and γ spectra LiAl_2O , Li_2TiO_3 , Li_2ZrO_3 Activation CS measurement (Nagoya, Osaka Univ.) (n,2n) coincident measurement
Nagoya Univ.,	Van de Graaf; D(d, n) JAERI FNS, OKTAVIAN	Activation cross section: 13.4 – 14.9 MeV; (n,np+d), ^{14}N , ^{31}P , ^{54}Fe , ^{63}Cu , ^{79}Br , ^{87}Rb 2.0 - 3.2 MeV; ^{27}Al , ^{51}V , ^{61}Ni , ^{65}Cu , ^{69}Ga , ^{92}Mo
Osaka Univ.,	Intense 14 MeV source OKTAVIAN JAERI FNS	Benchmark experiment; n and γ spectra ; LiAl_2O , Li_2TiO_3 , Li_2ZrO_3 Double differential (n,p) emission; F, Si (n,2n) coincident measurement

3.High Energy Region: $E > 20$ MeV

Institute	Facility & Apparatus	Quantities, Nuclides
Tohoku Univ.,	JAERI TIARA HIMAC/ RIKEN	(n,n ₀) and (n,xZ) ; E _n = 75 MeV, N, O, Al HI induced activation: C, Ne, c, He, p (230MeV/u) on Cu HI induced neutron emission: C, Ne, He (135MeV/u) on C, Al, Cu, Pb
JAERI	KEK 12 GeV PS JAERI Tandem linac	Neutron emission; 1.5 GeV p on thick Fe HI induced evaporation residue: $^{82}\text{Se} + ^{\text{nat}}\text{Ce}$, $^{76}\text{Ge} + ^{150}\text{Nd}$
Kyushu Univ.,	RCNP Ring cyclotron KEK 12 GeV PS	^{12}C , ^{27}Al , ^{93}Nb , $^{197}\text{Au}(p,xZ)$, (p,p') @ 300, 400 MeV π^+ , π^- induced neutron emission @0.87 & 2.1 GeV p-induced reactions: (p,xn)