

### List of Research Publications

#### Publications in Referred Journals (Published/Communicated)

##### 1. Level structure of odd-odd nucleus – $^{54}\text{Mn}$

**G. Kiran Kumar, S. Mukherjee, S. Mukhopadhyay, Krishichayan, Sudatta Ray, S. S. Ghugre, A. K. Sinha, A. Chakraborty, and S. K. Basu**  
Journal of Physics G 2008 (In press)

##### 2. Measurement and analysis of isomeric cross section ratio in the reaction $^{93}\text{Nb}(\alpha, 2n)$

$^{95}\text{Tc}$ : Pre-equilibrium reaction mechanism  
**S. Mukherjee, N.L. Singh, G. Kiran Kumar and L. Chaturvedi**  
Physical Review C 72, 014609 (2005)

##### 3. Effects of level density in the cross sections of $(\alpha, xn)$ , $(\alpha, pxn)$ , $(\alpha, 2pxn)$ and $(\alpha, \alpha xn)$ reactions in $^{197}\text{Au}$ , $^{181}\text{Ta}$ , $^{nat}\text{In}$ and $^{93}\text{Nb}$ and pre-equilibrium analysis.

**N. L. Singh, G. Kiran Kumar and S. Mukherjee**  
Int. Jour. Of Modern Physics E (Communicated-08)

##### 4. Nuclear structure of $^{195}\text{Tl}$ at high spins

**G. Kiran Kumar, S. Mukherjee, Elena Gueorguieva *et al.***  
Phys. Rev. C (Communicated – 08)

##### 5. Study of entrance channel effects in $^{215}\text{Fr}^*$ - through fission fragment angular distribution studies.

**S. Appanna Babu, G. Kiran Kumar, S. Mukherjee, Hardev Singh, Prashant Rath, R.G. Thomas, B. K. Nayak, S.S. Santra, N.L. Singh, K.S. Golda, P. Sugathan, A. Jinghan, Rakesh Kumar**  
Phys. Rev. C (Communicated-08)

**Conference/Symposium**

**International**

1. In-beam gamma ray spectroscopy of  $^{54}\text{Mn}$ .

**G. Kiran Kumar, S. Mukherjee et. al., (Best Paper Award in Nuclear Physics)**  
(Proc. of South African Institute of Physics Conference, (2006))

**National**

1. Fast alpha particle emission in  $^{14}\text{N} + ^{197}\text{Au}$  reaction up to 250 MeV.

**S. Mukherjee, P. Srinivasa Rao and G. Kiran Kumar. (Oral)**  
(Proc. of NUCAR conference, 2007)

2. Level Structure of  $^{54}\text{Mn}$  populated following the  $^{20}\text{Ne} + ^{51}\text{V}$  reaction at 145 MeV.

**G. Kiran Kumar, S. Mukherjee S. Mukhopadhyay, Krishichayan, Sudatta Ray, S.S. Ghugre, A.K. Sinha, A. Chakraborty, and S.K. Basu. (Oral)**  
(Proc. Of. DAE. Symp. On Nuclear Physics, Vol. 51, 248(2006))

3. In-beam gamma ray spectroscopy of  $^{36}\text{Cl}$ .

**G. Kiran Kumar, S. Mukherjee, S. Mukhopadhyay, Krishichayan, A. Chakraborty, Kausik Basu, S. S. Ghugre, A. K. Sinha, R. K. Thakur, S. K. Basu, R. Raut, A. Goswami**  
(Proc. of DAE Symp. On Nuclear Physics, Vol. 50, 236(2005))

4. Lifetime measurements in Cr and V isotopes using Centroid Shift Method and DSAM.

**S. Mukhopadhyay, Krishichayan, S. Ray, A. Chakraborty, N.S. patabiraman, S.S. Ghugre, AK. Sinha, S.N. Roy, G. Kiran Kumar, P.V. Madhusudana Rao, U. Garg, A. Deo, S.B. Patel, A. Dhal, L. Chaturvedi, R. Raut, A. Goswamy, M.B. chatterjee, S.K. Basu, and Rakesh Kumar**  
(Proc. of DAE Symp. On Nuclear Physics, Vol. 50, 238(2005))

5. Pre-Equilibrium effects in  $^{14}\text{N} + ^{103}\text{Rh}$  reactions up to 400 MeV.

**S. Mukherjee, G. Kiran Kumar, N. L. Singh and Anil Sharma**  
(Proc. of DAE Symp. On Nuclear Physics, Vol. 50, 311(2005))

Concerning the Nature of things (De rerum Natura)

*Bodies of things are safe till they receive,  
a force which may their proper thread unweave,  
nought then returns to naught, but parted falls.*

*To bodies of their prime Originals,  
then nothing sure it's being quite forsakes,  
since Nature one thing, from another makes."*

.....*Lucretius (Latin Poet 98 - 50 B.C.)*