Dr. Sanjay Kumar
CSIR-NGRI, Hyderabad, India

http://scholar.google.com/citations?user=APJ2Y2oAAAAJ

NGRI RESEARCH GROUP:

Passive Seismology

FIELD OF SPECIALIZATION:

Seismology, Local earthquake tomography, Local site effects

EDUCATION

2008 Ph. D., Seismology, Department Of Earthquake Engineering, IIT, Roorkee, India

2004 M. Sc. (Tech), Geophysics, Banaras Hindu University, Varanasi, India

1997 B. Sc. (Physcs,Chemistry, Mathematics), CCS University, Meerut, India

RESEARCH EXPERIENCE

09/2008	Joined as a Junior Scientist
09/2011	Promoted to Scientist

MEMBER

Member, Society of Petroleum Geophysicists (SPG)

HONORS

UGC studentship awarded by BHU, 2004
Research scholar fellowship awarded by Ministry of Human Research Development, (MHRD) New Delhi from 2004-2008

PH.D. ADVISOR :

Prof. J. P. Narayan, Department of Earthquake Engineering, IIT Roorkee

SCIENTISTS WITH WHOM I HAVE COLLABORATED (OUTSIDE NGRI):

Current
R. D. Catchings Earthquake Science Center, U.S. Geological Survey, 345 Middle field Rd. MS 977, Menlo Park, CA 94025

PUBLICATIONS

International Journals

2015

1. Catchings, R.D, Madan M. Dixit , Mark Goldman , **Sanjay Kumar** (2015) Structure of the Koyna-Warna Seismic Zone, Maharashtra, India Possible Model for Large Induced Earthquakes Elsewhere *Journal of Geophysical Research*,doi:10.1002/2014JB011695

2014

2. Madan M. Dixit, **Sanjay Kumar**, R. D. Catchings, K. Suman, D.Sarkar and M. K. Sen (2014) Seismicity, faulting, and structure of the Koyna-Warna seismic region, Western India from local earthquake tomography and hypocenter locations, *Journal of Geophysical Research*, Vol 119 ,6372-6398

2011

3. A.S.N. Murty , M.M. Dixit , B. Mandal , S. Raju , **Sanjay Kumar** , P. Karupannan , K. Anitha,, D. Sarkar (2011), Extension of Godavari Gondwana sediments underneath Trap covered region of Satpura basin as evidenced from seismic studies in Deccan Syneclise, India, *Journal of Asian Earth Sciences* vol 42 no 6 1232-1242

2010

4. Narayan, J.P., and **S. Kumar,** (2010), A 4th order accurate P-SV-wave staggered grid finite difference algorithm with variable grid size and VGR-stress imaging technique, *Geofizika* 27 pp 45-68
5. Narayan, J.P., and **S. Kumar**, (2010), Study of Effects of Focal Depth on the Characteristics of Rayleigh Waves Using Finite Difference Method, *Acta Geophys* vol. 58, no. 4, pp. 624-644

2009

6. Narayan,J.P., and **S. Kumar** (2009), Effects of soil layering on the characteristics of basin-edge induced surface waves, *Acta Geophys.* 57, 2, 294-310,

2008

7. Narayan, J.P., and **S. Kumar** (2008), A 4th order accurate SH-wave staggered grid finite difference algorithm with variable grid size and VGR-stress imaging technique, *Pure Appl. Geophys.* 165, 271-294,
8. **S. Kumar** and J.P., Narayan, (2008) Absorbing Boundary Conditions in a Fourth-order Accurate SH-wave Staggered Grid Finite Difference Algorithm, *Acta Geophys*. vol. 56, no. 4, pp. 1090-1108

Indian Journals

2017

1. **Sanjay Kumar** and Madan M. Dixit (2017).Three Dimensional Velocity Structure of the Koyna-Warna Region using Local Earthquake Tomography. J*ournal Geological Society of India Vol. 90 December 2017, pp. 692-697*

2015

2. Suman Kilaru, **Sanjay Kumar**, M.M.Dixit, and P.Rama Rao(2015) 1-D velocity model delineated using dense seismic network in the Koyna-Warna region, Maharashtra, India , *J. Ind. Geophys. Union Vol. 19 No. 2, 182-189*

2008

3. **S. Kumar** and J.P., Narayan, (2008) Importance of quantification of local site effects based on wave propagation in seismic microzonation, *J. Earth Syst. Sci*.117, S2, pp. 731–748

2011

4. A.S.N. Murty , M.M. Dixit , B. Mandal , PrakashKhare, P.KoteswaraRao, G.KesavaRao, S.Raju, GS.P Rao, A.S.S.R.S Prasad, L.Behera, M.S. Reddy, B.Mondal, **Sanjay Kumar**, V.Sridhar, P.Karupanan, K.Anitha and D.Sarkar. Delineation of basement configuration and SubtrappeanGondwana sediments along the Umapur-Khandala seismic profile in the Eastern part of Narmada-Tapti region of Deccan Syneclise, India. Memoir of the Geological Society of India. No. 77, **2011**, ISBN:978-81-907636-2-2, PP. 517-530

Papers presents in Symposium/Conferences

1. **Sanjay Kumar**, J.P. Narayan (2009) Simulation of basin-edge structure and soil layering effects on the characteristics of ground motion using SH-waves staggered grid finite-difference method, Indian geological congress 2009

2. **Sanjay Kumar,** J. P. Narayan and M. M. Dixit (2010) Simulation of basin-edge Trasnduced surface waves using finite-difference method, Poster presentation in AOGS 2010 held at Hyderabad India during 5-9th July 2010.

3. **Sanjay Kumar,** M. M. Dixit, Mrinal K. Sen, William L. Ellsworth and M. M. Peeran (2013)
   Seismicity trends with dense network in the Koyna-Warna region Maharashtra, India
   National Conference held in the Department of Earth Science IIT Roorkee; Earth Sciences in India: Challenges and emerging trends from 7th-9th Nov. 2013 Page. 49

4 **Sanjay Kumar**, J.P. Narayan (2014) 1-D and 2-D modeling of SH-wave propagation in sedimentary basin using finite-difference method. Indian Geophysical Union NGRI Hyderabad during 8th-12th January 2014

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