

# Javed N Malik

Department of Earth Sciences, IIT Kanpur

## Personal Information

### 1. Name in Full:

First Name	Middle Name	Last Name
JAVED HUSAIN	N	<u>MALIK</u>



### 2. Address

Present	Permanent
Department of Earth Sciences	A-6 Vrindavan Society
Indian Institute of Technology Kanpur	Opp. Novino Batteries
Kanpur 208 016	Makarpura Road
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3. Date of Birth: 24<sup>TH</sup> November 1968

4. Nationality: INDIAN

5. Sex: Male

### 6. Present Employment Details

Designation	Organization	From	Roles and responsibilities
<b>Professor</b>	Department of Earth Sciences Indian Institute of Technology Kanpur Kanpur 208016	15 June 2015	<ul style="list-style-type: none"><li>• Teaching UG and PG students in Geosciences</li><li>• Research on Earthquake and Tsunami Geology</li></ul>
<b>Head of the Department</b>	Department of Earth Sciences IIT Kanpur	1 <sup>st</sup> March 2017	<ul style="list-style-type: none"><li>• All administrative work related to the Department</li><li>• Towards the growth and strengthening the teaching and research activities of the department.</li></ul>

7. Area of Specialization: Active Tectonics, Paleoseismology, Paleo-tsunami and Archaeoseismology

### 8. Current Areas of Research

1. Active fault mapping and Paleoseismological investigations along Central-NW Himalaya and Kachchh
2. Paleo-Tsunami studies in Andaman and Nicobar Islands

### 9. Academic Record (starting with Bachelor's Degree)

Degree	University/ Institution	Year	Subjects/ Area of Specialization	Division/Grade
<b>B. Sc.</b>	Department of Geology Faculty of Science.	1989	<b>Geology</b>	<b>I</b>
<b>M. Sc.</b>	Maharaja Sayajirao University of Baroda	1991	<b>Geology</b>	<b>I</b>
<b>Ph. D.</b>	VADODARA 390002	1998	<b>Geology</b>	

Citation Google Scholar: <https://scholar.google.co.in/citations?user=a117no0AAAAJ&hl=en>

**Teaching Experience:**

<b>Duration</b>	<b>Post/ Organisation</b>	<b>Area(s)</b>
5 November, 2001 – December 2007	Assistant Professor Department of Civil Engineering Indian Institute of Technology Kanpur Kanpur 208016	Engineering Geosciences
31 December 2007- 15 June 2015	Associate Professor Department of Civil Engineering Indian Institute of Technology Kanpur Kanpur 208016	Engineering Geosciences
15 June 2015 onwards	Professor Department of Civil Engineering Indian Institute of Technology Kanpur Kanpur 208016	Geosciences
22 December 2015 onwards	Professor Department of Earth Sciences Indian Institute of Technology Kanpur Kanpur 208016	Active Tectonics and Paleoseismology

**Supervision of Master/Bachelor thesis****M. Tech Thesis**

<b>S. No.</b>	<b>Name</b>	<b>Year</b>	<b>Title of Thesis</b>	<b>Co-guides</b>
1	Vijay Pratap Singh	2003	Active Tectonics And Seismic Hazard Studies Along Himalaya With Reference To Indian Subcontinent	No
2	Chirashree Mohanty	2004	Morphometric Analysis And Tectonic Interpretation of Digital Terrain Data, NW Himalaya: A Remote Sensing and GIS Approach	No
3	Shishir Kumar Rath	2005	Active tectonics studies Along Himalayan Frontal Thrust, NW Himalaya	No
4	Afroz Ahmad Shah	2005	Identification of Active Tectonic Features Around Ramnagar and KotaBagh area of Nainital Foothills	No
5	Ajit Kumar Sahoo	2006	Active Tectonic and Ground Penetrating Radar Investigations along Western Part of Janauri Anticline with reference to Himalayan Frontal Thrust, NW-Himalaya	No
6	Arvind K Pandey	2007	Utility Mapping at IIT Kanpur Campus Using Ground Penetrating Radar (GPR)	No

7	P. Bharat Gandhi	2008	Development of a Remote Sensing and GIS based approach for archaeological investigation of Varanasi and its surroundings	With Prof. B. Lohani
8	Khalid Ansari	2008	Active Tectonic and Ground Penetrating Radar Investigations along Kachchh Mainland Fault and Katrol Hill Fault, Kachchh, Gujarat	No
9	Ashutosh Kumar	2009	Ground Penetrating Radar survey to identify archaeological remnants around Sundarwala Mahal and Sundarwala Burj (near Humayun's Tomb), Delhi	No
10	Satuluri Sravanthi	2009	Ground Penetrating Radar Application in Archaeological Investigations at Ahichhatra, Bareilly (District).	No
11	Bishuddhakshya Puhan	2009	Active Fault and Paleoseismic Studies along the Janauri Anticline, NW Himalaya, India	No
12	Chiranjib Banerjee	2010	Paleoseismic and paleo-tsunami investigations along the west coast of the South Andaman, Andaman and Nicobar Islands, India.	No
13	Afzal Khan	2010	Paleoseismic investigations along the west coast of South Andaman, Andaman Islands, India.	No
14	Mitrika Singha	2012	Mapping of sub-surface utility using GPR in IITK campus	No
15	Avichal Singh	2013	Boulder deposits study along Bhogat - Dwarka region, Gujarat coast, Western India: Storm or Tsunami deposits?	No
16	Sreejith G. H.	2014	Seismic Hazard Assessment of Hydropower plant sites across Himalayan Frontal Thrust (Hajipur Faults), Punjab, NW Himalayas	No
17	Kumar Saurav	2015	Understanding the past history of ancient settlements in the Great Rann of Kachchh, Gujarat	No
18	Helen P. Eldho	2015	Morphometric Analysis and Tectonic Interpretation around Pathankot, NW Himalaya	No
19	Vasanth Manohar	2015	Site characterization studies at Chandigarh and IIT Kanpur in Indo-Gangetic Plain, INDIA: Multichannel Analysis of Surface Waves	No

20	Gaurav Raghav	2016	Ground Penetrating Radar Investigations at Ahom Monuments Talatal Garh and Ahom Raja Palace at Sivasagar, Assam	No
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### Bachelor Project Supervision

No.	Name	Name Year	Title of Thesis	Co-guides	Year
1	Prabhat Ravi Kumar		Computer Simulation of 2004 Indian 2004 Sumatra-Andaman Earthquake		2013
2	Gaurav Vijayvargia		Pre and Post Seismic Response of Ocean Earthquake and Tsunami		2012

### PhD Supervision

Ph. D Completed				
1	Santiswarup Sahoo	Nov. 2014	Active fault and Paleoseismic studies in Kangra Valley, NW Himalaya: An attempt to identify the surface rupture of 1905 Kangra earthquake	No
2	Sambit Prasanjit Naik	Nov. 2014	Active fault and paleoseismic studies along Himalaya and effect of large magnitude earthquake in Indo-Gangetic Plain, with reference to liquefaction	With Prof. N. R. Patra
3	Frango C. Johnson	Aug. 2017	Paleoseismic and Paleo-tsunami investigations along the southern coast of Andaman Islands, A&N Island, India	No
4	S. Sravanthi	Sept. 2017	Paleoseismological and Archeoseismological studies in Kachchh, Gujarat: Implications on the abandonment of Ancient Settlements	No
5	Asmita Mohanty	2017	Tectonic Geomorphology and Paleoseismic studies along the northern fringe of Janauri Anticline in the foothill zone of NW Himalaya, India	No
6	Afzal Khan	Aug. 2018	Active Tectonic and Paleoseismic studies along west coast of Andaman Island: Its implication on seismic and tsunami hazard in A&N Islands	No
Ph. D Submitted/Ongoing				
7	Shreya Arora	Ongoing	Active Tectonics and Active Fault Studies around Chandigarh-Pinjore Dun, NW Himalaya	No
8	Prabhat Kumar (PMRF-Scholarship)	Ongoing	GPS and Active fault studies in NW Himalayas	No
9	Azhar Ansari	Ongoing	Active Fault and Paleoseismic studies in Central Himalayas	No
NPDF				
8	Dr. Rajeev Yadav	2017-2019	Crustal deformation modelling in the Himalaya utilizing detail information on subsurface geological structures.	

## Knowledge Dissemination

- 1) Two courses: Earth Sciences for Civil Engineering – Part 1 and Part – 2 for NPTEL, 2016-17.
- 2) Training workshop on Active Fault Mapping and Paleoseismology, organized at IIT Kanpur along with field training around Chandigarh and Hajipur, NW Himalaya, 04-12 October 2015. Sponsored by Ministry of Earth Science (MoES), New Delhi.
- 3) Training on Active Fault Mapping and Paleoseismic studies provided to the Geologists of Institute of Seismological Research (ISR), Gandhinagar – 2009-2011, under GSDMA project.

## Publications

### A. Journal Papers

Sl. No.	Year	Article Name	Author (s)	Published in	URL of the Publication
1	2017	Unravelling the hidden truth from Vigukot in the Great Rann of Kachchh, western India by surface and sub-surface mapping	<b>Malik Javed N.</b> , Gadhavi M., Sataluri S., Kumar S., Sahoo S., and Vikrama B.	<i>Current Science</i>	VOL. 113(10): 1906 - 1917.
2	2017	Four major unknown active faults identified, using satellite data, in India and Pakistan portions of NW Himalaya	Shah A. A. and <b>Malik Javed N.</b>	<i>Natural Hazard</i>	88:1845–1865. DOI <a href="http://10.1007/s11069-017-2949-5">http://10.1007/s11069-017-2949-5</a>
3	2017	Active fault topography along Kangra Valley Fault in the epicentral zone of 1905 Mw7.8 earthquake NW Himalaya, India	S. Sahoo and <b>Javed N Malik</b>	<i>Quaternary International</i>	460: 90-108 <a href="http://dx.doi.org/10.1016/j.quaint.2017.03.020">http://dx.doi.org/10.1016/j.quaint.2017.03.020</a>
4	2017	Paleo-earthquake signatures from the South Wagad Fault (SWF), Wagad Island, Kachchh, Gujarat, western India: A potential seismic hazard	<b>Malik Javed N.</b> , Gadhavi M., Kothiyari G., and Sataluri S.	<i>Journal of Structural Geology</i>	95: 142-159 <a href="http://dx.doi.org/10.1016/j.jsg.2016.12.011">http://dx.doi.org/10.1016/j.jsg.2016.12.011</a>
5	2016	Paleoseismic evidence of the CE 1505 (?) and CE 1803 earthquakes from the foothill zone of the Kumaon Himalaya along the Himalayan Frontal Thrust (HFT), India	Malik Javed N., Naik S. P., Sahoo S., Okumura K., Mohanty A.	<i>Tectonophysics</i>	<a href="http://dx.doi.org/10.1016/j.tecto.2016.07.026">http://dx.doi.org/10.1016/j.tecto.2016.07.026</a>
6	2016	Rupture model of Mw 7.8, 2015 Gorkha, Nepal earthquake: Constraints from GPS measurements of coseismic offsets	Yadav, R. K., Roy, P.N.S., Gupta, S. K., Khan, P.K., Catherine, J.K., Prajapati, S. K. Kumar, A., Puviarasan, N., Bhu, H., Devachandra, M., <b>Malik, J.</b> , Kundu, B., Debbarma, C., and Gahalaut, V.K.	<i>Journal of Asian Earth Sciences</i>	<a href="http://dx.doi.org/10.1016/j.jseaes.2016.04.015">http://dx.doi.org/10.1016/j.jseaes.2016.04.015</a>
7	2015	Stratigraphic evidence for earthquakes and tsunamis on the west coast of South Andaman Island, India during the past 1,000 years	<b>Malik, J. N.</b> , Banerjee, C., Khan, A., Johnson, F. C., Shishikura, M., Satake, K., and Singhvi, A. K.	<i>Tectonophysics</i> , 661 (2015) 49–65.	<a href="http://dx.doi.org/10.1016/j.tecto.2015.07.038">http://dx.doi.org/10.1016/j.tecto.2015.07.038</a>
8	2015	Active Fault and Paleoseismic Studies in Kangra Valley: Evidence of surface rupture of a Great Himalayan 1905 Kangra earthquake (Mw7.8), NW	<b>Malik, J. N.</b> , Sahoo, S., Sataluri, S., Okumura, K.	<i>Bulletin of Seismological Society of America</i> , AGU publication. Vol.	<a href="http://doi:10.1785/0120140304">http://doi:10.1785/0120140304</a>

		Himalaya, India		105, No. 5, pp. 2325–2342, October 2015,	
9	2014	Active fault study along foothill zone of Kumaun Sub Himalaya: influence on landscape shaping and drainage evolution	<b>Malik, J. N.</b> , Shah, A. A., Naik, S. P., Sahoo, S., Okumura, K., and Patra, N. R.	<i>Current Sciences, In special issue on Himalayas</i> , 106(2): 229-236	
10	2013	Spatial Distribution of Shear Wave Velocity for Late Quaternary Alluvial Soil of Kanpur City, Northern India	Naik S. P., Patra N. R., Malik J. N.	<i>Geotech Geol Eng</i>	<a href="http://DOI.10.1007/s10706-013-9698-3">http://DOI.10.1007/s10706-013-9698-3</a>
11	2013	Ground Response Analysis of Kanpur soil along Indo-Gangetic Plain	Jishnu, R. B., Naik. S. P., Patra, N. R., <b>Malik J. N.</b>	<i>Soil Dynamics and Earthquake Engineering</i> 51:47–57	
12	2012	Ground Penetrating Radar (GPR) investigations along Hajipur Fault -Himalayan1 Frontal Thrust: Attempt to identify near sub-surface displacement, N W Himalaya, India	<b>Malik, J. N.</b> , Kumar, A., Satuluri, S., Bishuddhakshya, P., Mohanty, A.	<i>International Journal of Geophysics</i> ,	doi:10.1155/2012/608269.
13	2012	Assessment of Liquefaction potential of alluvial soil of Indo-Gangetic Interfluvies, Northern India	Naik, S. P., Patra, N. R. and <b>Malik, J.N.</b>	<i>Geotechnical Special publication, ASCE</i> , 1859-1868.	
14	2011	Geologic evidence for two pre-2004 earthquakes during recent centuries near Port Blair, South Andaman Island, India.	<b>Malik, J. N.</b> , Shishikura, M., Echigo, T., Ikeda, Y., Satake, K., Kayanne, Swai, Y., Murty, C. V. R., and Dikshit, O.	<b>Geology</b> , 39(6); 559-562, GSA, USA	doi:10.1130/G31707.1
15	2010	Paleoseismic evidence from trench investigation along Hajipur fault, Himalayan Frontal Thrust, NW Himalaya: Implications of the faulting pattern on landscape evolution and seismic hazard.	<b>Malik, J. N.</b> , Sahoo, A. K., Shah, A., Shinde, D. P., Juyal, N., Singhvi, A. K.	<i>Journal of Structural Geology</i> , 32:350-361, Elsevier,	doi:10.1016/j.jsg.2010.01.005
16	2010	Active fault, fault growth and segment linkage along the Janauri anticline (frontal foreland fold), NW Himalaya, India	<b>Malik, J. N.</b> , Shah, A., Sahoo, A. K., Puhani, B., Banerjee, C., Shinde, D. P., Juyal, N., Singhvi, A. K., Rath, S. K.	<i>Tectonophysics</i> , 483: 327-343, Elsevier,	doi:10.1016/j.tecto.2009.10.028
17	2010	Active faulting and deformation of Quaternary landforms sub-Himalayan, India	Kothyari, G. Ch., Pant, P. D., Joshi, Maulishree, Luire, K., and <b>Malik, J. N.</b>	<i>Geochronometria</i> , 37: 63-71. Institute of Physics, Silesian University of Technology	doi: 10.2478/v10003-010-0015-3
18	2009	Preliminary report on Ground Penetrating Radar (GPR) investigations conducted at Ahichchhatra site, Indo-Gangetic Plain	<b>Malik, J. N.</b> , Satuluri S., Kumar A., Ansari K., Dikshit O., Vikram B., Prabhakar, V. N., and Rai G. K.,	<i>Journal of Interdisciplinary Studies in History and Archaeology (JISHA)</i> . Allahbad	
19	2008	Active Low-Angle Reverse Fault and Wide Quaternary Deformation Identified in Jhura Trench across Kachchh Mainland Fault, Kachchh, Gujarat, India	Morino, M., <b>Malik, J. N.</b> , Gadhavi, M. S., Ansari, K., Mishra, P., Bhuiyan, C., and Kaneko, F.	<i>Journal of Active Fault Research, Japan</i> , 29: 71-79. Japan	
20	2008	Challenges of Low-to-Moderate	Murty, C. V. R., and	<i>In special Issue:</i>	

		Seismicity in India	<b>Malik, J. N.</b> (2008).	<i>Earthquake Engineering in the low and moderate seismic regions of Southeast Asia and Australia.</i> EJSE, 64-78.	
21	2008	Active fault and paleoseismic investigation: evidence of historic earthquake along Chandigarh Fault in the frontal Himalayan zone, NW India	<b>Malik, J. N.</b> , Nakata, T., Philip, G., Suresh, N. and Viridi, N. S.	<i>Journal of Himalayan Geology</i> , 29(2): 109-117. WIHG, Dehradun	
22	2008	Active fault traces along Bhuj Fault and Katrol Hill Fault, and trenching survey at Wandhay, Kachchh, Gujarat, India	Morino, M., <b>Malik, J. N.</b> , Mishra, P., Bhuiyan, C., and Kaneko, F.	<i>Journal of Earth System Sciences</i> , 117(3): 181–188. Bangalore	
23	2008	First active fault exposure identified along Kachchh Mainland Fault: Evidence from trench excavation near Lodai village, Gujarat, Western India	<b>Malik, J. N.</b> , Morino, M., Mishra, P., Bhuiyan, C., and Kaneko, F.	<i>Journal Geological Society of India</i> , 71: 201-208. Bangalore	
24	2007	Coseismic and postseismic creep in the Andaman Islands associated with the 2004 Sumatra-Andaman earthquake	Kayanne, H., Ikeda, Y., Echigo, T., Shishikura, M., Kamataki, T., Satake, K., <b>Malik, J. N.</b> , Shaikh, B. R., Chakraborty, G. K., and Ghosh Roy, A. K.	<i>Geophysical Research Letters</i> , USA, 34, L01310,	
25	2007	Active tectonic influence on the evolution of drainage and landscape: Geomorphic signatures from frontal and hinterland areas along Northwestern Himalaya, India	<b>Malik, J. N.</b> and Mohanty, C	<i>Journal of Asian Earth Sciences</i> , Elsevier Publications, 29(5-6): 604-618.	
26	2007	Ground Penetrating Radar investigation along Pinjore Garden Fault: Implication toward identification of shallow sub-surface deformation along active fault, NW Himalaya	<b>Malik, J. N.</b> , Sahoo, A. K., and Shah, A. A.	<i>Current Science</i> , 93(10): 1422-1427. IAS, Bangalore	
27	2007	A repository of earth resource information - CORONA satellite program: A review	Dashora, A., Lohani, B., <b>Malik, J. N.</b>	<i>Current Science</i> , 92(7): 926-932. IAS, Bangalore	
28	2007	Farthest recorded liquefaction around Jammu caused by October 8, 2005 Muzaffarabad earthquake of Mw 7.6	<b>Malik, J. N.</b> , Sahoo, A. K., Shah, A. A., Rawat, A., and Chaturvedi, A.	<i>Journal of Geological Society of India</i> , 69: 39-41. GSI Bangalore	
29	2006	Landscape Changes in the Andaman and Nicobar Islands (India) after the December 2004 Great Sumatra Earthquake and Indian Ocean Tsunami	<b>Malik, J. N.</b> , Murty, C. V. R. and Rai, D.	<i>Earthquake Spectra, EERI</i> , USA, 22(S3): S43–S66. USA	
30	2005	Predecessors of the giant 1960 Chile earthquake	Cisternas, M., Atwater, B. F., Torrejo'n, F., Sawai, Y., Machuca, G., Lagos, M., Eipert, A., Youlton, C., Salgado, I., Kamataki, T., Shishikura, M.,	<i>Nature</i> , 437-USA	

			Rajendran, C. P., <b>Malik, J. N.</b> , Rizal, Y., and Husni, M.		
31	2005	Landscape Changes in Andaman & Nicobar Islands (India) due to Mw9.3 Tsunamigenic Sumatra Earthquake of 26 December 2004	<b>Malik, J. N.</b> , and Murty, C. V. R.	<i>Current Science</i> 88(9): 1385-1386. IAS Bangalore	
32	2005	Evidence of Paleoearthquakes from trench investigations across Pinjore Garden fault in Pinjore Dun, NW Himalaya	<b>Malik, J. N.</b> , and Mathew, G.	<i>Journal of Earth System Science</i> 114(4): 387-400. IAS and Springer Publications Bangalore	
33	2005	Effects of M9 Sumatra earthquake and tsunami of 26 December 2004	Jain, S. K., Murty, C. V. R., Rai, D. C., <b>Malik, J. N.</b> , Sheth, A., Jaiswal, A.	<i>Current Science</i> 88(3): 357-359. IAS Bangalore	
34	2005	Recent tsunami and earthquake devastation. Preliminary Report	Jain Sudhir K., Kaushik Hemant, Murty C.V.R., <b>Malik Javed N.</b> , Das Suresh R., Rai, Durgesh C., Mondal, Sheth Alpa, Gandhi Prathibha, Jaiswal Arvind, Sanyal Snigdha, Sodhi J.S., and Kumar Santhosh	<i>The Indian Concrete Journal.</i> 11-14. ACC Ltd. Thane	
35	2004	Use of satellite data for tectonic interpretation, NW Himalaya	Mohanty, C., Baral, D. J. and <b>Malik, J. N.</b>	<i>Journal of the Indian Society of Remote Sensing.</i> 32(3): 241-247. Dehra Dun	
36	2003	Active faults and related Late Quaternary deformation along the northwestern Himalayan Frontal Zone, India	<b>Malik, J. N.</b> , and Nakata, T.	<i>Annals of Geophysics,</i> 46(5), 917-936. Italy	
37	2003	Preliminary observations from trench near Chandigarh, NW Himalaya and their bearing on active faulting	<b>Malik, J. N.</b> , Nakata, T., Philip, G. and Viridi, N. S	<i>Current Science</i> 85(12): 1793-1799. IAS Bangalore	
38	2001	January 26, 2001, The Republic Day (Bhuj) earthquake of Kachchh and active faults, Gujarat, Western India.	<b>Malik, J. N.</b> , Nakata, T., Sato, H., Imaizumi, T., Yoshioka, T., Philip, G., Mahajan, A. K., and Karanth, R. V.	<i>Journal of Active Fault Research,</i> 20: 112-126. Japan	
39	2001	A Comprehensive Survey of the 26 January 2001 Earthquake (Mw 7.7) in the state of Gujarat, India	Sato, T., Hamada, M., Hayasi, Y., Hisada, Y., Kato, T., Katta, V., Lakhina, G. S., <b>Malik, J. N.</b> , Miyashita, K., Mori, J. J., Murakami, H., Nakata, T., Negishi, H., Paul, D. K., Sato, H., Sawada, S., Singh, R. P., Yoshioka, T.	<i>Research report on Natural Disasters, December 2001,</i> p. 117. Japan	
40	2001	Extensive surface deformation around Budharmora associated with the January 26, 2001, The Republic Day (Bhuj) earthquake of India	Nakata, T., Yoshioka, T., Sato, H., Imaizumi, T., <b>Malik, J. N.</b> , Philip, G., Mahajan, A. K., and Karanth, R. V.	<i>Journal of Active Fault Research,</i> 20: 127-136. Japan	



41	2001	Active Tectonic control on Alluvial fan Architecture along the Kachchh Mainland Hill Range, Western India	<b>Malik, J. N.</b> , Sohoni, P. S., Merh, S. S. and Karanth, R. V.	<i>Zeithschrift für Geomorphologie</i> , 45(1): 81-100. Germany	
42	1999	The influence of the southwest Indian monsoon on continental deposition over the past 130 ka, Gujarat, Western India	Khadkikar, A. S., Mathew, G., <b>Malik, J. N.</b> , Gundu Rao, T. K., Chowgaokar, M., Merh S. S.	<i>Terra Nova</i> , 11: 273-277. USA	
43	1999	Modern and Historic seismicity of Kachchh Peninsula, Western India	<b>Malik, J. N.</b> , Sohoni, P. S., Karanth, R. V. and Merh, S. S.	<i>Journal Geological Society of India</i> 54: 545-550. GSI Bangalore	
44	1999	Allogenic control on late Quaternary continental sedimentation in the Mahi Basin, Western India	<b>Malik, J. N.</b> , Khadkikar, A.S., and Merh, S. S.	<i>Journal Geological Society of India.</i> 53: 299-314 GSI Bangalore	
45	1999	Paleo-delta complex of Vedic Sarasvati and other ancient rivers of Northwestern India	<b>Malik, J. N.</b> , Merh, S. S. and Sridhar, V.	<i>Memoir Geological Society of India</i> 42: 163-174. GSI Bangalore	
46	1999	Active tectonics astride Katrol Hill Zone, Kachchh, W. India	Sohoni, P. S., <b>Malik, J. N.</b> , Merh, S. S. and Karanth, R. V.	<i>Journal Geological Society of India.</i> 53: 579-586. GSI Bangalore	
47	1999	Late Quaternary drainage disruption in Northwestern India: A Geoarchaeological Enigma	Sridhar, V. Merh, S. S. and <b>Malik, J. N.</b>	<i>Memoir Geological Society of India</i> 42: 187-204 GSI Bangalore	
48	1998	Calcretes in semi-arid alluvial systems: Formative pathways and sinks	Khadkikar, A. S., Merh, S. S., <b>Malik, J. N.</b> , and Chamyal, L. S.	<i>Sedimentary Geology</i> , 116: 251-260. Elsevier Publications	
49	1998	Remnants of large magnitude earthquakes: Evidences from the Great Rann sediments, Kachchh, Western India	Sohoni, P. S., and <b>Malik, J. N.</b>	<i>Current Science.</i> 74(11): 985-989. IAS Bangalore	
50	1997	Sedimentology of the Narmada alluvial fan, Western India	Chamyal, L.S., Khadkikar, A.S., <b>Malik, J. N.</b> and Maurya, D.M.	<i>Sedimentary Geology</i> , 107: 263-279. Elsevier Publication	
51	1997	Soft sediment deformation in the Quaternary sediments of the lower Mahi river basin, Western India	Maurya, D.M., <b>Malik, J.N.</b> , Rachna R. and Chamyal, L.S.	<i>Current Science</i> 72(7): 519-522. IAS Bangalore	
52	1997	The Holocene valley fill terraces in the lower Mahi valley, Gujarat	Maurya, D.M., <b>Malik, J.N.</b> , Rachna, R. and Chamyal, L.S.	<i>Current Science</i> , 73: 539-542. IAS Bangalore	
53	1996	Palaeoflood analysis of channel fill deposits, Central Tapi river basin, India	<b>Malik, J.N.</b> and Khadkikar, A.S.	<i>Zeithschrift für Geomorphologie</i> , 106: 99-106. Germany	
54	1996	Arid humid cycles in Mainland Gujarat over past 300 ka: Evidence from the Mahi river basin, India	Khadkikar, A.S., Chamyal, L.S., <b>Malik, J.N.</b> , Maurya, D.M. and Merh, S.S.	<i>Journal Geological Society of India.</i> 47(3): 383-388.	

				GSI Bangalore	
55	1995	The Quaternary sedimentation and Neotectonism in Lower Tapi valley	<b>Malik, J.N.</b>	<i>Man and Environment.</i> 20(2): 1-9.Pune	

### B Papers published in Conference Proceedings:

S. No.	Author(s)	Year	Title	Publisher
1	Satuluri, S., <b>Malik, J. N.</b> , Bhuvan, V.	2012	Ground Penetrating Radar Investigations at Ahichhatra: An attempt to identify buried subsurface structures	<i>IEEE, 14th International Conference on Ground Penetrating Radar (GPR) June 4-8, 2012, Shanghai, China @ ISBN 978-1-4673-2663-. Pages: 625-630</i>
2	Malik, J.N., Morino, M., Gadhavi, M.S., Ansari, K., Banerjee, C., Rastogi, B.K., Kaneko, K., Bhattacharjee, F., Singhiv, A.K.,	2011	Earthquake Geology and Related Hazard in Kachchh, Gujarat, Western India.	In: <i>2nd INQUA-IGCP-567 International Workshop on Active Tectonics, Earthquake Geology, Archaeology and Engineering, Corinth, Greece.</i> Edited by: C. Grützner, R. Pérez-López, T. Fernández Steeger, I. Papanikolaou K. Reicherter, P.G. Silva, and A. Vött.
3	Satake, K, Y Okamura, M Shishikura, T Aung, H Kayanne, Y Ikeda, T Echigo, <b>J N Malik</b> , S Basir, G., Chakraborty, W., Swe, T Swe, S Tun, H Saw	2006	Search for Evidence of Past Earthquakes Similar to the 2004 Event: Paleoseismological Surveys in Andaman Islands and Rakhine Coast	<i>EOS Trans. AGU, 87(52), Fall Meet. Suppl., Abstract U52A-06.</i>
4	<b>Malik, J. N.</b>	2006	Active faults along foot hill zone of Himalaya around Chandigarh and Pinjore Dun, NW Himalaya	<i>Seminar held at MES Chandimandir, Chandigarh Zone on 17 January 2006, on "Seismic Protection of Structure", p. 13-24</i>
5	<b>Malik, J. N.</b> , Sohoni, P. S., Merh, S. S. and Karanth, R. V.	2000	Palaeoseismology and neotectonism of Kachchh, Western India	<i>Proceedings of the Hokudan International Symposium and School on Active Faulting, Japan.</i> Eds. K. Okumura, K. Takada, H. Goto

### Funding

List R&D projects with details of funding, duration, whether PI or co-PI

Sr. No.	Period	Sponsoring Organisation	Title of Project	Amount of Grant (Rupee in Lakhs)	Co-Investigators
1	2016-2020	MoES	Active Fault, Paleoseismic And Crustal Deformation In NW and Central Himalaya India: An Integrated Approach Towards Seismic Hazard Assessment	299.71	-
2	2016-2020	MoES	Active Fault and Paleoseismic studies along Kachchh Mainland Fault between Bachchau and Nirona, Western India	36.0	M. S. Gadhavi, LD Collage of Engineering
3	2014-2019	MHRD	Understanding the Past History of Ancient Settlements in the Great Rann of Kachchh, Gujarat: Influence of Seismic Activities or Climatic Fluctuations	75.0	Prof. Shivam Tripathi; Koumudi Patil and Bhuvan Vikram (ASI)
4	2014-2019	MHRD	Science and Technology of Water Harvesting and Management in the Medieval Fort of Kalinjar in Central India	27.0	Co-PI with Prof. Shivam Tripathi; Naren Naik and Bhuvan Vikram (ASI)
5	2013-2018	INCOIS, Hyderabad (MoES)	Paleoseismic and Paleo-Tsunami Investigations Along South-Middle Andaman and Car Nicobar Islands Towards Earthquake And Tsunami Hazard Assessment Of A&N Islands	149.0	Dr. T. Srinivasa, Scientist & Head INCOIS, Tsunami Early Warning Centre. Hyderabad
6	Oct. 2010- Oct. 2015	JICA-JST, Japan	Paleoseismic & GPS studies for active fault mapping and slip rate estimation in NW-Central Himalaya, India	410.0	Prof. Onkar Dikshit
7	Oct. 2010- Oct. 2013	DST, New Delhi	Active tectonic influence on landscape evolution around northern fringe of Janauri anticline along Himalayan frontal zone, NW Himalaya	19.7	Prof. Onkar Dikshit
8	Feb. 2009- Feb. 2012	DST, New Delhi	Study of liquefaction potential alluvial soil along Indo-Gangetic Plain	28.3	Prof. Nihar R. Patra
9	Feb. 2008- Dec. 2012	INCOIS, Hyderabad (MoES)	Active Tectonic investigations around South-Middle Andaman and Car Nicobar Islands, A&N Islands	35.8	Prof. Onkar Dikshit
10	June 2008- June 2009	DST, New Delhi (INOD-JAPAN Collaborative project)	Paleoseismological investigations in Andaman Islands (A&N islands) India. Sponsored by Department of Science and Technology, New Delhi.	9.0	Prof. C. V. R. Murty

11	Feb. 2005– Feb. 2008	DST, New Delhi	Active tectonic investigation along northwestern Himalayan foothill zone	47.0	No
12	March 2004– Sept. 2007	MHRD, New Delhi	DSM generation using high altitude satellite photos for identification and mapping of active tectonic landforms related to paleo-earthquake in Kumaon Himalaya	15.0	Dr. B. Lohani, Department of Civil Engineering, IIT Kanpur
13	Sept. 2002 – Sept. 2006	DST, New Delhi (Fast Track Young Scientist)	Active faults along northwestern Himalayan foothill zone: Implications to the great Himalayan earthquakes	4.0	No

## Consultancy

List details of consultancy projects with details of funding, duration, whether PI or co-PI,

Sr. No	Period	Organisation	Nature of Work	Amount of Grant (Rupee in Lakhs)	Co-Investigators
1	April 2017- April 2019	L&T-Gulf, Vadodara, Gujarat	Seismic Studies On Barmer-Pali Pipeline Project (M/s GIGL)	14.37	D C Rai
2	April 2017- April 2019	L&T-Gulf, Vadodara, Gujarat	Seismic Studies On Palanpur-Pali Pipeline Project (M/s GIGL)	11.5	D C Rai
3	March 2017- April 2019	L&T-Gulf, Vadodara, Gujarat	Seismic Studies On Anjar- Mundra Pipeline Project (M/s GIGL)	17.25	D C Rai
4	Feb 2015 – Feb 2017	Archaeological Survey of India, Guwahati Circle	Ground Penetrating Radar (GPR) Investigation at Karenghar of the Ahom Kings (Talatalgharh) Sivasagar, Guwahati, Assam	14	No
5	Nov. 2013 – June 2015	Archaeological Survey of India, Agra Circle	Ground Penetrating Radar (GPR) Investigation at Gulistanpur – Harappan Site, Gautam Buddh Nagar (Noida), Uttar Pradesh	44.0	No
6	Sept. 2012 – March 2014	Archaeological Survey of India, New Delhi	GPR Survey At Subhash Park, Delhi	14.04	No
7	April 2012 – March 2014	Public Works Department, Lucknow, UP	Ground Penetrating Radar (GPR) Investigation On Well Foundation Of Bridge Over Yamuna River Near Shergarh, District-Mathura	14.80	No
8	January 2012– Aug. 2013	M/s Draupadi Trust, New Delhi	Ground Penetrating Radar Survey at Kampilya (erstwhile southern Panchaal capital)	0.4	No
9	May 2011- July 2011	Hindu Religious & Charitable	GPR investigations at Rajagopuram Temple Srirangam,	3.3	No

		Endowments Department of the Govt. of Tamil Nadu	Tiruchirapalli		
10	Aug. 2010 – Aug. 2011	L&T-Gulf, New Delhi	Seismic studies on seismic activities for Salaya Bhogat pipeline at Bhogat, Gujarat	12.13	Prof. S. K. Jain
11	July 2010 – June 2011	Trans-technologies Ltd. New Delhi	GPR survey at IIT Delhi	1.9	No
12	April 2010 – April 2011	L&T-Gulf, New Delhi	Seismic studies on Bhagyam Field	8.27	Profs. S. K. Jain; Durgesh Rai
13	Feb. 2009 – Feb. 2011	Archaeological Survey of India, New Delhi	GPR survey at Ahichhatra	16.58	Prof. Onkar Dikshit
14	Sept. 2009 – Aug. 2011	GSDMA, Gandhinagar, Gujarat	Active fault mapping along south Wagad and Gedi fault in eastern part of Kachchh, Gujarat	37.5	No
15	Jan. 2009 - Jan. 2010	L&TG	Active fault Survey along Island Belt fault and Nagar Parkar fault: BSPL pipeline project	6.74	Prof. S. K. Jain
16	Oct. 2008 – Sept. 2009	ISR, Gandhinagar	Seismotectonic Investigations around Mundra	2.02	No
17	Aug. 2008 – Oct. 2008	AGAKF, New Delhi	Ground Penetrating Radar (GPR) Survey to identify archaeological remnants around Sundernwala Mahal and Sunderwala Burj, Sunder Nursery, New Delhi	11.63	Prof. Onkar Dikshit
18	Nov. 2006 – Nov. 2010	OYO International Corporation Japan	Active fault mapping and paleoseismic investigations in Kachchh region. Gujarat	13.44	No

## Peer Recognition

### Awards, fellowships, other recognitions

1. **PROF. B. B. LAL, PROFESSOR CHAIR** of IIT Kanpur. Endowed Chair for 3 years.
2. **NATIONAL GEOSCIENCE AWARD - 2016** by Ministry Of Mines in recognition of Significant Contribution in Disaster Management.
3. **Member of Research Advisory Committee (RAC)** for National Centre For Seismology, Moes, for Two Years from 2016-2018.
4. **S. S. MERH AWARD 2004** for significant contribution in Quaternary Geology of India by Geological Society of India, Bangalore, India.
5. **JSPS (JAPAN SOCIETY FOR THE PROMOTION OF SCIENCE) POST-DOCTORAL FELLOWSHIP**, for a period of 24 months from 1999-2001 to carry out "A comparative study of active

*faults in India and Japan*", in Japan at Department of Geography, Hiroshima University, Higashi-Hiroshima 739-8522, JAPAN.

6. **YOUNG MUSLIM SCIENTIST AWARD (YMSA)-2002** in Physical Sciences by Muslim Association for Advancement of Science (MAAS).
7. **JSPS (JAPAN SOCIETY FOR THE PROMOTION OF SCIENCE) SHORT TERM FELLOWSHIP - VISITING RESEARCHER** at Earthquake Research Institute (**ERI**), **University of Tokyo**, June-July, **2013**. To work on Comparison between 2004 Sumatra-Andaman Tsunami of Indian Ocean and 2011 Tohoku Tsunami of Japan.
8. **POST DOCTORAL FELLOWSHIP - VISITING RESEARCHER** at Earthquake Research Institute (**ERI**), **University of Tokyo**, for June, **2012**.
9. **POST DOCTORAL FELLOWSHIP - VISITING RESEARCHER** at Earthquake Research Institute (**ERI**), **University of Tokyo**, June-July, **2009**.
10. **BOYSCAST FELLOWSHIP 2003-2004** (3 months) to work at Institut De Physique Du Globe De Strasbourg, France.

#### **Journal Editorship, membership of national and international committees:**

<b>Description</b>	<b>Duration</b>
Section Secretary-Solid Earth, Asia Oceania Geosciences Society	Since 2004
Fellow of Geological Society of India, Bangalore	Since 1999
Member, American Geophysical Union (AGU)	Since 2010
Member, Indian Society of Earthquake Technology, Roorkee	Since 2002
Member Editorial Board - Fast Track Articles: Journal of the Geological Society of India	Since 2012
Member Geochronological Facility at IUAC, New Delhi	Since 2016
Member Research Advisory Committee, National Centre of Seismology, MoES, New Delhi	2016-2018

#### **Contributions to the institute**

Academic and non-academic administration, mentoring in the department and institute, setting up labs

<b>Sr. No.</b>	<b>Period</b>	<b>Organisation</b>	<b>Nature of Responsibility</b>	<b>Designation</b>
1	March 2017 onwards	IIT Kanpur	Head of the Department of Earth Sciences	Head of the Department
2	2016-2019	IIT Kanpur	Institute Space Planning and Allocation (ISPAC)	Member
3	2014-2015	IIT Kanpur	Allocation of Funds to all Hostels	Chairman, DCF committee FY 2014-15
4	2014 -2015	IIT Kanpur	Looking after all activities related to Hall - VIII	Warder In-Charge
5	2012 - 2013	IIT Kanpur	Looking after all activities related to Mess and other in Hall - VIII	Warden (Mess) Hall - VIII
6	2013- 2014	IIT Kanpur	Chairman, Senate Student Prize Committee. Scholarships at UG and PG level.	Chairman, Senate Student Prize Committee (SSPC)
7	2012-2013	IIT Kanpur	Department Time-Table preparation	Member, DUGC
8	2010-2012	IIT Kanpur	In-charge Engineering Geosciences Lab	In-charge EG Lab

9	2011- 2012	IIT Kanpur	Society of Civil Engineering (SOCE)	Convener
10	2010- 2011	IIT Kanpur	Academic activities related to Post Graduate Programs	Member, DPGC
11	2009-2010	IIT Kanpur	Academic activities & admissions related to Post Graduate Programs	DPGC, Convener
12	2004-2009	IIT Kanpur	Academic activities related to Post Graduate Programs	Member, DPGC
13	2003-2005	IIT Kanpur	House Allotments to Faculties and Research Staff	Member, HAC-I
14	2002-2003 2003-2004	IIT Kanpur	Faculty Member Incharge Summer Training of B. Tech Students	Member, DUGC

## Others:

### Setting up of Lab:

#### OSL (Optical Stimulation Luminescence) – dating lab at IITK.

The OSL lab was set-up as a part of JICA-JST sponsored project. Application of luminescence dating techniques will be immensely helpful in Earth sciences, as it allow to asses the ages of sedimentary archives that are crucial in diverse range of studies ranging from archeology, paleoseismology, paleo-climatology, geomorphology, land use planning etc. Various geological processes are complex, hence it is necessary to reconstruct the chronology and estimate the recurrence intervals of such events so as to understand and model the nature of the underlying geodynamic processes for a better assessment of risk and hazards associated with such changes.

S. No.	Training Courses	Year	Location
1	International Workshop on “Earth	27-29 January 2003	IIT Kanpur

	System Processes Related to Gujarat Earthquake Using Space Technology”	(as Co-convener)	
2	International Workshop on “Active Fault in Kachchh and its Implication Towards Seismic Microzonation”	18-19 January 2008 (With ISR, Gandhinagar and GSDMA, Gujarat)	Bhuj, Kachchh, Gujarat
3	Training Workshop on Active Fault Mapping and Paleoseismology	04-12 October 2015	IIT Kanpur



Signature  
Date: October 15, 2018

**Participation in national/international level committees, running short-term training courses**