# CURRICULUM-VITAE

*(Updated on 29-12-2024)*

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| **I. Name & Designation:** | Dr. Prosanta K. Khan, Professor (HAG) |
| **II. Father's Name:** | Late Bhupendra Nath Khan |
| **III. Broad Area of Specialization:** | Applied Geophysics |
| **IV. Current Areas of Research:** | Seismology, Geodynamics, Geothermics & Geotechnical Modelling |
| **V. Subjects of Teaching:** | Geothermics & Geodynamics, Geotechnical Investigation, Strong Motion Seismology and Structural Responses, Theoretical, Observational & Computational Seismology, |
| **VI. Nationality:** | Indian |
| **VII. Religion:** | Hindu |
| **VIII. Sex:** | Male |
| **IX. Date of Birth:** | Feb. 02, 1966 |
| **X. Address for correspondence:** | Department of Applied Geophysics<br>Indian Institute of Technology (Indian School of Mines)<br>Dhanbad – 826 004, Jharkhand, India<br>Phone: 0326-2235465 (Off.); 09431711020 (Mob.)<br>Email: khanprosanta1966@iitism.ac.in; khanprosanta1966@gmail.com; pkkhan_india@yahoo.com |
| **XI. Permanent Address:** | C/o Mr. Anil Kumar Khan<br>Amtala, School Para, PIN – 742 121<br>Dist. – Murshidabad, West Bengal, India |
| **XII. SC/ST/OBC/GEN:** | General |

**XIII. Details of Ph.D. Award:**

| Degree | University/Institute | Year of Passing | Subject | Title of the Ph.D. Thesis |
|---|---|---|---|---|
| Ph.D. | Indian School of Mines | 2000 | Seismotectonics & Geodynamics | Evolving Trends of Seismicity in India and its Neighborhood |

**XIV. Educational Qualification:**

| Exam. Passed | University/Institute | Subject | Year of Passing |
|---|---|---|---|
| M.Sc. Tech. in Applied Geophysics | Indian School of Mines | Applied Geophysics | 1992 |
| B.Sc. Hons. Physics | University of Calcutta | Physics (Hons.), Chem., Maths, English. | 1987 |

**XV.Employment Record:**

| Sl. No. | Name and Addresses of Employer | Post Held | Temp./ Permnt. | Period From To | Nature of Duties |
|---|---|---|---|---|---|
| **1.** | Indian Indian Institute of Technology (ISM), Dhanbad, Jharkhand | Professor (HAG) | Permanent | Dec. 26, 2023 - Contd….. | Research, Teaching and Development |
| **2.** | Indian Indian Institute of Technology (ISM), Dhanbad, Jharkhand | Professor | Permanent | Jan. 20, 2016 - Contd….. | Research, Teaching and Development |
| **3.** | Indian School of Mines, Dhanbad, Jharkhand | Associate Professor | Permanent | Feb. 15, 2010 - Jan. 19, 2016 | Research, Teaching and Development |
| **4.** | Indian School of Mines, Dhanbad, Jharkhand | Assistant Professor | Permanent | Feb. 15, 2007 - Feb. 14, 2010 | Research, Teaching and Development |
| **5.** | Council of Scientific and Industrial Research, New Delhi | Scientist | Temporary | Feb. 17, 2004 - Feb. 14, 2007 | Research and Teaching |
| **6.** | Deptt. of Science and Technology, New Delhi | Scientist | Temporary | Jan. 23, 2001 Jan. 22, 2004 | Research and Teaching |
| **7.** | Department of Earthquake Engineering, University of Roorkee, Roorkee | Fellow 'A' | Temporary | Nov. 06, 1997 Sept. 30, 2000 | Research |

**XVI.**Research/Teaching Experience

Research Experience: ~ 33 years
Post-doc Experience: ~ 08 years
Teaching Experience: ~ 21 years

**XVII.M.Sc. Tech./Integrated M.Sc. Tech/M.Tech. Dissertation Project Supervision:**

Completed: 90, On-Going: 09, No. of External Ph.D. Thesis Reviewed: 10

**XVIII.Publication Details**

No. of Research Papers Published in SCI Journals: 59
No. of Research Papers Published in non-SCI Journals/Special/Conference Proceeding Volumes: 19
No. of Abstract Published in Volumes of International Symposia/Workshop/Seminar/Conference: 20
No. of Abstract Published in Volumes of National Symposia/Workshop/Seminar/Conference: 41
Total Citation (as per Google Scholar): 1151, h-index: 22, i10-index: 37
Total Citation (as per Web of Science): 868, h-index: 18

**XIX.Details of EDP Course conducted as Coordinator**

Training Programme on "Basic Geophysical Techniques" for faculties, Scientists and Researchers during the period January 18-25, 2015, Sponsored by SERB, DST, Govt. of India, New Delhi
Sanctioned Amount: **Rs. 6,00,000/-**

**XX. Significant Responsibilities at the Department/Institute Level**

| Sl. No. | Details of Responsibility | Tenure | Department/ Institute Level |
|---|---|---|---|
| **1.** | HOD/AGP | 2021-2022 | Institute |
| **2.** | Chief Hostel Warden (Saphire, Amber and Topaz) | 2016-2018 | Institute |
| **3.** | Member, House Allotment Committee, IIT(ISM), Dhanbad | 2016-2018 | Institute |
| **4.** | Joint Secretary in Basant Reunion | 2012 | Institute |
| **5.** | Member of the Committee of ISM M.Sc./M.Sc. Tech. Entrance Examination | 2008-2009 | Institute |
| **6.** | Chairman, Member, FIST Project | 2021-2022 | Department |
| **7.** | DPGC Convener, Revesion of All the Courses of the Dept. of Applied Geophysics and Introduction of Several New Papers. | 2018-2020 | Department |
| **8.** | In-Charge, ISM Seismological Observatory | 2007-2021 | Department |
| **9.** | Coordinator, 2-year M.Tech. Course on "Earthquake Science & Engineering" | 2015-2017 | Department |
| **10.** | Introduction 2-year M.Tech. Course on "Earthquake Science & Engineering" designing all the contents | 2015 | Department |
| **11.** | Establishment of Absolute Gravity Station at the Premises of ISM Seismological Observatory | 2014 | Department |
| **12.** | BOCS Chairman for Pre-final Year Applied Geophysics Students | 2012-13 | Department |
| **13.** | Field In-Charge for Three Weeks Winter Training to More Than 60 Students of Pre-final Year Applied Geophysics at Bakreswar, W.B. and IIT(ISM), Dhanbad | 2010 & 2021 | Department |
| **14.** | Imparting Winter Field Training to More Than 60 Pre-final Year Applied Geophysics Students at Rajganj, UCIL, Thakurkuli and Tundi Areas | 4-field seasons | Department |
| **15.** | In-Charge and Establishment of Permanent GPS Station at the Premises of ISM Seismological Observatory | 2010 | Department |
| **16.** | Training and Placement In-Charge | 2011-13 | Department |
| **17.** | Faculty Adversor | 2009-2011 | Department |

**XXI.Conferences/Seminar/Symposia/Workshop Organised as Convener**

| Sl. No. | Title of the Event | Location | Date of the Event | Internal Cash Flow |
|---|---|---|---|---|
| **1.** | Emerging Trends in Geophysical Research for Make-in-India (ETGRMI-2018) | IIT(ISM) | March 09-11, 2018 | Rs. 23.5 lakh |

**XXII. Details of R & D Sponsored Projects**

| Funding Agency | Tenure | Working Place | Project Title | Outlay (Lakhs) | Status |
|---|---|---|---|---|---|
| Science and Engineering Research Board, Govt. of India, New Delhi | 2024 – Contd… | Indian Institute of Technology (ISM) | Long-Term Stress Field Perturbation and Stress Modeling Along the Myanmar-Andaman-Sumatra Subduction Margin | 27.00 | PI |
| University Grants Commission, Govt. of India, New Delhi | 2018 – 2022 | Indian Institute of Technology (ISM) | Low-cost Array-based Earthquake Early Warning for Eastern India | 143.12 | PI |
| Dept. of Science and Technology, Govt. of India, New Delhi | 2013 – 2017 | IIT(ISM) & ISM | Geodynamic Modeling of the Eastern Subduction Margin of India | 31.23 | PI |
| Ministry of Earth Sciences, Govt. of India, New Delhi | 2011 – 2014 | Indian School of Mines | Setting up, operation and maintenance of GPS station at Indian School of Mines, Dhanbad | 17.63 | PI |
| Ministry of Earth Sciences, Govt. of India, New Delhi | 2009 – 2012 | Indian School of Mines | Monitoring and study of local seismicity of the Eastern Indian shield region | 11.15 | PI |
| Ministry of Earth Sciences, Govt. of India, New Delhi | 2009 – 2012 | Indian School of Mines | Finite element stress modeling of the subducting Indian lithosphere and the overlying structures in northeast part of India | 16.19 | PI |
| Minor Research Project, MHRD, Govt. of India, New Delhi | 2007 – 2009 | Indian School of Mines | Mapping of seismic b-value and its correlation with Bouguer gravity anomaly over the northeast India | 0.40 | PI |
| Council of Scientific and Industrial Research, Govt. of India, New Delhi | 2004 - 2007 | Indian School of Mines | Poly-phase Tertiary Development of the Himalayas and Surrounding Regions Implications for the Recent Trends of Seismicity in India | ~8.00 | PI |
| Dept. of Science and Technology, Govt. of India, New Delhi | 2001 - 2004 | Indian School of Mines | Evolving seismicity in India and its adjoining regions in the 20$^{th}$ century | 9.12 | PI |

**XXIV. Prizes/Awards/Honours**

**"Pool Scientist, 2004"**, Council of Scientific and Industrial Research, Govt. of India, New Delhi

**"Young Earth Scientist, 2000"**, SERB, Department of Science and Technology, Govt. of India, New Delhi.

**Award:** Adjudged One of the Best Four Participants in DST Sponsored *2$^{nd}$ SERC School (SEP-II)* During April 14 to May 4, 1994 Held at Banaras Hindu University, Varanasi.

**Award:** Adjudged One of the Best Four Participants in DST Sponsored *3rd SERC School (SEP-III)* During Sept. 23 to Oct. 12, 1996 Held at Indian School of Mines, Dhanbad.

**XXIII. Details of PhD Supervision Completed**

| Sl. No. | Name of the Students | Title of The Thesis | Status | Date of Award | Sole Guide/Principal Guide/Co-guide |
|---|---|---|---|---|---|
| **1.** | Dr. Himangshu Sekhar Mandal | Seismic behavior of the subsurface geomorphic features over the central part of India | Awarded | 10-10-2013 | Principal Guide |
| **2.** | Dr. Md Afroz Ansari | Geodynamics Status of the Central Orogenic Segment between Darjeeling and Himachal Himalayas | Awarded | 13-03-2014 | Sole Guide |
| **3.** | Dr. Sushmita Sinha | Neotectonics of the Kachchh Basin and Its Implication For Seismitectonic Activity | Awarded | 07-8-2014 | Co-guide |
| **4.** | Dr. Sandeep Kumar Aggarwal | Seismotectonic and precursor studies in Gujarat and adjoining regions | Awarded | 08-02-2016 | Sole Guide |
| **5.** | Dr. Butchi Babu Bongu | Seismotectonic and precursor studies in Gujarat and adjoining regions | Awarded | 23-03-2018 | Principal Guide |
| **6.** | Dr. Sk Shamim | Evolving Dynamics and Kinematics along the Andaman-Sumatra Margin | Awarded | 04-04-2018 | Principal Guide |
| **7.** | Dr. Koushik Biswas | Modeling of seismogenesis of earthquakes occurring in two intraplate zones in India | Awarded | 27-07-2020 | Principal Guide |
| **8.** | Dr. Kuntal Bhukta | Study of lithospheric dynamics and seismic hazard in the Eastern Indian Shield region | Awarded | 15-03-2021 | Principal Guide |
| **9.** | Dr. Rashmi Singh | Study of Seismotectonics and Seismogenesis of the Eastern Indian Shield Region | Awarded | 18-11-2021 | Principal Guide |
| **10.** | Dr. Niladri Bhattacharjee | Evolution of the Habo Dome and adjacent areas in the Kachchh Inland Basin, Gujarat, India | Awarded | 16-03-2022 | Co-guide |
| **11.** | Dr. S Vishal Gupta | Site-Specific Seismic Hazard Study of the Kashmir Basin, Northwest Himalaya | Awarded | 28-04-2023 | Principal Guide |

**Number of On-Going PhD: 04**

**XXV. Research Interest**

- Earthquake Source Kinematics and Dynamics
- Seismotectonic Modeling
- Lithospheric Deformation
- Plate Kinematics and Dynamics
- Origin and Evolution of the Lithospheric Stress Field

- Subduction Dynamics vis-à-vis Back-Arc Tectonics
- Seismic b-value
- Earthquake Hazard Assessment and Mitigation
- Statistical Analysis of Earthquake Time-Series, Earthquake Forecasting, Prediction and Earthquake Early Warning

**XXVI.List of Publications**

| SL. NO. | RESEARCH ARTICLES IN SCI JOURNALS<br>Average Impact Factor: 2.709 (as per 2023 report, https://jcr.clarivate.com/) | I.F. | (Q1-4) |
|---|---|---|---|
| **58.** | Gupta, S.V., Parvez, I.A., **Khan, P.K.**, 2023. Site response analysis beneath the Kashmir basin (NW Himalaya) using ambient noise, Earthquake Spectra, http://doi:10.1177/ 87552930231195640 | **3.1** | **Q2** |
| **57.** | Gupta, S.V., Parvez, I.A., **Khan, P.K.**, 2022, Imaging subsurface geological complexity (2D/3D) beneath the Greater Srinagar region of the Kashmir basin, Northwest Himalaya, Near Surface Geophysics, 2022. doi: 10.1002/nsg.12186 | **1.1** | **Q3** |
| **56.** | Bhukta, K., Paul, A., **Khan, P.K.**, 2022, SKS and SKKS Splitting Measurements Beneath the NW Himalaya, Pure and Applied Geophysics, 179, 641–661, https://doi.org/10.1007/s00024-021-02935-4. | **1.9** | **Q2** |
| **55.** | Gupta, S.V., Parvez, I.A., Ankit, **Khan, P.K.**, Chandra, R., 2021, Site Effects Investigation in Srinagar City of Kashmir Basin Using Microtremor and Its Inversion, Journal of Earthquake Engineering, https://doi.org/10.1080/13632469. 2020.1816232. | **2.5** | **Q2** |
| **54.** | Butchibabu, B., **Khan, P.K.**, Jha, P.C., 2021, Geophysical investigations for stability and safety mitigation of regional crude-oil pipeline near abandoned coal mines, Journal of Geophysics and Engineering, 18, 145–162, https://doi.org/ 10.1093/jge/gxab003 | **1.6** | **Q3** |
| **53.** | Shamim, S., **Khan, P.K.**, Mohanty, S.P., Mohanty, M., 2021, Andaman–Nicobar–Sumatra Margin Revisited: Analysis of the Lithospheric Structure and Deformation Based on Gravity Modeling and Distribution of Seismicity, Surveys in Geophysics, 42, 239–275, https://doi.org/10.1007/s10712-021-09633-9 | **4.9** | **Q1** |
| **52.** | **Khan, P.K.**, Mohanty, S.P., Chakraborty, P.P., Singh, R., 2021, Earthquake shocks around Delhi-NCR and the adjoining Himalayan front: A seismotectonic perspective, Frontiers in Earth Science, 9, 598784. https://doi.org/10.3389/feart. 2021.598784 | **2.0** | **Q3** |
| **51.** | Singh, R., **Khan, P.K.,** 2021, Crustal configuration and seismic stability of the Eastern Indian shield and adjoining regions: Insights for incidents of great earthquakes in the Nepal-Bihar-Sikkim Himalaya, Frontiers in Earth Science 9, 586152. https://doi.org/ 10.3389/feart.2021.586152 | **2.0** | **Q3** |
| **50.** | Singh, R., Singh, A.P., **Khan, P.K.**, Pandep, A.P., 2021, Investigation of shallow structures using ambient seismic noise data recorded at permanent broadband seismic stations in the Eastern Indian Shield and adjoining regions. Environmental Earth Sciences, 80, 129, https://doi.org/10.1007/s12665-021-09385-0. | **2.8** | **Q3** |
| **49.** | **Khan, P.K.**, Bhukta, K., Mandal, P., 2020, Estimation of source parameters of local earthquakesbased on inversion of waveform data, Current Science, 119, 1159-1168, https://doi.org/10.18520/cs/v119/i7/1159-1168. | **1.0** | **Q3** |
| **48.** | **Khan, P.K**., Shamim, Sk, Mohanty, S.P., Aggarwal, S.K., 2020. Change of stress patterns during 2004 MW 9.3 off-Sumatra mega-event: Insights from ridge–trench interaction for plate margin deformation, Geological Journal, 55, 372-389, https://doi.org/10.1002/gj.3419 | **1.4** | **Q3** |

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| **47.** | Singh R., **Khan, P.K.**, Singh A.P., 2020, Earthquake source dynamics and kinematics of the Eastern Indian Shield and adjoining regions, Acta Geophysica, 68, 337-355, https://doi.org/10.1007/s11600-020-00418-z. | **2.0** | **Q2** |
| **46.** | Singh, R., Sharma, S., Mitra, S., **Khan, P.K.**, 2019, Mapping of Coda-Wave Attenuation and Its Frequency Dependency Over Eastern Indian Shield, Pure and Applied Geophysics, 176, 5291–5313, doi.org/ 10.1007/ s00024-019-02284-3 | **1.9** | **Q2** |
| **45.** | Biswas, K., Mandal, P., **Khan, P.K.**, 2019, Estimation of coda **Q** for the eastern Indian craton, Journal of Earth System Science, 128, 109, https://doi.org/10.1007/s12040-019 1140-7. | **1.3** | **Q3** |
| **44.** | Butchibabu, B., **Khan, P.K.**, Jha, P.C., 2019, Foundation Evaluation of a Repeater Installation Building using Electrical Resistivity Tomography and Seismic Refraction Tomography, Journal of Environmental & Engineering Geophysics, 24, 27–38, https://doi.org/10.2113/ JEEG24.1.26. | **1.0** | **Q4** |
| **43.** | Shamim, Sk, **Khan, P.K.,** Mohanty, S.P., 2019, Stress reconstruction and lithosphere dynamics along the Sumatra subduction margin, Journal of Asian Earth Sciences, 170, 174–187, https://doi.org/10.1016/j.jseaes.2018.11.008. | **2.7** | **Q2** |
| **42.** | Butchibabua, B., **Khan, P.K.,** Jha, P.C., 2019, Foundation evaluation of underground metro rail station using geophysical and geotechnical investigations, Engineering Geology, 248, 140-154, https://doi.org/10.1016/j.enggeo.2018.12.001. | **6.9** | **Q1** |
| **41.** | **Khan, P.K.**, Banerjee, J., Shamim, Sk, Mohanty, M., 2018, Long-term seismic observations along Myanmar–Sunda subduction margin: insights for 2004 $M_w > 9.0$ earthquake, International Journal of Earth Sciences, 107, 2383–2392, https://doi.org/10.1007/s00531-018-1603-0. | **1.8** | **Q3** |
| **40.** | Bhukta, K., **Khan, P.K.**, Mandal, P., 2018, Upper mantle anisotropy inferred from shear wave splitting beneath the Eastern Indian Shield region, Geoscience Frontiers, 9, 1911-1920, https://doi.org/10.1016/j.gsf.2017.12.003. | **8.5** | **Q1** |
| **39.** | **Khan, P.K.**, Ansari, A., Singh, D., 2017, Insights into the great Mw 7.9 April 25, 2015 Nepal earthquake, Current Science, 113, 2014-2020. | **1.1** | **Q3** |
| **38.** | Butchibabu, B., Sandeep, N., Sivaram, Y.V., Jha, P.C., **Khan, P.K.**, 2017, Bridge pier foundation evaluation using cross-hole seismic tomographic imaging, Journal of Applied Geophysics, 144, 104–114, http://dx.doi.org/10.1016/ j.jappgeo.2017.07.008. | **2.2** | **Q2** |
| **37.** | Aggarwal, S.K., Pastén, D., **Khan, P.K.**, 2017, Multifractal analysis of 2001 Mw7.7 Bhuj earthquake sequence in Gujarat, Western India, Physica A, 488, 177–186, http://dx.doi.org/10.1016/j.physa.2017.06.022. | **2.8** | **Q2** |
| **36.** | **Khan, P.K.,** Shamim, Sk, Mohanty, M., Kumar, P, Banerjee, J., 2017, Myanmar-Andaman-Sumatra subduction margin revisited: insights of arc-specific deformations Myanmar-Andaman-Sumatra subduction margin revisited: insights of arc-specific deformations, Journal of Earth Science, 28, 683–694, http://dx.doi.org/10.1007/ s12583-017-0752-6. | **4.1** | **Q1** |
| **35.** | 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., Malik, J., Kundu, B., Debbarma, C., Gahalaut, V.K., 2017, Rupture model of Mw 7.8 2015 Gorkha, Nepal earthquake: Constraints from GPS measurements of coseismic offsets, Journal of Asian Earth Sciences, 133, 56-61, http://dx.doi.org/10.1016/j.jseaes.2016.04.015 | **2.7** | **Q2** |
| **34.** | Catherine, J.K., Uma Maheshwari, D., Gahalaut, V.K., Roy, P.N.S., **Khan, P.K.**, Puviarasan, N., 2017, Ionospheric disturbances triggered by the 25 April, 2015 M7.8 Gorkha earthquake, Nepal: Constraints from GPS TEC measurements, Journal of Asian Earth Sciences, 133, 80-88, http://dx.doi.org/10.1016/j.jseaes.2016.07.014. | **2.7** | **Q2** |
| **33.** | **Khan, P.K.**, Mohanty, S.P., Sinha, S., Singh, S., 2016, Occurrences of large-magnitude earthquakes in the Kachchh region, Gujarat, western India: Tectonic implications, Tectonophysics, 679, 102–116, http://dx.doi.org/10.1016/j.tecto. 2016.04.044 | **2.7** | **Q2** |

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| **32.** | Aggarwal, S.K., **Khan, P.K.,** Mohanty, S.P., Roumelioti, Z., 2016, Moment tensors, state of stress and their relation to faulting processes in Gujarat, western India, Physics and Chemistry of the Earth, 95, 19-35, http://dx.doi.org/10.1016/j.pce. 2016.01.004. | **3.0** | **Q2** |
| **31.** | Aggarwal, S.K., **Khan, P.K.,** 2016, $Q_{Lg}$ tomography in Gujarat, Western India, Physics and Chemistry of the Earth, 95, 135-149, http://dx.doi.org/10.1016/j.pce.2015.12.003. | **3.0** | **Q2** |
| **30.** | **Khan, P.K.,** Bhukta, K., Tarafder, G, 2016, Coda Q in Eastern Indian Shield, Acta Geodaetica et Geophysica, 51, 333–346, http://dx.doi.org/10.1007/s40328-015-0129. | **1.4** | **Q3** |
| **29.** | Telesca, L, Lovallo, M, Aggarwal, S.K., **Khan, P.K.,** Rastogi, B.K., 2016, Visibility Graph Analysis of the 2003–2012 Earthquake Sequence in the Kachchh Region of Western India, Pure and Applied Geophysics, 173, 125–132, http://dx.doi.org/ 10.1007/s00024-015-1034. | **1.9** | **Q2** |
| **28.** | Telesca, L, Lovallo, M, Aggarwal, S.K., **Khan, P.K.,** 2015, Precursory signatures in the visibility graph analysis of seismicity: An application to the Kachchh (Western India) seismicity, Physics and Chemistry of the Earth, 85-86, 195-200, http://dx.doi.org/10.1016/ j.pce.2015.02.008. | **3.0** | **Q2** |
| **27.** | Aggarwal, S.K., Lovallo, M., **Khan, P.K.,** Rastogi, B.K., Telesca, L, 2015, Multifractal detrended fluctuation analysis of magnitude series of seismicity of Kachchh region, Western India, Physica A, 426, 56-62, http://dx.doi.org/10.1016/ j.physa.2015.01.049. | **2.8** | **Q2** |
| **26.** | Hainzl, S., Aggarwal, S.K., **Khan, P.K.,** Rastogi, B.K., 2015, Monsoon-induced earthquake activity in Talala, Gujarat, India, Geophysical Journal International, 200, 627–637, http://gji.oxfordjournals.org/content/200/1/627. | **2.8** | **Q2** |
| **25.** | Sharma, N.K., **Khan, P.K.,** Bhukta, K.K., 2015, Nature of the Moho in the mid-eastern part of the Chotanagpur Plateau, India, from a receiver function perspective, Arabian Journal of Geosciences, 8, 5669-5675, http://dx.doi.org/10.1007/s12517-014-1648-8. | **1.827** | **Q3** |
| **24.** | Ansari, M.A., **Khan, P.K.,** Tiwari, V.M., Banerjee, J., 2014, Gravity anomalies, flexure, and deformation of the converging Indian lithosphere in Nepal and Sikkim–Darjeeling Himalayas. International Journal of Earth Sciences, 103, 1681–1697, http://dx.doi.org/10.1007/s00531-014-1039-0. | **1.8** | **Q3** |
| **23.** | **Khan, P.K.,** Ansari, M.A., Mohanty, S., 2014, Earthquake source characteristics along the arcuate Himalayan belt: geodynamic implications. Journal of Earth System Science, 123, 1013–1030, http://dx.doi.org/10.1007/s12040-014-0456-6. | **1.3** | **Q3** |
| **22.** | Ansari, M.A., **Khan, P.K.**, 2014, Occurrences of damaging earthquakes between the Himachal and Darjeeling Himalayas: tectonic implications. Acta Geophysica, 62, 699-736, http://dx.doi.org/10.2478/s11600-013-0190-5. | **2.0** | **Q2** |
| **21.** | Mandal, H.S., **Khan, P. K.** and Shukla, A.K., 2014, Soil responses near Delhi ridge and adjacent regions in Greater Delhi during incidence of a local earthquake, Natural Hazards, 70, 93-118, http://dx.doi.org/10.1007/s11069-012-0098-4. | **3.3** | **Q2** |
| **20.** | Mandal, H.S., **Khan, P.K.** and Shukla, A.K., 2013, Shear wave attenuation characteristics over the Central India Tectonic Zone and its surroundings, Journal of Asian Earth Sciences, 73, 440-451, http://dx.doi.org/10.1016/j.jseaes.2013.05.020. | **2.7** | **Q2** |
| **19.** | Mandal, H.S., Shukla, A.K., **Khan, P.K.** and Mishra, O.P., 2013, A new insight into Probabilistic seismic hazard analysis for Central India, Pure and Applied Geophysics, 170, 2139-2161, http://dx.doi.org/10.1007/s00024-013-0666-x. | **1.9** | **Q2** |
| **18.** | **Khan, P. K.**, Chakraborty, P.P., Tarafder, G. and Mohanty, S., 2012, Testing the intraplate origin of mega-earthquakes at subduction margins, Geoscience Frontiers, 3, 473–481, http://dx.doi.org/10.1016/j.gsf.2011.11.012, | **8.5** | **Q1** |
| **17.** | **Khan, P. K.**, Ghosh, M., Chakraborty, P.P. and Mukherjee, D., 2011, Seismic b-value and the assessment of ambient stress | **1.9** | **Q2** |

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| | in Northeast India, Pure and Applied Geophysics, 168, 1693–1706, http://dx.doi.org/10.1007/s00024-010-0194-x. | | |
| **16.** | **Khan, P. K.**, Mohan, A. and Chowdhury, S., 2012, Pre- and post-seismic activities along the Mayanmar-Andaman-Sumatra Subduction Margin: insights for tectonic segmentation, Journal of Indian Geophysical Union, 16, 71-80. | **0.1** | **Q4** |
| **15.** | **Khan, P. K.**, 2011, Role of unbalanced slab resistive force in the 2004 off Sumatra mega-earthquake ($M_w$ > 9.0) event, International Journal of Earth Sciences, 100, 1749–1758. http://dx.doi.org/10.1007/s00531-010-0576-4. | **1.8** | **Q3** |
| **14.** | Kayal, J.R., Srivastava, V.K., Kumar, P., Chatterjee, R. and **Khan, P. K.**, 2011, Evaluation of crustal and upper mantle structures using receiver function analysis: ISM broadband observatory data, Journal of the Geological Society of India, 78, 76-80, http://dx.doi.org/10.1007/s12594-011-0069-5. | **1.2** | **Q3** |
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2. Wason, H. R., Sharma, M. L., **Khan, P. K.**, Kapoor, K., Nandini, D. and Kara, V., 2000, Broadband Seismic Recording of the Chamoli Earthquake of March 29, 1999 and its Aftershock sequence, in A Report on Chamoli Earthquake of March 29, 1999, Department of Earthquake Engineering, University of Roorkee, India, 45-61.

1 **Khan, P. K.** and Chouhan, R. K. S., 1994, Latur earthquake – a probable cause, in abstract of the National Symposium on Mantle dynamics and its relation to earthquake and volcanism, S.N. Bose National Centre for Basic Sciences, Calcutta, p. 41.

**XXVII. Life Membership**

- Journal of Himalayan Geology, Dehradun
- Journal of the Indian Geophysical Union, Hyderabad
- Indian Geological Congress, Roorkee
- Journal of the Indian Society of Earthquake Technology, Roorkee

**XXVIII.Major Achievements in Research**

- Tectonic Understading for the Recent Delhi Earthquake Sequence,
- Geotechnical Investigations for Tunnel, Bridges, Coal-Mines, etc.,
- Soil Response Analysis for NCT of Delhi,
- Seismic Wave Attenuation Studies for the Western, Central and Eastern India,
- Time-Series Analysis of 2001 Mw 7.7 Bhuj Aftershock Sequences,
- Model for Occurrences of Large to Great Earthquake in the Himalaya,
- Model for Genesis of the Great Damaging Earthquakes in Bhuj Area,
- Plate Driving Forces Behind the Occurrence of Subduction Zone Mega-Earthquake,
- Evolutionary Strain-Hardening Model Behind the Generation of Mega-Earthquakes Along the Subduction Margins Around the World,
- Model for the Two-Phase Opening of the Andaman Sea,
- Episodic Late Tertiary Episodic Development of Myanmar Region,
- Installation of Duplex Telemetry Seismic Network in the Kumaun Himalaya under the Himalayan Seismicity Programme of Department of Science & Technology, Govt. of India, New Delhi,
- Seismotectonic Model for Northwesterd Widening of the Himalayan Orogeny,
- Origin of the Core of the Hindukush-Pamir Converging Zone,
- Model Over Relationship Between the Bouguer Gravity Anomaly and Seismic b-value,
- Model for Finite Stress Perturbation in the Converging Lithosphere along Subduction Margins Surrounding India.

**XXIX.International Collaboration**

1. On-Going Collaborative Project Entitled “Lowcost-based Earthquake Early Warning for Eastern India” between Tel Aviv University and IIT(ISM), Dhanbad Since August 27, 2018, PI: Prof. P.K. Khan, IIT(ISM), India and Dr. Gilles Hillel Wust-Bloch, TAU, Israel
2. Research Activities Under MoU Between Department of Applied of Applied Geophysics, Indian Institute of Technology (Indian School of Mines), Dhanbad, Jharkhand, India and OGS-Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, Sgonico (Trieste), Italy. Scientific Reference Persons: Prof. P.K. Khan from IIT(ISM), India and Dr. Antonella Peresan and Dr. Franco Pettenati from OGS, Italy
3. Country Visited: United States of America, Austria, Italy, Israel, Nepal