



**DR R. JAYANGONDA PERUMAL**  
**WIHG, DEHRADUN, INDIA**

**GOOGLE SCHOLAR PAGE:**

[HTTPS://SCHOLAR.GOOGLE.CO.IN/CITATIONS?USER=HR33VY8AAAAJ&HL=EN](https://scholar.google.co.in/citations?user=HR33VY8AAAAJ&hl=en)

**RESEARCH GROUP:**

**STRUCTURE AND TECTONICS**

**FIELD OF SPECIALIZATION:**

**STRUCTURAL GEOLOGY, ACTIVE TECTONICS, EARTH QUAKE GEOLOGY**

My initial studies at the Wadia Institute of Himalayan Geology were on the structural evolution of the Lesser Himalayan Klippen lying in the core of the Mussoorie syncline. Based on field, structure, and Paleomagnetic/Anisotropy of Magnetic Susceptibility (AMS) data, an alternative model, negating large translation along the klippen detachment thrust from an assumed root zone in the Higher Himalayas, was proposed (Jayangondaperumal PhD Thesis, 1998; Jayangondaperumal et al, 2001 and Dubey and Jayangondaperumal, 2005). Strain analyses are sparse in the Lesser Himalaya because of weak deformation and lack of suitable visible strain markers. Thus, in what is probably the first application of its kind in the Himalayan region, three-dimensional data are being generated using the AMS method.

Now the focus is to understand the Holocene rate of slip and paleo-earthquakes history along the Indian Himalayan Frontal Thrust and other active faults in the hinterland.

**EDUCATION:**

**Doctor of Philosophy (Ph.D.) (Geology) (1999)**

H.N.B. Garhwal University, Srinagar (Garhwal)

Wadia Institute of Himalayan Geology,

Title of the Thesis: *Structural Evolution of Mussoorie Syncline, Lesser Himalaya, and U.P, India*

2001-2002

**Post Graduate Diploma in GIS Management**

University of Madras

1991 - 1993

**Master of Science in Applied Geology**

University of Madras

Secured Second rank (70%)

1988 - 91

**Bachelor of Science in Geology**

University of Madras Presidency

College

Distinction and Secured Second rank (76.85%)

1986 - 88

**Higher Secondary Certificate (+2)**

Secondary School of Education, Tamil Nadu

Stream: Physics, Chemistry, Botany & Zoology (86.64%)

**PROFESSIONAL EXPERIENCE:**

July-2021- Till date

**Scientist-F**

(Grade Pay 13A)

Head - Structure and Tectonic Group,

**Wadia Institute of Himalayan Geology,**

Dehradun, 248001, Uttarakhand, India

April- 2021 to June 2021

**Scientist-E**

(Grade Pay 13 or 8,700/-)

Head - Structure and Tectonic Group,

**Wadia Institute of Himalayan Geology,**

Dehradun, 248001, Uttarakhand, India

August-2020 to April-2021

**Associate Professor**

(Academic pay: 13 A)

Department of Geology, School of Earth Sciences

**Central University of Tamil Nadu**

Thiruvarur, Tamil Nadu

June 2017\* to August 2020

**Scientist-E**

(Grade Pay 13 or 8,700/-)

Group Head of the Structure and Tectonic Group,  
**Wadia Institute of Himalayan Geology,**  
Dehradun, 248001, Uttarakhand, India

October 2017 to February 2018

**Associate Professor (on-lien)**

(Academic pay: 13 A)

**The Head, Geology Department,**  
**Central University of Kerala,**  
Kasaragod, Kerala

**Scientist-D**

Grade Pay 7,600/- (Scale of Pay Rs.15,600-39,000/-)

The Structure and Tectonic Group,  
**Wadia Institute of Himalayan Geology,**  
Dehradun, 248001, Uttarakhand, India

April,2008-December, 2012 **(4 Years)**

**Scientist-C** (Scale of pay Rs.15, 600-39000/- +Grade Pay 6,600/-)

The Structure and Tectonic Group,  
**Wadia Institute of Himalayan Geology,**  
Dehradun, 248001, Uttarakhand, India.

December 2007---April, 2009 **(Lien service;1.4 Years)**

**Senior Lecturer** (Scale 10,000-325-15,200)

**Centre for Geo Technology**  
Manonmaniam Sundaranar University,  
Tirunelveli, India

December 2002 - December, 2007**(5 Years)**

**Scientist-B** (Rs.8000-275-13500/-)

The Structure and Tectonic Group,  
**Wadia Institute of Himalayan Geology,**  
Dehradun, 248001, Uttarakhand, India.

August, 1997 - December, 2002 **(5.4 Years)**

**Assistant Mining Geologist**

*(Min. of mines vide lr no. 26(3)/2004-M.III, dtd 22.3.2005*

*Rs.6500-200-10500/-)*

**Indian Bureau of Mines, Ajmer and Madras**

1994-1997 **(Three Years, 3)**

**Junior & Senior Research Fellow**

**Wadia Institute of Himalayan Geology,**

Dehradun, 248001, Uttarakhand, India.

**VISITING POSITIONS:**

- BOYSCAST Fellow-2010-2011, Govt. of India, Dept of Science & Technology, with Prof S.G. Wesnosuky, Centre for Neotectonic Studies, University of Nevada, Reno, and with Prof Lewis A. Owen, University of Cincinnati, Cincinnati, Ohio.
- Awarded Professor Invitee by LGCA and Univ. of Savoie. France, Chambéry, and Grenoble (2009-2010) to work with Tectonic Geomorphology and Structural Geology
- “Indian Scientific Delegates” (2005-2006) award under “National Programme for training Scientists and Technologists in Govt. Sector by the DST to Academia sinica, Taiwan, Univ. of Hong Kong, and National Univ. of Singapore

**TEACHING EXPERIENCE:**

August-2020 to April-2021

**Associate Professor (On-Lien)**

**(Academic pay: 13 A)**

Department of Geology

School of Earth Sciences

Central University of Tamil Nadu

Thiruvarur, Tamil Nadu

October 2017 To February 2018

**Associate Professor (On-Lien)**

**The Head, Geology Department,**

Central University of Kerala,

Kasaragod, Kerala

December 2007---April, 2009

**Sr. Lecturer (On-Lien)**

**Centre for Geo Technology,**

Manonmaniam sundaranar University,

Tirunelveli,

Tamil Nadu,

India

## SERVICES:

### a. Supervision/Guidance to Ph.D. Students: 5 (Awarded); 5 (On-Going)

US Fulbright-Nehru PhD student: One (awarded)

### b. Training:

## TRAINING UNDERGONE

- One-year advanced specialized training undertaken in Neotectonics studies under the BOYSCAST Fellow-2010-2011, with Prof S.G. Wesnosuky, Centre for Neotectonic Studies, University of Nevada, Reno, and with Prof Lewis A. Owen, University of Cincinnati, Cincinnati, Ohio.
- Worked with J.L.Mugnier on Neotectonics and Cosmogenic technique for dating under the “Professor Invite” Fellowship in the LGCA, University of Savoie, France.
- Worked as Summer Faculty trainee with Prof A.K.Singhvi’s OSL/TL Laboratory, Earth Planetary Science Division, Physical Research Laboratory (PRL), Ahmedabad.
- Second Orientation Course on “Analytical Techniques and Data Interpretation in Petrology” 14-25 Feb.1994, organized by W.I.H.G, Dehra Dun.
- “Geological Mapping of Folded Supra-Crustal Belt” Sponsored by Dept. of Science Technology, under the aegis of SERC School held at *Chitradurga Centre of GSI Training Institute* from 4/9/1994-1/10/1994.
- Data bases, Numerical Methods and computer modeling in Modern Approach to petrology” sponsored by DST (*SERC School*) and organized by WIHG, Dehra Dun.
- Second Foundation Training Programme for Scientists/Technologists for 12 weeks in Indian Institute of Public Administration (IIPA), New Delhi.
- ARC-GIS Training Programme organized by ESRI, ARC-GIS at W.I.H.G, Dehra Dun.

### c. PROGRAMMES ORGANIZED (6)

- Organized 30<sup>th</sup> HKT international workshop in WIHG as one of the convener on 6 -8 October, 2016, Dehradun.
- Discussion meeting on “Tectonic Geomorphology –Landform Evolution and Quaternary Tectonics” conducted in the month of Nov-2006 at Wadia Institute of Himalayan Geology (WIHG), Dehra Dun.
- A third module of Five-Year cycle of the DST on Crustal Deformation and Tectonic Geomorphology of the SERCSchool conducted in Feb.6-2007 at WIHG, Dehra Dun.
- 11<sup>th</sup> Project Assessment Monitoring Committee (PAMC) meeting of Earth Science Section (ESS), Department of Science & Technology DST, Govt. of India at WIHG, D.Dun.
- A Fifth module on SERC Five Year School of the DST on Crustal Deformation and Tectonic Geomorphology focusing on climate and tectonic interaction conducted in association with IISc, Bangalore and Sikkim Manipal Institute of Technology (SMIT) at Sikkim, (SMIT) from 27 May-2009 to 10 June, 2009.
- Field Training workshop on the “Quaternary setup of arid NW Himalaya: main focus on Ladakh” organized at Leh as one of the coordinator from 18<sup>th</sup> August to 6<sup>th</sup> Sep, 2012 by WIHG, D.Dun and sponsored by DST, Govt. of India, New Delhi.

#### d. Membership:

HIMALAYAN GEOLOGY & GEOLOGICAL SOCIETY OF INDIA

#### e. Editorial Board:

ASSOCIATE EDITOR of Himalayan Geology

#### f. International/National Seminars/Workshop:

##### International (18)

- Niemi, Tina M., Daniels, Robyn L., and **R. Jayangondaperumal**, New paleoseismic data from the LalDhang trench site across the Himalayan Frontal Thrust in India, 7th International workshop PATA (Paleoseismology, Active Tectonics and Archeaseismology, May 30- June-3,2016 Colorado)
- R.L. Daniels,**R. Jayangondaperumal**,T.M. Niemi, Developing a paleoseismic age model for large-magnitude earthquakes on fault segments of the Himalayan Frontal Thrust in India 7th International workshop PATA (Paleoseismology, Active Tectonics and Archeaseismology, May 30- June-3,2016 Colorado)
- **R. Jayangondaperumal**,Kumahara, Y, Thakur, V.C.Dubey, S, Kumar Anil1, Srivastava Pradeep1, Dubey, A.K, Joevivek, V., Inferring the A.D. 1344 great earthquake surface ruptures using backthrusting and re-calibrated radiocarbon ages in the NW Himalayan Frontal Thrust System, 30<sup>th</sup> HKT workshop, 6-8 October, 2015, WIHG, Dehradun, India
- Priyanka Singh Rao, Arjun Pandey, Ishwar Singh, R.L Mishra, G.Bhat, HrishikeshBaruah, Pradeep Srivastava, **R. Jayangondaperumal**., Primary surface faulting of the A. D. 1697 and A.D. 1950 great earthquakes along the Main Frontal Thrust, Arunachal Pradesh, NE Himalaya. 30<sup>th</sup> HKT workshop, 6-8 October, 2015, WIHG, Dehradun, India
- Rajeeb L. Mishra, I. Singh, A. Pandey, P.S. Rao, **R. Jayangondaperumal** (2015) Evidence of A.D. 1255 earthquake at Panijhori tea garden, Sikkim Himalaya along the north eastern Himalayan Front, India, 30<sup>th</sup> Himalayan Karakoram Tibet (HKT) workshop, 6-8 October, 2015, WIHG, Dehradun, India (extended Abstract)
- Arjun Pandey, I. Singh, R. L. Mishra, P. S. Rao, G. R. Bhatt, P. Srivastava, Steven G. Wesnousky,**R. Jayangondaperumal**(2015) Preliminary palaeoseismic investigations along the Mishmi Thrust at Roing, Arunachal Pradesh, NE Himalaya, India, 30<sup>th</sup> Himalayan Karakoram Tibet (HKT) international workshop, 6-8 October, 2015, WIHG, Dehradun, India (extended Abstract)
- **R. Jayangondaperumal** and J. L Mugnier Primary surface ruptures of the 1255 AD and 1344 AD great Himalayan earthquakes at Ramnagar, Kumaun Sub Himalaya: Evidence from Geometric and Kinematic analyses of the scarp geometry. Golden Jubilee, Indian Geophysical Union, Workshop on Modern Perspective in Himalayan Geosciences, June 1112, 2013, WIHG, Dehradun.
- **R. Jayangondaperumal**, V.C.Thakur, B.K.Choudhuri, and A.K.Dubey. Surface rupture faulting of the 1950 Assam Earthquake: Evidence from paleoseismological trench

investigation across the Northeastern Himalayan Front, India. T43B-2189, Poster (American Geophysical Union - 2010)

- **R. Jayangondaperumal**, M.S. Murari, P. Sivasubramaniam, A.K. Singhvi, Senthil Kumar, N. Chandrasekar. Luminescence dating of Teri red sand dune in the SE coast, India: Implications of early-mid Holocene environmental changes and dune reddening
- S. Kumar, Wesnosuky, S.G., **R. Jayangondaperumal**, Nakata, T., Kumahara, Y., Singh, V., Beginning to Place Limits on the Timing, Size and Spatial Extent of Great Earthquakes along the Himalayan Frontal Thrust with Paleoseismology (American Geophysical Union - 2009)
- **R. Jayangondaperumal**, A. K. Dubey, S. G. Wesnousky, Senthil Kumar, Paleoseismology of active faults along the Himalayan Frontal Thrust: Implications to Seismic Hazard Assessment (SHA) (IGU, WIHG, Dehradun)
- S. Kumar, Wesnosuky, S.G., **R. Jayangondaperumal**, Nakata, T., Kumahara, Y., Singh, V., Beginning to Place Limits on the Timing, Size and Spatial Extent of Great Earthquakes along the Himalayan Frontal Thrust with Paleoseismology (Geological Society of America, GSA-2008)
- Kumar, S., Wesnousky, Steven G, **Jayangondaperumal**, R, Nakata, T, Kumahara, Y., and Singh, V., (2008). Paleoseismological evidence of surface faulting along the northeastern Himalayan front, India: Timing, Size, and Extent of Great Earthquakes presented in the International seminar on Mountain Building, Climate and Tectonics interactions- 2008 held in WIHG, Oct-23-25, 2008 D. Dun
- **R. Jayangondaperumal**, Senthil Kumar, Steven G. Wesnosuky, Vikram Gupta, A.K. Mahajan, B.R. Arora, N. Suresh (2008) Late Pleistocene activity of intra-basinal Bhauwala Thrust (BT), Dehra Dun, NW Himalaya, presented in the International seminar on Mountain Building, Climate and Tectonics interactions- 2008 held in WIHG, Oct-23-25, 2008 D. Dun
- Vimal Singh, Senthil Kumar, **R. Jayangondaperumal**, Steven G. Wesnousky and Pradeep Srivastava (2008) Morphotectonic development at the NE Himalayan frontal hill, Tezpur, Assam presented in the International seminar on Mountain Building, Climate and Tectonics interactions- 2008 held in WIHG, Oct-23-25, 2008 D. Dun
- **R. Jayangondaperumal**, S. J. Sangode, and P.K. Champati Ray (2007). Late Quaternary Tearing Off of the Main Boundary Thrust, Evolution of Dehradun Transverse Zone, NW Garhwal Himalaya, India: Evidence Based on Magnetic Fabrics, Structural and Geomorphic Features International Conference on Tectonics of the Indian Subcontinents (TOIS), March 3-6<sup>th</sup> 2008, Dept. of Earth Sciences, Indian Institute of Technology Bombay, Powai, Mumbai- 400076
- A.K. Dubey, **Jayangondaperumal**, Sangode, S.J. (2006) Simultaneous thrusting and normal faulting in different segments of a fault during constrictional deformation: Field and AMS studies in the Western Himalaya, 2006, 21<sup>st</sup> HKT Work shop
- Kumar, S, S. G. Wesnousky, T. K. Rockwell, V. C. Thakur, **R. Jayangondaperumal** and R. W. Briggs (2005). "Evidence for a surface rupturing, great earthquake along the Himalayan front of the India during A.D. 1400" was presented in the Centenary seminar on Kangra Earthquake, 4-6 April, 2005, GSI at Palampur, Himachal Pradesh

## National (8)

- **Jayangondaperumal** and others (2018) presented a paper on Great earthquake is real along Himalayan Frontal Thrust: Insight to the 1950 (Mw 8.6) Tibet-Assam earthquake, Golden Jubilee Conference of WIHG held at WIHG, May-16-17, 2018.
- Presented a paper entitled “Paleoseismology of active faults along the Himalayan Frontal Thrust: Implications to Seismic Hazard Assessment in the Himalayan Foreland Basin’ in the 46<sup>th</sup> Annual Convention and meeting on “Evolution of Himalayan Foreland Basin and emerging exploration (Indian Geophysical Union)-5-7 Oct, 2009, WIHG, D.Dun by **R. Jayangondaperumal**, A.K.Dubey, S. G. Wesnousky Kumar, S.
- Presented a paper entitled “Peripheral foreland basin evolution in Eocene-Early Miocene in Northwest Himalaya and Western Nepal” by V.C.Thakur, **R.Jayangondaperumal** in Indian Geophysical Union,-2009, 3-5, Oct, 2009, WIHG, D.Dun.
- Presented a paper entitled Jesus Christ earthquake along the Himalayan Frontal Thrust (HFT), near exit of Beas River, Punjab, NW Himalaya, India in the workshop on Seismogenesis to prediction of earthquake: Himalaya and Indian Shield perspective (SPRED-2009), WIHG, Oct-22-24,2009 by **R. Jayangondaperumal**, A.K.Dubey, S. G. Wesnousky Kumar, S and P.Srivastava.
- Presented a paper entitled “Kinematics of interaction between pressure solution and shear deformation evidence based on AMS by **R.Jaynagondaperumal** and A.K.Duby and N.S.Gururajan presented in National Seminar on Role of fluids in the Crustal Evolution: Special Emphasis on the Himalayan Magmatism, Tectonism and Metallogeny. 2004 WIHG, D.Dun
- **R.Jaynagondaperumal**, Champathi Ray, P.K., Suresh, N., (2005). The paper entitled “Can we discriminate the tectonic or climatic processes in the Foreland basin of the Himalaya? Evidence based on tectonic geomorphology of the DunValley, NW Himalaya was presented in the Sedimentary Basins of the Himalaya: Challenge for the Future &XXII convention of Indian Association of Sedimentologists (IAS 2005) organized at WIHG, Dehra Dun.
- Collision Zone Geodynamic work shop,2007, WIHG, D.Dun
- **R.Jayangondaperumal**,V.C.Thakur, M.A.Malik, M.I.Bhat, Kinematic of Coseismic secondary fractures of 8<sup>th</sup> October Kashmir earthquake WORKSHOP on "October 8 Kashmir Earthquake and after"22-23 March 2008 University of Jammu, Jammu Tawi,J&K India.

#### **g. External Research Fund received & Project Handled:**

##### **Completed National Projects**

1. Paleoseismology along the foothill zone of Central Himalaya, Uttarakhand, India for preparation of Field guide book, Code# NR013, funded by 36th IGC, New Delhi, as PI (36th IGC/Sectt./Field Trips/2018/20.30/541-546, dated 22.07.2019); Cost: Rs. 4 Lakhs
2. Quaternary Landform Evolution along the Himalayan Frontal Thrust of India: Insight to the patterns of strain release along a Continental Convergent Plate Boundary. Cost Rs. 97 Lakhs INR, as a Principle Investigator (PI), MoES, New Delhi.03-06-2014-02-06-2019.
3. Neo–active tectonics of SurinMastgarh anticline and associated structures around Ravi River exit area in the Panjab Sub Himalaya: Implication for Seismotectonics of the Kashmir seismic gap region as a Principle Investigator (PI) (Rs. 32 Lakhs, RJ, Thakur, V.C and Suresh.N),MoES, New Delhi.23-06-2014-12-01-2018



4. Mapping of Neighborhood in Uttarakhand (MANU), Bhagirathi Valley, as Co PI, DST, cost of the Project: INR 32 Lakhs 25.9.2013-4.9.2016, vide letter no. NRDMS/11/3018(G), dated 25.09.2013.
5. Post-2005 Kashmir Earthquake studies for Surface Rupture Deformation and Land Form Changes. (PI; INR3.5 Lakhs, Completed), DST, Govt. of India. November, 2006 only post field survey grant has been given.15.11.2005-15-6-2006.
6. Field studies, magnetic and petro-fabric strain determination along the Frontal and Oblique ramp in the Western Himalaya (INR13.5 Lakhs;Co PI), DST, Govt. of India.10.6.2003-09.6.2006

### **Collaborative National and International Projects**

1. Tectono-Geomorphologic Evolution of the Alaknanda Valley between Alaknanda Fault and Main Central Thrust. Cost: Rs. 34, 48, 080, as Co-Investigator and PI Prof. Y.P.Sundriyal. Ref. GU/Geol/DST(P)/115/2008, 26.5.2008 (2012-2015)21-08-2012-2008-2015.
2. Geological documentation of the damages in Alaknanda and Mandakini valley during the flash flood of 17<sup>th</sup> June, 2013 and to suggest geological, geomorphological and geotechnical remedial measures to minimize the losses in future (As a Co-PI; Total Cost:14.40 Lakhs; PI:Y.P.Sundriyal).16-10-2013-15-10-2015
3. Paleoseismic Investigation along Reasi Thrust, Jammu and Kashmir Himalaya with Prof. J.L.Mugnier, Universite of Savoe, CNRS, Chambéry, France. 14-08-2012-13-08-2014

### **Completed Industrial Funded Projects (1)**

- Paleoseismic and Structural mapping studies for Lower Subansiri river valley Project, Assam. Principle investigator (P.I), Cost: Rs. 60/ Lakhs from National Hydropower Corporation Min. of Power, PC, Faridabad. 09-12-2009 to 8.12.2010.

### **Completed International Projects (3)**

- NSF Project entitled “Structural, Kinematic, and Dynamic Segmentation of the Himalayan Frontal System, NW India” collaborative Research with Prof. Steven G. Wesnousky, Director, Centre for Neotectonic studies, University of Nevada, Reno (FY1999-FY2003) 02-08-2002-01-08-2005.
- NSF Project entitled “Earthquake Geology along the Himalayan Frontal Thrust of India: Insight to Mechanics of Earthquake along a Continental Convergent Plate Boundary” collaborative Research with Prof. Steven G. Wesnousky, Director, Centre for Neotectonic studies, University of Nevada, Reno.15-08-2006-14-08-2009
- Environmental Change and the Indus Civilization-(H-04) with Dr Y. Kumahara, Hiroshima University, Japan. 12-07-2011-11.07.2013

### **AWARDS/FELLOWSHIPS/HONORS/MEMORIAL LECTURES:**

- Conferred **IGU-Anni Talwani Memorial Prize** for the year 2020 by the Indian Geophysical Union.

- IGC'S **17th Prof. Jhingran Memorial Lecture Award** for the year 2019 by the Indian Geological Congress.
- Recipient of **National Geosciences Award-2018** for the subject Natural hazards, by the Min. of Mines, Government of India.
- **Best Paper Award** for the paper entitled "Paleoseismic evidence of a giant medieval earthquake in the eastern Himalaya" in Geophysical Research letters, 43,5707–5715 by Wadia institute of Himalayan Geology, Department of Science and Technology, Govt. of India, Dehra Dun for the year 2017.
- Conferred **Prof. S. S Merh Award** for the year 2016 for the contribution of Quaternary Geology by the Geological Society of India.
- "**Indian Scientific Delegates Award**" to travel advanced countries to know the scientific development under "National Programme for training Scientists and Technologists in Govt. Sector funded by the Department of Science Technology 2006.
- **Best Paper Award** for the paper entitled Magnetic fabrics indicating Late Quaternary seismicity in the Himalayan foothills published in Int. J Earth Sci. (Geol.Rundsch.) by Wadia institute of Himalayan Geology, Department of Science and Technology, Govt. of India, Dehra Dun for the year 2009
- **Best Paper Award** for the paper entitled "Superposed folding of a blind thrust and formation of klippen: results of anisotropic magnetic susceptibility studies from the lesser Himalaya" by Wadia institute of Himalayan Geology, Department of Science and Technology, Govt. of India, Dehra Dun for the year 2001.
- **Jawaharlal Nehru Outstanding Science Talent Award**, Govt. of Tamil Nadu, 1988.
- Recipient of **Merit Scholarship** for Under Graduate degree through **JNOSTA** scheme (1988-1991)

#### a. Fellowships:

- **BOYSCAST** Fellow by the DST Govt. of India, (2010-2011) to the Centre for Neotectonic studies, University of Nevada, Reno with Prof S.G.Wesnousky and Prof. L.A Owen, University of Cincinnati, Ohio, USA
- "**Professor Invitee**" to University of Savoie, LGCA, CNRS Laboratory, Chambéry, France (2009-2010).

#### b. Memorial Lectures:

17<sup>th</sup> Professor Jhingran Memorial Lecture of the Indian Geological Congress (IGC) "Paleoseismology of the Western Part of the Himalayan Central Seismic Gap: Its Implication for Seismic Hazard Assessment and Sustainable Development

#### COUNTRIES VISITED:

USA, France, Japan, Taiwan, Singapore and Honkong

#### NATIONAL/INTERNATIONAL (outside CSIR-NGRI) COLLABORATION:

HNB Garhwal University, BSIP, IUAC, IIRS, PRL (Indian Collaborators)

UMKC-USA, US (France), UoH-Japan (Int. Coll.)

## Inside WIHG Collaborator:

Sedimentology, Geo-Chronology

### PATENT

Joe Vivek, N. Chandrasekar, **R.Jayangondaperumal**, V.C.Thakur, Anandkumar, H., (2017) Method of Exploration and Discrimination of Mineral Abundance in Beach Sand, Published in Official Journal of the Patent Office, Issue No. 19 / 2017; dated 12/5/2017, Page: 14845, Application No. 201741015394, Status: Awaiting Examination results

### SCHOLARSHIPS AWARDED, GATE

- Senior research fellowship awarded by Department of Science and Technology, Govt. of India, 1996-1997
- Junior research fellowship awarded by Department of Science and Technology, Govt. of India, 1994-1996
- Qualified UPSC, GSI, CSIR and Gate exams.

### PH.D. ADVISOR:

DR A.K. DUBEY

### LIST OF PUBLICATIONS

#### (a) Books-authored:

**Jayangondaperumal, R.**, Thakur, V.C., Joe Vivek, Priyanka Singh Rao, Anil Kumar Gupta (2018) *Active tectonics of Kumaun and Garhwal Himalaya*, Springer Natural Hazards, 150 pp. ISBN 978981-10-8242-9

#### (b) SCI Research Papers

1. Singh, I., Pandey, A., Mishra, R. L., Priyanka, R. S., Brice, A., **Jayangondaperumal\*, R.**, & Srivastava, V. (2021). Evidence of the 1950 great Assam earthquake surface break along the Mishmi Thrust at Namche Barwa Himalayan Syntaxis. **Geophysical Research Letters**, 48, e2020GL090893. <https://doi.org/10.1029/2020GL090893>
2. Arjun Pandey, R. Jayangondaperumal\*, György Hetényi, Rao Singh Priyanka, Ishwar Singh, Pradeep Srivastava and Hari B. Srivastava (2021) Establishing primary surface rupture surface rupture evidence and magnitude of the 1697 CE Sadiya earthquake at the Eastern Himalayan Frontal thrust, India, Scientific Reports, Nature Research 11:879, 1-14, <https://doi.org/10.1038/s41598-020-79571-w>
3. Pradeep Srivastava, Anil Kumar, Randheer Singh, Oshin Deepak, Arjit M. Kumar, Yogesh Ray, **R. Jayangondaperumal**, Binita Phartiyal, Poonam Chahal, Pankaj Sharma, Rupa Ghosh, Naresh Kumar and Rajesh Agnihotri (2020) Rapid Lake level fall in Pangong Tso (lake) in Ladakh, NW Himalaya: a response of late Holocene aridity, **Current Science**, vol. 119 (2), 219-231. doi: 10.18520/cs/v119/i2/219-231

4. **R Jayangondaperumal**, Rajeeb Lochan Mishra, Rao Singh Priyanka, Rajeev Kumar Yadav, Durga Prasanna Mohanty, Arjun Pandey, Ishwar Singh, Aravind Anil and Sandipta Dash (2020) Active Tectonics of Himalaya, Rift Basins in Central India and those Related to Crustal Deformation at Different Time Scales, **Proc Indian Natn Sci Acad** 86 No. 1, 445-458
5. Rajeev K. Yadav, V.K. Gahalaut, Param K. Gautam, **R. Jayangondaperumal** K.M. Sreejith, Ishwar Singh, Amit Kumar, V. Joevivek, Ritesh Agrawal, Joshi K. Catherine, S.P. Sati (2020) Geodetic Monitoring of Landslide Movement at two sites in the Garhwal Himalaya, **Himalayan Geology**, Vol. 41 (1), 21-30.
6. V. Joevivek, N. Chandrasekar, **R. Jayangondaperumal**, V. C. Thakur, K. Shree Purnima (2019). An interpretation of wave refraction and its influence on foreshore sediment distribution. **Acta Oceanologica Sinica**, Vol. 38, No. 5, 151–160, <https://doi.org/10.1007/s13131-019-1446-y>
7. Thakur, V.C, **Jayangondaperumal**, R\*V. Joevivek (2019) Seismotectonics of Central and NW Himalaya: plate boundary – wedge thrust earthquakes in thin - and thick - skinned tectonic framework, **Geological Society of London.**, SP 481, DOI: 10.1144/SP481.8, 41-63.
8. **R. Jayangondaperumal** (2019) Paleoseismology of the Western Part of the Himalayan Central Seismic Gap: Its Implication for Seismic Hazard Assessment and Sustainable Development, **Journal of Indian Geological Congress Journal**, Vol. 11(2), 7-29. ISSN 2229-435X
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**(f) Edited volume:**

**EDITED SPECIAL ISSUE**

Earthquake and Active Tectonics of The Himalayan Convergent Boundary, Vol. 462; 30 December 2017 ISSN 1040-6182; 1-236 pp. *Guest Editors:* **R. Jayangondaperumal**, Tina M. Niemi & Naresh Kumar

**(g) Editorial Note:**

**R. Jayangonda Perumal** (2021) Geological Evidence of Great Earthquakes along the Eastern Himalayan Foothills, **Journal Geological Society of India**, Vol.97, Aug. 2021, 823-826.

**(h) Reports/Other Documents:**

- A Geological Excursion Guide Book was prepared for *Yamuna Bird Count, Summer-2005*, Uttarakhand Forest and Wild life Department
- Assessment report of mild tremor affected area Kanyakumari, Muttam submitted to District Collector of Nagerkovil, Tamil Nadu.