

# DR R.JAYANGONDAPERUMAL WIHG, DEHRADUN, INDIA

#### **GOOGLE SCHOLAR PAGE:**

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 Paleomagetic/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 Mussoorrie Syncline, Lesser Himalaya, and U.P, India

2001-2002

## Post Graduate Diploma in GIS Management

University of Madras1991 - 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

December-2022 to April 2023

#### Professor

(Grade Pay-14)

Department of Geology School of Earth and

Environment

Central University of Punjab

(VPO) Ghudda,

Bhatinda, Punjab

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

AssociateProfessor

(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, Chambery, 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:**

December-2022 to April 2023 Professor(On-Lien) (Academic Grade Pay-14) Department of Geology School of Earth and Environment Central University of Punjab (VPO) Ghudda, Bhatinda, Punjab

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

October 2017 To February 2018 Associate Professor (On-Lien)

Thiruvarur, Tamil Nadu

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

- Conducted 3rd Triennial Congress of FIGA (Nov-16-19, 2022)as a convener at the WIHG, DDN
- Conducted as a Convener of the 6th National Geo-Research Scholar meet at Leh, Ladhakh (June-7-10, 2022).
- Organized 36th International Geological Congress (IGC) pre-congress field workshop on Paleoseismology along the Foothill Zone of Central Himalaya, Uttarakhand, India between Feb-25-29, 2020 (NR-013)
- 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.
- À 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 - Himalayan Geology

Associate Editor - Geological Society of India, Bangalore.

Executive Council Members, Geological Society of India.

# f. International/National Seminars/Workshop:

#### International

- 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. Jayang ond aperumal, 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 MountainBuilding, Climate and Tectonics interactions- 2008 held in WIHG, Oct-23-25, 2008 D.Dun
- R.Jayangondperumal, Senthil Kumar, Steven G. Wesnosuky, VikramGupta, A.K. Mahajan, B.R. Arora, N. Suresh (2008) Late Pleistocene activity of intra-basinalBhauwala 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 TechnologyBombay, Powai, Mumbai- 400076
- A.K.Dubey, **Jayayangondaperumal**, 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, 21st 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

- 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 entitledJesus 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 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 Geodymaic 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-Geomorphic 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, Chambery, 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
- "Professur Invitee" to University of Savoie, LGCA, CNRS Laboratory, Chambery, 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

- Daniels, Robyn L, Tina M. Niemi, R. Jayangondaperumal, A. Aravind, Piyoosh Rautela, Arjun Pandey, Lauren D. Murphy (2023) Late Medieval seismicity on the Himalayan Frontal Thrust Fault at Lal Dhang, Uttarakhand, India, Tectonophysics, https://doi.org/10.1016/j.tecto.2023.229934
- 2. Lamont, E.A., Francis J. Sousa, Andrew J. Meigs, **Jayangondaperumal, R.** Rebecca, M. Flowers, Aravind Anilkumar, Danielle Woodring, Edward R. Sobel (2022) Accretion of the NW Himalayan foreland pre-datesLate Cenozoic climate change, **Terra Nova**, 2022;00:1–8,DOI: 10.1111/ter.12627
- 3. Sandeep Panda, Anil Kumar, Pradeep Srivastava, Satyabrata Das, R. Jayangondaperumal, Kuldeep Prakash (2022). Deciphering the role of late Quaternary sea level fluctuations in controlling the sedimentation in the Brahmaputra Plains, Sedimentary Geology, 442 (2022) 106289, https://doi.org/10.1016/j.sedgeo.2022.106289
- 4. Anil Aravind, Rajeeb Lochan Mishra Shraddha Jagtap, **R. Jayangondaperumal\*** V. C. Thakur C.C. Pant V. Joevivek (2022) Detachment folding, growth mechanism and seismic potential in the Jammu Sub-Himalaya, **Journal of Structural Geology**, 155 (2022) 104514, 1-14 https://doi.org/10.1016/j.jsg.2022.104514
- 5. Jagtap,S., Arjun Pandey, R. Jayangondaperumal\*,Sharma,A.K., Anil Aravind, Ishwar Singh, Atul Kumar (2022) Active uplift along uncommon bending moment fault in the northern limb of Surin Mastgarh Anticline, Jammu Sub Himalaya, **Himalayan Geology**, Vol. 43 (2), 2022, pp. 442-456
- 6. A. Aravind, Rahul Devrani, R. Jayangondaperumal\*, C.C. Pant (2022) Non-emergent thrust front along the northwest Jammu Sub-Himalaya: Evidence from channel profile analysis across the Surin Mastgarh Anticline, Himalayan Geology, vol.43 (1B), 303-318.
- 7. **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.
- 8. 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
- 9. 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
- 10. 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
- 11. **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
- 12. 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.
- 13. 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
- 14. 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.
- 15. **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**, Vol. 11(2), 7-29. ISSN 2229-435X
- 16. Kavita Tripathi, A.K. Dubey and **R. Jayangondaperumal** (2019) Mesoscopic, magnetic and petrofabric study of the High Himalayan gneisses and leucogranite along oblique and frontal ramps of the Vaikrita Thrust in Satluj and Bhagirathi valleys: thrust locking and superposed folding, **J. Earth Syst. Sci.**, 128:77 (4):1-23,https://doi.org/10.1007/s12040-019-1094-9
- 17. Arjun Pandey, Ishwar Singh, Rajeeb Lochan Mishra, Priyanka Singh Rao, Hari B. Srivastava, R. Jayangondaperumal\*(2018) Active tectonics in the Assam Seismic Gap between the meizoseismal zone of A.D. 1934 and 1950 earthquakes along eastern Himalayan front, India, J. Earth Syst. Sci. 127:66, https://doi.org/10.1007/s12040-018-0967-7
- 18. Rao Singh Priyanka, R. Jayangondaperumal\*, Arjun Pandey, RajeebLochan Mishra, Ishwar Singh, Ravi Bhushan, Pradeep Srivastava, S. Ramachandran, Chinmay Shah, SumitaKedia, Arun Kumar Sharma and G. R. Bhat (2017) Primary surface rupture of the 1950 Tibet-Assam great earthquake along the eastern Himalayan front, India, Scientific Reports 7: 5433, DOI:10.1038/s41598-017-05644-y.
- 19. Dey, J., **Jayangondaperumal**, **R\*.**, Subham Sarkar, Anamitra Bhowmik (2017) Seismic profile analysis of the Kangra and Dehradun re-entrant of NW Himalayan Foreland thrust belt, India: A new approach to delineate subsurface geometry **J. Earth Syst. Sci.** 126:83, 1-17, DOI 10.1007/s12040-017-0869-0

- 20. **Jayangondaperumal, R.,\*** Robyn L. Daniels, Tina M. Niemi (2017) A paleoseismic age model for large-magnitude earthquakes on fault segments of the Himalayan Frontal Thrust in the Central Seismic Gap of northern India, **Quaternary International**, **462**, 462 (2017) 130-137 http://dx.doi.org/10.1016/j.quaint.2017.04.008
- 21. Rakesh Bhambri, Manish Mehta, Shweta Singh, **R. Jayangondaperumal**, Anil Kumar Gupta, Pradeep Srivastava (2017) Landslide inventory and damage assessment in the Bhagirathi Valley, Uttarakhand, during June 2013 flood, **Himalayan Geology** Vol. 38 (2), 193-205
- 22. Pradeep Srivastava, Rajesh Agnihotri, Deepti Sharma, NarendraMeena, Y. P. Sundriyal, Anju Saxena, Ravi Bhushan, R. Sawlani, Upasana S. Banerji, C. Sharma, P. Bisht, N. Rana and **R. Jayangondaperumal** (2017) 8000-year monsoonal record from Himalaya revealing reinforcement of tropical and global climate systems since mid-Holocene, Scientific Reports, 7: 14515 DOI:10.1038/s41598-017-15143-9.
- 23. **Jayangondaperumal, R.,\***Tina M. Niemi and Naresh Kumar (2017)Earthquakes and active tectonics of the Himalayan convergent boundary, **Quaternary International**, 462, 462 (2017) 1- 2, http://dx.doi.org/10.1016/j.quaint.2017.04.008
- 24. Amit Kumar, AKL Asthana, Rao Singh Priyanka, **R. Jayangondaperumal\***, Anil K Gupta, SS Bhakuni (2017) Assessment of landslide hazards induced by extreme rainfall event in Jammu and Kashmir Himalaya, northwest India, **Geomorphology**, 284, 72–87.
- 25. **Jayangondaperumal**, **R**\*, Kumahara, Y, Thakur, V.C, Kumar Anil, Srivastava Pradeep, ShubhanshuDubey. Joevivek, V, Ashok Kumar Dubey (2017) Great earthquake surface ruptures along backthrust of the Janauri anticline, NW Himalaya. **Journal of Asian Earth Sciences**, 133 (2017) 89–101.
- 26. Mugnier, J.-L., V. Vignon, R. Jayangondaperumal, R. Vassallo, M.A. Malik, A. Replumaz, R.P. Srivastava, F. Jouanne, J.F. Buoncristiani, H. Jomard, J. Carcaillet (2017) A complex thrust sequence in western Himalaya: The active Medlicott Wadia Thrust, **Quaternary International**, 462,109-123(2017)http://dx.doi.org/10.1016/j.quaint2017.05.028
- 27. P. Srivastava, A. Kumar, S. Chaudhary, N. Meena, Y.P. Sundriyal, S. Rawat, N. Rana, R.J. Perumal, P. Bisht, D. Sharma, R. Agnihotri, D.S. Bagri, N. Juyal, R.J. Wasson, A.D. Ziegler (2017) Paleofloods records in Himalaya, **Geomorphology**, 284 (2017), 17-30;https://doi.org/10.1016/j.geomorph.2016.12.011
- 28. Philip, G., Suresh, N., and **Jayangondaperumal** (2017) Late Pleistocene-Holocene strain release by normal faulting along the Main Boundary Thrust atLogar in the northwestern Kumaon Sub Himalaya, India, **Quaternary International**, 462; 50-64; http://dx.doi.org/10.1016/j.quaint.2017.05.022
- 29. Vignon, V., J.-L. Mugnier, R. Vassallo, P. Srivastava, M.A. Malik, R. Jayangondaperumal F. Jouanne, J.F. Buoncristiani, J. Carcaillet, A. Replumaz, H. Jomard, (2017) Sedimentation close to the active MedlicottWadia Thrust (Western Himalaya): how to estimate climatic base level changes and tectonics, Geomorphology, 284 (2017) 175-190; https://doi.org/10.1016/j.geomorph.2016.07.040.
- 30. RajeebLochan Mishra, I. Singh, A. Pandey, P. S. Rao, H. K. Sahoo, R. Jayangondaperumal\* (2016), Paleoseismic evidence of a giant medieval earthquake in the eastern Himalaya Geophysical Research Letters, 43,5707–5715, doi:10.1002/2016GL068739 ((This article has been awarded for the Best Paper with cash prize during the year-20016)
- 31. V. Joevivek, N. Chandrasekar and **R. Jayangondaperumal** (2016) Evaluation of optimal wavelet filters for seismic wave analysis, **Himalayan Geology**, Vol.37, 176-189

- 32. A K Jain, S Dasgupta, O N Bhargava, MdIsrail, **R Jayangondaperumal**,R C Patel, M Mukul, S K Parcha, V Adlakha, K K Agarwal, P Singh,K Bhattacharyya and Pant, N.C (2016)Tectonics and Evolution of the Himalaya, **Proc Indian Natn. Sci. Acad.** 82 No. 3 July Spl Issue 581-604pp.
- 33. Mishra, R.L., **Jayangondaperumal**, **R\***., HrushikeshSahoo (2016) Active tectonics of Dikrong valley, Northeast Himalaya, India: Insight into the differential uplift and fold propagation from river profile analysis **Himalayan Geology**, vol. 37 No.2, 85-94
- 34. Y.P. Sundriyal, Anil D. Shukla, Naresh Rana, **R. Jayangondaperumal,** Pradeep Srivastava, L.S. Chamyal, S.P. Sati and Navin Juyal (2015). Terrain response to the extreme rainfall event of June 2013: Evidence from the Alaknanda and Mandakini River Valleys, Garhwal Himalaya, India. **Episodes** Vol. 38, no. 3, 179-188.
- 35. R. Vassalloa, J.-L. Mugniera, V. Vignonc, M.A. Malik, **R. Jayangondaperumal**, P. Srivastava, F. Jouannea, J. Carcaillet (2015) Distribution of the Late-Quaternary deformation in Northwestern Himalaya, **Earth Planetary Science Letters**, 411, 241-252.
- 36. V. C. Thakur and **R. Jayangondaperumal**\*(2015). Seismogenic active fault zone between 2005 Kashmir and 1905 Kangra earthquake meizoseismal regions and earthquake hazard in eastern Kashmir seismic gap. **Current Science**, vol. 109, no. 3, 610-617
- 37. **R. Jayangondaperumal,\*** UpasanaDevrani, A.K. Dubey (2015) Petrofabricandmagnetic strains in the Garhwal Himalaya: A comparative study in the region of superimposed folding, **Himalayan Geology** 36 (1), 39-47 pp.
- 38. V. C. Thakur, M. Joshi, D. Sahoo, N. Suresh, **R. Jayangondapermal**, A. Singh (2014) Partitioning of convergence in Northwest Sub Himalaya: Estimation of late Quaternary uplift and convergence rates across the Kangra Reentrant, North India, **Int J Earth Sci** (GeolRundsch)DOI 10.1007/s00531-014-1016-7, **Impact factor: 2.5**)
- 39. J.L. Mugnier, A. Gajurel, P.Huyghe, **R. Jayangondaperumal**, F. Jouanne, B. Upreti (2013) Structural interpretation of the great earthquakes of the last millennium in the central Himalaya, **Earth Science Reviews**, 127,30–47. http://dx.doi.org/10.1016/j.earscirev.2013.09.003
- 40. **R. Jayangonaperumal**,\* J. L. Mugnier A. K. Dubey (2013) Earthquake slip estimation from the scarp geometry of Himalayan Frontal Thrust, western Himalaya: Implications for seismic hazard assessment, **Int J Earth Sci (GeolRundsch)**102:1937–1955,DOI 10.1007/s00531-013-0888-2 (2013)
- 41. Kumahara, Y., **Jayangondaperumal, R.,** (2013) Paleoseismic evidence of a surface rupture along the northwestern HimalayanFrontal Thrust (HFT), **Geomorphology,** 180-181), 47-56.
- 42. **R. Jayangondaperumal**,\* M. K. Murari, P. Sivasubramaniam, N. Chandrasekar and A.K. Singhvi (2012) Luminescence dating of fluvial and coastal Red sediments in the SE coast, India, and implications for environmental changes and dune reddening **Quaternary Research** 77, 468–481, doi:10.1016/j.yqres.2012.01.010
- 43. A K Jain, Ahmad, T., Sandeep Singh, Ghosh, S K, Patel, R.C., Rohtash Kumar, Agarwal, K.K., Jayangondaperumal, R., Islam, R., and Bhargava, O.N (2012). Evolution of the Himalaya, Proceeding of Indian National Science Academy, 78 No. 3, 259-275
- 44. **R Jayangondaperumal\***, SG Wesnousky, BKChoudhuri (2011) Near-Surface Expression of Early to Late Holocene Displacement along the Northeastern Himalayan Frontal Thrust at Marbang Korong Creek, Arunachal Pradesh, India **Bulletin of the Seismological Society of America** 101 (6), 3060-3064.
- 45. Kumar, S., Wesnousky, S.G., **Jayangondaperumal**, R, Nakata, T. Kumahara, Y, and Singh, Vimal (2010) Paleoseismological evidence of surface faulting along the

- northeastern Himalayan front, India: Timing, Size, and Spatial Extent of Great Earthquakes. **Journal of Geophysical Research (B),** Volume, 115, B12422, doi:10.1029/2009JB006789.
- 46. V.C. Thakur, **R.Jayangondaperumal**, M. A. Malik. (2010) Redefining Medilcott-Wadia's Main Boundary Fault from Jhelum to Yamuna: An active fault strand of Main Boundary Thrust in Northwest Himalaya, **Tectonophysics**, Volume 489, Issues 1-4, 20 June 2010, Pages 29-42, doi:10.1016/j.tecto.2010.03.014
- 47. **R.Jayangondaperumal,** A.K.Dubey and Sen, K (2010). Structural and magnetic fabric studies of recess structures in the western Himalaya: Implications for 1905 Kangra earthquake. In the Special issue on "Structural Geology-Classical to Modern Concept" edited by M. A. Mamtani, **Journal of Geological Society of India**, Vol.75:212-225.
- 48. **Jayangondaperumal, R.,\*** Dubey, A.K, and Sen, K., (2010) Mesoscopic and magnetic fabrics in arcuate igneous bodies: an example from the Mandi-Karsog pluton, Himachal Lesser Himalaya. **Geological Magazine**, Volume 147 / Issue 05, 652-664 doi:10.1017/S0016756810000105
- 49. **Jayangondaperumal, R,\***Dubey, A.K., Senthil Kumar, B., Wesnousky, Sangode, S. J, (2010) Magnetic fabrics indicating Late Quaternary seismicity in the Himalayan foothills. **International Journal of Earth Sciences (GeolRundsch),**Volume 99, Supplement 1, 265-278. DOI 10.1007/s00531-009-0494-5, 2010,(This article has been awarded for the Best Paper during the year-2009-10.)
- 50. Champati Ray, P.K., Parvaiz, I., **Jayangondaperumal, R.,** Thakur, V.C., Dadhwal, V.K., and Bhat, F.A (2009) Analysis of seismicity-induced landslides due to the 8 October 2005 earthquake in Kashmir Himalaya. **Current Science,** vol. 97, No. 12, 1742-1751.
- 51. V.C. Thakur, **R.Jayangondaperumal**, and Suresh, N (2009). Late Quaternary-Holocene fold and landform generated by morohogenic earthquakes in Chandigarh anticlinal ridge in Panjab Sub Himalaya. **Himalayan Geology** Vol.30, No.2, 103-113.
- 52. **R.Jayangondaperumal**,\*V.C.Thakur (2008). Kinematics of Coseismic Secondary Surface Fractures on Southeastward Extension of the Rupture Zone of Kashmir Earthquake. **Tectonophysics**, V.446,61-76 doi:10.1016/j.tecto.2007.10.006
- 53. **R. Jayangondaperumal\***, Thakur, V.C., Suresh, N. (2008). Liquefaction features of the 2005 Kashmir earthquake and evidence of paleoearthquakes near Jammu, Kashmir Himalaya. **Current Science** Vol. 95, NO. 8,1071-0177.
- 54. K.Sen, **R.Jayangondaperumal**, A.K.Dubey (2007). Interplay of deformation and pluton growth in the Lesser Himalaya (NW India): implications for pre-Himalayan extensional tectonics and magmatism. **Himalayan Geology**, Vol., 28, 3, 18-19. (Ext.Abstract).
- 55. **R. Jayangondaperumal**,\*A.K.Dubey, S.J.Sangode, (2007).Late Quaternary evolution of forelimb-seismogenic fault along the HFT: Implications to aseismic and coseismic deformation a geological perspective. **Himalayan Geology**, Vol., 28, 3. 37-38 (Ext.Abstract).
- 56. Kumar, S., S. G. Wesnousky, T. K. Rockwell, V. C. Thakur, R. W. Briggs and **R.Jayangondaperumal** (2006). Paleoseismic evidence of great surface-rupture earthquakes along the Indian Himalaya, **Journal of Geophysical Research** Vol. 111, B03304, doi:10.1029/2004JB003309.
- 57. V.C.Thakur, **R.Jayangondaperumal**, P.K.Champatiray, M.I.Bhat, M.A.Malik (2006). 8th October Kashmir earthquake and the seismic hazard assessment in Northwest Himalaya. **Journal of Geological Society of India**Vol.68, 187-200.
- 58. A.K.Dubey, Jayangondaperumal, R.,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, Vol.26,2, **Journal of Asian Earth Sciences**, Special issue 21st HKT workshop (Extended Abstract).
- 59. P.K.Champati Ray, **R.Jayangondaperumal**, V.C. Thakur, M.I. Bhat, M.A. Mallik, Vivek Kr. Singh, R.C. Lakhera, (2005). A Quick Appraisal of Ground Deformation in Indian Region due to the October 8, 2005 Earthquake, Muzaffarabad, Pakistan. **Journal of the Indian Society of Remote sensing**, Vol.33, No., 4, 465-473.
- 60. **R.Jayangondaperumal**,\*A.K.Dubey,S.J.Sangode&K.V.Sathyanarayana (2001) Superimposed folding, finite strain and magnetic lineation in the Mussoorie Syncline, Lesser Himalaya: implications for regional thrusting and the Indian Plate motion. **Himalayan Geology,** Vol. 22(1), 207-216.
- 61. **R.Jayangondaperumal\*** and A. K. Dubey (2001) Superposed folding of a blind thrust and formation of Klippen: results of anisotropic magnetic susceptibility studies from the Lesser Himalaya. **Journal of Asian Earth Sciences** Vol., 19, 713- 725. https://doi.org/10.1016/S1367-9120(00)00066-3 (*This article has been awarded for the Best Paper with cash prize during the year-2001-02.*)

# Book Chapter (6)

- 1. Jouanne, F., Mugnier, J.L., Vassallo, R., Munawar, N., Ahmed, A., Awan, A.A., Malik, M.A., **Jayangondaperumal, R.,** (2023) Recent and Present Deformation of the Western Himalaya, Himalaya, Dynamics of a Giant 3: Current activity of the Himalayan Range, Edited by Rodolphe CATTIN and Jean-Luc EPARD © **ISTE Ltd**, DOI: <a href="https://doi.org/10.1002/9781394228683.ch7">https://doi.org/10.1002/9781394228683.ch7</a>, 193-216,
- 2. V. C. Thakur, M. Joshi, and **R. Jayangondaperumal** (2020) Active Tectonics of Himalayan Frontal Fault Zone in the Sub-Himalaya, Chapter 12, in Geodynamics of the Indian Plate, edited by N. Gupta, and S. K. Tandon, **Springer Geology**, 439-466 pp, https://doi.org/10.1007/978-3-030-15989-4\_12: ISSN No: 978-3-030-15989-4
- 3. Champatiray, P.K., Parvaiz, I, **Jayangondaperumal, R.,** Thakur, V.C., Dadhwal, V.K (2018) Earthquake-Triggered Landslide Modeling and Deformation Analysis Related to 2005 Kashmir Earthquake Using Satellite Imagery, Chapter-26 Pages 433-450, Integrating Disaster Science and Management. eBook ISBN: 9780128120576; Paperback ISBN: 9780128120569, **Elsevier Publisher**, 486 pp.
- 4. Mehta M., Bhambri R., **Perumal J.,** Srivastava P., Gupta A.K. (2018) Uttarakhand Calamity: A Climate Revelation in the Bhagirathi River Valley Uttarakhand, India. In: Pal I., Shaw R. (eds) Disaster Risk Governance in India and Cross Cutting Issues. Disaster Risk Reduction (Methods, Approaches and Practices) **Springer**, Singapore, ISBN 979-981-10-3309-4
- 5. **R.Jayangondaperumal** (2014)Teri Red Sands, Tamil Nadu, Landscapes and Landforms of India, 211-216,pp Ed V.S.Khale, in World Geomorphological Landscapes, Series Ed., P.Mignon, Springer 271-pp ISBN: 978-94-017-8028-5 (Print) 978-94-017-8029-2 (Online)
- A.K. Dubey and R.Jayangondaperumal (2005). One Pop-Up Klippen in the Mussoorie Syncline, Lesser Himalaya: Evidence from field and model deformation Studies. In: P.S.Saklani (Ed.), Himalaya (Geological Aspects) (pp. 203-222) Vol.3, Satish Serial Publishing House. New Delhi, India, ISBN: 9788189304041

# (d) Non-SCI Articles

#### FIELD GUIDE BOOK

R.Jayangondaperumal and others (2019) Paleoseismology along the foothill zone of Central Himalaya, Uttarakhand, India, (NR013) Pre conference field workshop February 25-29, 2019, 36<sup>th</sup> International Geological Congress (IGC), 1-55pp.

R. Jayangondaperumal, V.C. Thakur, Meera Tiwari (2015) Himalayan Frontal Folds thrust Belts, Excursion Guide Special Publication No. 3, 30th Himalaya- Karakoram-Tibet Workshop, Wadia Institute of Himalayan Geology, Dehradun 248001 (India), 1-15pp.

## (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

Special Issue in the memory of Prof. Late K.S. Valdiya, Vol. 43 IB 2022 ISSN 0971-8966; 123-382 pp. Guest Editors: V.C.Thakur, R. Jayangondaperumal, and S.K.Parcha

## (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.