

# RESUME

## Shilpa Pal, Ph. D.

Associate Professor

Delhi Technological University  
(Formerly Delhi College of Engineering)  
Delhi

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**Date of Birth** 06-02-1981

**Area(s) of Interest** 2-D & 3-D Seismic Analysis of Dams and Seismic Slope Stability Analysis, Damage detection in buildings, Biofortified Concrete, Green Materials in Construction.

### ACADEMIC RECORD

Educational Qualifications	Discipline	Year	Board/ Institution	CGPA/ %
Post Doctoral Visit		1 <sup>st</sup> June 2017 – 31 <sup>st</sup> July 2017	Norwegian Geotechnical Institute -	
Ph D	Earthquake Engineering	2008	IIT Roorkee	N.A.
M. E. (Gold Medalist)	Structures	2004	Punjab Engineering College, Chandigarh	81.76 %
B. E. (Hons.)	Civil	2002	Thapar Institute of Engineering & Technology, Patiala	77.85 % (8.65 / 10)
12 <sup>th</sup>	Science	1998	PSEB	73.50 %
10 <sup>th</sup>	Science	1996	CBSE	77.80 %

### ACHIEVEMENTS

- Winner of the drawing completion conducted by Itasca Consulting group, Minneapolis, USA held at the **Seventh International Conference on Case Histories in Geotechnical Engineering** in Chicago from 1st – 4th May 2013.

- Jan [2005] Awarded Ministry of Human Resource Development (MHRD) Fellowship to pursue Ph.D. in the Deptt. of Earthquake Engineering at IIT Roorkee.
- [2004] Gold Medalist for standing First in M.E.(Civil).
- [2003] First Runner-up in the 12<sup>th</sup> Annual Concrete Cube Competition 2003 organized by India Chapter of American Concrete institute and ACC Ltd.
- [1998, 2001] Awarded Scholarship for first and third year academic achievement at BE Level at Thapar Institute of Engineering and Technology, Patiala.

## **RESEARCH ACTIVITIES**

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- **Name of Guide:** Prof. D.K.Paul & Mr. A.D.Pandey (DEQ, IIT Roorkee)
- **Topic:** EFFECT OF FOUNDATION AND DAM DISCONTINUITIES ON THE RESPONSE OF CONCRETE GRAVITY DAM
- **Ph.D. GUIDING: 04**
  - Yudhveer Singh (Working Professional) – Rainfall Runoff Modelling for urbanized Watersheds since 29<sup>th</sup> December 2016 – **Thesis submitted**
  - Ruchi Saraswat (Working Professional) - Study on Environmental Development and Disaster in Upper part of Bhagirathi Valley, Garhwal Himalayas with particular focus on the Disaster Risk Reduction since September 2013.
  - Aditi Singh (Full Time) – Landslide Hazard, Vulnerability and Risk Assessment in and around Gopeshwar Township of Chamoli district, Garhwal Himalayas since July 2015.
  - Sachin Tiwari (Full Time) - Studies in Development of Biofortified Concrete since July 2015.
- **M.TECH DISSERTATION: 118 (guided) + 10 ongoing**
- **PROJECTS: 102 (guided)**
- **SEMINAR: 102 (guided)**
- In the areas as follows:**
  - Green Materials in Construction
  - Seismic Analysis of Multistoried Buildings

- Application of Soft Computing Techniques in Civil Engineering with particular focus of tuned mass dampers.
- Damage detection in Buildings

➤ **PUBLICATIONS**

- International/National Conferences: 42
- International/National Journal: 25
- Report: 01

➤ **PROJECTS**

- Involved in Consultancy work in GBU such as material testing, etc.
- Worked as Co-PI in the project “Seismic Vulnerability Assessment of Building types in India” sponsored by NDM, Delhi in collaboration with Centre of Excellence in Disaster Mitigation & Management, IIT Roorkee, 2011.

**MEMBER OF INSTITUTIONAL BODIES**

<b>Society/Association</b>	<b>Membership</b>	<b>W.E.F</b>
Indian Society of Earthquake Technology	Life Member(LM 1239)	2005 Onwards
Institute of Engineers	Associate Member(AM095277-2)	2008 Onwards
Indian Society for Construction Materials and Structures	Life Member(LM 2015005)	21 <sup>st</sup> July 2015
Indian Concrete Institute (ICI)	Life Member (11827)	25 <sup>th</sup> October 2016
Soft Computing Research Society (SCRS)	Life Member (2017/4/46)	March 2017
The Indian Science Congress Association	Life Member (L33596)	September 2017
Indian Association of Structural Engineers	Life Member (M 252)	May 2018

**TEACHING EXPERIENCE**

<b>INSTITUTE</b>	<b>BRIEF DESCRIPTION</b>	<b>POST</b>	<b>Date of Joining</b>	<b>Date of Leaving</b>
Delhi Technological University	Teaching UG,PG	Associate Professor	10 October 2018	Till date
Gautam Buddha	Head of Department for	Assistant	28 Oct	09 Oct 2018

University, Greater Noida	03 years Teaching B.Tech., M.Tech., Ph.D.	Prof.	2010	
Galgotia College of Engineering & Technology, Greater Noida	Teaching B.E.	Assistant Prof.	2 <sup>nd</sup> March 2010	27 Oct 2010
Thapar University, Patiala	Teaching B.E. & M.E.	Assistant Prof.	18 August 2008 – 1 March 2010	
Indo Global College of Engineering, Ropar, Punjab	Taught B.E. & Architecture	Lecturer	21/6/2004	2/01/2005

### **EXPERT LECTURES**

1. Lecture on “Codal Provisions for Seismic Design and Ductility Considerations of Tall Buildings” 20<sup>th</sup> July 2018 in the faculty development programme on Planning and Design of High Rise Buildings, GNIOT, Greater Noida from 16<sup>th</sup> -20<sup>th</sup> July 2018.
2. Lecture on “Earthquake Resistant Design of Structures” on 29<sup>th</sup> March 2018 in the Department of Civil Engineering, ABES College, Ghaziabad.
3. Lecture on “Seismic Analysis of Dams and Landslides” in the Faculty Development Programme on 10<sup>th</sup> December 2017 Earthquake Resistant Design of Structures organized by GNIOT from 08<sup>th</sup> – 12<sup>th</sup> December 2017.
4. Lecture on “Lessons learnt from past earthquakes and New Codal provision IS 1893:2016 (Part-I)” in the Faculty Development Programme on 06<sup>th</sup> July 2017 on Earthquake Resistant Design of Structures organized by AKGEC from July 3 – 10<sup>th</sup> July 2017.
5. Lecture on “Seismic Analysis of Dam Foundations” at a Workshop on Earthquake Related disaster organized by Centre for Disaster Management Studies at Aligarh Muslim University on 26<sup>th</sup> April 2012.
6. Lecture on the topic Effect of Foundation Discontinuity on Dam Response in an International Course on “Earthquake Risk Mitigation” for participants from SAARC Countries at IIT Roorkee Extension centre at Greater Noida organized by Centre of Excellence in Disaster Mitigation & Management and SAARC Disaster Management Centre, New Delhi on 14 June 2011.
7. Lectures & Practical’s on Modeling of Dams using UDEC/3DEC in the Short Term Course on EQ Resistant Design of Embankment & Concrete Gravity Dams organized

by Department of Earthquake Engineering and Continuing Education Centre, IIT Roorkee on 9<sup>th</sup> -14<sup>th</sup> February, 2009.

8. Lectures & Practical's on Modeling of Dams using UDEC/3DEC in the Short Term Course on Modeling and Analysis of Dam Systems Subjected to Earthquakes organized by Department of Earthquake Engineering and Continuing Education Centre, IIT Roorkee on 18<sup>th</sup> -23<sup>rd</sup> May, 2009.
9. Lectures & Practical taken on Modeling of Dams using UDEC/3DEC in the Short Term Course for NHPC Engineers on Earthquake Resistant Design of Embankment and Concrete Gravity Dams organized by Department of Earthquake Engineering and Continuing Education Centre, IIT Roorkee on 4-9 February, 2008.
10. Lecture & Practical taken on Modeling of Dams using UDEC/3DEC and Reservoir Rim Stability Analysis in the Short Term Course for CWC & NTPC Engineers on Seismic Analysis and Design of Large Dams organized by Department of Earthquake Engineering and Continuing Education Centre, IIT Roorkee on 12-24 March, 2006.

#### **COURSES/WOKSHOP/CONFERENCE/LECTURE ORGANIZED**

- Organized a Short Term Training Programme on “Computer Aided Engineering Graphics and Drawing” from 13<sup>th</sup> to 17<sup>th</sup> June 2011 at Gautam Buddha University.
- Organized a 3 days training programme with Dr. V.K. Shanwal on Rapid Visual Screening of Buildings jointly with NIDM, Sponsored by NIDM GOI, Ministry of Home Affairs, in School of Engineering, GBU from 19<sup>th</sup> – 21<sup>st</sup> June 2013.
- Organized one day Workshop of “Seismic Design” jointly with Civil Simplified, Bangalore on 28<sup>th</sup> March 2014 at Gautam Buddha University.
- Organized one day Workshop on “Research Areas in Structural Engineering” on 14<sup>th</sup> September 2015 at Gautam Buddha University.
- Organized one day Workshop on “Nature Inspired Algorithms & its Application in Engineering” on 28<sup>th</sup> March 2016 at Gautam Buddha University.
- Organized one day Workshop on “STAAD Software” on 14<sup>th</sup> March 2016 in collaboration with CEPTA Infotech Pvt. Ltd at Gautam Buddha University.
- Organized one day Workshop on “Primavera” on 29<sup>th</sup> September 2016 in collaboration with CEPTA Infotech Pvt. Ltd at Gautam Buddha University.
- Organized a Short Term Training Programme on “Application of Techniques/Tools in Engineering” from 9<sup>th</sup> to 14<sup>th</sup> October 2017 at Gautam Buddha University

- Organized one day workshop on “Primavera” on 04<sup>th</sup> April 2018 in collaboration with CEPTA Infotech Pvt. Ltd at Gautam Buddha University.
- Organized one day workshop on “AutoCAD and Revit Architecture” on 05<sup>th</sup> April 2018 in collaboration with CEPTA Infotech Pvt. Ltd at Gautam Buddha University.

### **COURSES/WORKSHOP/LECTURE ATTENDED**

- “Earthquake Engineering Literature Survey Workshop” organized by NICEE, NPEEE & IIT Kanpur from 21<sup>st</sup> -26<sup>th</sup> August 2006.
- “Structural Steel Design for University Faculty” organized by Thapar University (Patiala) & INSDAG (Kolkata) from 1<sup>st</sup> – 6<sup>th</sup> December 2008.
- Two day workshop on “Research Methods in Educational Technology,” organized by JIIT, Noida and IIT Bombay on 2nd and 9th February 2013.
- “The Bentley Learning Conference” organized by BENTLEY from 24<sup>th</sup> -25<sup>th</sup> Nov. 2015 at Delhi.
- One week STTP on “Research Techniques in Information and Communication Technology” from 30<sup>th</sup> January to 04<sup>th</sup> February 2017, organized by SOICT, GBU, G. Noida.
- One week FDP on “Recent Advances in Concrete Technology and Sustainable Concrete” from 15<sup>th</sup> – 19<sup>th</sup> March 2017 organized by ITS Engineering College, G. Noida and ICI.
- One day Workshop on “Advances in Corrosion in Concrete Structures – Science, Prevention and Repair” organized by CSIR-CRRI, New Delhi on 24<sup>th</sup> April 2017.
- Two day National Workshop on NBC 2016 & Recently revised Seismic Codes – Impact on Structural Design, Construction & Safety of Buildings” organized jointly by the IAStructE and BIS, New Delhi, 27<sup>th</sup> & 28<sup>th</sup> June 2017.

### **CONFERENCES ATTENDED**

- 1 Workshop on *Seismic Hazard and Risk Assessment* from 18<sup>th</sup> -19<sup>th</sup> March 2006 organized by DEQ, IIT Roorkee & INPIC in collaboration with NGI and NORSAR, Norway.
- 2 Workshop on *Earthquake Engineering for Teachers* from 18<sup>th</sup> – 19<sup>th</sup> August 2006 organized by DEQ, IIT Roorkee & NPEEE, MHRD.

- 3 1<sup>st</sup> Indian Disaster Management Congress from 29<sup>th</sup> -30<sup>th</sup> November 2006 organized by NIDM, New Delhi.
- 4 13<sup>th</sup> Symposium on *13<sup>th</sup> Earthquake Engineering 13SEE* from 18<sup>th</sup> – 20<sup>th</sup> December 2006 organized by DEQ, IIT Roorkee & ISET Roorkee.
- 5 Workshop on *NCFRS* from 26<sup>th</sup> - 27<sup>th</sup> May 2007 organized by Department of Civil Engineering IIT Roorkee.
- 6 National Seminar on *Recent trends in Geotechnical and Structural Engineering* from 22<sup>nd</sup> – 23<sup>rd</sup> December 2007 organized by DSE, MNIT Jaipur.
- 7 Diamond Jubilee Conference on *Landslide Management Present Scenario & Future Directions* from 10<sup>th</sup> – 12<sup>th</sup> February 2008 organized by CBRI, Roorkee.
- 8 14<sup>th</sup> Symposium on Earthquake Engineering 14SEE from 17<sup>th</sup> – 19<sup>th</sup> December 2010 organized by DEQ, IIT Roorkee & ISET Roorkee.
- 9 Seventh International Conference on Case histories in Geotechnical Engineering from 1<sup>st</sup> – 4<sup>th</sup> May 2013 organized by Missouri University of Science and Technology, Wheeling (Chicago), Illinois, USA.
- 10 16<sup>th</sup> conference of IAMG on geostatistical and geospatial approaches for the characterization of natural resources in the environment: challenges, processes and strategies, 17-19 October 2014, JNU, New Delhi.
- 11 International Conference on Trends and Recent Advances in Civil Engineering (TRACE 2016), 11-12<sup>th</sup> August 2016, Amity University, Noida.
- 12 International Conference on Emerging Technology in Structural Engineering (ETSE 2017), 17-18<sup>th</sup> March 2017, Nagpur.
- 13 1<sup>st</sup> International Conference on New Frontiers in Engineering, Science and Technology, 8<sup>th</sup> -12<sup>th</sup> January 2018, DTU, Delhi.
- 14 2<sup>nd</sup> International Conference on Advances in Concrete, Structural and Geotechnical Engineering (ACSGE 2018), 26-28<sup>th</sup> February 2018, BITS Pillani.
- 15 International Conference on Advances in Construction Materials and Structures (ACMS 2018), 7-8<sup>th</sup> March 2018, IIT Roorkee.

### **ADMINISTRATIVE RESPONSIBILITIES:**

- Head of Department of Civil Engineering from 13<sup>th</sup> July 2015 to 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Expert Member for the Board of Studies from 18 April 2011 to 09<sup>th</sup> October 2018 at Gautam Buddha University.

- Faculty coordinator of Civil Engineering Society CEAS GBU from 12th November 2016 to 25<sup>th</sup> September 2018 at Gautam Buddha University.
- Member of the committee for selection of guest faculty in the Department of Civil Engineering from 2012 to 2018 at Gautam Buddha University.
- Lab – in – charge of Concrete Lab, Material Testing Lab, Structural Analysis Lab – I, Transportation Lab and STAAD Lab at Gautam Buddha University till 09<sup>th</sup> October 2018.
- Ph.D. Coordinator from 10<sup>th</sup> January 2018 to 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Department RTI Coordinator from 10<sup>th</sup> January 2018 to 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Established the library of the Department of Civil Engg, at Gautam Buddha University.
- Involved in the revision and development of the course structure and syllabus of the programmes namely 05 Yr Integrated B.Tech. + M.Tech., 04 Yr B.Tech. for Lateral entry students and 02 Yr M.Tech Structural Engineering since 2011 to 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Developed the rules of consultancy in the Department of Civil Engineering 09<sup>th</sup> October 2018 at Gautam Buddha University and did consultancy work from November 2017 till 09<sup>th</sup> October 2018.
- Survey Lab– in – charge from 10/10/2011 to 22/3/2012 at Gautam Buddha University.
- Faculty-in-charge of School Newsletter “SPECTRUM” from 2011 to 2014 (July) and 10<sup>th</sup> January 2018 - 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Member of the expert panel for Ph.D. interviews in Department of Civil Engineering for admission in academic session 2015-16 at Gautam Buddha University.
- Member of organizing committee if ITech-2012 conducted by SOE from 17<sup>th</sup> – 18<sup>th</sup> March 2012 at Gautam Buddha University.
- Chairperson, The Other Backward Class Committee w.e.f. 09<sup>th</sup> December 2017 to 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Member of coordinating committee of the University for NAAC inspection inspection held from 04<sup>th</sup> -06<sup>th</sup> October 2018 at Gautam Buddha University.



- Member of core committee of the University for 12B UGC inspection held in Feb 2018 at Gautam Buddha University.
- Member, Proctorial Board from 29th July 2013 to 11th April 2014 and from July 2015 to 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Member, Faculty Club of GBU from 2nd July 2015 to 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Member of Council for Sport Affairs from 15 June 2011 till 8th October 2013 and from 30th October 2017 to 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Member of the committee to celebrate the birth centenary of Pt. Deen Dayal Upadhyay from 11th July 2017 to 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Member of the committee to make the mark - sheets of the examination section online from 11th July 2017 to 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Member of the organizing committee of SWACHHTA PAKHWADA from 1st – 15th Sept 2017 09<sup>th</sup> October 2018 at Gautam Buddha University.
- Deputy Centre Superintendent at GBU centre for GPT/GTU/GPTR 2017 held on 28th May 2017.
- University Coordinator (Examinations) from 22<sup>nd</sup> August 2012 till 23<sup>rd</sup> Jan 2014 and from 01<sup>st</sup> July 2015 – 10<sup>th</sup> August 2016 at Gautam Buddha University.
- Member of the screening committee for the post of draftsman, maintenance department for retired persons and Assistant Professor in Civil Engineering and Architecture at Gautam Buddha University.
- Member of the Degree and Medal preparation Committee for the 1st Convocation at Gautam Buddha University.
- Centre superintendent of GBTU entrance exam of university at centre GBU held on 23 & 24 April 2016 at Gautam Buddha University.
- Nodal Officer of entrance exam for written test for nurse grade - II conducted by SSPH&PGTI on 28th February 2016 held at GBU.
- Nodal Officer of entrance exam for written test for recruitment of technician & pharmacist conducted by SSPH&PGTI on 17th April 2016 held at GBU.
- Faculty coordinator of GBU Adventure Club of GBU Cultural Council from June 2011 to 25th August 2016 at Gautam Buddha University.
- Member of SRC of the Mr. Ajay Satija, Ph.D. Student of Department of Applied Mathematics, SOVSAS, GBU from 2015 to till date.

- Chairperson, sports council from 9<sup>th</sup> October 2013 to June 2014 at Gautam Buddha University.
- Assistant Centre Superintendent for entrance examination GPTU 2011 at GBU centre.
- Member of the International Scientific Committee of 16th conference of IAMG on “Geostatistical and geospatial approaches for the characterization of natural resources in the environment: challenges, processes and strategies”, 17-19 October 2014, JNU, New Delhi.
- Convener and chairman of the Session 8: Engineering Geology and Geotechnical Engineering in the 16th conference of IAMG on “Geostatistical and geospatial approaches for the characterization of natural resources in the environment: challenges, processes and strategies”, 17-19 October 2014, JNU, New Delhi.
- Member of the Executive Committee of ICI Western UP Ghaziabad Centre from September 2017 onwards.

## PERSONAL PROFILE

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**Marital status.....**Married  
**Blood Group** O+  
**Weight** 80 kg; **Height** : 168 cm  
**Category** General  
**Father's Name** (Late) Dr. Sat Pal Garg  
**Corresp. Add.** W/o Naveen Pareek, Scientist ‘B’, National Technical Research Organization, Govt of India, Opposite Kala Vihar Apartments, Pocket – IV, Phase – I, New Delhi - 91  
**Permanent Address** C/o Sh. S.N.Pareek, Plot No. 29 A, Nanu Nagar, Murlipura, Jaipur 302039  
**Languages Known** English, Hindi, Punjabi

## REFERENCES

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**Dr. D. K. Paul**, Retd. Prof. Emeritus, DEQ, IIT Roorkee, dpaulfeq@iitr.ernet.in  
**Prof. M. L. Sharma**, Professor, DEQ, IIT R, mukatfeq@iitr.ernet.in, Mb: 09412075062  
**Prof. Amjad Masood**, Professor, Department of Civil Engineering, Aligarh Muslim University, Aligarh, Amjadmasood1@rediffmail.com, Mb: 09410426876  
**Dr. Amir M. Kaynia**, Norwegian Geotechnical Institute (NGI), Oslo, Norway, Amir.M.Kaynia@ngi.no  
**Dr. Rajinder Bhasin**, Senior Geologist, Norwegian Geotechnical Institute (NGI), Oslo, Norway, rkb@ngi.no

## List of Papers Published in Conferences/Workshop

### NATIONAL CONFERENCES

1. **Shilpa Pal**, A.D. Pandey and D.K. Paul (2006). “Dam Foundation Interaction Studies – A Review,” Proceedings of the National Conference on Earthquake Disaster: Technology and Management, Allahabad, India, February 11-12, Paper No. IV-28-32.
2. **Shilpa Pal**, D.K. Paul and A.D. Pandey (2006). “Influence of Foundation Discontinuities on a Concrete Gravity Dam,” Proceeding of the Workshop on Earthquake Engineering for Teachers, Roorkee, India, August 18-19, Pg. 75-86.
3. D.K. Paul, A.D. Pandey. and **Shilpa Pal** (2007). “Influence of Dam Foundation Discontinuities on the response of Concrete Gravity Dam,” Proceeding of NCFRS – 2007, Pg 31-36, May 23-24, Roorkee.
4. **Shilpa Pal**, D.K.Paul, A.D.Pandey (2007), “Effect of Discontinuities on a Concrete Gravity Dam,” Proceedings of RTGSE – 2007, Pg 265-270, Dec 22-23, Jaipur.
5. **Shilpa Pal**, D.K. Paul (2008). “Modeling Failure Mechanism to explain Rock Slope Stability,” Proceeding of Landslide Management – Present Scenario & Future Direction, Feb 10-12, 2008, CBRI, Roorkee.
6. Shilpa Pal (2012), “Stability Analysis of Rock Slope under Blasting,” Proceedings of the 2nd National Conference on Trends and Recent Advances in Civil Engineering, 27<sup>th</sup> September 2012, Pg 36-39, ISBN: 978-93-81583-65-4.
7. H. Bhatia, A. Chaurasia, **Shilpa Pal**, S.S. Patel (2016), “Effect of Masonry Infill on RC Buildings,” Role of Civil Engineering in Nation Building (RCNB-2016), 16<sup>th</sup> & 17<sup>th</sup> April, Roorkee. (proceedings not published)
8. Sameer Vyas, Neetu Singh, Mohmmad Sameer, **Shilpa Pal** (2017), “Development of Fly ash based Green Concrete using Nano- Silica,” Proceeding of poster abstracts, Nano India 2017, 15-16<sup>th</sup> March 2017, New Delhi.
9. Shivangi Sharma, V.V.L.Kanta Rao, **Shilpa Pal** (2018), “Experimental Investigation for carbonation of some concrete members,” 19<sup>th</sup> National Conference on Corrosion Control, 5-7 December 2018. (Accepted)

## INTERNATIONAL CONFERENCES / CONGRESS

1. D.K. Paul and **Shilpa Pal** (2006). “Seismic Stability of Cracked Koyna Dam,” Proceeding of 2<sup>nd</sup> International Congress on Computational Mechanics and Simulation, Guwahati, India, 8<sup>th</sup> -10<sup>th</sup> Dec 2006, ISBN: 8189866184, 8189866168, 9788189866181.
2. **Shilpa Pal**, D.K. Paul and A.D. Pandey (2006). “Dynamic Analysis of Cracked Concrete Gravity Dam,” Workshop on Seismic hazard and Risk Assessment, New Delhi, March 18-19, SHRA-05.
3. **Shilpa Pal**, D.K. Paul and A.D. Pandey (2006). “Case Studies of Dam Failures: A Geological Insight,” Workshop on Seismic hazard and Risk Assessment, New Delhi, March 18-19, SHRA-09.
4. **Shilpa Pal**, N.V.V Raghvan, D.K. Paul (2006). “3-D Analysis of Koyna Dam Using DEM,” Workshop on Seismic hazard and Risk Assessment, New Delhi, March 18-19, SHRA-15.
5. Tewdros Mulat, Nand K. Kolpate, **Shilpa Pal**, D.K. Paul (2006). “Seismic Response of Tunnels in Fractured Rock Mass using DEM,” Workshop on Seismic hazard and Risk Assessment, New Delhi, March 18-19, Pg. SHRA-06.
6. N. Kolpate, T. Mulat, **Shilpa Pal**, D.K. Paul (2006). “Seismic Response of Underground Cavities in Jointed Rock Mass using DEM,” Workshop on Seismic hazard and Risk Assessment, New Delhi, March 18-19, Pg. SHRA-07.
7. R.K. Bhasin, A.M. Kaynia, D.K. Paul, Y. Singh and **Shilpa Pal** (2006). “Effect of Seismicity on Rock Support in Tunnels of Different Sizes,” Workshop on Seismic hazard and Risk Assessment, New Delhi, March 18-19, Pg. SHRA-13.
8. **Shilpa Pal**, D.K.Paul, A.D.Pandey, Rajinder Bhasin and Amir M. Kaynia (2006). “Effect of Discontinuities on the seismic response of Koyna Dam,” Proceeding of 13 SEE, Pg: 1137-1146, Dec. 18-20, Roorkee, ISBN:81-88901-25-3.
9. R.K.Bhasin, Amir. M.Kaynia, D.K.Paul,Y.Singh, **Shilpa Pal** (2010), “Seismic Behaviour of Rock Supports in Tunnels,” Proceeding of 13 SEE, Pg: 1098-1105, Dec. 18-20, Roorkee, ISBN:81-88901-25-3.
10. **Shilpa Pal**,R.K. Bhasin, Amir M. Kaynia, D.K. Paul (2010), “Stability Analysis of a Landslide Using Distinct Element Method,” “14SEE, 17-19 December 2010, Roorkee, Pg No. 1359-1372, ISBN:88901-42-3.

11. **Shilpa Pal**, D.K Paul. And A.D. Pandey(2010), “Effect of Discontinuities on the Response of a Concrete Gravity Dam,” 14SEE, 17-19 December 2010, Roorkee, Pg No. 1434-1448, ISBN:88901-42-3.
12. R.K. Bhasin, M. Abokhalil, Amir M. Kaynia, K. Hoeg, D.K. Paul and **Shilpa Pal** (2010), “Numerical Simulations of Earthquake Effect in Underground Structures,” 14SEE, 17-19 December 2010, Roorkee, Pg No. 1384-1394, ISBN:88901-42-3.
13. **Shilpa Pal**, D. K. Paul(2013), “ Influence of Dam and Foundation Discontinuities using Discountinuum Approach – A Case Study,” Proceedings of Seventh International Conference on Case histories in Geotechnical Engineering, 3.76(a), May 2013, USA.
14. Abhishek Singh and Shilpa Pal(2014), “Shear Seam in Dam Foundation System,” Proceedings of International Association for Mathematical Geosciences - Geostatistical and Geospatial Approaches for the Characterization of Natural Resources in the Environment, pp 513-521, 17<sup>th</sup> – 20<sup>th</sup> October 2014, ISBN: 978-93-81891-25-4.
15. Shubham Kumar, **Shilpa Pal**, H.C. Arora (2016), “Shear Deformability Characteristics of FRP (Fibre-Reinforced Polymer) Strengthened RC Beam,” Proceedings of International Conference on Futuristic Trends in Engineering, Science, Humanities and Technology, 23-24 Feb 2016, Pg. No. 5- 10, Gwalior,ISBN:978-93-85225-55-0.
16. Tushar Bansal, **Shilpa Pal**, Siddharth(2016), “Performance of Self-Compacting Concrete Containing Fly Ash and Alccofine Mineral Admixture as a Partial Replacement of Cement,” Proceedings of International Conference on Trends and Recent Advances in Civil Engineering, Pg 558-567, 11-12<sup>th</sup> August 2016, India, ISBN:978-93-86238-00-9.
17. **Shilpa Pal**, Dipti Singh, Varun Kumar(2017), “Hybrid SOMA: A Tool for Optimizing TMD,” Advances in intelligent systems and computing, Proceedings of Sixth International Conference on Soft Computing for Problem Solving (Springer), Vol. 546(1), pp. 35-41, 2017, ISSN : 2194-5357/ISBN 978-981-10-3321-6.
18. Piyush Vidyarthi, Dipti Singh, **Shilpa Pal**, and Seema Agrawal(2017), “Cost Optimization of 2-Way Ribbed Slab Using Hybrid Self Organizing Migrating Algorithm,” Advances in intelligent systems and computing, Proceedings of Sixth

- International Conference on Soft Computing for Problem Solving (Springer), Vol. 547(2), pp. 30-37, 2017, ISSN : 2194-5357/ISBN 978-981-10-3321-6.
19. Aditi Singh, **Shilpa Pal**, D.P. Kanungo, N. Pareek (2017), “An Overview of Recent Developments in Landslide Vulnerability Assessment-Presentation of a New Conceptual Framework.” Proceedings of WLF 2017: Advancing Culture of Living with Landslides, Springer, Cham Vol. 2, pp 795-802, ISBN: 978-3-319-53497-8.
  20. Sachin Tiwari, **Shilpa Pal**, Rekha Puria and Vikrant Nain (2017), “A Review on Biofortified Self-Healing Concrete,” Proceedings of International Conference on Advances in Construction Materials and Systems, Vol. 2, Pg 91-100, ISBN:978-2-35158-194-0.
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