

## CURRICULUM VITAE



1. **NAME** : **BAHUGUNA** **PREM** **PRAKASH**  
Surname First name Second name
2. **DATE OF BIRTH** : 04. 11. 1947  
dd mm yyyy
3. **ADDRESS** :
  - a) Office : Dr. Prem P. Bahuguna,  
Associate Professor  
Deptt. of Mining Engineering,  
Indian School of Mines,  
Dhanbad-826 004 (INDIA)
  - b) Home : Flat No. E/19, Teachers' Colony,  
Indian School of Mines,  
Dhanbad-826 004 (INDIA)
4. **Telephone** : + 91 0326 2206657(Residence)  
+ 91 0326 2206396(Office)
5. **Qualification (Graduation) -**
  - i) Bachelor of Science-1966, Physics, Mathematics & Geology (Agra University)
  - ii) Assoc. Member, Institution of Surveyors (India)-1979 - Land Surveying
  - iii) Assoc. Member, Institution of Engineers (India)-1988 (Civil Engg.)

**( Post - graduation) –**

  - i) Master of Engineering, 1981, Civil Engineering, (Adv. Surveying & Photogrammetry - Roorkee University )- Gold medallist
  - ii) Doctoral – Ph.D. (Civil Engineering – Roorkee University )
6. **Field of Specialization :**
  - i) Advanced Surveying - Geodesy, Photogrammetry & Remote Sensing
  - ii) Mine Subsidence - Monitoring & Prediction,
  - iii) Modern Surveying - GPS and GIS
  - iv) Mine Surveying - Correlation Survey

**7. Topics of Thesis :**

a) M.Tech : Development of a Photogrammetric system for Monitoring Deformations in Dudhganga dam,

b) Ph.D : Development of a Prediction Model for Mine Subsidence in Indian Coalfields.

**8.. Experience :**

i) **Field** – 14 years as Survey Officer in Survey of India (National Agency for Surveying in India)

ii) **Teaching** – Teaching Mine Surveying and Advanced Surveying to undergraduate and post graduate Engineering students :

a) Lecturer - 7 years.

b) Senior Lecturer - 2 years

c) Assistant Professor - 10 years

d) Associate Professor - 1 year

iii) **Research** – Research Scholar for 4 years leading to Ph. D degree from University of Roorkee in Civil Engineering

iv) **Administrative** – Head of Mine Surveying Division (5 years),  
Deptt. of Mining Engineering,  
Indian School of Mines, Dhanbad – 826004.

**9. Computer Skills :**

i) Developed and used computer programs for Masters (1981) and doctoral thesis (1993) in FORTRAN 77

ii) Developed and used computer programs for consultancy project numbering about 46 in Surveying & Mine Surveying,

iii) Using professional soft wares i (SURPAC 2000 for Surveying, SKIPRO for GPS, ArcGIS 9 for GIS, Autocad etc.)

iv) Knowledge of basic programs in UNIX and Windows,

v) Microsoft office softwares.

**10. Language & level of proficiency :**

English : Written good

: Spoken good

**11.. Present Assignment :**

Associate Professor in Mine Surveying and the Head of Mine Surveying Division of the Indian School of Mines, Dhanbad.

**12. Field Projects handled (List enclosed)**

**13. Professional Achievements**

i) Gold medalist in Master of Engineering (Civil Engg.)

ii) Completed 47nos. of sponsored consultancy projects from Industry,

iii) Conducted 21nos. of Refresher courses for Mine Surveying Executives of Mining Industry,

iv) Best paper Award from Institution of Surveyors (India),

- v) Contributed a 'Bureau of Indian Standard (BIS)' guideline for the 'Prediction of Mine Subsidence and Associated Parameters in Indian Coal Mines,
- vi) Established a modern Mine Surveying Laboratory in the Department of Mining Engineering, Indian Schhol of Mines, Dhanbad from MHRD Funding.
- vii) Six-months experience in Mine Surveying in Underground Mines,
- viii) 14 years field, 20 years teaching and 4 years Research experience,
- ix) Developed a number of computer programs to solve day-to-day problems in Surveying,
- x) Working on a GIS based research project for its application in an Opencast Mine,
- xi) Handled most of the surveying instruments including Precise Digital Theodolites, Precise Levels, Total Station, Gyro Theodolite, Laser-Nadir plummets for Mine Shaft Correlation, GPS, Photogrammetric Plotters. Astronomical observations etc.
- xii) Worked in different types of terrains and in different types of surveying jobs viz in Desert Areas of Rajasthan, Forest Areas of Maharashtra, High hill areas of Himalayas in Ladakh and in plains of Punjab, Gujarat etc.,
- xiii) Worked as Administrative and supervisory officer of Survey parties in Survey of India,
- xiv) Visited England, the Netherlands, Germany and Poland for presenting papers and under faculty exchange programmes,
- xv) Council Member and the Chairman, Institution of Surveyors, Dhanbad branch.

**14. Membership of Professional Bodies :**

- i) Institution of Engineers (India),
- ii) Institution of Surveyors (India),
- iii) Indian Society for Photogrammetry and Remote Sensing,
- iv) Indian Society for Rock Mechanics & Tunnelling Technology.

**15. Publication (List Attached) :**

**16. Present Address for communication :**

Dr. P P Bahuguna, Associate Professor,  
 Deptt. of Mining Engineering,  
 Indian School of Mines, Dhanbad-826 004  
 INDIA  
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**Consultancy Projects handled by Dr. P. P. Bahuguna - ( in ISM )**

Sl.No	Proj.No. / Year	Organi- zation	Title of the Project and Nature of Work. ( Amount in Rs.)	Co-investigators
1	1982	CMPDIL, Dhanbad	(New Laikdih Project) EDM – Control survey and Contouring ( Rs. 15,000)	Prof. S.P. Ahuja Dr. P.P. Bahuguna
2	1982	CMPDIL Ranchi	Rajmahal Coal Prospecting Gravity & Traverse Surveying ( Rs. 80,000)	Prof R.S. Verma Dr. M. Mukherjee Dr. P.P. Bahuguna
3	1982	CCL, Orissa Area	Nandira Project Precise EDM – Traverse and Special Survey ( Rs. 71,300)	Prof. S.P. Ahuja Dr. P.P. Bahuguna
4	1984	CCL, Kuju Area	National Grid Connection Survey (Rs. 80,000)	Prof. S.P. Ahuja Dr. P.P. Bahuguna
5	1985	WCL, Ib Valley Area	Belpahar Opencast Project (Topographical Surveys). ( Rs. 1,10,000)	Prof. S.P. Ahuja Shri A. R. Ansari Dr. P.P. Bahuguna
6	1986	CCL, Kargali Mine	Surface & U/G Precise Survey ( Rs. 10,000)	Prof. S.P. Ahuja Dr. P.P. Bahuguna
7	1229/ (1985)	CCL, NK Area, Rachi	Ray-Bachhra Underground Mines (Correlation and Precise U/G Surveying) – Rs. 50,000	Prof. S.P. Ahuja Sri V.K. Srivastava Dr. P.P. Bahuguna
8	1313/ (1985)	BCCL,Block II Area, Nawagarh	Contour Surveying for Housing site at Bhimkanari ( Rs.55450)	Dr. P.P. Bahuguna Prof. S.P. Ahuja Dr. M. Jawed
9	1985	Industry colliery,BCC L	National Grid Connection ( Rs.12,000)	Prof. S.P. Ahuja Dr. P.P. Bahuguna
10	1275 (1986)	WCL Patherkhera Area, MP	Surface Surveys and Conto- uring for Shobhanpur Sarni & Tawa Mines (Rs.95,000)	Prof. S.P. Ahuja Dr. P.P. Bahuguna
11	1986	Nagpur Area WCL, Nagpur ( Mah.)	Topographical survey of Saoner Opencast Project ( Rs.85,000)	Prof. S.P. Ahuja Shri A.R. Ansari Dr. P.P. Bahuguna
12	1986	IISCo, Chasnalla Washery	Lay-out Plan for Chasnala Washery Complex ( Rs. 6,000)	Prof. S.P. Ahuja Shri V.K. Srivastava Dr. P.P. Bahuguna
13	1203/ (1982/ 1986)	BCCL, Dhanbad	Pootki-Balihari Project (Precise underground correlation survey) ( Rs. 91,000)	Prof. S.P. Ahuja Shri Alam Chand Shri V.K. Srivastava Dr. P.P. Bahuguna
14	1311/ (1986/ 1987)	Moonidih Area BCCL, Dhanbad	Surfaces & Ground Correlation Survey of Underground Moonidih Mine, ( Rs. 60,000)	Dr. P.P. Bahuguna Prof. S.P. Ahuja
15	1987	TISCo, Jamadoba	Surface & Underground Precise traversing and correlation survey.( Rs 15,000)	Shri V.K. Srivastava Prof. S.P. Ahuja Shri P.P. Bahuguna
16	1987	IISCo, Sudamdih Mine	Connection to National Grid Survey. ( Rs. 18,000)	Shri V.K. Srivastava Prof. S.P. Ahuja Dr. P.P. Bahuguna

17		CCL, Piparwar OCP	Contour survey for office workshop and housing complex. (Rs. 90,000)	Dr. P.P. Bahuguna Prof. S.P. Ahuja
18	1347/ (1987)	TISCo West Bokaro	Control Survey at West Bokaro.	Prof. S.P. Ahuja Dr. P.P. Bahuguna
19	1992	Bastacola Area BCCL	Check Survey of Golakdih OCP, for cutting Fire-isolation trench. ( Rs.59,000)	Dr. P. P. Bahuguna Shri V.K. Srivastava Prof. S. P. Ahuja
20	1510/ (1996)	ACC, Sindri	Survey for Railway Siding- line near ACC Plant , Sindri (Rs.18,320)	Dr. P. P. Bahuguna Sri V. K. Srivastava Prof. S. P. Ahuja
21	1511/ 1996	TISCO Jamadoba	Correlation Survey of Under- ground Pits in Malkera and Sijua Collieries ( Rs. 25,000)	Dr. P. P. Bahuguna Sri V. K. Srivastava
22.	1512/ (1996)	BCCL, HQ	Practical Test for Surveyors ( Rs. 12,000)	Prof. S.P. Ahuja Shri V.K. Srivastava Dr. P.P. Bahuguna
23.	1519/ (1996)	CFRI, Digwadih ,Dhanbad	Topographical Survey of CFRI Campus for Bio-gas Pipe Line Project ( Rs. 63,000)	Dr. P. P. Bahuguna Sri V. K. Srivastava
24.	1542/ (1997)	Area III, BCCL Govindpur	Connection of Colliery Survey Network to National Coal Grid ( Rs. 2,73,000)	Dr. P. P. Bahuguna Sri V. K. Srivastava
25	1610/ (1997).	TISCO Jamadoba	Correlation Survey for Deepening of Mine Shaft in Digwadih Colliery	Sri V. K. Srivastava Dr. P. P. Bahuguna
26	1577/ (1998)	IISCO, Chasnala	Precise Correlation Survey for sand – stowing system in Chasnala colliery ( Rs. 12,000)	Dr. P. P. Bahuguna Sri V. K. Srivastava
27	1603/ (1999)	Airport Authority of India	Determination of Geographi- cal Co-ordinates of AAI, Office at Nrayanpura ( Rs. 3,000)	Dr. P. P. Bahuguna
28	1632/ (2000)	Kustore Area, BCCL, Dhanbad	Correlation and Underground Precise Traverse in Burragarh Mine ( Rs. 38,000)	Dr. P. P. Bahuguna Sri V. K. Srivastava
29	2001	Uranium Corporation of India Ltd, Jaduguda	Correlation Survey for Brake- room and winder- room of the proposed U/g Cage system ( Rs. 1,93,000)	Dr.P.P.Bahuguna
30	1667/ 2002	C.B.I. Anti – Corruption Branch	Technical assistance in a case relating to volume of earthwork , (Rs.!,94,000)	Dr.P.P.Bahuguna Prof.S B. Srivastava
31	1708/ 2003	Ramnagar colliery, IISCo	Correlation Survey in Pit No.4 of Ramnagar Colliery, IISCo., ( Rs.63,000)	Dr. P. P. Bahuguna
32	1714/ 2004	Ramnagar colliery, IISCo	Check Survey in Pit No.4 of Ramnagar Colliery, IISCo., ( Rs.63,000)	Dr. P. P. Bahuguna
33	1718/ 2004	Jitpur colliery, IISCo	Corr. & Check Survey in Pit J2 & 3 of Jitpur, Colliery, IISCo., ( Rs.63,000)	Dr. P. P. Bahuguna

34	1720/ 2004	Jamadoba Collieries TISCO	GPS Survey in Jamadoba Collieries, TISCO., ( Rs.26,600)	Dr. P. P. Bahuguna
35	1724/ 2004	Chasnala colliery, IISCO	Correlation & check Survey, Chasnala Colliery, IISCO., ( Rs.3,51,000)	Dr. P. P. Bahuguna
36	8/7 & 10/04	Jogidih Colliery, BCCL	Ground profile of OCP in 5, 6 and 7 seams of Jogidih Colliery, Area III, BCCL (Rs. 88,160)	Dr. P. P. Bahuguna
37	16/10/04	Katras Area, BCCL	Survey measurements for three opencast patches at Katras area, BCCL (Rs.1,86,492)	Dr. P. P. Bahuguna
38	11/10/04	WJ Area, BCCL	Survey of initial RLs for the proposed opencast II in Murilidih Colliery, WJ Area, BCCL (Rs.1,17,495)	Dr. P. P. Bahuguna
39	18/10/05	Bhelatand Colliery, Tisco	Establishment of National Grid Station in No.2 Pit, 12 & 15 seams of Bhelatand Colliery and No. 8 Pit, 11 seam of Sijua Colliery, TISCO (Rs.1.10,200)	Dr. P. P. Bahuguna
			<b>Total = 27,83,817</b>	

Major Consultancy Projects handled, while in Survey Of India

40	Rajasthan Canal Project	Rectangulation Survey for RCP and the Command Area	Dr. P. P. Bahuguna
41	Irrigation-Deptt. Gujarat	Topographical Survey for Small- scale Irrigation projects	Dr.P.P.Bahuguna
42	Irrigation Deptt. Maharashtra	Command Area Survey for Varna River Project	Dr.P.P.Bahuguna
43	Dudhganga Dam Project (Maharashtra)	Development of Photogram-metric System for monitoring Dam deformations.	Dr.P.P.Bahuguna
44	Revenue Deptt. W. B. Govt./ Survey of India	Indo- Bangladesh Boundary Demarcation Survey in Rajshahi- Murshidabad sector	Dr.P.P.Bahuguna
45	Revenue Deptt. Tripura Govt./ Survey of India	Indo- Bangladesh Boundary Demarcation Survey in Tripura- Comilla sector	Dr.P.P.Bahuguna
46	Min. of Defence	Precise Control survey for Photogrammetric Survey in Ladakh Sector ( J& K)	Dr.P.P.Bahuguna

## **REVIEW/RESEARCH REPORT/THESIS**

- 1. Bahuguna, P.P., 'Establishment and Calibration of Photogrammetry System for Monitoring Dudhganga Dam' - *M.E. Thesis*, Roorkee University, 1981.**
- 2. Bahuguna, P.P., 'Development of a Mine Subsidence Prediction Model for Indian Coalfields', *Ph.D. Thesis*, Roorkee University, 1993.**
- 3. Saxena N.C., Singh, U.K., and Pandey, S.N., Bahuguna,P.P., April, 1997 "State of Art on Land Subsidence due to Fluid and GAS withdrawal". 251 p. submitted to Oil & Natural Gas Commission, Ahmedabad, (Project Title 'Development of Subsidence Prediction ;model for oil & Gas fields of ONGC in Gujarat).**