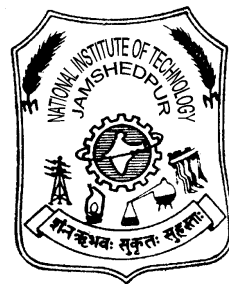


Department of Civil Engineering
(Providing Technical Services Since 1960)



NATIONAL INSTITUTE OF TECHNOLOGY JAMSHEDPUR
JAMSHEDPUR-831014, JHARKHAND (INDIA).





DEPARTMENT OF CIVIL ENGINEERING NIT JAMSHEDPUR

FACULTY PROFILE

Sl. No.	Name of the Faculty	Designation	Highest Qualification	Area of Specialization
1.	Dr. M.M. Prasad	Professor	Ph.D (IIT Roorkee)	Structural Engineering
2.	Dr. A.K. Khan	Professor	Ph.D (IIT Kharagpur)	Geotechnical Engineering
3.	Dr. A.K.L. Srivastava	Professor	Ph.D (IIT Kharagpur)	Structural Engineering (Static & Dynamic Stability of Plates/Shell)
4.	Shri. R.P. Singh	Associate Professor	M. Tech (MAREC, Allahabad), Pursuing Ph.D under QIP at IIT Roorkee	Geotechnical Engineering
5.	Dr. A.K. Singh	Associate Professor	Ph.D (IIT Roorkee)	Geotechnical Engineering
6.	Dr. A.K. Choudhary	Associate Professor & Head	Ph.D (Ranchi University)	Geotechnical Engineering
7.	Shri. Nigam Prakash	Associate Professor	M.Sc. Engg. (Jadavpur Univ.)	Hydrology & Water Resource Engg.
8.	Dr. B.K. Prasad	Associate Professor	Ph.D (RGPV, Bhopal)	Structural Engineering
9.	Dr. Sanjay Kumar	Associate Professor	Ph.D (Ranchi University)	Structural Engineering
10.	Dr. Virendra Kumar	Associate Professor	Ph.D (IIT Roorkee)	Structural Engineering
11.	Dr. A.K. Sinha	Associate Professor	Ph.D (IIT Roorkee)	Transportation Engineering
12.	Shri. S.K. Paswan	Associate Professor	M.Sc. Engg. (Ranchi Univ.)	Soil Mechanics and Foundation Engineering
13.	Shri. Prahalad Prasad	Associate Professor	Ph.D (IIT Roorkee)	Earthquake Engineering
14.	Shri. S.R. Pandey	Associate Professor	M.Sc. Engg. (Ranchi Univ.) Pursuing Ph.D at NITJSR	Structural Engineering
15.	Shri. Ashok Kumar	Assistant Professor	M.Sc. Engg. (Ranchi Univ.) Pursuing Ph.D at NITJSR	Structural Engineering
16.	Dr. Ch. Madhusudan Rao	Assistant Professor	Ph.D (IIT Roorkee)	Water Resource Engineering
17.	Dr. P.Basak	Visiting Professor	Ph.D (IIT Kanpur)	Geotechnical Engineering



**DEPARTMENT OF CIVIL ENGINEERING
NIT JAMSHEDPUR**

NAME OF THE LABORATORIES

Sl. No.	Name of the laboratory	Name of the Lab in-charge	Contact details
1.	Soil Mechanics Laboratory	Prof. Rakesh Pratap Singh	Ph: 9430746532 Email: singhrpnitjsr@yahoo.com
2.	Geotechnical Engineering Laboratory	Dr. A. K. Choudhary	Ph: 9431161850 Email: drakchoudharycivil@gmail.com
3.	Transportation Engineering Laboratory	Dr. Abdhesh Kumar Sinha	Ph: 9575678533 Email: abdheshsinha@gmail.com
4.	Concrete & Structure Laboratory	Dr. Virendra Kumar	Ph: 9431330642 Email: kumarvirendra57@gmail.com
5.	Survey Laboratory	Dr. Sanjay Kumar	Ph: 9973680156 Email: sanjay_civil@rediffmail.com
6.	Environmental Engineering Laboratory	Dr. Ch. Madhusudana Rao	Ph: 7870344602 Email: madhu_chintalacheruvu@yahoo.co.in
7.	Computational Fluid Dynamics & Software Laboratory	Dr. Prahalad Prasad	Ph: 9430335621 Email: ppdritappjsr@rediffmail.com



**DEPARTMENT OF CIVIL ENGINEERING
NIT JAMSHEDPUR**

LIST OF INDUSTRY /MAJOR CLIENTS

SL.No.	Name of Sponsoring Industries and Agencies
1.	M/S CPWD, Govt. of India
2.	Indian Oil Cooperation Ltd.(MD), Jamshedpur
3.	Harihar International Pvt. Ltd, Sunder Nagar Jamshedpur
4.	Choudhary & Chemicals Pvt.Ltd., Sidgora, Jamshedpur
5.	Nav Nirman Builders, M-9(old) Adityapur, Jamshedpur
6.	M/S S.E. Railway,
7.	M/S BSNL (Civil), Telecom Compound Sidgora, Jamshedpur.
8.	S.E. Railway,Concrete Sleeper Plant, Chandil, Saraikela-kharsawan.
9.	Coal Mines Assocaited Traders Burdwan (W.B.)
10.	S.E. Railway, Chakradharpur.
11.	Tisco Growth Shop (P) JSR
12.	Seth & Associates, Kolkata-19
13.	Indian Concrete Institute and The Associated Cement Companies Ltd. S.P. Verma road, Patna-800001.
14.	Minor Distribution Division No-12, Mango, Jamshedpur.
15.	Mackintosh Burn Ltd, MBL House Kolkata-4
16.	Tata Project Adityapur, JSR.
17.	Paresh Construction, Kolkata.
18.	Adhunik Alloys & Power Ltd, Kanda Chowk, Kandra.
19.	NBCC Ltd, Hinoo, Ranchi.
20.	Praxiar India Pvt. Ltd, UPSA Oxygen Plant II, C/O Usha Martin, Gamharia.
21.	Bihar Rajya Pul Nigam Ltd., 7-sardar Patel Marg, Patna-800015
22.	Uranium Coorporation of India Ltd (UCIL), India Govt Enterprise, Turamdih, Jamshedpur,
23.	Indian Railway, Govt. of India, at Koderma
24.	Kew Construction Pvt. Ltd., Moubhandar Ghatshila, Dist. East Singhbhum, Jharkhand.
25.	EMAK Consulting Engineers Pvt. Ltd.,164 C, Ashok Nagar, Road No. – 4D, Ranchi (Jharkhand),
26.	M/S Jindal Pvt. Ltd.
27.	L & T Construction, Matallurgical & Material Handling at Tata Steel, Jamshedpur.
28.	M/S Hindustan Copper Limitd, Ghatsila
29.	M/S TATA STEEL Jamshedpur
30.	RSVNL Ltd, Ranchi
31.	Forest Department, Hazaribagh, Jharkhand.
32.	L & T Construction, Barage Project, Adityapur
33.	M/s Tarapore & Company
34.	M/S Sapudjee & Paloonjee,
35.	M/S Subernrekha Multipurpose Project, Jharkhand



DEPARTMENT OF CIVIL ENGINEERING NIT JAMSHEDPUR

TESTING FACILITY AND RATES

1. CONCRETE AND STRUCTURAL ENGINEERING LABORATORY



Sl. No.	Description of Test	Rate (In Rs.)
A. Test on Concrete Sample		
1.	Cube Compressive Strength Test (Min.3 Nos.)	Per specimen 500
2.	Split Tensile Test (Min.3 Nos.)	Per specimen 500
3.	Flexure Strength Test (Min.3 Nos.)	Per specimen 1000
4.	Cube Compressive Strength with casting, curing & testing (One set of 03 Nos. each at 7 days & 28 Days)	3000
5.	Workability of Concrete Mix for each type with/without plasticizer	1200
6.	Compressive strength of concrete solid/hollow block	Per specimen 800
7.	Water absorption of concrete solid/hollow block	500
8.	Block density of concrete solid/hollow block	400
B. Non Destructive Testing on Concrete		
1.	Details of Reinforcement checking in existing structures for each test	2500
2.	Compressive Strength of concrete core for each location up to 100 mm diameter including sample preparation	3000
3.	i) Concrete Strength by Ultrasonic Concrete Tester per location	1500
	ii) Concrete Strength by Rebound Hammer concrete tester per location	1500
4.	Detection of voids and cavities in concrete by Ultrasonic concrete tester per suspected cavity	4000
5.	Estimating the depth of surface cracks in concrete by Ultrasonic concrete tester per location	5000
6.	Static or Dynamic elastic modulus of concrete by Ultrasonic concrete tester per location	1500
C. Test on Cement Sample:		
1.	Compressive Strength of Cement mortar cube with curing	600
2.	Compressive Strength of cement with casting, curing, testing exclusively for mix design and cement strength test:	
	a) One set of 3 Nos. at 3 days	600
	b) One set of 3 Nos. at 7 days	900
	c) One set of 3 Nos. at 28 days	1200

3.	Consistency	1000
4.	Setting Time (Initial & Final)	1000
5.	Fineness	1000
6.	Soundness	1500
7.	Specific Gravity	1500
D. Coarse Aggregate (Stone Chips)		
1.	Sieve Analysis	1500
2.	Specific Gravity	1000
3.	Water Absorption	800
4.	Bulk Density	800
5.	10 % fine value (including sample preparation)	1500
6.	Free Moisture Content	500
E. Fine Aggregate (Sand)		
1.	Sieve Analysis	1500
2.	Specific Gravity	1000
3.	Water Absorption	800
4.	Bulk Density	800
5.	Bulking of sand	2000
6.	Silt Content	800
7.	Free Moisture Content	500
F. Test on Bricks sample:		
1.	Compressive Strength	800
2.	Water Absorption	800
3.	Efflorescence Test	800
4.	Shape Test	400
G. Miscellaneous Testing:		
1.	Mortar Test for Sand, Cement & Aggregates	20000
2.	Mortar Bar Expansion	2000
3.	Test for Deleterious materials (Aggregates)	15000
4.	Corrosion of reinforcement	4000
5.	Concrete Core testing (Including core cutting & sample preparation) Per sample	5000

2. SOIL MECHANICS / GEOTECHNICAL ENGINEERING LABORATORY



Sl. No.	DESCRIPTION	Rates (in Rs)
1.	Natural Moisture Content (Per Sample)	150
2.	Bulk Density of Soil (Per Sample)	350
3.	Dry Density of Soil (Per Sample)	500
4.	Specific Gravity of Soil (Per Sample)	600
5.	Sieve Analysis(Dry) (Per Sample)	500
6.	Sieve Analysis(Wet) (Per Sample)	800
7.	Hydrometer Analysis (Per Sample)	1500
8.	Atterberg's Limit (L.L ,P.L ,P.I ,Flow Curve) (Per Sample)	1500
9.	Shrinkage Limit (Per Sample)	800
10.	Free Swell Index (Per Sample)	600
11.	a) Standard Proctor's Compaction Test (Per Sample)	1500
	b)Modified Proctor's Test (Per Sample)	3000
	c)Standard Compaction Test (Consideration of Higher Particle Size) (Per Sample)	4000
12.	Field Dry Density (Core Cutter Method) (Per Sample)	1500
13.	Field Dry Density (Sand Replacement Method) (Per Sample)	2000
14.	Relative Density (Per Sample)	2000
15.	Compaction Test for Density Calibration (Per Sample)	1500
16.	California Bearing Ratio Test (Unsoaked) (Per Sample)	2000
17.	California Bearing Ratio Test (Soaked) (Per Sample)	2500
18.	Field CBR Test (Per Sample)	8000
19.	Permeability Test on Undisturbed Samples (Per Sample)	1500
20.	Permeability Test on Remolded Samples (Per Sample)	2000
21.	Undrained Shear Box Test (Per Sample)	800
22.	Drained Shear Box Test (Per Sample)	1000
23.	Wall Friction Test (Per Sample)	1500
24.	Tri-axial Compression Test (38 mm dia without Pore Water pressure Measurement & Three Tests Required for each Sample)	5000
25.	Tri-axial Compression Test (38 mm dia with Pore Water pressure Measurement & Three Tests Required for each Sample)	7500
26.	Tri-axial Compression Test without Pore Water pressure Measurement (100 mm dia. Sample & Three Tests required for each Sample) (Per Sample)	10000

27.	Tri-axial Compression Test with Pore Water pressure Measurement (100 mm dia. Sample & Three Tests required for each Sample) (Per Sample)	15000
28.	Unconfined Compression Test (Per Sample)	1000
29.	Unconfined Compression Test on Rock (Per test)	1000
30.	Determination of Core Recovery & R.Q.D. (Per Sample)	1500
31.	Water absorption test for rock core sample (at least three specimens to be tested for each sample) (Per test)	500
32.	Consolidation Test – with undisturbed samples (Per sample)	2000
33.	Consolidation Test – with remolded samples (Per sample)	3000
34.	Differential Free Swell (Per Sample)	1500
35.	Swelling Potential (Per Sample)	2000
36.	Swelling Pressure (Per Sample)	3000
37.	Plate Load Test (First Test) (Per location)	20000
38.	Plate Load Test (Subsequent) (Per location)	15000
39.	Cyclic Plate Load Test (Per location)	50000
40.	Standard Penetration Test (Per Test)	1500
41.	Block Vibration Test (Per location)	80000

3. TRANSPORTATION ENGINEERING LABORATORY



Sl. No.	DESCRIPTION	Rate (in Rs.)
A. Testing of Stone Aggregates		
1.	Crushing Value (Including sample preparation)	2000
2.	Abrasion Value (Los-Angeles) (Including sample preparation)	2000
3.	Abrasion Value (Dorry) (Including sample preparation)	3000
4.	Deval's Attrition Value (Including sample preparation)	3000
5.	Impact Value (Including sample preparation)	1500
6.	Shape Test	1500
7.	Sieve Analysis & Gradation	1500
8.	Structure Test of Aggregates	500
9.	Hardness	600
10.	California Bearing Ratio Test on Aggregate (Unsoaked)	2500
11.	California Bearing Ratio Test on Aggregate (Soaked)	3000
12.	Soundness of aggregates (Per sample)	5000
B. Testing of Bitumen		
1.	Marshall Stability Test	5000
2.	Bitumen Content	3500
3.	Quantitative Analysis of Premix Carpet	2000
4.	Quantitative Analysis of Bituminous Concrete	500
5.	Quantitative Analysis of W.B.M Sample (Coarse Aggregate Only)	2000
6.	Penetration Test of Bitumen	2000
7.	Viscosity Test of Bitumen	2000
8.	Ductility Test of Bitumen	3000
9.	Float Test	3000
10.	Specific Gravity	1500
11.	Softening Point Test	2000
12.	Flash & Fire Point Test	2500

13.	Solubility Test	1500
14.	Spot Test of Bitumen	1500
15.	Loss on Heating	1500
16.	Water Content Test	1500
17.	Bitumen Adhesion Test	2000
18.	Marshall Stability Test for Mix Design of Bituminous Concrete	15000
C. Precast Concrete Blocks for Paving (IS 15658:2006)		
1.	Dimension (Shape test)	750
2.	Thickness of wearing layer	600
3.	Water Absorption	1000
4.	Compressive Strength	600
5.	Tensile Splitting Strength	1200
6.	Flexural Strength/ Breaking load	1500
7.	Abrasion Resistance	2000
D. Testing of Floor Tiles		
1.	Checking of Conformity of Shapes & Dimensions	500
2.	Transverse Strength (Dry Test)	600
3.	Transverse Strength (Wet Test)	900
4.	Resistance of Wear Test (Including sample preparation)	1500
5.	Water Absorption	1000
E. Testing of Street Tiles/Slabs		
1.	Checking of Conformity of Shapes & Dimensions	600
2.	Transverse Strength (Dry Test)	1000
3.	Transverse Strength (Wet Test)	1500
4.	Resistance of Wear Test (Including sample preparation)	2500
5.	Water absorption	1000

4. ENVIRONMENTAL ENGINEERING LABORATORY



Sl. No.	DESCRIPTION OF TEST	Rate (in Rs.)
A. Water, Waste Water & Sewerage:		
1.	Acidity	2000
2.	Alkalinity	2000
3.	Aluminium	3000
4.	Ammonia (Nitrogen)	3000
5.	Arsenic as AS_2O_3	3000
6.	Absorption to toluene	3000
7.	B.O.D. (for 5 days)	3000
8.	Calcium	2000
9.	Chloride	2000
10.	Colour	500
11.	C.O.D	5000
12.	Calcium Oxide as CaO	2000
13.	Carbondioxide	1000
14.	Calcium hardness as $CaCO_3$	3000
15.	Calcium Carbonate as $CaCO_3$	3000
16.	Carbonate hardness as $CaCO_3$	3000
17.	Calcium Sulphate as $CaCO_3$	3000
18.	Copper	5000
19.	Citric acid	5000
20.	Deleterious materials	20000
21.	Dissolved Oxygen	2000
22.	Fluoride	2000
23.	Hydrochloric acid	2000
24.	Hardness (Total)	1500
25.	Iron	3000
26.	Insoluble matter	2000
27.	Inorganic matter	2000
28.	Kjeldahi Nitrogen	3500
29.	Larvae	5000
30.	MPN	3000
31.	Magnesium Oxide as MgO	2000
32.	Magnesium hardness as $CaCO_3$	2000
33.	Magnesium sulphate as $CaCO_3$	2000
34.	Magnesium chloride as $CaCO_3$	2000
35.	Total Sulphur content	2000

36.	Nitrate (Nitrogen)	2000
37.	Nitrite (Nitrogen)	2000
38.	Non-carbonate hardness as CaCO ₃	2000
39.	Odour	500
40.	Organic (Nitrogen)	3000
41.	Organic matter	2000
42.	Oil and Grease	2000
43.	Potassium	2000
44.	p ^H	1000
45.	Phosphate	2000
46.	% of Chloride in Bleaching powder	3000
47.	Residual chlorine in water	2000
48.	Sodium	3000
49.	Soluble Aluminium as Al ₂ O ₃	3000
50.	Sulphate	3000
51.	Suspended matter	2000
52.	Settleable matter	2000
53.	Silicon as SiO ₂	2500
54.	Sodium Chloride as CaCO ₃	3000
55.	Taste	500
56.	Total Volatile matter	3000
57.	Total dissolved matter	3000
58.	Turbidity	3000
59.	Temperature	500
B. Wood Sample:		
1.	Wood test for specific gravity, moisture content & texture	3500
2.	Weight loss with Dil. HCl	3000
3.	Zinc	2000
4.	Weight loss on ignition	3000
5.	Mica content	3000
6.	Heat of hydration	6000
C. Rock Sample:		
1.	Aluminium Oxide	6000
2.	Calcium Oxide	6000
3.	Ferric Oxide	6000
4.	Titanium Oxide	6000
5.	Loss of Ignition	5000
D. Chemical Test on Soil Cement & Aggregates:		
1.	Petrographic Examination	6000
2.	Potential Reactivity (Sand & Stone)	8000
3.	SO ₄ ⁺ , Cl ⁻ & p ^H of Soil samples	3000

- N.B.:** i) For all types of testing/ consultancy services, written requests with all relevant details should be submitted either to the office of ‘The Director, NIT, Jamshedpur’ or P/I, Consultancy, NIT, Jamshedpur.
- ii) Test samples/ specimens in required quantity are required to be supplied to the laboratory in sealed bag(s) duly authenticated by the competent authority.
- iii) The above rates are approved by the Competent Authority with effect from 08.07.2014. In addition to the respective testing charges mentioned above, the Service Tax, Educational Cess, Government Levies’ i.e Sales Tax, Income Tax, VAT etc. as applicable from time to time will be charged extra. All payments are required to be made in advance in the form of demand draft in favour of ‘ The Director, NIT, Jamshedpur’ payable at SBI, NIT, Jamshedpur branch (Code No. 1882).