

## General Information

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## Educational Qualification

Qualification	Year	Marks/Grade	University	Subject
Ph. D.	1985		IIT - KHARAGPUR	ENGINEERING
Post-Graduation	1981	A - GRADE	IIT - KHARAGPUR	STRUCTURAL ENGG
Graduation	1979	74.8%	JADAVPUR UNIVERSITY	CIVIL ENGINEERING

- After Ph. D , conducted short period research abroad ie. in USA and Australia
- Holds a MBA degree also

## Administrative Experience

Post	Organization	Duration		Work Description
		From	To	
Head of Civil Engineering	Jadavpur University	2006	2008	Departmental administration Civil Engineering Construction & Design administration
Country Head	Setraco Nigeria Ltd.	2009	2010	
Dean of Engineering & Technology	Jadavpur University	2016		Faculty administration

- Served a number of administrative committee of Jadavpur University, UGC , AICTE , ISI etc.
  - Served as a Board member of Setraco Nigeria Ltd.
  - Served as Expert in selection committee of different IIT, NIT , University etc.
- Please see Annex II also

## Academic Experience

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Post	Organization	Duration		Work Description
		From	To	
<b>Lecturer</b>	<b>Jadavpur University</b>	<b>1982</b>	<b>1989</b>	<b>Teaching &amp; Research</b>
<b>Reader</b>	<b>Jadavpur University</b>	<b>1989</b>	<b>1993</b>	<b>Teaching &amp; Research</b>
<b>Professor</b>	<b>Jadavpur University</b>	<b>1993</b>	<b>Till date</b>	<b>Teaching , Research &amp; Administration</b>

## International Academic Exposure -

**Please see Annex I**

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## Significant Contributions to academics Including Research Projects executed

**Please see Annex II**

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## Details of Memberships of Academic Societies

**Please see Annex III**

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## Other information

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**Please see Annex IV – Consultancy & Industrial experience**



## Annex I

### International visits

Country	University/Organisation	Year	Purpose
Nigeria	Techgrade Consulting	2014	Invited lecture series
Nigeria	Setraco Nigeria Ltd.	2009	To serve a MNC on contract
Australia	Monash University-Melbourne	2007	Research
USA	North Western University- Chicago- ACBM centre	2006	Research
USA	Rutgers University – New Jersey	2005	Research
UK	University of Dundee	2003	Research and to present papers in International conference
UK	University of Glasgow	2003	Invited lecture
UK	University of Sheffield	1992	To present papers in International conferences
Thailand	AIT, Bangkok	1989	Invited lecture
Malayasia	University of Malaysia, Kualalumpur	1989	Invited lecture
Malayasia	University Malaya, Kualalumpur	1989	Invited lecture
Malayasia	CI Premier	1989	To present papers in International conferences
Singapore	CI Premier	1989	To present papers in International conferences

## **Annex II**

### **Contribution to Academics & Administration**

**34+ years Teaching/Research/Administration**

**Served as Head of the Civil Engineering Department , Jadavpur University**

**Publications ( Brief list of publications enclosed)**

**Research Publication – 90 +**

**Book Publication - 6**

**Ph.D thesis examiner for Monash University, Australia**

**Ph.D and M.Tech thesis examiner for IIT /NIT/ BESU( now IEST) /University within India**

**Invited lecture given in IIT/NIT/University**

**Invited lecture given in the Training programme organized by the corporate houses**

**Organised a number of Workshop/Seminars / Industrial fair for the University**

**Chaired a number of technical sessions in seminars within and outside university**

**Presented a number of papers in seminars / conferences**

**Participated in panel discussion as one of the panel speakers**

**Written articles in news paper**

**Participated in TV programme and Radio**

**Participated in Radio programme in Australia**

**Ph.D Thesis supervised**

**Completed: 10**

**In Progress: 02**

**M.Tech Thesis supervised**

**Completed: 40+**

**In Progress: 01**

**Administrative Experience (Academic and Research Administration & Expert Committee member )**

**a) International Level:**

- **Worked as a Country Head of a division for a MNC ( SETRACO NIGERIA LTD. ABUJA, NIGERIA ) – served as a board member - on lien**
- **Served as a member of Ph.D committee in Monash University, Melbourne, Australia**

**b) National Level**

**\* Served as Standing Committee member of AICTE**

- **Expert member in the selection committee of faculty recruitment for IIT Kanpur, IIT Roorkee, Bengal Engineering and Science University ( now IEST ) , NIT, Engineering colleges etc.**
- **Chancellor's nominee in the selection committee of faculty recruitment in Orissa state**
- **Expert member in the selection committee of SRF, JRF for CSIR , New Delhi**
- **Expert member in the Promotion committee of scientists for CSIR , New Delhi**
- **Expert member of Visiting committee of NBA, AICTE, UGC etc.**
- **Expert member in the selection committee of UPSC for Engineer recruitment**
- **Member of IS code committee**

**b) State Level**

- **Expert member of Visiting committee of WBUT ( State University)**
- **Expert member of special Administrative committee of WBUT( State University)**
- **Expert member in the selection committee of PSC for Engineer recruitment**

- Expert member of special committee for Higher Education Council , Govt. of West Bengal
- Expert member of committee of West Bengal Infrastructure Development Finance Corporation Ltd., Govt. of West Bengal
- Expert member in the selection committee of faculty recruitment for Engineering colleges.

**d) Jadavpur University Level**

- Serving as Dean of Engineering & Technology
- Served as Head of Civil Engineering Department
- Serving as Member of Planning and Development committee
- Serving as Member of Tender committee
- Served as Member of a Special committee for fire safety
- Served as a Convener of PG syllabus and Curriculum committee of Engineering faculty.
- Serving as a Chairman of Routine committee
- Serving as a member of Doctoral committee for Engineering faculty
- Serving as a member of Faculty Council of Engineering & Technology
- Serving as a member of Executive Council of the University
- Serving as a member of Working Council
- Serving as a member of Travel Grant Committee
- Serving as a member of Equivalence committee
- Serving as Chairman – Disciplinary committee of Engineering Faculty
- Serving as Coordinator – TEQIP – World Bank Funded Project
- Serving as Chairman of Research Project committee
- Serving as Member of Faculty Selection committee
- Serving as Member of International collaboration committee

### e) Department Level

Served as Head of Civil Engineering Department

Served as a member PG admission committee

Convener and member of Special assistance programme

Served as a Convener of UG & PG Syllabus and Curriculum committee

Served as a Convener of Routine committee

Served as a member of Departmental doctoral committee

Served as a member of Teacher-Student committee

### Research Projects Executed

Title of the Project	Funding Agency/ Institute with amount approved	Year of duration	Completed / ongoing
Strength and ductility of Steel Fibre Reinforced Concrete	AICTE - 7.7 lakhs - PI	3	Completed
Wind effect on structures	AICTE-9 lakhs - PI	3	Completed
Wind effect on structures	Innovative programme -UGC - 13 lakhs - CI	3	Completed
Wind Tunnel studies of structures	SAP-Phase I -UGC-15 lakhs-CI	5	Completed
Dynamic behaviour of structures	SAP - Phase II -UGC- 20Lakhs-CI	5	Completed
Rheological Properties of High performance concrete	DRS - I - UGC- 17.5lakhs-PI	5	Ongoing

## List of Recent publications ( last 5 years )

### In Peer reviewed international journals

1. Workability and Setting Time of Alkali Activated Blast Furnace Slag Paste, **ASTM International Journal, Advances in Civil Engineering Materials**, 2013; 2(1), pp 1-17.
2. "Effect of Na<sub>2</sub>O Content on Durability of Geopolymer Mortars in Sulphuric Acid", **International Journal of Chemical and Biomolecular Engineering**, Vol.2, No.1, 2009, pp.20-25.
3. "Effect of Si/Al ratio on performance of fly ash geopolymers at elevated temperature," **Arabian Journal for Science and Engineering, Springer**.
4. "Durability of fly ash geopolymer mortars in nitric acid-Effect of Alkali (Na<sub>2</sub>O) content", **Journal of Civil Engineering and Management**, Taylor and Francis. Vol. 17, No.3, 2011, pp.393-399.
5. Effect of Na<sub>2</sub>O content on durability of geopolymer pastes in magnesium sulfate solution", **Canadian Journal of Civil Engineering**, Vol.39, 2012, pp. 1-10.
6. A 3D Computational Model of RC Beam Using Lower Order Elements with Enhanced Strain Approach in the Elastic Range.', **Computers, Materials & Continua** , Aug'2008, Vol. 8, No. 1, pp 43-52
7. 'A 3D Hypoelastic Computational Model of Reinforced Concrete Structure.', **Journal of structural Engineering, Icfai University**, Jan'2009, Vol. II, No. 1, pp 32-53.
8. Bond-slip effects on the behaviour of RC beam under monotonic loading –An Integrated 3D Computational Model using EAS Approach.', **Computers, Materials & Continua** , Dec'2009, Vol. 12, No. 1, pp 1-38.
9. Effect of Fineness on Engineering Properties of Alkali-activated GGBFS paste, **International Journal of Applied Engineering Research**, 2013; 8 (2), 131-146.
10. Effect of alkali content on strength and microstructure of GGBFS paste, **Global Journal of Researches in Engineering**, 2013; 13(1), pp. 11-19.
11. Effect of curing conditions on the compressive strength and microstructure of alkali-activated GGBS paste, **International Journal of Engineering Science Invention**, 2013; 2(2), pp. 24-31.
12. Strength and Microstructure of Alkali-activated blast furnace slag paste, **International Journal of Pure & Applied Research in Engineering & Technology** , 2013
13. Effect of Potassium Hydroxide on Compressive Strength and Workability of Ground Granulated Blast Furnace Slag paste, **Asian Journal of Chemistry** -2013



14. "Resistance of Fly ash Based Geopolymer Mortars in Sulfuric Acid", **Journal of Engineering and Applied Sciences**, Vol.4, No.1, April 2009, pp.65-70.
15. "Acid Resistance of Fly ash based Geopolymer mortars", **International Journal of Recent Trends in Engineering**, Vol. 1, No. 6, May 2009, pp.36-40.
16. "Porosity and Sorptivity on Performance of Fly Ash Based Geopolymer Mortars in Nitric Acid", **International Journal of Applied Engineering Research**, Vol.4, No.11, 2009, pp.2085-2092.
17. "Effect of Water Absorption, Porosity and Sorptivity on Durability of Geopolymer Mortars", **Journal of Engineering and Applied Sciences**, Vol.4, No.7, 2009, pp.28-32.
18. "Performance of Fly ash Based Geopolymer Mortars in Sulphate Solution", **Journal of Engineering Science and Technology Review**, Vol.3,No.1, 2010, pp.36-40.
19. "Effect of Na<sub>2</sub>O content on performance of fly ash geopolymers at elevated temperature", **International Journal of Civil and Environmental Engineering**, Vol.3;1, 2011, pp. 34-40
20. "Effect of silica fume additions on porosity of fly ash geopolymers", **Journal of Engineering and Applied Sciences**, Vol.5, No.10, 2010, pp. 74-79.
21. "Effect of incorporating silica fume in fly ash geopolymer", **World Academy of Science, Engineering and Technology**, Vol. 60, 2011, pp.243-246.
22. 'Direct compressive strength and elasticity modulus of recycled aggregate concrete' **International journal of Civil and Structural engineering**, Vol-2, No.1, 2011, pp-292-304
23. 'Recycled aggregate concrete exposed to elevated temperature' – **International journal of engineering and applied science**, Vol-7, January 2012, No.1, pp-100 -107
24. ' Durability of geo polymer coated recycled aggregate concrete exposed to sulphuric acid' – **International journal of Applied engineering research**, Vol-7, No.1(2012), pp-91-103
25. "Performance of Fly ash Based Geopolymer Composites at Elevated Temperature", **International Journal of Applied Engineering Research** , April 2009, Volume 4, Number 4, pp.583-593.
26. "Effect of Alkali Content on Direct Compressive Strength of Fly ash Based Geopolymer Composites", **International Journal of Civil Engineering**

27. "Effect of Mix Composition on Compressive Strength and Microstructure of Fly Ash Based Geopolymer Composites, **Journal of Engineering and Applied Sciences**
28. "Effect of Elevated Temperature on Residual Properties of Fly ash Based Geopolymer Composites", **International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences** , July 2009
29. Effect of silica fume additions on porosity of Fly ash geopolymers, **Journal Of Engineering And Applied Sciences**, Vol. 5, No. 10, October 2010.
30. Effect of Incorporating Silica Fume in Fly Ash Geopolymers , **World Academy of Science, Engineering and Technology**, 2011.
31. Evaluation of Geopolymer properties with temperature Imposed On Activator Prior Mixing With Fly Ash, **International Journal Of Civil And Structural Engineering** ,Vol 3, No 1, 2012
32. Comparative Study of Geopolymer Paste Prepared from Different Activators, **Recent Trends in Civil Engineering & Technology** Volume 2, Issue 3, Pages 1-10, December2012.
33. Effect of Lime Stone Dust on Geopolymerisation and Geopolymeric Structure, **International Journal of Emerging Technology and Advanced Engineering** , Volume 2, Issue 11, November 2012.

#### **International conference publication ( Last 5 years )**

1. 'A 3D Computational Model of RC Beam Using Lower Order Elements with Enhanced Strain Approach in the Elastic Range.', Presented in **International Conference on Computational & Experimental Engineering and Sciences (ICCES'08)**, Honolulu, Hawaii, Presented on March 17-22, 2008, pp 113-113.
2. 'On Performance of EAS based Lower Order Element in 3D Computational Modeling of RC Beam in the Elastic Range.' Proceedings of **International Conference on Advances in Concrete and Construction (ICACC-2008)**, Hyderabad, India, Feb 7-9, 2008, pp 1084-1093.
3. 'Implementation of 3D Constitutive model on RC Frame using EAS based Lower Order Element in the Elastic Range.' **International Conference on Computational & Experimental Engineering and Sciences (ICCES'09)**, 8-13 April 2009: Phuket, Thailand & ICCES online Vol. 9, No. 3, pp 143-149.
4. 'Effect of fly ash on recycled aggregate Concrete' – Proceedings of **second international conference on – ' Fly ash disposal and utilization'** at New Delhi, organised by Central Board of Irrigation and Power, February -2000, Vol-2, pp 1-12

5. 'Durability of recycled aggregate concrete' – Proceedings of **7<sup>th</sup> NCB International seminar on cement and building materials**, 21<sup>st</sup> to 24<sup>th</sup> November- 2000, pp IX B-73
6. "Fly ash based Geopolymer composite", Proceedings of **10th NCB International Seminar**, 27-30 Nov. 2007, New Delhi, India, vol.3, pp.443-452.
7. "Strength and workability of high performance Geopolymer composites", Proceedings of the **First International Conference on Emerging Technologies and Applications in Engineering, Technology and Science(ICETAETS-2008)**, 13-14 January 2008, Rajkot, India, 51-56.
8. "Effect of synthesis parameters on compressive strength of fly ash based Geopolymer composites", Proceedings of **International Conference on Sustainable concrete constructions, Feb.2008, Ratnagiri, India**, pp.117-123.
9. "Behavior of Fly ash Based Geopolymer Composites at Elevated Temperatures", Proceedings of **4<sup>th</sup> International Conference on 'Innovative World of Concrete'08, 11-14 December 2008, New Delhi, India.**
10. "Strength and Sorptivity of Fly ah Based Geopolymer Composites", proceedings of **International conference on Innovative World of Structural Engineering, ICIWSE 2010, September 17-19, 2010, Aurangabad, India.**

#### **National conference publication ( Last 5 years )**

1. "Geopolymer Composites – A Sustainable Infrastructure Materials for 21st Century", Proceedings of **National Conference on "Emerging Technology and Developments in Civil Engineering"**, **22-23 March 2007, Government College of Engineering, Amravati, M.S.**, pp.82-90.
2. "Direct Compressive Strength of High Performance Geopolymer Composites", Proceedings of National Conference on **"Emerging Trends in Engineering and Technology (NC(ET)2-07)"**, **5th May 2007, Saintgits College of Engineering, Kottayam, Kerla-686532**, pp.11-15.
3. "Effect of Mix Composition on Strength and Workability of Geopolymer composites", Proceedings of **National Conference under TEQIP on "Advances in Construction Materials and Equipments"**, **January 2008, Government College of Engineering, Jabalpur, M.P.**, pp. 74-81
4. "Development of New Construction Material by Alkali Activation of Fly ash", Proceedings of **All India Seminar on "Emerging Trends in Civil Engineering Materials"**, **5-6th December 2008, at Institution of Engineers., Kolkata, India**, pp.68-74.

5. "Development of New Construction Material by Alkali Activation of Fly ash", Proceedings of All India Seminar on **"Emerging Trends in Civil Engineering Materials"**, **5-6th December 2008, at Institution of Engineers., Kolkata, India**, pp.68-74.
6. "Durability of Fly ash Based Geopolymer Mortars in Sulfuric Acid", Proceedings of **All India Seminar on "Emerging Trends in Civil Engineering Materials"**, **5-6th December 2008, Institution of Engineers, Kolkata, India**, pp.75-80.
7. "Resistance of Fly ash based mortars in Nitric acid", Proceedings of National Conference on **"Recent Innovations in Technology"**, **NCRIT 2009, 26-28 March 2009, Rajiv Gandhi Institute of Technology, Kottayam, India**, pp.420-423.
8. "Strength and Sorptivity of Fly ah Based Geopolymer Composites", proceedings of **International conference on Innovative World of Structural Engineering, ICIWSE 2010**, September 17-19, 2010, Aurangabad, India.
9. "Porosity and Sorptivity of Fly ash Based Geopolymer Composites", Proceedings of **National Conference on Advanced Materials and Structures, AMAS 2011, February 3-4, Pondicherry Engineering College, Puducherry**
10. Durability study of geopolymer paste blended with blast furnace Slag, **International On Global Trends In Engineering And Management, Nagpur, ICJTM**  
22<sup>nd</sup> March,2013

#### **Few old papers**

1. **"Deterioration of concrete structure under marine Environment and their inspection and repair"** –proceedings of the seminar on "Durability of Concrete" organized by the Institution of Engineers (India) on July 7-8, 1988.
2. **"Some repair techniques for pre-stressed concrete towers of offshore gravity structures"**- proceedings of the seminar on "Maintenance of Civil engineering Structures and Systems" organized by the Institution of Engineers (India) October 15-16, 1988
3. **"Bamboo Reinforced Concrete"** proceedings of the seminar on "Alternate Technology" Organised by World Federation of Engineering Organisation on 23 December, 1988
4. **"Ferro cement Technology – A critical evaluation"** proceedings of the seminar on "Alternate Technology" organized by Federation of Engineering Institutions of South and Central Asia and the Institution of Engineers (India), 24 December ,1988

5. **“Some chemical tests on hardened concrete and their reliability”**- proceedings of the national seminar on “Quality Assurance in Concrete Construction” at Calcutta (ICI Convention) 30 June –1 July, 1989 pp 1-13 Vol-2
6. **“Ultimate analysis of reinforced concrete slab –beam systems- A. New approach”** proceeding of the international conference on “ Concrete and Structures” at Malaysia on 3-4 October, 1989
7. **“A critical review on some major aspects of two way reinforced concrete slabs”** proceeding of the international conference on “ Concrete and Structures” at Malaysia on 3-4 October, 1989
8. **“Ultimate analysis of reinforced concrete interior slab panels”** proceedings of national seminar on “Concrete Design and concrete Practices” at Allahabad on 21-23 December,1988
9. **“A study of the ductility of steel fiber reinforced concrete”** proceedings of the International Symposium on “Innovative World of Concrete (IWC-98)” at Calcutta on 16-19 November ,1998
10. **“Membrane action in reinforced concrete slab beam system”** proceedings of International seminar on Civil Engineering Practices in twenty first century, India 1996, pp 208-220

## List of Books

1. **High Temperature Resistant Fly ash Based Geopolymer Composites: Physical and Mechanical behavior**  
LAP LUMBERT PUBLISHING HOUSE , Germany
2. **Steel Fibre Reinforced Concrete Under Elevated Temperature: Strength and ductility assessment**  
LAP LUMBERT PUBLISHING HOUSE , Germany
3. **Fly ash Based Geopolymer Composites: Manufacturing and Engineering Properties**  
LAP LUMBERT PUBLISHING HOUSE , Germany
4. **A 3D Hypoelastic Model of RC Structure Using Lower Order EAS Elements: Lower order solid elements, Finite element approach, Three-dimensional, Enhanced assumed strain**  
LAP LUMBERT PUBLISHING HOUSE , Germany
5. **Strength and Durability of Fly Ash Geopolymers: Resistance to acids**  
– LAP PUBLISHING HOUSE - GERMANY
6. **Fiber Reinforced Self Compacting Concrete: Rheology and Compatibility of Ingredients**  
CDC LUMBERT PUBLISHING HOUSE , Germany

## **Annex III**

### **Professional Membership**

- **MIStructE , C.Eng. - Member of THE INSTITUTION OF STRUCTURAL ENGINEERS - UK  
Chartered Structural Engineer**
- **MIE - Member of THE INSTITUTION OF STRUCTURAL ENGINEERS - INDIA**

## **Annex IV**

### **Consultancy / Direct Industrial experience**

**Worked as a Country Head of a division for a MNC ( SETRACO NIGERIA LTD.  
ABUJA, NIGERIA ) – on lien**

**Served as a consultant to a number of prestigious projects at National  
level for NBCC, HSCL, LLOYDS INSULATION, SIKIM GOVT. PWD, NAA , L&T, Airport  
authority and some more.**

**Number of noteworthy consultancy jobs completed – More than 80 since 1985**

#### **List of Recent Consultancy works**

1. **Design of Cricket stadium at Guwahati  
BCCI –Assam Project**
2. **Re-construction and Structural Strengthening of Industrial  
structures suffered heavy damage due to earthquake at Kandla Special  
Economic Zone, Gandhidham, Gujarat  
NBCC Project**
3. **Design of a Umbrala type canopy structure (17m cantilever on either side on six  
columns) at Patna airport Airports Authority of India, Kolkata  
NAAI Project**
4. **Design of a Car Parking Cum Shopping Complex at Balwakhani,  
Gangtok, Sikkim  
NBCC Project**
5. **Repair and Rehabilitation of damaged RCC framed Assembly buildings due  
to earthquake at Gangtok  
Govt. of Sikkim Project**

6. Investigation of the failure of Box Prestressed bridge girder  
United Insurance company  
National Highway Authority of India Project
7. Multistoried Building Project at New Town, Rajarhut, Kolkata 14 no. 15 storied buildings with a shopping complex.  
NBCC Project
8. Hill top 52m tall Buddha statue Project, Namchi, Sikim  
Govt. of Sikim Project
9. West Bank Hospital Project , Andul Road, Howrah, West Bengal
10. Repair and Rehabilitation of damaged Masonry buildings and RCC Water tanks at Riffle factory ( Ordnance factory, Govt. of India), Ishopore, West Bengal.
11. Expert opinion on Technical problem in Prestressed Concrete Girder no. A1-P1- RHS of Grade separator no. 1 in connection with the job of  
' Widening to 4 lanes and rehabilitation of existing two lane carriageway of Palliconda to Ranipet ( NH 46 ) & Proposed Walajahpet Bypass : Package 5  
– KR-3 ( Km 00.00 to 144.20 & 7.5km.)  
ITD Cementation India Limited
12. Repair and Rehabilitation of damaged RCC framed buildings-Youth hostels at Digha for PWD, Govt. of West Bengal.
13. Expert opinion on technical problem in Bridge construction along NH-31 near Purnea ( Bridge at 438/1, SpanP1-P2 , I-Section PSC girder, EW-12/BR, Chainage 419Km. to 447Km., Kishhangunj/Dalkhola)  
Skanska Cementation India Ltd.
14. Repair and Rehabilitation of damaged RCC framed buildings Officer's mess at Fort Williams at Kolkata  
MES, Govt. of India .
15. Investigation and Expert opinion on the stability of a tilted building at Lake garden, Kolkata  
For Executive Engineer, Housing department, Govt. of West Bengal.
16. Repair and Rehabilitation of damaged RCC framed buildings Administrative building at Suri  
For PWD, Govt. of West Bengal

17. **Repair and Rehabilitation on of damaged RCC framed buildings Residential buildings at Haldia, West Bengal  
For Indian Oil Corporation.**
18. **Repair and Rehabilitation of damaged RCC Swimming Pool at Subhas Sarabar For Govt. of West Bengal**
19. **Repair and Rehabilitation of damaged RCC Clarifier at Howrah  
For CMWSA, Govt. of West Bengal**
20. **Investigation of the failure of Box Prestressed bridge girder For  
United Insurance company for National Highway Authority  
Project**
21. **15 Cyclone resistant shelter project – 24 parganas – West Bengal  
HSCCL project**
22. **Design of Academic building of Tripura University  
HSCCL project**
23. **Design of SIDBI building with basement car parking at Bhubaneswar  
HSCCL project**
24. **Remnant life assessment of building and structures at New Cossipore  
generating station for Calcutta Electric supply corporation.**
25. **Repair and Rehabilitation report for Rail over-bridge near Purnia railway  
station for Bihar Rajya Pul Nigam LTD.**
26. **Report on health of fire damaged RCC structure of Decanter for MCC PTA ,  
Haldia**
27. **Re-strengthening of factory building to accommodate heavier new equipment  
for MCC PTA , Haldia**
28. **Design of Kendriya Vidyalaya at Bhadrak**
29. **Stability check of earthquake damaged BPCL staff quarters at Matigara ,  
Siliguri**
30. **Stability check and Rehabilitation of an Overhead water tank at Purulia for PWD.**
31. **Retrofitting of earthquake damaged two markets ( Laxmi market and New market ) at  
Imphal, Manipur for PWD , Manipur**
32. **Design of a Museum building on top a hillock including a 18m Tall horse structure  
mounted on top of the roof , at Marjing, Imphal , Manipur**
33. **Design of a 45m Tall TV Tower for Doordarsan , Kolkata**
34. **Design of a Cultural Complex at Shilong for HSCCL.**