

## RESUME OF Dr. I.C. SYAL

- 1. Name** : Dr. ISHWAR CHANDER SYAL
- 2. Father's Name** : Sh. Bakhshi Ram Syal
- 3. (a) Date of Birth** : 6<sup>th</sup> August, 1942
- (b) Nationality** : INDIAN
- 4. Post Held** : **Professor & Head (Retd.)**  
**Deptt. Of Civil Engg.,**  
**Punjab Engineering College, Chandigarh.**  
**(Superannuated on 31.8.2000)**
- 5. Present Residential Address** : H. No. 53, Sector 56, S.A.S Mohali
- 6. Permanent Address** : H.No. 53, Sector 56 (Phase VI), Mohali
- 7. Educational / Technical Qualifications:**

Sr. No.	Examination Passed	University	Year of Passing	Percentage	Division
1.	Matriculation	Punjab Uni. Chandigarh	1958	71 %	First Div
2.	B.Sc. Engg.(Civil)	Punjabi Uni. Patiala	1964	66.89%	First Div
3.	M.Sc. Civil Engg. (Structures)	Punjab Uni. Chandigarh	1965	76.7%	.....
4.	Ph.D. in Engg.	Punjab Uni. Chandigarh	1970	.....	.....

**(Topic: Inelastic Behaviour of Biaxially Loaded Steel Columns with Eccentricities of Loading Not Alike at Two Ends)**

In addition to above, I have passed certificate courses in German & French languages in First Division from Punjab University, Chandigarh in 1969 & 1970 resp. and also additional subject of Punjabi of Matriculation standard from Punjab Education Board in 1971.

**8. EXPERIENCES :****A.) Teaching / Research**

<b>Sr. No.</b>	<b>Post held</b>	<b>Employer/Organization</b>	<b>Period</b>
1.	Assistant Professor	Principal, Thapar Institute of Engg. & Tech., Patiala.	23.9.1966 to 29.9.1967
2.	Senior Research Fellow,	Secretary, C.S.I.R., New Delhi	30.9.1967 to 8.9.1969
3.	Assistant Professor (Later designated as Senior Lecturer)	Home Secretary, Chandigarh Admn., U.T. Chandigarh.	9.9.1969 to 29.4.1975
4.	Associate Professor (Later designated as Assistant Professor)	-- do --	30.4.1975 to 31.3.1985
5.	Professor (ON Merit Promotion)	-- do --	1.4.1985 to 29.4.1993
6.	Professor & Head of the Deptt.	-- do --	30.4.1993 to 31.8.2002

**(B) PROJECTS COMPLETED/IN HAND (Struct. Design & Supervision)****(a) BRIDGE STRUCTURES(CONCRETE STEEL & SUSPENSION BRIDGES)**

- (i) RCC Box culvert Bridges at Industrial Area, Panchkula,
- (ii) SUSPENSION BRIDGE WITH STIFFEING GIRDER 140m SPAN at Vill. Suru, Rampur, distt. Shimla over Satluj river
- (iii) Suspension Foot Bridge 140M span at Rupi Panchayeti near Chaura (H.P)
- (iv) Steel Bridge 60 m span over nallah at Rajpura(Punjab).
- (v) H.L. Bridge at Vill. Alam, Distt. patiala, Punjab.
- (vi) 60m span steel Bridge at Gehra, Chamba for Shivalik hydro Pvt. Ltd., Ropar

**(b.) OFFICE BUILDINGS**

- (i) Haryana State Electricity Board, Head Office, Sec 6, Panchkula
- (ii) H.U.D.A., Head Office Building, Sector 6, Panchkula
- (iii) H.A.F.E.D., Head Office Building, Sector 4, Panchkula
- (iv) P.S.I.D.C. Building, Sector 17, Chandigarh.
- (v) Pb. Financial Corp. Building, Sector 17, Chandigarh.
- (vi) D.C.Office Complex, Sector 17, Chandigarh
- (vii) Pb. Irrigation Deptt., Head Office Building, Sec. 18, Chandigarh
- (viii) Geological Survey of India Head Office Building, Sec 33, Chandigarh
- (ix) Income Tax. Office Buildings at Panchkula, Ambala, Ropar
- (x) Chandigarh Administrative Tribunal, Sector 17, Chandigarh
- (xi) Tourist Reception Centre, Anandpur Sahib
- (xii) “QUARK R & D Center Building”, Industrial Area, Mohali (Under Construction)

**(c.) Educational Buildings:**

- (i) College for Girls, Sector 42, Chandigarh.
- (ii) College for Boys, Sector 46, Chandigarh.
- (iii) Central School, Sector 31, Chandigarh.
- (iv) Dev Samaj College, Sector 36, Chandigarh.
- (v) Administrative Block, Pb. Engg. College, Chandigarh.
- (vi) Computer Sc. & Electronic Block, Pb. Engg. College, Chandigarh.
- (vii) Mahatama Ganghi Institute of Public Administration, Sec 26, Chandigarh.
- (viii) Reginal Engg. College Complex, Hamirpur(H.P.) Admn Block, Civil Engg. Block, Elec. Engg. Block, Workshop Block, Boys Hostel, Girls Hostel, etc
- (ix) Shiwalik Public School, Sector 41, Chandigarh.

- (x) St. Kabir School, Sector 26, Chandigarh.
- (xi) Vivek Public School, Sector 38, Chandigarh
- (xii) Pb. State Education Board Building, Phase VIII, Mohali

**(d.) Bank Buildings:**

- (i) State Bank of India, Local Head Office, Sector 17, Chandigarh
- (ii) Reserve Bank of India Building Sector 17, Chandigarh.
- (iii) NABARD Bank, Sector 34, Chandigarh.
- (iv) Canara Bank Building, Sector 34, Chandigarh.
- (v) Punjab & Sind Bank Building, Sector 17, Chandigarh.

**(e) Hospital Buildings**

- (i) P.G.I. Chandigarh: Dental Block, Gastrology block, Sarai Building, Doctor's Hostel , New Library Block, Emergency O.P.D.
- (ii) E.S.I. Hospital at Jalandhar
- (iii) Blocks B and C of Chandigarh Medical College & Hospital, Sector 32, Chandigarh.
- (iv) Balbir Nursing Home Building at Faridjot (Under Construction)
- (v) Isvini Hospital Building, Colaba, Bombay

**(f) Industrial Buildings:**

- (i) I.C.L. Extn, Rajpura
- (ii) Punjab Tractor Ltd., Mohali, Majri, Chhapparchheri; Sawraj Engines, Industrial Area, Mohali, Sawaraj Mazda, Ropar
- (iii) Bhushal Steel & Strips, Industrial Area Chandigarh, Derabasi, Sahibabad (Near Delhi)
- (iv) Spinning & General Mills, Bhatinda, Mansa, Malout
- (v) Extn of Pfizer India Ltd., Industrial Area, Chandigarh
- (vi) Extn of Ranbaxy Building at Industrial Phase I , Mohali & at Tonsa Ropar.
- (vii) Four Storey Building of TRIDENT GROUP at Barnala

**(g) PWD Pb. Referred Buildings**

- (i) Judicial Court Complexes at Ludhdhiana, Jalandhar, Amritsar
- (ii) Lawyer Chamber at Ludhiana( Under Contruction)
- (iii) Polytechnic Building at Mukatsar

**(h) Pb. MILKFED, Chandigarh referred Buildings**

- (i) Head Office Building at Sector 34, Chandigarh
- (ii) Milk Plant at Sangrur
- (iii) Extn of Milk Plant at Patiala, Ludhiana, Amritsar
- (iv) Animal Sheds near Village Badal

**(i) PWD Haryana referred Buildings**

- (i) Panchayat Bhawan, Sector 28, Chandigarh.
- (ii) Judicial Court Complex at Ambala
- (iii) Yagya Shala & Puja Bhawan at Mansa Devi Complex, Manimajra  
Slabs Bridges at various places in Panchkula

**(j) Haryana Tourism, Sector 17, Chandigarh referred Buildings**

- (i) Tourist complexes at Panchkula, Tilyar, Yamuna Nagar, Hisar,
- (ii) Extn of Tourist complexes ar Karnal, Panipat, Pipli, Samalkha

**(k) MARKFED Punjab**

- (i) Four Rice Plants and allied Buildings at Goniana, Giddarbaha, Jaiton & Batala

**(l) Pb. Mandi Board:**

- (i) Mandi Sheds-Sheltor at various places in Punjab

**(m) Indian Oil Corp. Chandigarh reffered jobs**

- (i) Retail Outlets (12 Nos. in Punjab) St. Design, Architecture, & Supervision; 4 Nos. in Himchal
- (ii) Similarly 3 Nos. R.O.s from B.P.C.L.

**(n) VARDHMAN GROUP INDUSTRIES**

Sheds & Factory Buildings at Mahavir Spining Milss at Hoshiarpur,  
Aura & Arihant at Baddi, Spinning & General Mills and Special Steels at  
Ludhiana

**(o) M/S Satnam Namita & Associates**

- (i) Dasmesh Academy at Anandpur Sahib, (School Buildings, Hostel Buildings, Library, Gymnasium, etc.)
- (ii) Naval Academy at Keral, Various buildings
- (iii) Martial Academy of Sports at Anandpur Sahib
- (iv) Ellora Cinema, Model Town Patiala.
- (v) Pb. Warehousing corp, Container Freight Station at Bombay
- (vi) Hotel SUN BEAM at Sector 22, Chandigarh
- (vii) Cardioc Centre, P.G.I., Chandigarh in hand

**(p) SGPC. Referred projects**

- (i) Sarai Building at Golden Temple Complex, Amritsar
  - (ii) Nada Sahib Parking Complex, NadaSahib
  - (iii) Gurudwara Saheedawala, Sec 44, Chandigarh ( Under Construction)
  - (iv) Gurudwara, Sector 8, Chandigarh
  - (v) Construction Parikarma. Minar 150' high at TaranTaran
- (q)** Pb. Health Systems Dispensaries/ hospitals at various places in Punjab.
- (r)** Haryana Housing Board, Chandigarh  
Different Housing categories at various places in Haryana
- (s)** Chandigarh Housing Board, Chandigarh  
Category III in Modern Housing Complex at Manimajra,  
Category HIG (Upper) in Sector 38, Chandigarh.E.W.S. Housing Scheme,

(t) **Punjab Urban Development Authority (PUDA)**

D.A.C. Jalandhar, D.A.C. Hoshiarpur, D.A.C. Bhatinda, PUDA Office Complex at Sec 62, Mohali, Spinal Injury Centre, S.A.S.Nagar, V.V.I.P. Guest House, Punjab Raj Bhawan, Chandigarh, India Gate Hussainiwala

(u) Five Star Hotel “Holiday Inn” at Kandghat in hand

9. 1. **Ph.D. thesis guided:** one: Dr. N.P. Devgan has worked under my supervision on topic, “Flexural-Torsional Behaviour of Biaxially Loaded Spatial Steel Beam Columns,” and was awarded degree by Punjab Uni. in 1997.
2. M.E. Theses guided: More than 150 in Nos.
3. Technical Books Published.
- (a) Syal I.C. & Gupta S.P. , “ Computer Programming & Engineering Analysis” Pub. A..H. Wheeler & Co. Ltd., Allahabad, II nd Ed., 1986.
- (b) Syal I.C., & Goel A.K., “Reinforced Concrete Structures”, Pub. A.H. Wheeler & Co. Ltd, Allahabad, 3<sup>rd</sup> Ed. 1998.
- (c) Syal ,I.C. & Ummat Ramesh,” Behaviour, Analysis and Design of Reinforced Concrete Structural Elements,” A.H.Wheeler & co. Ltd., Allahabad, 1989.
- (d) Syal I.C., & Kukreja C.B & Arun Kumar “ Structural Mechanics,” Standard Pub, 1991.
- e) Syal I.C & Satinder Singh, “ Design of Steel Structures”, Standard Pub., 1<sup>st</sup> Ed, August 2000).

**10. Technical Papers Published:**

- (i) Syal I.C. & Sharma S.S, “ Econominal Design of Reinforced Concrete Rectangular Frames”, Published in CEMENT & CONCRETE Magazine, April June, 1968.

- (ii) Syal I.C. & Sharma S.S, “ Elastic Behaviour of Biaxially Loaded Steel Columns”, Journal of the Structural Division, ASCE, Vol. 96, Proc. Paper 7143, March 1970.
- (iii) Syal I.C. & Sharma S.S, “ Biaxially Loaded Beam- Columns”, Journal of the Structural Division, ASCE, Vol. 97, Proc. Paper 8384, Sept 1971.
- (iv) Syal I.C. & Krishan Lal, “Imperfections in Biaxially Loaded Steel Columns”, Journal of the Institution of Engineers (India) Calcutta, Vol. 52, No. 5, Jan 1972.
- (v) Syal I.C. , “ Biaxially Loaded Tapered Steel Columns”, Journal of the Institution of Engineers (India) Calcutta, Vol. 54, No. CI3 5, Jan 1974.
- (vi) Syal I.C. & Jain H.L., “Design Criteria for Biaxially Loaded Steel Columns”, Journal of the Institution of Engineers (India) Calcutta, Vol. 56, No. CI35, Jan 1976.
- (vii) Syal I.C. & Ramesh Ummat, “Analysis of Continuous Non Planner Plate Structures”, Journal of the Institution of Engineers (India) Calcutta, Vol. 63, No. CI35, Nov 1982.
- (viii) Syal I.C.,” Maintenance of Existing Buildings”, Key Note address presented in National Seminar on Construction Management,T.I. E.T., Patiala, Oct 27-28, 1989.
- (ix) Syal I.C., Development of Graphics Saoftware for Design of Shallow Footings”, National Seminar on Computer Applications in Civil Engg. , T.I.E.T, Patiala 1994.
- (x) Syal. IC.,”Parametric Studies on Planner and Spatial Grid Roofing Systems,” National Seminar in Civil Engg., T.I.E.T., Patiala.
- (xi) Syal I.C. & Devgan N.P.,” Flexural Torsional Behaviour of Spatial Beam Columns,” International Conference on Computational Metjods in Structural & Geotechnical Enginnering, Hongkong, Dec. 1994.
- (xii) Syal I.C. & Rajiv Syal,” Welded Wire Fabric as Structural Reinforcement,” Journal of Indian Building Congress, Vol, IV, No.3, 1997.

- (xiii) Syal I.C. and Syal Rajiv, "New Trends in Construction with Welded Wire Fabric as Reinforcement," Indian Concrete Journal, Vol. 71, No.7, July 1997.
- (xiv) Syal I.C., & Syal Rajiv, "Distresses & Rehabilitation in Housing," presented in National Conference on Construction, Power & Roads, Urban Infrastructure & Housing 2000", March 5-6, 1999,

**11. TRAINING COURSES ATTENDED:**

Punjab State Institute of Public Admn, Chandigarh" Office Management & Office Progresses" One week, 1995.

**12. MEMBER Technical JOURNALS/Magazines**

- (i) Fellow Institution of Engineers (Calcutta) F8168
- (ii) Life Member Indian Society for Wind Engineers
- (iii) Member Indian Society for Technical Education
- (iv) Member of Magazine New Materials

13. Member of Staff Selection boards & Research Boards for REC Kurukshetra, Roorkee Uni. Roorkee, T.I.E.T. Patiala, Panjab Uni. Chandigarh, Guru Nanak Engg. College, Chandigarh, U.P.S.C., Delhi.

**14. MEMBER:** SASE (Snow & Avalanche Study Estt.) Ministry of Defence R & D Center, Chandigarh.

**15. PROOF CONSULTANT/ Structural EXPERT** for PUDA (Punjab Urban Planning & Development Authority, Chandigarh