Shanti Swarup Bhatnagar to Homi Bhabha and 150 years of Higher Education in Punjab

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(*on lien from Tata Institute Fundamental Research, Mumbai, an institution founded by Homi J Bhabha)

July 9, 2013

M.G.K. Menon: 80th Birth Year, 2008

Birth Centenary of J.R.D. Tata, July 29, 2004

Remembering the Legends at PU Campus

Feb. 21, 2013

Feb. 21, 2013

- S R Kashyap Hall
- S S Bhatnagar Hall
- Mehr Chand Mahajan Hall
- G C Chatterji Hall
- P N Mehra Botanical Garden
- Dewan Anand Kumar Admn. Block
- G P Sharma Herbal Park
- R C Paul Rose Garden
- M R Sahni Geology Block
- H R Gupta Mathematics Block
- Balwant Gargi Theatre
- SS Bhatnagar Univ. Inst. of Chemical Engg & Technology

Apr. 5, 2013
150th Birthday of R R Sahni (1863-1948)

Professor Ruchi Ram Sahni
(April 5, 1863 – June 3, 1948)

Professor Ruchi Ram Sahni
(April 5, 1863 – June 3, 1948)

Prof. Ruchi Ram Sahni was born barely 10 years after the British annexation of the kingdom of Punjab and lived to see India become independent. His life span covered an important part of Punjab's and India's history. He was prominent figure in the intellectual and public life of Punjab.

Prof. Sahni was a multi-faceted personality. He was a scientist, an innovator, an educationist, a devoted patriot, social worker and an science populariser. Prof. Sahni become the first Indian science professor at Government college, Lahore in 1887. He was also India's first nuclear scientist who published two single author research papers on radioactivity communicated by Nobel Laureate Lord Rutherford in 1915 and 1917.

Prof. Ruchi Ram was a great advocate of Science education through mother-tongue. A great votary of employment-oriented technical education combined with management and entrepreneur skills, he played an important role in the establishment of the Victoria Diamond Jubilee Technical Institute in Lahore in 1897 and had the honour of delivering its inaugural address.

(from Compendium on RRS, P.U., Chandigarh, 2013)

Remembering Ruchi Ram Sahni

(An Extract from an editorial in 'Dream 2047' November 2012, Vol.15, No.2, Pg 33,39 by Subodh Mahanti)

R. Ramachandran, while reviewing the Memoirs of Ruchi Ram Sahni correctly argued why Sahni should be accorded as prominent as a place given to pioneers of modern India science as J.C. Bose, P.C. Ray, M.N. Saha, C.V. Raman and S.N. Bose. Ramachandran wrote: "Prof. Ruchi Ram Sahni is not a name that people are likely to recognise –let alone an average India, not even someone from the Indian scientific community, which is indeed a pity. Though the sub-title of the book refers to him as the pioneer of science popularisation in Punjab, his were the pioneering efforts in the entire country. And it may not be an exaggeration to say that they remain unique to this day.

The 150th birth anniversary of Ruchi Ram Sahni should be celebrated throughout the country. Sahni should be accorded his due place for his multi-faceted contribution in shaping modern India. The year 2013 should be declared as the Year of Scientific Temper to honour Sahni, who did so much for creating scientific awareness in the country.

Pandit Nehru, Maulana Azad & Dr. S S Bhatnagar

Dr. Bhatnagar and Dr. Bhabha

Dr Bhabha's letter to Sir Sorab Saklatvala (1944)

I also hope that in time we shall receive liberal support from the Board of Scientific and Industrial Research whose avowed policy includes support of pure research.

It would be in the interest of efficiency if the Board of Scientific and Industrial Research decided to subsidise us to carry on pure research which is its intention to foster by paying us, say, ten percent of the annual expenditure it contemplates on the projected National Physical Laboratory.

Dr Bhabha's address on Foundation Stone Laying Ceremony at TIFR

(January 1, 1954)

I would also like to record here my appreciation of the tireless efforts made by my colleague, Dr Bhatnagar, in securing this site and it is, thanks to this, and all the help he has given, that we are today in a position to lay the foundation stone.

We have associated with them as executing architects, the well-known firm of Master, Sathe & Bhuta who built the National Chemical and the National Physical Laboratories and with them we have also associated Mr. Kanvinde of the Council of Scientific and Industrial Research for working out the details.

Dr. Bhatnagar with Dr. Birbal Sahni

Prof. C V Raman & Dr. S S Bhatnagar

Khan Bahadur Mian Muhammad Afzal Hussain

First whole time VC of PU, (1938-44)

S.No.	NAME	FROM	TO
1.	S. B. S. TEJA SINGH	09.02.1945	31.03.1949
2.	Sh. G. C. CHATTERJI	01.04.1949	31.07.1949
3.	Sh. DIWAN ANAND KUMAR	01.08.1949	30.06.1957
4.	Sh. A. C. JOSHI	01.07.1957	30.06 1965
5.	Sh. SURAJ BHAN	01.07.1965	30.06.1974
6.	Prof. R. C. PAUL	01.07.1974	31.12.1984
7.	Prof. R. P. BAMBAH	01.01.1985	31.03.1991
8.	Prof. T. N. KAPOOR	22.07.1991	22.07.1997
9.	Prof. M. M. PURI	23.07.1997	22.07.2000
10.	Prof. K. N. PATHAK	22.07.2000	22.07.2006
11.	Prof. R. C. SOBTI	22.07.2006	22.07.2012
12.	Prof. ARUN K. GROVER	23.07.2012	

Two Doyens

Sir Shanti Swarup Bhatnagar

- 21 February, 1894, **Bhera**, Shahpur in Distt. (Pakistan) - Jan 1 1955, Baroda
- Parents : Smt. Parbati and Shri Parmeshwari Sahai
- Childhood at Sikandarabad, Distt. Bulandshahar, UP, after losing his father when he was just 8 months old
- 1908 : Moves to Lahore, under the care of **Shri Raghunath Sahai,** the famous headmaster of the **Dyal Singh High School** at Lahore and a close friend of his father

Dr Homi J. Bhabha

(October 30, 1909, Mumbai – January 24, 1966, Mount Alps
* Parents : Smt. Meharbai and Mr J. H . Bhabha, Barristor, Legal Advisor to Tatas ,
Grandson of Dr Col. Hormusji J. Bhabha, M.A. , D.Litt., Inspector General of Education at Mysore

Childhood and Early Education: Mumbai.

Sir Shanti Swarup Bhatnagar

- 1911 Matriculation, Dyal Singh High School at Lahore
- 1913 Intermediate, Dyal Singh Intermediate College
- May, 1915: Married to Lajwanti, daughter of Shri Raghunath Sahai
- 1916 : Completes B.Sc. with Honours in Physics from Forman Christian College
- Was **failed in Chemistry** due to an upto date answer on wave attributes of X-rays, not available in then text books of Physics and Chemistry
- Provides import substitution for German Gelatin duplicating pads used for printing , in particular, the Question Papers of P.U. Lahore. **Rewarded Rs.150 for this innovation**

Dr Homi J. Bhabha

Schooling : Cathedral School and Royal Institute of Science, Mumbai

1927-1939 : Cambridge University, UK

First –Degree in Mechanical Engineering, followed by that in Mathematics and Physics. Ph.D. in Theoretical Physics.

Travelled to Europe on a Fellowship like SSB, met W. Pauli at Switzerland and Neils Bohr in Copenhagen.

Sir Shanti Swarup Bhatnagar

- 1919 : Completes M.Sc., takes three years as he has to earn while learning. Works for FC College, while studying at Government College, Lahore.
- 1919-1921 : D.Sc. Degree at University of London. Fellowship arranged by **Prof. Ruchi Ram Sahni from Dayal Singh Trust.**
- Meets Prof. Walther Hermann Nernst, Nobel Prize Chemistry (1920)
- 1921-1924 : **Research Professor at Banaras Hindu University**, on invitation from Pt. **M M Malviya** - Establishes Chemistry Laboratory

Dr Homi J. Bhabha

1939-1945: Stay at Dept. of Physics, Indian Institute of Science, Bangalore

19 August 1943 : Proposes the initiation of Tata Institute of Fundamental Research

1 June 1945 : TIFR Starts at IISc., Bangalore

19 December 1945 : TIFR inaugurated at Mumbai

Sir Shanti Swarup Bhatnagar

- 1924-1939 : Professor of Physical Chemistry and Founder Director of University Chemical Laboratory, Lahore. **Initiator of Chemistry Honours School** at P.U. Lahore.
- December 1939: Sir Ramaswami Mudaliar, Commerce Member in Viceroy's Committee identifies him to conceive plans for Scientific and Industrial Research (SIR) to aid war effort of British in Eruope.
- **1940: Director, Scientific and Industrial Research, Calcutta.**

  Sets up Research Laboratory at Alipore in Calcutta

Dr Homi J. Bhabha

April, 1946: First meeting of CSIR Committee for Atomic Research conducted at TIFR, Mumbai in which Shanti Swarup Bhatnagar participated.

26 August, 1947: Board for Atomic Research created in CSIR

April 1948: Atomic Energy Commission created with Dr Homi Bhabha, Dr Shanti Swarup Bhatnagar and Dr K.S. Krishnan as members.

Sir Shanti Swarup Bhatnagar

- Nov. 14, 1941: Industrial Research Fund Created with an annual grant of Rs.10 lakhs
- 12 March 1942: CSIR registered as a Society
- September 26, 1942 : Research Fund transferred to CSIR, Hence the Foundation Day of CSIR.

(SS Bhatnagar Prizes announced every year on this day)

- After August 1945: Creates Committee for Atomic Research
- Starts setting up chain of CSIR Laboratories
- CGCRI, Calcutta, 24 December 1945

.* CFRI , Dhanbad , 17 Nov., 1946

•NML , Jamshedpur , 21, Nov., 1946

• NPL New Delhi , 4 January, 1947

•NCL Pune, April 6, 1947

Acharya Praful Chandra Ray

(MA in Chemistry teacher of Ruchi Ram Sahni at Calcutta)

- **"On turning over the pages of Nature my eyes changed across an advertisement of Macmillan's in which I find your book* at last advertised. That the book is of a high standard is indicated by the most excellent review in Current Science by Professor Stoner, who is competent to judge.**

Physical Principles and Applications of Magneto-Chemistry, by S S Bhatnagar and R N Mathur,

Macmillan and Co. Ltd., 1935

Dr. P.C. Ray (contd…)

- As far as I know, Meghnad's is the only text book in Physical Science that has been adopted in foreign universities and it gladdens my heart that another work in Physical Science is likely to occupy a similar place.

- My days are numbered and my great consolation is that you in chemistry are trying to raise the reputation of Indian workers abroad".

Prof. C.V. Raman

- …it is always a pleasure to me to handle new scientific books by reputed authors. In the present instance, the pleasure has been greatly enhanced by the very attractive printing and get up of the book and by the fact that the authors are my own countrymen.
- I very much specially admire your energy and perseverance in having produced such a book in spite of your other important scientific activities. Your name now stands as one of the very few Indians who have written scientific books claiming the respect and attention of senior workers in every country".

Convocation Address of Sir Herbert Emerson, Governor of the Punjab to the Punjab University,

1935

- "…..**first class work being done by that very distinguished scientist Dr. Bhatnagar in the University Laboratories on the technology of oils**. In am told by men who know the practical side of the industry that the results already attained promise to be of very great commercial value. While the possibilities are immense, we know that **a well-known firm has shown its faith in Dr. Bhatnagar** and his assistants by a handsome financial contribution towards the cost of the work that is being done".

Convocation Address of Sir Tej Bahadur Sapru at the Pb. University, 1936

"When , therefore, I read the other day in the newspapers that Messers Steel Brothers had in recognition of the great work done by Dr. Bhatnagar, made very generous gift of money to him and he had with a singular sense of patriotism and self denial transmitted a considerable part of that gift to the Chemistry Department of your university so as to create an Industrial research Department in which some research scholars could develop new processes for the industrial utilization of Indian raw materials.

Convocation Address of Sir Sikander Hayat Khan Prime Minister , Punjab to the Pb. University, 1937

- "It is gratifying that the Chemistry laboratory under the able and enthusiastic guidance of Dr. Bhatnagar continues to do valuable research work, which apart from its educational valueis proving of great benefit to the industrial concerns in Punjab and elsewhere. Some of the results of Dr. Bhatnagar's researches have deservedly earned for him and his associates an international place in the field of Applied Chemistry.

Prof. M.N. Saha, D.Sc., F.R.S.

- "Congratulations on your noble gift to the Punjab University, you have hereby raised the status of the University teachers in the estimation of the public, not to speak of the benefit conferred on your Alma Mater.

- India does not lack in men earning millions but if a few of these millionaires were guided b the fine examples set up by a comparatively poor teacher like yourself, …

His Excellency Sir Henry Craik, Governor of the Punjab while inaugurating 26th session of the All Indian Science Congress, Lahore (2nd Jan. 1939)

- "There has been also been much of greater output of written work notably in Chemistry Department under the distinguished direction of Professor Bhatnagar which had attracted students from all parts of India, and its achievements have won recognition in Europe also.

His Excellency Sir Henry Craik, Governor of the Punjab at the Annual Lunch of the Northern India Chamber of Commerce, Lahore, 13th April, 1940

- "There is every reason to suppose that the war will give an immense fillip to Indian industry. There will be double stimulus. The great demand for industrial products created by the War will be the direct incentive to the existing industries while the difficulty of obtaining many of the articles, we are importing before will stimulate, the search for substitutes or ways and means of producing them here.

Sir Henry Craik ….contd.

- And in order to promote and coordinate and to facilitate the exploration of more fields of development. The Central Government have just set up a Board of Scientific and Industrial Research on which a number of Scientists and Industrialists of this country have agreed to serve. I believe that the establishment of this new organization will prove to be an important landmark in the history of India's industrial development.
- And I am sure everybody here , would agree with me in congratulating the Central Government on having secured the services of Dr. Bhatnagar as member of the Board and as Director of Scientific and Industrial Research. As Chancellor of our provincial University of which he is so distinguished an ornament, I deeply regret his transfer to another sphere

Bulletin Board of TIFR ARCHIVES

Early days of TIFR

1945-1950

In **May 1945,** the Trustees of **the Sir Dorabji Tata Trust** decided to sponsor an Institute for Fundamental Research, in co-operation with the Government of Bombay. It was decided to incorporate the Cosmic Ray Unit of the Indian Institute of Science, Bangalore in this Institute. It was also decided to name the new Institute

"The Tata Institute of Fundamental Research"

The Provisional Council consisting of

Sir S.D. Saklatvala (Chairman)	Representative of Sir Dorab Tata Trust
Mr S.N. Moos	Representative of Government of Bombay
Dr John Mathai	Representative of Sir Dorab Tata Trust
Dr H.J. Bhabha	Director of the Institute

held its first meeting **on May 18, 1945.**

First Meeting of TIFR Council (May 1945)

In this meeting, a tentative proposal for the budget of Rs 80,000 was passed for the year 1945-46.

The income available was

- Rs 45,000 from the Sir Dorab Tata Trust
- Rs 25,000 from the Government of Bombay
- Rs 10,000 from the Council of Scientific and Industrial Research

TIFR ANNUAL REPORT 1946-47

The Council of Scientific and Industrial Research sanctioned an annual block grant of Rs 75,000 to the Institute during the year 1946-47 and requested for representation on the Council of the Institute.

This grant was to enable the Institute to create a chair of Astrophysics and to invite a Visiting Professor.

Sir S.S. Bhatnagar, Director CSIR, was appointed as a representative of the Central Government on the Council of the Institute.

TIFR ANNUAL REPORT : 1947-48

Dr P.S Gill joined the Institute on June 26, 1947 as a Professor of Experimental Physics. Mr S. Gupta joined the Institute as a Reader in Theoretical Physics on August 13, 1947. Dr F.W. Levi joined the Institute as Professor of Mathematics from February 6, 1948.

Sir S.S. Bhatnagar, Sir K.S. Krishnan, Dr D.M. Bose and Mr D.N. Wadia, members of the Board of Research on Atomic Energy also **visited TIFR on April 9, 1948.**

Atomic Research Committee, appointed by the CSIR recommended in 1948 that TIFR should be the centre of all large-scale research in nuclear physics in India.

The Committee recommended that a high energy accelerator capable of producing particles of energy above 200 MeV and sufficient to create mesons should be set up in TIFR.

A committee was set up to appoint a team of ten scientists and train them in techniques of Nuclear Physics. CSIR also sanctioned a sum of Rs. 32,400 for the training of this team of scientists.

The following eight appointments were made.

Mr R.P. Thatte, Mr A.B. Sahiar, Mr P.C. Vaidya, Mr G.H. Vaze, Mr G.S. Gokhale, Mr R.R. Daniel, Dr Pritam Sen and Mr R.V.S. Sitaram.

Dr Bhabha personally was in charge of the team.

TIFR ANNUAL REPORT : 1948-49

In September 1949, the Institute moved from its old premises at Pedder Road to the converted Yacht Club buildings.

The Department of Scientific Research sanctioned an additional grant of Rs 30,000 for the purpose of constructing suitable accommodation in the new premises.

Dr Bhabha's communication to Pandit Nehru (1953)

The **Atomic Energy Commission**, on the initiative of Dr **S.S. Bhatnagar**, at its 27th meeting on the 22nd and 23rd **April 1953** recorded the following:

"The Commission noted that it had recognized the **Tata Institute of Fundamental Research** as the only laboratory of the Commission for fundamental research in atomic science. **In view of this decision the Commission would not set up another laboratory of its own for fundamental research in atomic physics**."

Dr. S.S. Bhatnagar (1 January, 1954)
(Foundation stone laying of TIFR)

About a year ago, Dr. Bhabha and I were working on the plan for the development of the fundamental research laboratory for nuclear physics. The problem which perplexed us was whether we could afford to have a separate institute for nuclear studies or expand the Tata Fundamental Research Institute to include all this and develop it into a really very good laboratory for such investigations.

The lack of sufficient funds made me propose that the Tata Fundamental Research Institute should be expanded to include all scientific research of a fundamental character in these fields and that it should be ranked and perhaps named as a national institute.

Dr. S.S. Bhatnagar (Jan. 1,1954) contd…

A distinguished young politician walked into my room and asked me about the nature of discussion which we *(he and Homi Bhabha*) were having. I explained to him briefly our ideas on the subject.

Dr. Bhabha had to go away for, he had another appointment and this young man found time to ask me in all curiousness as to why as a practical scientist I wanted to associate myself with the transfer of such important practical activities to the care of Dr. Bhabha whose fame rested mainly on subjects which were highly mathematical and of little significance to the material development of our country. He said a senior scientist asked him to dissuade me from being a party to an ambitious project which could not be brought into being in my life time.

Dr. S.S. Bhatnagar contd…

With all the patience and gentleness I am capable of having, I told my friend that he did not know Dr. Bhabha intimately enough and that although his fame in mathematical physics brought a great deal of credit to India, his talents in other fields such as arts and paintings were no less creditable and that above all he had had his basic training in engineering subjects and he holds a degree in engineering and that nobody in India was in my opinion better fitted to take up this task which was assuming world importance and could not be neglected by us.

Dr. S.S. Bhatnagar … Jan. 1, 1954

I wish to offer my colleague, Dr. Bhabha the felicitations of the Ministry of Natural Resources and Scientific Research. I hope my desire to see the grandeur and beauty of this new Institute with my own eyes will be fulfilled. **I have decided to live to see it fully constructed and equipped.**


1954

Dr. S S Bhatnagar at laying of Foundation Stone of TIFR, Jan. 1, 1954

Pt Nehru with Architectural Model of TIFR

TIFR

TIFR

Dr. H.J. Bhabha, F.R.S. (1955)

I had worked with him as a colleague for nearly 10 years and I can, therefore say personally, his premature death was due to over work. Science is today an integral part of the modern civilization and it is Dr. Bhatnagar's outstanding achievement that in the short period of a few years he conceived and built in India a chain of magnificent National Laboratories.

Dr. Homi Bhabha's address on 'Science and Problems of Development', Jan. 7, 1966, Mumbai

I would like at this point to pay a tribute to the memory of my friend and colleague, the late Dr S.S. Bhatnagar, thanks to whose enthusiasm, energy and dynamic personality a large number of national laboratories were established within a period of some seven years.

College and University Education in Punjab since 1850

Regulation of Education in Punjab

Pre-Higher Education Phase (1850-63)

- **1854: Enunciation of Education Policy in India**
- **1856: D.P.I., Punjab to regulate School Education**
- **1861: 4 Students qualify Entrance Examination of Calcutta University**

Higher Education In Punjab: Phase I (1864-1904)

- Jan, 1864: Govt. College at Lahore (GCL)
- Dec 1869: Punjab University College, Lahore (PUCL), Infrastructure appended to GCL
- Oct 14, 1882: University of Punjab at Lahore, centered around GCL & PUCL, and affiliating other colleges, like Oriental College, Law School, St Stephen's (Delhi), etc.
- 1886: DAV College, Lahore,

  F.C. College, Lahore

1887: Mahindra College, Patiala

By 1901-02 : 15 Colleges affiliated to P.U.

Stalwarts of the Era (Phase –I)

- Sardar Dyal Singh Majithia
- Prof Ruchi Ram Sahni (b. 1863)
- Raja Narendra Nath
- Prof Gopal Singh Chowla
- Sir Ganga Ram
- Mahatma Hans Raj (b. 1864)
- Pt. Guru Datt Vidyarthi
- Lala Hardyal

Higher Education: Phase II (1904-47)

- 1904: Indian Universities Act
- Universities empowered to appoint Professors & Lecturers & to Undertake Research
- 1904 onwards: College Teachers given sabbatical leave to go abroad for research
- Eminent teachers invited from Britain
- 1912: Astronomical Observatory set up at Lahore
- 1916: M.Sc. Degree instituted
- 1920s: Hons Schools started in Oriental Languages, History, Mathematics, Physical Chemistry, Botany & Zoology.
- 1921: Faculty of Commerce Instituted.
- 1922 : Dean University Instruction Appointed

  Dr S S Bhatnagar appointed founder Director of Univ. Chemical Lab. & Prof. of Physical Chemistry

Phase II

- 1924-33: Dr S S Bhatnagar's pioneering contributions in fundamental research, applications in industry & Consultancy to Industrialists.

Contemporaries of Dr S S Bhatnagar at Lahore:

- Botany: Prof S R Kashyap

(Dr Birbal Sahni, Dr A C Joshi, Dr P N Mehra, Dr M S Randhawa)

Zoology: Prof .Vishwanath, Dewan Anand Kumar

Chemistry: Prof. S S Bhatnagar, Prof .Kartar Singh Bawa, Prof Sri Krishna

Physics: Prof P K Kitchlu, Dr P S Gill

Prof . A H Compton visited P.U. Lahore in 1926 to carry out

Cosmic Ray Reseearch at High altitudes near Gulmarg

Mathematics: Prof Sarvadaman Singh Chowla

(R P Bambah, F C Kohli, Abdus Salam)

Agriculture: Khan Bahadur Mian Mohammad Afzal Hussain, First full time VC of P.U. (1938-44) & Foundation Fellow of National Institute of Sciences (INSA) in 1934

PHASE - II

- 13 Scientists from Punjab were the Founding Fellows of the Indian Academy of Sciences, Bangalore in 1934.
- 1947: One Lakh Students had paid Examination Fee to P.U. Lahore
- 100 affiliated Colleges, 3 Constituent Colleges & 17 Teaching Depts. at Lahore in 1947

Higher Education in Punjab- Phase III (1947-2000)

- Oct 1, 1947: P.U. Commenced Functioning at Simla

Key Persons to re-initiate the East Punjab University

Justice Teja Singh
Prof G C Chatterjee, Secy, Education Dept.
Chief Justice Mehr Chand mahajan
Dr S S Bhatnagar
Dewan Anand Kumar
Dr M S Randhawa

1948: Administrative Offices in Simla
1949: Govt. College Hoshiarpur selected to reinitiate Univ. Depts.
Jan 26, 1950: Renamed as Panjab University
1951: Govt College Hoshiarpur transformed to PU College, Hoshiarpur
1951: Chandigarh selected as State Capital city
1953: Sector 14 acquired for PU Campus

1956: Administrative offices move to Chandigarh
1958: Teaching Depts start to move to Chandigarh from various locations
1960: Most Depts start functioning from Chandigarh Campus

Vigorous drive to induct faculty from all over the world (A C Joshi's efforts)
Encourage teaching staff to upgrade qualifications via study leave

Contemporaries of Dr S S Bhatnagar and their students at Panjab University Campus, Chandigarh

- Dewan Anand Kumar
- Dr A C Joshi, Dr P N Mehra
- Dr Vishwanath, Dr G S Pruthi, Dr G P Sharma
- Dr Hans Raj Gupta, Dr R P Bambah
- Dr D C Sharma
- Dr M R Sahni
- Dr R C Paul
- Principal C L Anand
- Dr. Mulk Raj Anand
- Prof. Hazari Prasad Dwivedi (came from BHU)
- Shri Balwant Gargi (nurtured by Norah Richards at Andretta)

and many others….

Higher Education : Phase IV (since 2000)

Focus: To provide Technical & Professional Education,

Following Institutes set up: 56 New Courses Started

- **Univ Insttt of Engg & Technology**
- **Instt of Dental Sciences**
- **Univ Instt of Legal Studies**
- **Univ Instt of Hotel Mgt & Tourism**
- **Univ Instt of Applied Mgt Sciences**

- To focus on interdisciplinary areas, 3 Institutes set up:
- Instt of Emerging Areas in Sc. & Technology incorporating Centres for Stem Cell & Tissue Engg, Nanotechology, Microbial Biotechnology, Public Health, Human Biology and Genomics
- Instt of Emerging Areas in Social Sciences having centres in Human Rights, Police Administration, Social Work
- Instt of Educational Technology & Vocational Education
- Four Constituent Colleges Set up in Remote and Rural Areas to Spread Quality Education

Proposed newer Activities

- Introduction of Hons. School System across all Disciplines
- Revitalisation of Graduate Schools notion across 11 Faculties through integration of MSc-Phd, Choice Based Credit Sysem & Lateral Entry/Movement modes
- Teachers of Affiliated Colleges motivated to undertake Research at PU Campus through vigorous Sabbatical Leave programme
- Creation of Chandigarh Region Knowledge & Innovation Cluster (CRIKC)

Re-initiating PU Annual Foundation Day Lectures
October 20, 2012

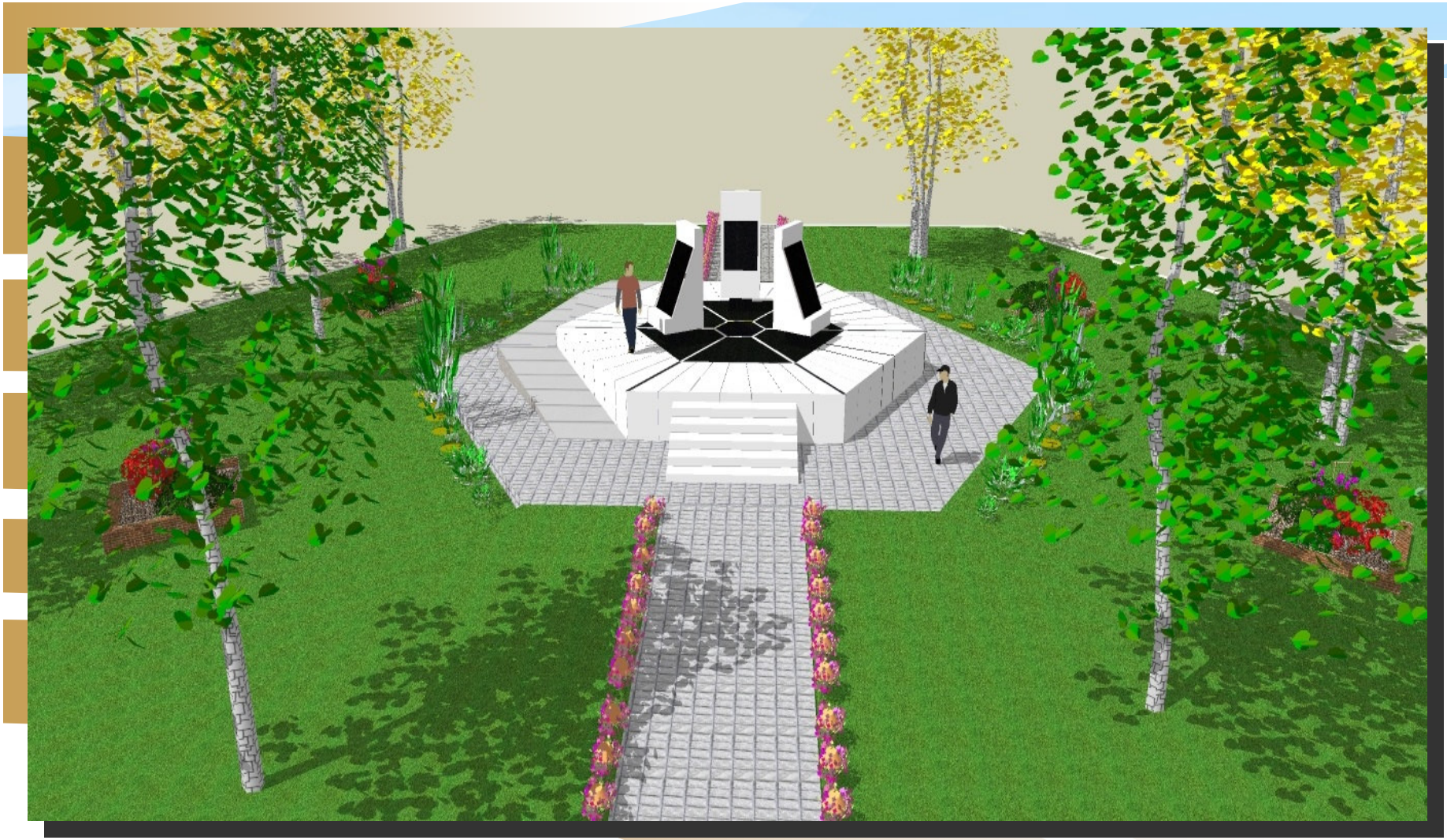
PANJAB UNIVERSITY

SET UP 65 YEARS BEFORE
INDIA'S INDEPENDENCE
THRIVED AS A LEADING CENTRE OF LEARNING
IN THE ENTIRE SUBCONTINENT

THE TRAUMA OF PARTITION IN 1947
PUT ITS RESILIENCE TO THE SEVEREST TEST

65 YEARS LATER
THE UNIVERSITY LOOKS BACK
AT ITS RECORD OF GLORIOUS RESURGENCE WITH PRIDE

TO COMMEMORATE THE OCCASION
PROFESSOR ROMILA THAPAR
EMINENT HISTORIAN AND AN ALUMNA OF THE UNIVERSITY
UNVEILED THIS PLAQUE ON
20TH OCTOBER 2012



PROPOSED PANJAB UNIVERSITY MONUMENT

APPROACHING PATH, WALKWAYS AROUND AND LUSH GREEN BEAUTIFUL GARDEN.

Thank you all !