



The Institution of Engineers (India)

ALIGARH LOCAL CENTRE, ALIGARH

57th ENGINEER'S DAY 2024

Sunday, 15th September

Theme: “*Driving Sustainability with Engineering Solutions Embracing the Latest AI Driven Technologies*”

Life Sketch of Sir Mokshagundam Visvesvaraya

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Happy Engineer's Day

• Legacy: Sir MV's birthday, September 15, is celebrated as Engineers' Day in India to honor his contributions to engineering and his role in nation-building.

**57th ENGINEER'S DAY
2024**

Happy Engineers' Day: Several leaders, including Union Home Minister Amit Shah, Delhi CM Arvind Kejriwal, Tripura CM Manik Saha paid a tribute to the legendary civil engineer M. Visvesvaraya on his birth anniversary.

Taking to the social media platform X, Amit Shah extended his greetings to all the technocrats. He emphasized the contributions of engineers in fueling India's growth and innovation.

"Engineers are the backbone of our nation's growth and innovation, advancing progress and shaping our future through their vital contributions.

My homage to visionary engineer Bharat Ratna, Sir M Visvesvaraya Ji, whose enduring legacy will inspire engineers as they forge Bharat's future," Shah posted on X.

Presentation Outline

- Introduction
- Life and journey of legendary engineer
- Responsibilities
- Sir Mokshagundam Visvesvaraya : A man with values
- Major achievements of Bharat Ratna
- Memorial and institutions in his honor.
- An inspiring message to all engineers.
- **Concluding Remarks**

Legendry Engineer : Sir Mokshagundam Visvesvaraya



India's greatest civil engineer, Sir M Visvesvaraya's journey from being a little boy born in a small village to a humble family to that of the Bharat Ratna is an inspiring tale.

He was an engineer, statesman and visionary who firmly believed in industrialization, education and women empowerment. Every year his birth anniversary, September 15th is celebrated as *Engineering Day*. As India's first civil engineer, his achievements are testimony to the power of education and how knowledge can make even the impossible, possible.

**AN EFFICIENT ADMINISTRATOR, AN EMINENT STATESMAN, EDUCATIONIST, ECONOMIST,
SOCIAL WORKER AND ABOVE ALL A PATRIOT OF THE HIGHEST ORDER**

➤ **57th Engineers' Day**

➤ **Commemorating 163rd Birthday Celebrations of Bharatha Ratna Dr. SIR.M.VISVESVARAYA**

➤ **Due to his outstanding contribution to the society, Government of India conferred “Bharat Ratna” on this legend in the year 1955.**

➤ His life and journey as an engineer is also a inspiration to all engineers.

➤ He was the engineer of modern India. His inspiring words will always inspire the young engineers

Life & Journey of Sir MV



BIRTH PLACE

BORN : September 15, 1861
at Muddenahalli near

Bangalore



PLACE OF ETERNAL REST

DEMISE : APRIL 14,
1962 102 YRS

Sir M.V - A MULTI-FACETED PERSONALITY

Three distinct distinguished facets are ---

---- An eminent engineer, an eminent statesman, an eminent economist

Dr. BRAHMANANDA, Dr. ATHRE AND OTHER ELITE
ECONOMISTS HAVE EXPRESSED THAT ----

----- the distinguished statesman and economist

PANDIT NEHRU, C. RAJAGAPALCHARI AND OTHER ELITE
STATESMEN HAVE EXPRESSED THAT

“SIR MV IS ONE OF THE MOST EMINENT STATESMAN, INDIA HAS SEEN”

The Indian engineering community feels that

“SIR MV is one of the most distinguished engineer, India has seen”

The public, in general, are convinced that---

‘Sir MV is a national icon and a patriot of highest integrity’

in essence, his is a multi-faceted personality

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Education

- Early schooling was completed at Chikkaballapur.
- 1881 : B.A examination from central college, Bangalore.
- 1883 : Civil Engineering from science college, Poona
- He ranked first in C.C.E and F.C.E examinations
(equivalent to B.E examination today)

“Sir MV was one of those rare human beings who practiced in personal life what he purchased in public”

- **WAS AWARDED “JAMES BERKELEY GOLD MEDAL” FOR HIS OUTSTANDING PERFORMANCE**



His responsibilities

Some of his job positions he held were

- Assistant Engineer, Bombay Government Service (1884) .
- Chief Engineer in Mysore state (Nov 15,1909)
- Chairman, Bhadravati Iron Works
- Member of Back Bay Enquiry Committee, London.
- Member of the Governing Council of Indian Institute of Science, Bangalore.

- Diwan of Mysore State (For 6 years)
- President of Education and Industrial Development Committees in Mysore state.
- Member of the Governing Council of TATA Iron and Steel Company [TISCO].

A Man with values

- **Punctuality** : He was never late even by a minute and expected his people also to realize the importance of time.
- **Perfect Clothing** : Every person having met sir MV, proudly remembers his neat and fine clothing.
- **Perfectionist** : There are many examples to show that even a little task that he took up, always completed to perfection. Even if it was to deliver a speech, he would think in advance, write and rehearse number of times.

- **Courageous:** Many of the projects completed by him that India stands proud of today, would not have existed if it was not his will and conviction.
- **Fitness:** Even at the age of 92, he was never dependent on comforts; he would not only walk by himself, but, take full participation in all proceedings.

“sir MV was one of those rare human beings who practiced in personal life what he purchased in public”

Some Major Achievements

BOMBAY :

- Introduced the block system irrigation
- Designed a new system of systematic water weir flood
- Established Deccan Club in Poona

BIHAR & ORISSA :

- Selected site for a railway bridge on river ganga in Bihar
- Hirakund enquires

Hyderabad

- Scheme for flood protection and drainage for Hyderabad
- Remolding of Hyderabad city

✓ Architect of the Krishna rajasagar dam or **KRS and** brindavan gardens. One of the biggest dam in India which irrigates a hundred and twenty thousand areas of land

✓ **Bhadravati** iron and steel works-as its Chairman he recued it from becoming extinct.



- State bank of Mysor
- Founder of Mysore sandal oil factory and the Mysore soap factory.
- Mysore Chamber of Commerce
- Founder of Canada literary “Mysore University”

Sir MV’s question was “if Australia and Canada could have universities of their own for less than a million population cannot Mysore with a population of not less than 60 lakhs.

“To give real service, you must add something which cannot be bought or measured with money.”

Awards



- 1955: conferred **BHARAT RATNA** (The gem of India) .
- **1943: Elected as an honorary life member of the Institution of Engineers.**
- 1906 : “**KAIAR-E-HIND**” in recognition of his services. **Kaisar-e-Hind**
- 1904: Honorary membership of London Institution of Civil Engineers
- C.I.E (Companion of the Indian empire) at the Delhi Durbar.
- K.C.I.E (Knight Commander of the order of the Indian Empire).



Memorials & Institutions in His Honour

- Memorial at Muddenahalli .
- Visvesvaraya national Institute of Technology (V.N.I.T.),
- Sir Mokshgundam Visvesvaraya Institute Of Technology, Bangalore is named after Sir M.V.
- University Visvesvaraya College of Engineering .
- Visvesvaraya National Technological University, Belgaum.





A WORD ABOUT FAMILY LIFE.....

**1861 - born as second son of Sri. Srinivasa
Shastry**

1882 - Married Ms. Saraswathi

1888 - sad demise of her with new born baby

1889 - second marriage with Ms. Savithri

1890 - sad demise of Mrs. Savithri along with new born baby

**1891 - third marriage but separated from her soon after, for
reasons**

**not clear however ensured to send money for her livelihood till
his death**

-spent rest of his life all alone

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SIR M. V. --- A FEW MOMENTS

“one of his first actions when appointed to the Dewanship was to invite all his relatives to a dinner, wherein he announced news of his acceptance of the position.

but he made a special request to them that no favours should be asked of him.

-He adhered strictly to this principle to the very end.

“He tendered his resignation to the dewanship when certain issues proposed by the maharaja (highness) were not acceptable to him in principle.

While handing over resignation letter to the highness, he drove to the palace in official car and drove back to his residence in his private car.”

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His First Assignment(1884)

His first assignment was in Khandesh district(Dhulia) of Bombay presidency.

as a part of water supply scheme to Dattari village, he had to bring water through a siphon below the river Panjira. siphon was essentially through rock.

The British officer had set the time target. the work stalled frequently due to floods in Panjira.

BUT THE DEADLINE HAD TO BE MET.

Even in heavy rain, he continued boring work, by motivating staff and by working hard along with them.

on more than one occasion, he had to take off his coat and swim across the river to assist his staff.

➤the task was completed much before the set time target.

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SUKKUR WATER SUPPLY SYSTEM (1895)

Water supplied to the town (Sindh province) was turbid and unfit for drinking. it was the cause of several illness affecting the town inhabitants

He decided that clean water must be supplied. sukkur town authority was not financially sound enough to adopt “filtration”

Sir MV developed a new scheme. He dug a tube-well on the bank of the river and struck underground water. it was essentially river water filtered by the intervening rocky mass. water was clean enough.

Further a tunnel was driven from the bottom of the well for some distance under the flowing river to augment the clean water. This technique

today is termed “collector well” system

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SUMMARY OF SOME IMP. WORKS OF SIR. M. V.

A. In Mysore state (present Karnataka)

K.R.S Dam at Krishnarajasagar (1909)

- Visvesvaraya iron & steel works at Bhadravathi (1918)**
- Established University of Mysore at Mysore (1916)**
- College of Engineering at Bangalore**
- Sri Jayachamaraja occupational institute at Bangalore (1929)**
- constructed 205 miles of railway lines**
- initiated hydro-electric project to harness jog falls**

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B. water supply schemes in different parts of India



Ahmed Nagar, Akkalkot, Bombay

Bangalore, Belgaum, Dharwad (Karnataka)

Baroda, Bhavnagar (Gujarat)

Bhopal (M P) Madgaon (Goa) etc.

C. In Hyderabad State

Schemes for flood protection and drainage

Remodelling of Hyderabad City

advisory services during construction of Tungabhadra dam

D. In BIHAR and ORISSA States

selection of site for railway bridge across river Ganga, Advisory

services for construction of a major dam across Mahanadi.

In around 1906/1907, the Government of British India sent Visvesvaraya to the British Colony of Aden (present-day Yemen), to study water supply and drainage systems. The project prepared by him was successfully implemented in Aden

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several hardships were being experienced by the public at Aden due to paucity of drinking water and due to paucity of cleanliness in the city. the British govt. directed govt. of India to look into this problem.

Aden is surrounded by hillocks about 60 miles away. the scanty rain fall in the small area between the hillocks and the town gets into the sandy desert. A small stream in the beginning vanishes after a distance. He studied the entire geography and identified that a reservoir of water existed at a considerable depth at a location, about 18 miles away from Aden

-scheme comprised of providing deep bore wells at this location and pumping out clear water for drinking. the scheme successfully worked. further, he designed surface and underground drainage schemes for the town

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ADEN WATER WORKS (Contd.....)

THE CITY STILL REMEMBERS THE GREAT ENGINEER, WHO CAME TO THEIR RESCUE. THE BRITISH GOVT. IN RECOGNITION OF HIS SERVICES AWARDED HIM THE TITLE “KAISER-E-HIND”



CONTRIBUTIONS TO THE INDUSTRIAL GROWTH OF INDIA

HIS SLOGAN WAS “*INDUSTRIALIZE OR PERISH*”. HIS CONTRIBUTIONS WERE SIGNIFICANT FOR INDUSTRIAL GROWTH OF THE COUNTRY, WHICH AT THAT TIME WAS MOST BACKWARD.

THE THREE THAT BENEFITED BY HIS EFFORTS ARE -

- 1. STEEL MANUFACTURING INDUSTRY**
 - 2. AUTOMOBILE INDUSTRY; AND**
 - 3. AIRCRAFT INDUSTRY.**
-



CHAIRMANSHIPS AND MEMBERSHIPS

- 1. 1921 - CHAIRMAN, BOMBAY TECH AND INDUSTRIAL EDUCATION COMMITTEE**
- 2. 1922 - MEMBER, NEW CAPITAL (NEW DELHI) ENQUIRY COMMITTEE OF GOVT. OF INDIA**
- 3. 1923 - CHAIRMAN, BOARD OF
-29 MANAGEMENT, BHADRAVATHI
IRON & STEEL WORKS**
- 4. 1925 - CHAIRMAN, INDIAN
ECONOMIC ENQUIRY
COMMITTEE**

(Contd/.....)

CHAIRMANSHIPS (Contd...)



5. **1926 - MEMBER, KARACHI MUNICIPAL FINANCE ADMINISTRATION COMMITTEE**
6. **1927 - DIRECTOR, BOARD OF DIRECTORS, TATA IRON & STEEL COMPANY**
-55
7. **1929 - MEMBER, BANGALORE POLITICAL DISTURBANCES ENQUIRY COMMITTEE**
8. **1930 - CHAIRMAN, BOMBAY UNIVERSITY COMMITTEE FOR PROMOTING CHEMICAL INDUSTRIES**

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CHAIRMANSHIPS (Contd...)



**9. 1937 - CHAIRMAN, COMMITTEE ON
IRRIGATION POLICY BY
BOMBAY PRESIDENCY GOVT.**

**10. 1938 - CHAIRMAN, COURT OF
-47 THE INDIAN INSTITUTE
OF SCIENCE, BANGALORE**

**11. 1941 - PRESIDENT, ALL INDIA
-54 MANUFACTURERS'
ASSOCIATION**



A FEW SAYINGS OF SIR M V

- 1. “if your business is only to sweep a crossing, remember -it is your duty to make that crossing the best swept in the world”**
- 2. “success in life depends on action, i.e, on what you do, and not on what you feel or think”**
- 3. “The price of success is hard work”**
- 4. “Sacrifice money rather than principles”**

(Contd/.....)



BOOKS AUTHORED BY SIR. M. V.

**1920 - “RECONSTRUCTING INDIA”,
PUBLISHED BY P S KING & SON Ltd.,
LONDON**

**1932 - “UNEMPLOYMENT IN INDIA .. ITS
CAUSES AND CURE”, PUBLISHED BY
THE BANGALORE PRESS,
BANGALORE**

**1934 - “PLANNED ECONOMY FOR INDIA”,
PUBLISHED BY THE BANGALORE
PRESS, BANGALORE**

**1937 - “NATION BUILDING - A FIVE YEAR
PLAN FOR THE PROVINCES”,
PUBLISHED BY THE BANGALORE
PRESS, BANGALORE**

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BOOKS AUTHORED (Contd.....)

- 1939-** **“DISTRICT DEVELOPMENT SCHEME - ECONOMIC PROGRESS BY FORCED MARCHES”, PUBLISHED BY THE BANGALORE PRESS, BANGALORE**
- 1943 - “PROSPERITY THROUGH INDUSTRY”, PUBLISHED BY THE ALL INDIA MANUFACTURERS’ ORGANIZATION, BOMBAY**
- 1951 - “MEMOIRS OF MY WORKING LIFE”, PUBLISHED BY CAXTON PRESS, BOMBAY and many more-----**
-



about the great man...

“Sri Visvesvaraya is a man of incorruptible integrity and a model of purity of character -his simplicity and sense of correct behaviour are extraordinary, rising sometimes to an unbelievable degree

A pure soul and a great heart; and a passionately patriotic citizen of India” C. Rajagopalachari (in 1960)

“Dreamer, thinker, and a man of action, not lost in the past but always thinking of the future, living an integrated life, bringing into existence and giving shape to dreams not for himself but for India and the people of India” — this was **Nehru’s tribute to Sir MV on his 100th birthday in 1960.**



A word about SIR M V...

“SIR M V was perhaps the first technocrat to become a national icon

what the Narayanamurthys and the Premjis of the IT world are talking today, Sir M V had dinned in the ears of then impervious leaders, Indian and British

needless to say, Sir. M V Would have ushered in the it era had the technology been developed in his time

(Contd/...)



1955



1960

HISTORIC MEETS



1960

HISTORIC MEETS



“Work hard, Work harder, Work with efficiency Work in cooperative spirit, Work with a team spirit to make your country great, self supporting and strong”

- SIR. M. VISVESVARAYA



In Conclusion ...

SIR M.V is indeed a legendary figure in the history
his creativity was not confined to just his professional discipline
his thoughts and innovations were far ahead of his time

his thoughts and actions were always out of his concern for the masses

he was the embodiment of discipline and hard work

this in brief is a glimpse of the legendary figure.....

a great engineer

an eminent statesman

an economist par excellence

and above all

a patriot of the highest order



THANK YOU