

IJSRR TRIBUTE TO
DR. CHANDRASEKHARA VENKATA RAMAN
TO COMMEMORATE THE 95TH ANNIVERSARY OF
‘RAMAN EFFECT’ DISCOVERY;
which was declared on 28th February, 1928



C.V. Raman

A SHORT BIOGRAPHY OF SIR C. V. RAMAN

Born : 7 November 1888; Tiruchirapalli, Madras Presidency, India
Died : 21 November 1970 (aged 82); Bangalore, Mysore State, India.
Nationality : Indian
Alma mater : University of Madras; Degree – M.A.

Awards Received by Sir C. V. Raman:

- 1924: Fellow of Royal Society¹
- 1928, 28th February : Discovery of ‘Raman Effect’²
- 1928: Matteucci Medal³
- 1930: Knight Bachelor
- 1930: Hughes Medal
- 1930: Nobel Prize⁴
- 1954: Bharat Ratna⁵
- 1958, 14th June: Lenin Peace Prize⁶

¹ <https://royalsocietypublishing.org/doi/10.1098/rsnr.2003.0224>

² <https://www.britannica.com/science/Raman-effect>

³ https://en.wikipedia.org/wiki/Matteucci_Medal

⁴ <https://www.nobelprize.org/prizes/physics/1930/summary/>

⁵ <http://www.dashboard-padmaawards.gov.in/?Award=Bharat%20Ratna>

⁶ https://en.wikipedia.org/wiki/Lenin_Peace_Prize

Institutions Served by Sir C. V. Raman:

- Indian Audits and Accounts Services, Govt. of India⁷
- Rajabazar Science College, University of Calcutta⁸
- Indian Association for the Cultivation of Science⁹
- Indian Institute of Science¹⁰
- Raman Research Institute¹¹

Spouse(s): Lokasundari Ammal (1908–1970)

Children: Chandrasekhar Raman and Venkatraman Radhakrishnan¹²

Sir Chandrasekhara Venkata Raman was born on 7 November 1888 in Tiruchirapalli, Madras Presidency (now- Tamil Nadu) to a Hindu Tamil Brahmin Family. His father **Chandrasekhara Ramanathan Iyer** was a teacher in a local High School, and mother **Parvathi Ammal** was a house-wife.

Dr. Chandrasekhara Venkata Raman had discovered a phenomenon of scattering of photons and declared on 28th February, 1928; which was later known as '**Raman Effect**'¹³ after his name. The 28th February, 2022 is the 95th Anniversary of Sir C. V. Raman's discovery of 'Raman Effect'. The **Indian Institute of Social Reform & Research**¹⁴ (IISRR) has decided to dedicate the Volume-7, Issue- III of its journal- the "**IJSRR – International Journal of Research**"¹⁵ to Sir Chandrasekhara Venkata Raman to commemorate the 95th Anniversary of his Discovery.

Discovery of Raman Effect:

The Britannica¹⁶ described about 'Raman Effect' that-

"Raman effect, change in the wavelength of light that occurs when a light beam is deflected by molecules. When a beam of light traverses a dust-free, transparent sample of a chemical compound, a small fraction of the light emerges in directions other than that of the incident (incoming) beam. Most of this scattered light is of unchanged wavelength. A small part, however, has wavelengths different from that of the incident light; its presence is a result of the Raman effect.

The phenomenon is named for Indian physicist Sir Chandrasekhara Venkata Raman, who first published observations of the effect in 1928. (Austrian physicist Adolf Smekal theoretically described the effect in 1923. It was first observed just one week before Raman by Russian physicists Leonid Mandelstam and Grigory Landsberg; however, they did not publish their results until months after Raman.)"

⁷ <https://cag.gov.in/en>

⁸ <https://www.caluniv.ac.in/campuses/campus-2.html>

⁹ <http://www.iacs.res.in/>

¹⁰ <https://iisc.ac.in/>

¹¹ <https://www.rri.res.in/>

¹² <https://atomstalk.com/stories/venkatraman-radhakrishnan/>

¹³ <https://www.britannica.com/science/Raman-effect>

¹⁴ www.iisrr.in

¹⁵ <http://www.iisrr.in/journal/>

¹⁶ <https://www.britannica.com/science/Raman-effect>

Nobel Prize¹⁷ Winning:

Just after 2 years of his discovery of 'Raman Effect', **Dr. Chandrasekhara Venkata Raman** got the '**Nobel Prize**' in 1930 for this remarkable discovery. This is the first Nobel Prize for India in the field of Science.

'National Science Day'¹⁸ Observation:

To mark the discovery of his famous phenomenon the National Council for Science and Technology Communication (NCSTC) asked the Government of India to designate 28 February as '**National Science Day**' and the then Government of India accepted and declared the day as National Science Day in 1986. The first National Science Day was celebrated on February 28, 1987, and then it is being celebrated each year.

The basic objective of observation of National Science Day is to spread the message of importance of science and its application among the people. National science day is celebrated as one of the main science festivals in India every year with following purpose-

- To widely spread a message about the significance of scientific applications in the daily life of the people;
- To display all the activities, efforts and achievements in the field of science for welfare of human being;
- To discuss all the issues and implement new technologies for the development of the science;
- To give an opportunity to the scientific minded citizens in the country;
- To encourage the people as well as popularize the Science and Technology.

¹⁷ <https://www.nobelprize.org/prizes/physics/1930/summary/>

¹⁸ <https://ncsm.gov.in/28th-february-national-science-day-in-india/>

Some Important Images of Sir C. V. Raman

PROF. CHANDRASEKHARA VENKATA RAMAN RECEIVED THE NOBEL PRIZE IN PHYSICS IN 1930

Professor Chandrasekhara Venkata Raman received the Noble Prize in Physics in 1930 for his work done from this institute on the scattering of light and for the discovery of the effect named after him. [Noble Lecture by Sir C V Raman¹⁹](#) and [Presentation Speech by Professor H. Pleijel²⁰](#)



Professor C. V. Raman used this simple innovative instrument²¹ which led to the discovery of RAMAN EFFECT

¹⁹ http://iacs.res.in/waterways/admin/ckeditor/ckfinder/userfiles/files/noble-lecture_sir_cv_raman.pdf

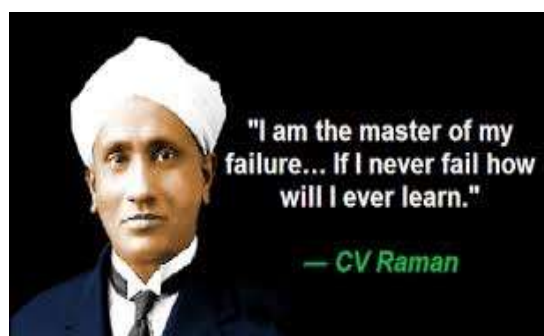
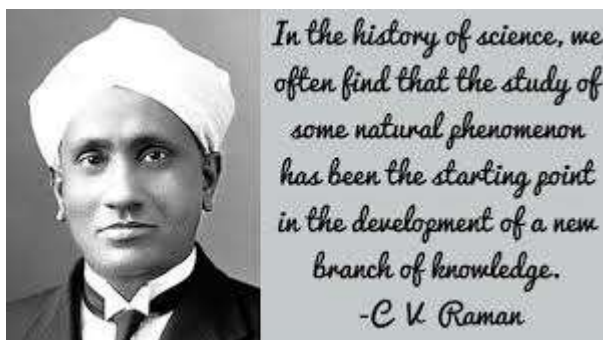
²⁰ http://iacs.res.in/waterways/admin/ckeditor/ckfinder/userfiles/files/Award_Ceremony_Speech_Prof_H_Pleijel.pdf

²¹ <http://iacs.res.in/nobel-prize.html>

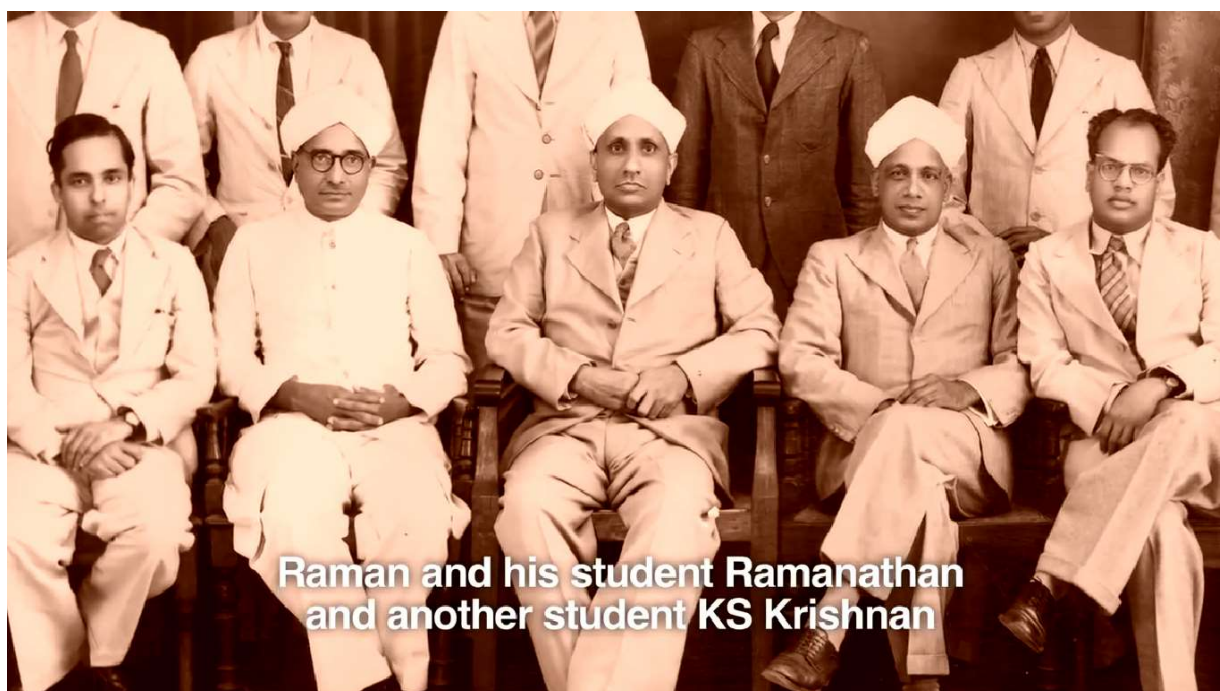


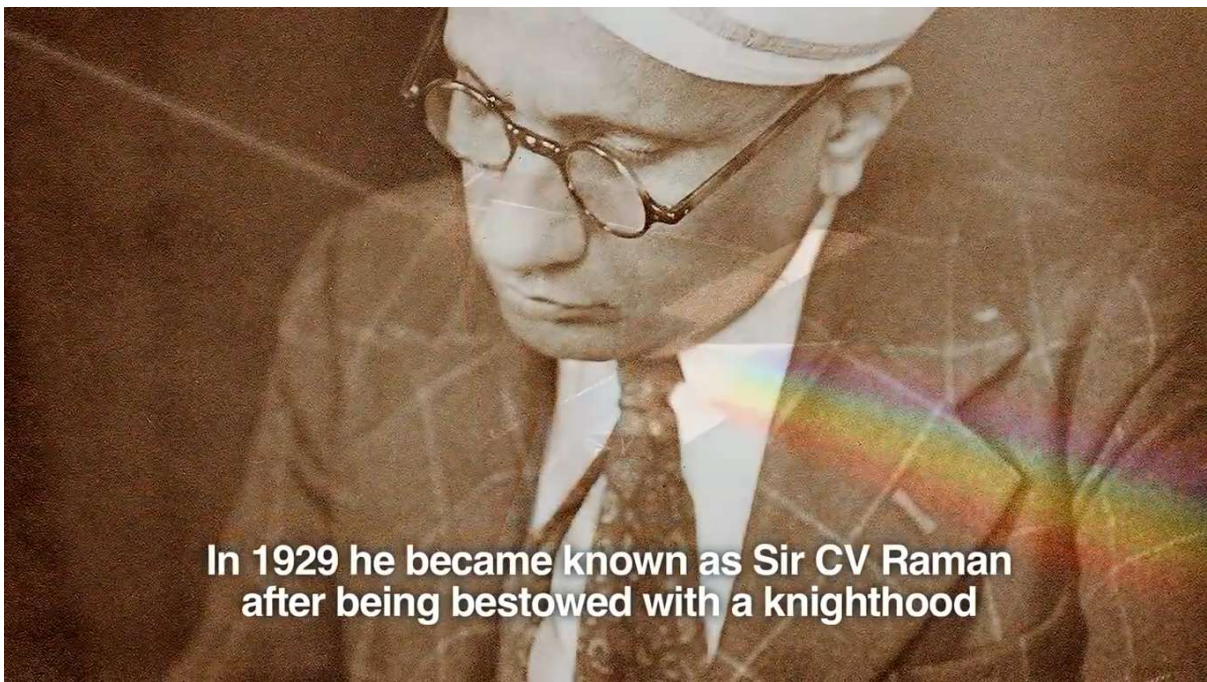
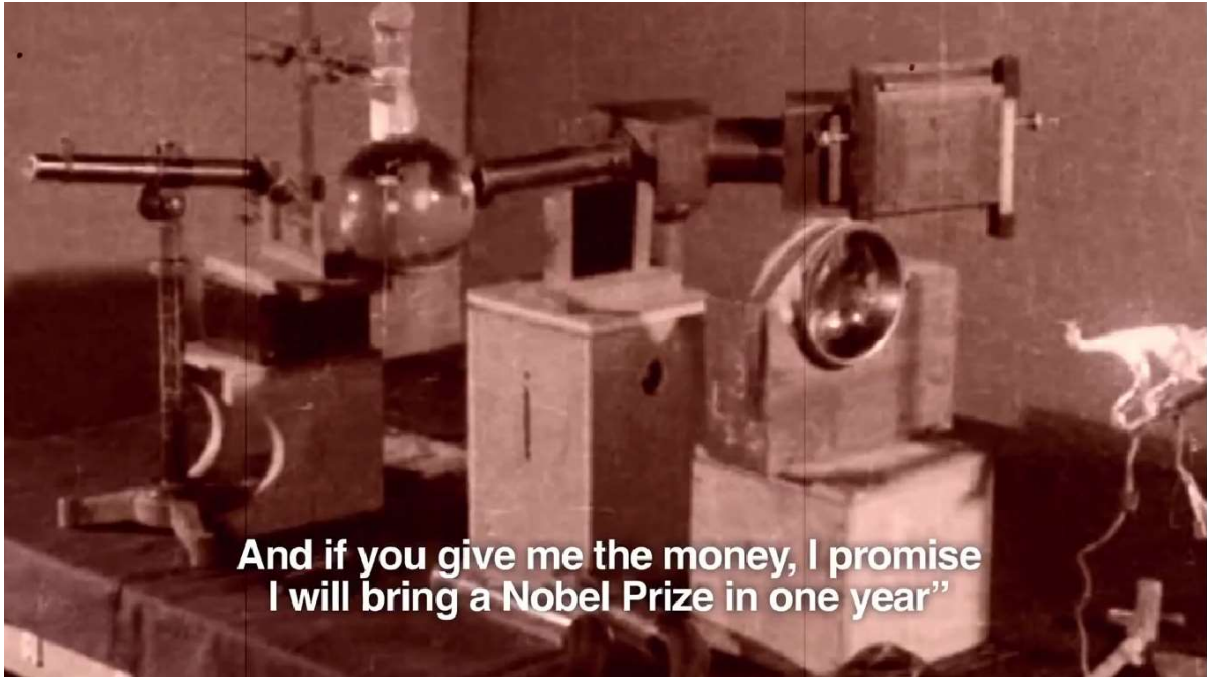
Sir Chandrasekhara Venkata Raman (second from right) with physics laureate Niels Bohr to his left at the University of Copenhagen Institute for Theoretical Physics, 1930. The others are (from left): George Gamow, Thomas Lauritsen, Ebbe Rasmussen, and Oskar Klein.

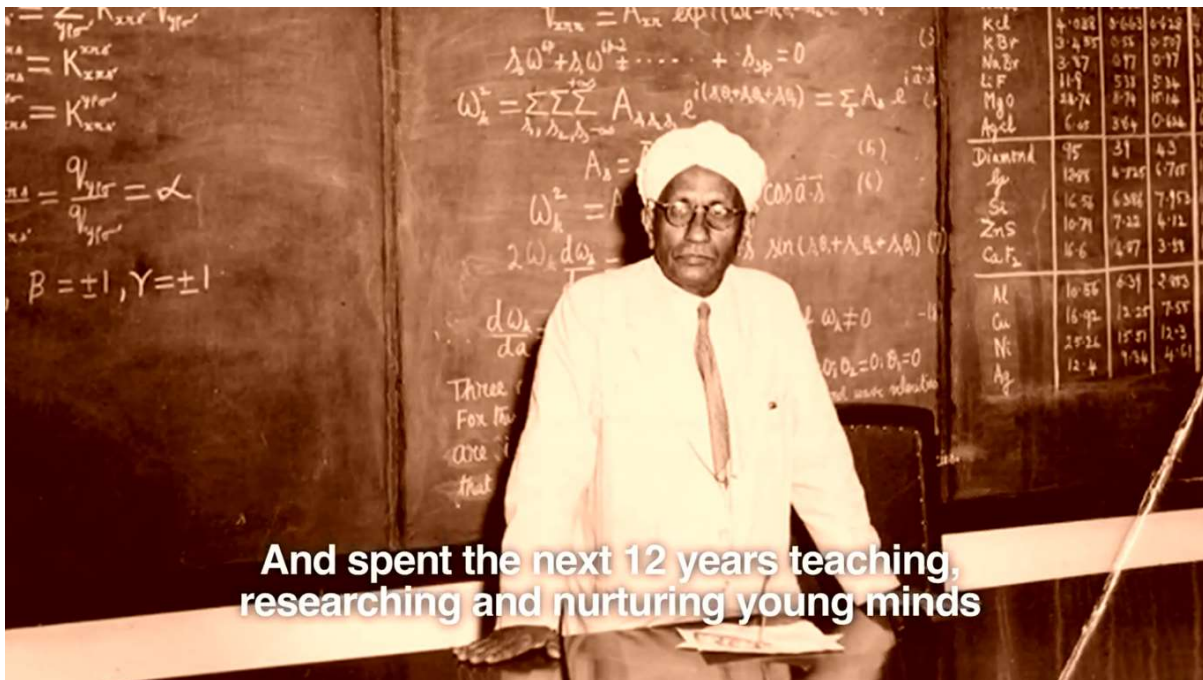
Source²² - Sir Chandrasekhara Venkata Raman – Photo gallery. NobelPrize.org. Nobel Prize Outreach AB 2022. Fri. 4 Mar 2022. <https://www.nobelprize.org/prizes/physics/1930/raman/photo-gallery/>



²² Sir Chandrasekhara Venkata Raman – Photo gallery. NobelPrize.org. Nobel Prize Outreach AB 2022. Fri. 4 Mar 2022. <https://www.nobelprize.org/prizes/physics/1930/raman/photo-gallery/>







And spent the next 12 years teaching, researching and nurturing young minds



In 1960, after 10 years of great work