

Mind'sPark

News Letter

Department of Mechanical Engineering

Academic Year 2022-23 | Volume 7 Issue 3 | Feb 2023

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Sudha Murthy born 19 August 1950 a known Indian educator, author and philanthropist presently chairperson of the Infosys Foundation. She is married to the co-founder of Infosys, N. R. Narayana Murthy. Murthy was awarded the Padma Shri, the fourth highest civilian award in India, for her social work. Later in 2023, she was awarded the Padma Bhushan, the third highest civilian award in India.

Sudha Murthy was born to a Kannada -speaking family on 19 August 1950 in Shiggaon, Haveri in Karnataka, India, the daughter of R. H. Kulkarni, a surgeon, and his wife Vimala Kulkarni, a school teacher. She was raised by her parents and maternal grandparents. These childhood experiences form the historical basis for her first notable work entitled How I Taught My Grandmother to Read, Murthy completed a BE in Electrical and Electronics Engineering from the B.V.B. College of Engineering & Technology (now known as KLE Technological University), and then Masters in Computer Science from the Indian Institute of Science.

Sudha Murthy became the first female engineer hired at India's largest auto manufacturer TATA Engineering and Locomotive Company (TELCO). She joined the company as a Development Engineer in Pune and then worked in Mumbai & Jamshedpur as well. She had written a postcard to the company's Chairman complaining of the "men only" gender bias at TELCO. As a result, she was granted a special interview and hired immediately. She later joined Walchand Group of Industries at Pune as Senior Systems Analyst.

In 1996, she started Infosys Foundation and to date has been the Trustee of Infosys Foundation and a Visiting Professor at the PG Center of Bangalore University. She also taught at Christ University.

Sudha Murthy has written and published many books which include novels, non-fiction, travelogues, technical books, and memoirs. Her books have been translated into all major Indian languages. She is also a columnist for English and Kannada newspapers.

Droupadi Murmu presenting the Padma Bhushan Award to Dr. (Smt.) Sudha MurthyA. P. J. Abdul Kalam presenting the Padma Shri Award to Dr. (Smt.) Sudha MurthyMurthy receiving the Raja Lakshmi Award

2004: Raja-Lakshmi Award by Sri Raja-Lakshmi Foundation in Chennai

2006: India's fourth highest civilian award Padma Shri

2006: She also received the R.K. Narayana's Award for Literature.

2010: Daana Chintamani Attimabbe Award by Karnataka Government.

2011: Murthy was conferred honorary LL.D (Doctor of Laws) degrees for contributions to promote formal legal education and scholarship in India.

2013: Basava Shree-2013 Award was presented to Narayan Murthy & Sudha Murthy for their contributions to society.

2018: Murthy received the Crossword Book award in popular (Non-Fiction) category.

2019: IIT Kanpur awarded her Honorary Degree (Honoris Causa) of Doctor of Science.

2023: Padma Bhushan by the Government of India

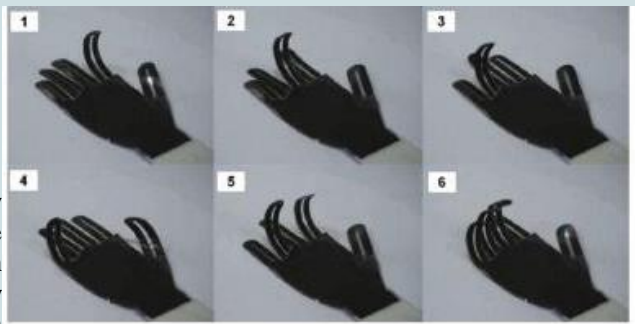
2023: Sahitya Akademi Bal Sahitya Puraskar.

2023: The Global Indian Award, which is worth \$50, 000, is given each year to a prominent Indian who has made a major mark in his or her chosen field.

[4D printing.docx](#)

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4D printing is a revolutionary new technology that is changing the way we design and manufacture products. With 4D printing, you can quickly and easily create custom, functional objects with intricate and complex designs. 4D printing is a form of additive manufacturing, in which an object is created by adding successive layers of material. It is similar to 3D printing, but with the added dimension of time. With 4D printing, the object can change shape and properties over time in response to external stimuli, such as heat, light, or pressure.



Four-dimensional (4D) and Three-dimensional (3D) printing arose as the up-and-coming age of manufacturing methods in the generation of fabrication of components across the various fields of science and engineering like chemistry, biology, computer science and material science. Three-dimensional printing empowers the manufacture of complex components and products with high accuracy, through a layer-by-layer expansion of various materials. Utilisation of smart materials which change shape or shading, produce an electrical flow, become bioactive, or fill a planned role because of an outside upgrade, makes ready for the development of dynamic 3D component's, which is currently called 4D printing.

4D Printing works by utilising 3D printing technology and combining it with computer-aided design (CAD) to create complex and dynamic parts that are able to change shape and properties over time. This new technology enables us to create parts with a wide range of characteristics, such as shape memory alloys, self-healing materials, and responsive materials.

With 4D Printing, we are able to reduce manufacturing time and cost, and the end result is a product that is highly customised and tailored to the specific needs of each client. Moreover, 4D Printing allows us to quickly produce complex parts that would otherwise be extremely difficult to produce using traditional manufacturing methods.

The possibilities for 4D printing are endless. It can be used to create objects from scratch, or to modify existing 3D-printed objects. It can also be used to create living materials, such as human tissue, or to create self-assembling robots and machines.

For example, in the automotive industry, 4D printing is being used to create parts that can be programmed to change shape in response to heat or pressure. This allows engineers to create parts that can be adjusted to fit different vehicles or even to fit the driver's body.

In the medical industry, 4D printing is being used to create implants that can be programmed to change shape over time to fit the patient's body. This could help reduce the need for multiple surgeries, as well as reduce the risk of complications associated with traditional implants.

Future scope for 4d printing

In the near future, 4D printing could be used to create structures with dynamic properties that can change shape or function in response to external stimuli. This could be used to create self-assembling structures, such as aerospace components that can be stored in a flat state but then assemble themselves into a three-dimensional object when exposed to a particular environmental condition.

In the medical field, 4D printing could be used to create living tissues and organs that respond to chemical or electrical cues. In the automotive industry, 4D printing could be used to create self-repairing and self-assembling components that can adapt to changing conditions. Finally, 4D printing could be used to create smart materials that can sense their environment and respond accordingly.

We hope you'll join us in exploring the exciting world of 4D printing. Keep an eye out for our upcoming newsletters featuring the latest news, tips, and advice on 4D printing.



National level meeting of ISTE Award selection committee held on 18th January 2023. Presided by Prof Desai Chairman of ISTE.



A Webinar held on Career opportunities in automobile engineering dated 21st January 2023 in collaboration with Paramount Auto Bay Services. The proceedings were carried out by Dept of Mechanical Engineering, with Ms Vidya Nambirajan CEO of Paramount Auto Bay Services as the main speaker of the event.



Capacity Building a Staff development program organised by Internal Quality Assurance Cell of Methodist College of Engineering & Technology on 9th & 10th March 2023.



Department of Mechanical Engineering

VISION

To be a reputed centre of excellence in the field of Mechanical Engineering by synergizing innovative technologies & research for the progress of society.

MISSION

- M1:** To impart quality education by means of state-of-the-art infrastructure.
- M2:** To be involved in training & activities on leadership qualities & social responsibilities.
- M3:** To inculcate the habit of lifelong learning, practise professional ethics & serve the society.
- M4:** To establish industry- institute interaction for stakeholder development