

Current Affairs search results for: "nobel prize"

### **1. Israeli Mathematician Avi Wigderson Wins 2023 ACM Turing Award ( April 14, 2024 )**

Avi Wigderson, an Israeli mathematician and computer scientist, was awarded the 2023 ACM A.M. Turing Award.

#### **An Overview of the News**

- This award is widely regarded as the "Nobel Prize of Computing".
- He holds the position of Herbert H. Maass Professor in the School of Mathematics at the Institute for Advanced Study (IAS) in Princeton, New Jersey, USA.

#### **Reason for Award:**

- Wigderson was honored for his foundational contributions to the theory of computation.
- His work significantly influenced the understanding of randomness in computation and mathematics.
- He was recognized for his intellectual leadership in theoretical computer science.
- The ACM A.M. Turing Award carries a prestigious cash prize of USD 1 million.

#### **Contributions and Career Highlights:**

- In 1986, Wigderson began his academic career as a Senior Lecturer in the Department of Computer Science at the Hebrew University in Jerusalem, Israel.
- He was promoted to Associate Professor in 1987 and later became a full Professor at the Computer Science Institute of the Hebrew University.
- In 1993, he assumed the role of Chairman of the Computer Science Institute at Hebrew University.
- In 1999, he joined the faculty as a Professor at the Institute for Advanced Study (IAS) in Princeton, New Jersey.

### **2. Famous Physicist Peter Higgs Passes Away at the Age of 94 ( April 11, 2024 )**

Peter Higgs commenced his teaching journey as a Temporary Lecturer in Mathematics at University College London, UK.

#### **An Overview of the News**

- In 1960, he relocated to Edinburgh and assumed the role of a Lecturer in Mathematical Physics at the Tait Institute.
- Progressing steadily, he ascended through the academic ranks, culminating in his appointment to a Personal Chair of Theoretical Physics in 1980.

- Upon retirement in 1996, he was granted the title of Professor Emeritus at the University of Edinburgh.

**Awards and Honours:**

- 2015: Royal Society's Copley Medal for his contributions to the theory of the Higgs boson.
- 2013: Nobel Prize in Physics, jointly with François Englert, for their theoretical discovery explaining the mass of subatomic particles.
- 2013: Appointed as Companion of Honour in the New Year Honours List for scientific achievements.
- 2013: Edinburgh Medal from the Edinburgh International Science Festival and the Nonino 'Man of Our Time' Prize.
- 2004: Wolf Prize in Physics shared with Robert Brout and François Englert.
- 1997: High Energy and Particle Physics Prize from the European Physical Society shared with Robert Brout and François Englert.

**3. Romania unveils world's most powerful laser ( April 6, 2024 )**

Developed by a research center in Romania as part of the EU Infrastructure Extreme Light Infrastructure (ELI) project.

**An Overview of the News**

- Operated by French company Thales, this laser claims to have revolutionary potential in a variety of fields, from healthcare to space exploration.
- At the core of this groundbreaking laser technology lies chirped-pulse amplification (CPA), a method developed by Mourou and Strickland.
- CPA facilitates the amplification of laser power while ensuring safe intensity levels by stretching and compressing the ultra-short laser pulse.
- This innovative technology achieves unprecedented levels of intensity, opening the door to myriad applications such as corrective eye surgery and advanced precision instruments in industrial operations.

**Nobel Prize Winner Contribution:**

- Gerard Mourou and Donna Strickland were awarded the Nobel Prize in Physics in 2018 for their pioneering work in laser technology.
- His inventions have led to revolutionary advancements by enabling precision instruments and applications.

**Possible Applications:**

- Nuclear waste treatment: Laser technology can reduce the radioactivity period of nuclear waste, increasing the safety and manageability of disposal.

- Space debris removal: Laser technology can be deployed to clear space debris, reducing the risk of collisions with satellites and spacecraft.
- Medical Advances: The precision of lasers promises breakthroughs in medical treatments, including targeted cancer treatments and advanced surgical techniques.

**Involvement of the ELI Project and Thales Group:**

- Part of the European Union Infrastructure Extreme Light Infrastructure (ELI) project, which aims to push laser technology boundaries.
- Operated by Thales Group, a leading global provider of aerospace, defense and security solutions, headquartered in France.

**4. Abel Prize 2024 awarded to Michel Talagrand ( March 27, 2024 )**

Michel Talagrand of the French National Center for Scientific Research (CNRS), Paris, France, has been honored with the 2024 Abel Prize by the Norwegian Academy of Science and Letters.

**An Overview of the News**

- Michel Talagrand was recognized for his pioneering work in probability theory and functional analysis.
- His contributions have had significant applications in mathematical physics and statistics.
- Talagrand's achievements were deemed groundbreaking by the Academy, leading to this prestigious award.
- Talagrand's research primarily focuses on the Gaussian distribution, also known as the bell curve, which influences various aspects of life, from birth weights to school test scores and athlete retirement ages.

**The Abel Prize recognizes Talagrand's contributions in three key areas:**

- Analysis of supremum in stochastic processes, aiding in predicting extreme events like the largest wave hitting a beach.
- Development of quantitative estimates for the concentration of measures, where different sources of randomness can lead to more predictable outcomes.
- Application of statistics and probability theory to understand spin glass matter, contributing to the completion of Giorgio Parisi's Nobel Prize-winning work in 2021.

**5. 2023 Nobel Prize in Economics awarded to Claudia Goldin ( Oct. 9, 2023 )**

American labor economist Claudia Goldin was awarded the 2023 Nobel Prize in Economics for her significant contributions to our understanding of women's labor market outcomes.

**An Overview of the News**

- Hans Ellgren, Secretary General of the Royal Swedish Academy of Sciences, announced the Nobel Prize awards in Stockholm on October 9.
- Claudia Goldin, born in New York in 1946, received her PhD from the University of Chicago and is currently a professor at Harvard University in Cambridge.
- Claudia Goldin became the third woman to receive the Nobel Prize in Economics, after Elinor Ostrom (2009) and Esther Dufo (2019).
- Claudia Goldin will receive prize money of 11 million Swedish kronor.

**Last year's Nobel Prize in Economics (2022):**

- In 2022, the Nobel Prize in Economics was awarded to American economists Douglas Diamond and Philip Dybvig as well as former Federal Reserve chief Ben Bernanke for their research on banks during times of financial turmoil.

**History of Nobel Prize in Economics:**

- The Nobel Prize in Economics was first awarded in 1969 to Ragnar Frisch and Jan Tinbergen for their work on dynamic economic models.

**First Nobel Prize Winner:**

- Jean Henry Dunant and Frederick Passy were the first winners of the Nobel Peace Prize in 1901.

**First Indian Nobel Prize Winner:**

- Rabindranath Tagore was the first Indian to receive the Nobel Prize specifically in Literature in 1913.

**About Nobel Prize in Economic Sciences:**

- The Nobel Prize in Economic Sciences was established in 1968 by Sveriges Riksbank, the central bank of Sweden, in memory of Alfred Nobel. It is awarded by the Royal Swedish Academy of Sciences following the same principles as the original Nobel Prizes.

**Indian Nobel Prize Winners in Economics:**

- Amartya Sen is the only Indian economist to receive the Nobel Memorial Prize in Economic Sciences in 1998.
- Indian-American economist Abhijit Banerjee shared the Nobel Memorial Prize in Economic Sciences in 2019 with Esther Dufo and Michael Cramer for their experimental approach to addressing global poverty.

**6. Iranian human rights activist Narges Mohammadi wins Nobel Peace Prize 2023 ( Oct. 6, 2023 )**

The Swedish Academy in Stockholm awarded the 2023 Nobel Peace Prize to Iranian human rights activist Narges Mohammadi.

### **An Overview of the News**

- Narges Mohammadi is known for her courageous fight against the oppression of women in Iran and her unwavering commitment to promoting human rights and freedom for all.
- Narges Mohammadi, a 51-year-old Iranian author and human rights activist, currently serves as the Deputy Director of the Defenders of Human Rights Center (DHRC).
- She is currently imprisoned in Tehran's Evin prison, and is facing multiple sentences totaling 12 years for "spreading anti-state propaganda".
- Her activism primarily focuses on abolishing the death penalty in Iran and advocating for women's rights.

### **Notable achievements and persecutions of Narges Mohammadi:**

- Over the past decade, Narges Mohammadi has been in and out of jail due to her activism, which led to her being arrested 13 times, convicted five times and sentenced to 31 years in prison and 154 lashes.
- Her Nobel Peace Prize win makes her the second Iranian woman to receive the prestigious award, following Shirin Ebadi's recognition in 2003.

### **Nobel Prize and historical context:**

- The Nobel Prize was established in honor of Alfred Nobel's testamentary wishes, with the aim of rewarding those who have made significant contributions to the betterment of humanity.
- The Nobel Foundation was established in 1900 and the first Nobel Prize was awarded in 1901.
- The Nobel Peace Prize, awarded 104 times between 1901 and 2023, has recognized 141 individuals and organizations.
- Notable recipients include the International Committee of the Red Cross (ICRC), which has received the Nobel Peace Prize three times, and the Office of the United Nations High Commissioner for Refugees, awarded twice.
- In 2022, the Nobel Peace Prize was awarded to Ales Bilyatsky of Belarus, Memorial (a Russian human rights organization) and the Ukrainian human rights organization Center for Civil Liberties.

## **7. Nobel Prize in Literature 2023: Awarded to author Jon Olav Fosse ( Oct. 5, 2023 )**

Norwegian author John Olav Fosse awarded 2023 Nobel Prize in Literature

### **An Overview of the News**

- The Swedish Academy has selected John Olav Fosse for the Nobel Prize in Literature 2023 for his innovative literary contributions.

### **John Olav Fosse: a brief biography**

- He was born on September 29, 1959 in Haugesund, Norway.
- He is a prolific writer with a diverse body of work including plays, novels, short stories, poetry, children's books and essays.
- Fosse's first novel, "Raud Svart", was published in 1983.
- Notable novels such as "Stengd Gitar" and "Skuggar" (2007), as well as the short novel "Morgon og Kveld."
- Recognition as a finalist for the International Booker Prize in 2022 for "A New Name: Septology VI-VII".

### **Norwegian Nobel Prize winners in literature**

- John Olav Fosse has become the fourth Norwegian to receive the Nobel Prize in Literature.
- Previous Norwegian laureates: Björnstjern Björnsson (1903), Knut Hamsson (1920), Sigrid Undset (1928).

### **About Nobel Prize**

- The Nobel Prize was established in 1900 in honor of Alfred Nobel, and the first Nobel Prize was awarded in 1901.
- The Nobel Prize in Literature has been awarded 116 times to 120 recipients from 1901 to 2023.
- The first Nobel Prize in Literature was awarded to Sully Prudhomme of France in 1901.
- The Nobel Prize for Literature in 2022 was awarded to France's Anne Ernaux.
- Rabindranath Tagore is the only Indian to receive the Nobel Prize in Literature, which he achieved in 1913, making him the first Asian to receive the prestigious award.

### **8. 2023 Nobel Prize in Medicine won by Katalin Kariko and Drew Weissman ( Oct. 3, 2023 )**

mRNA pioneers Katalin Kariko and Drew Weissman will be jointly awarded the 2023 Nobel Prize in Physiology or Medicine.

### **An Overview of the News**

- Katalin Kariko and Drew Weissman will be awarded the Nobel Prize for their groundbreaking work in messenger RNA (mRNA) technology, which was crucial in the development of COVID-19 vaccines.

- His contributions led to the rapid development of vaccines during the COVID-19 pandemic, saving millions of lives and reducing the severity of the disease.

**mRNA Technology Revolution:**

- mRNA vaccines such as those from Moderna and Pfizer-BioNTech were approved in December 2020.
- These vaccines provide genetic instructions to cells, simulating infection and training the immune system.
- The technology, which was initially experimental, has now been administered to millions of people globally and is being explored for other diseases as well.

**Honors and Upcoming Celebrations:**

- Kariko and Weissman, both from the University of Pennsylvania, have received multiple awards for their research, including the Lasker Prize in 2021.
- They will officially receive their Nobel Prize at a ceremony in Stockholm on 10 December 2023, coinciding with the anniversary of the death of Alfred Nobel, who founded the Nobel Prize.

**9. Swati Nayak selected for the 2023 Borlaug Field Award ( Sept. 21, 2023 )**

Odia scientist Swati Nayak selected as the recipient of the Borlaug Field Award 2023.

**An Overview of the News**

- Swati Nayak is currently working as a Scientist and South Asia Head for Seed System and Product Management at the Philippines-based CGIAR-International Rice Research Institute (IRRI).
- Swati Nayak received the award for her innovative approach to engaging farmers in demand-driven rice seed systems, testing, deploying, and promoting access and adoption of climate-resilient and nutritious rice varieties.
- The award was presented to him by the prestigious selection jury of the World Food Prize, highlighting his significant contributions to global food production and combating hunger and malnutrition.

**Swati Nayak's Career and Achievements**

- Throughout her 13-year career, Swati Nayak has organized over 10,000 on-farm and comparative testings, leading to the dissemination of more than 20 climate-resilient, high-yielding, bio-fortified, and healthier rice varieties through seed systems in multiple countries.
- She was instrumental in introducing the drought-tolerant rice variety Shahbhagi paddy in Mayurbhanj, Odisha, which is highly popular in Odisha and other parts of India even after eight years.

- Swati Nayak contributed to the establishment of Seeds Without Borders, an international seed policy agreement that facilitates the distribution of modern varieties of rice in South and Southeast Asia.
- She actively contributed to empowering women in agriculture through her work with the National Rural Livelihood Mission (NRLM) led by the Government of India and the World Bank.

### **Official Awards Presentation**

- Swati Nayak will officially receive the Borlaug Field Award during the Borlaug Dialogue event on October 24 in Des Moines, Iowa.
- The Borlaug Field Prize, named for agricultural scientist and Nobel laureate Norman Borlaug, consists of a \$10,000 prize and an award diploma.

## **10. India's historic Santiniketan received World Heritage status by UNESCO ( Sept. 18, 2023 )**

Santiniketan, located in **West Bengal**, India, has achieved the prestigious status of being recognized as a UNESCO World Heritage Site.

### **An Overview of the News**

- This significant achievement was officially confirmed during the **45th World Heritage Committee meeting** held in **Riyadh, Saudi Arabia**, marking Santiniketan as the **41st World Heritage Property in India**.

### **Historical Background:**

- Shantiniketan was founded as an ashram by **Rabindranath Tagore in 1863**.
- In **1901, Rabindranath Tagore converted it into a school and art centre**, following the traditional Gurukul system of education.

### **UNESCO Nomination:**

- Shantiniketan has been part of the UNESCO tentative list since 2010, reflecting its potential cultural and historical importance.
- The official nomination document for UNESCO inscription was submitted to the World Heritage Center in January 2021.

### **Rabindranath Tagore's vision:**

- Shantiniketan is a symbol of the visionary work of Rabindranath Tagore.
- Tagore's vision, known as '**Visva Bharati**', aimed **to promote global unity by incorporating elements of ancient, medieval and folk traditions**.



**About Rabindranath Tagore**

- He was an Indian poet, writer, playwright, musician, philosopher, social reformer and painter.
- He reshaped Bengali literature, music and Indian art with contemporary modernism in the late 19th and early 20th centuries.
- Tagore won the **Nobel Prize in Literature in 1913, becoming the first non-European and the first lyricist to win the honour.**
- His notable works include "**Gitanjali,**" "**Ghare-Baire,**" "**Bharto Bhagyo Bidhata,**" "**Gora,**" "**Jana Gana Mana,**" "**Ravindra Sangeet,**" and "**Amar Shonar Bangla.**"
- He was often called the "**Bard of Bengal**" and was known by nicknames such as **Gurudev, Kobiguru and Biswokobi.**

**About UNESCO**

- The United Nations Educational, Scientific and Cultural Organization (UNESCO) is a specialized agency of the United Nations (UN).
- It is also a member of the United Nations Sustainable Development Group (UN SDGs), a coalition of United Nations agencies and organizations that aims to meet the Sustainable Development Goals (SDGs).
- Headquarters:- **Paris, France**
- Director General:- **Audrey Azoulay**
- Founded:- **16 November 1945 in London, United Kingdom**
- The organization has:- **193 members and 11 associate members.**