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News & Views

Ram Lalla Idol at Ayodhya Carved Out of 2.5 Billion-Year-Old Black Granite

The idol of Ram Lalla or infant Lord Ram found a home on Monday, 22nd Jan 2024 with a Pran Pratishtha ceremony by Prime Minister Narendra Modi at the new Ayodhya temple. The stone used to create the 51-inch idol is special black granite brought all the way from Karnataka.

"The stone is 2.5 billion years old," confirms HS Venkatesh, Director of the National Institute of Rock Mechanics (NIRM), Bengaluru, the national facility that helped in testing the stone using physico-mechanical analysis. The NIRM is the nodal agency to test rocks for Indian dams and nuclear power plants.

Dr Venkatesh says, "The rock is highly durable and resistant to climatic variation and will sustain thousands of years in this subtropical zone with minimum maintenance."

Most granitic rocks formed when molten lava cooled down after the earth was formed. The granite is a very hard material.

The Ram Temple has been constructed using traditional architectural designs and highest quality stones, yet it incorporates modern science and engineering techniques to make it durable, says Union Science Minister Jitendra Singh. "It has been designed to last for more than 1,000 years," he adds.

The stone was chosen from the village Jayapura Hobli in Mysuru district, a region known for high quality granite mines.

The rock is dated to the pre-Cambrian era, which is estimated to have begun some four billion plus years ago. The earth is estimated to have originated some 4.5 billion years ago. The black granite rock from which the Ram Lalla statue has been sculpted has seen at least half or more of Earth's history.

Early humans appeared on earth about 14 million years ago and the humans as we see today - the species Homo sapiens - are only 300,000 years old. Scientists estimate that life originated on earth some 4 billion years ago.

The stone was carved into a beautiful idol by 38-year-old Arun Yogiraj from Mysuru, who belongs to a family of five generations of sculptors. It took him about six months to craft the Ram Lala statue. Among his other well-known masterpieces is the 30-feet black stone statue of Netaji Subhash Chandra Bose at India Gate in Delhi.

The NIRM, which helped assess the granite block with its testing laboratories at Kolar Gold Fields, told Nripendra Misra, chairperson of the temple construction committee, that the rock was "massive, melanocratic and uniform in colour". The stone is fine-grained, hard, compact and has high compressive strength, tensile strength, bending strength, breaking strength and elasticity.

The rock's qualities make it amenable for any kind of carving, Dr Venkatesh says. "In addition, the rock possesses high density, low porosity and water absorption with high P-wave velocity, it is devoid of any internal cracks and fractures." The stone does not absorb water or react with carbon.

Source: https://www.ndtv.com/india-news, 23.01.2024

India's longest transportation tunnel opens in Jammu on Udhampur-Srinagar-Baramula Rail Link

The longest transportation tunnel of the country on the Udhampur-Srinagar-Baramulla Rail Link (USBRL) was opened by Prime Minister Narendra Modi on 19th Feb 2024 as he flagged off the first electrified trains of the Kashmir valley.

"Prime Minister Modi was present in Jammu and he virtually flagged off two electrified trains simultaneously -- one from Srinagar to Sangaldan in the down direction and the other from Sangaldan to Srinagar in the up direction," a railway official said.

He added that the prime minister also inaugurated the 48.1-km-long Banihal-Khari-Sumber-Sangaldan section. "This longest tunnel, which is 12.77-km long and known as T-50, falls between the Khari-Sumber section," the official said.

According to the Northern Railway (NR), trains can now run from Baramulla to Sangaldan via Banihal, which used to be the last or originating station earlier.

T-50 is supposed to be the most challenging of the 11 tunnels in the Banihal-Khari-Sumber-Sangadal section.

According to railway officials associated with the project, the tunnel work started around 2010 and it took almost 14 years to operationalise it.

"All safety measures have been taken inside the tunnel to meet emergency situations. An escape tunnel has been constructed parallel to T-50 to evacuate passengers in case of any emergency," an official said.

"At every 375 metres, a connecting passage between the escape tunnel and T-50 has been made so that the passengers can be brought to the escape tunnel and then, carried to their desired destinations in vehicles," he added.

The official told PTI that in order to tackle a fire incident, water pipes have been laid on both sides of the tunnel with an opening valve provided at every 375 metres so that water can be sprayed on a train from both sides to douse the flames.

"Escape tunnels have been created for other bigger tunnels too," he said.

According to NR officials, the opening up of the Banihal-Khari-Sumber-Sangaldan section has brought them a step closer to achieving the dream of running a train from the Kasmir valley in the north to Kanyakumari on the southern tip of the country.

"Earlier, eight diesel trains (four each from one side) were operating between Baramulla and Banihal. Today, Prime Minister Modi not only inaugurated the extension of the Banihal route to Sangaldan via Khari and Samber, but also flagged off the first electrified trains on the whole route from Baramulla to Sangaldan," the official said.

Now, eight electrified trains have started running between Baramulla and Banihal and four of those have been extended to Sangaldan.

"The four other trains will also be extended up to Sangaldan after a couple of months," the official added.

According to experts associated with the project, the first section of the USBRL -- the Quazigund-Baramulla section -- was operationalised by the Congress-led United Progressive Alliance (UPA) government in 2009. In July 2013, the Banihal-Quazigund section, which included the operationalisation of the 11.2-km-long T-80 Pir Panjal tunnel, was opened.

"Once the complete USBRL opens in the coming months, passengers will enjoy infrastructural marvels, such as the Chenab bridge, the highest railway bridge in the world, and the Anji bridge, which is the first cable-stayed bridge of the Indian Railways," an NR official said, adding that the total length of the USBRL is 272 km and the cost of the project is Rs 41,119 crore.

Source: https://economictimes.indiatimes.com/news, 20.2.2024

World faces tunnelling skills void, WTC 2024 told

The global tunnelling industry is facing an engineering skills shortage, delegates at World Tunnel Congress (WTC) 2024 in Shenzhen last week were told.

Delivering the Muir Wood Lecture entitled "Underground resources for a sustainable global future", Professor Priscilla Nelson, head of the Department of Mining Engineering at the Colorado School of Mines, said there was a lack of qualified professionals, particularly in the west.

"There is a generation of engineers coming to retirement who will never be replaced. We simply are not educating those who could take over," she said.

As an example, Nelson said that one university of mining in China produced more qualified engineers in a year than all the universities of mining study in the US combined.

"In the future, the new generation of mining engineers will be Chinese," she said.

Professor Dr Hehua Zhu of Geotechnical Engineering at Tongji University, Shanghai, delivered the keynote lecture, entitled the "Development and applications of intelligent tunnel construction: the state-of-the-art and future perspectives". He outlined how advanced China was in developing intelligent tunnelling systems to reduce uncertainties during excavation and improve the quality, safety, and operating durability of creating and managing underground public infrastructure.

Two plenary roundtable discussions expanded on the WTC's theme of "Tunnelling for a better future". The first explored the challenges and path of developing future tunnelling technology. The panel agreed that industry innovations could only be achieved with team work and that the 'team' included owners and financiers.

The second roundtable discussion considered the use of tunnels and underground space towards sustainable development. The panellists included Dr Norlida Buniyamin, WFEO-World Federation of Engineering Organisations Executive Council member from Malaysia; ITA president Arnold Dix, Australia; Ke Fang, director-general of the Implementation Monitoring Department of the AIIB-Asia Infrastructure Investment Bank; Samuel Huckle, member of the ITA Young Steering

Board and a civil engineer; Sheng Ying, national officer of UN-Habitat China Office; and Alexis de Pomerol, Socie'te' des Grands Projets of France.

The discussion concluded that the focus of underground engineering was not the excavation process, but the purpose of the underground space and how it would impact the lives of many. The engineer's task was to design and excavate that space as efficiently, safely and cost-effectively as possible and to deliver an underground structure that was fit for purpose, durable, and maintenance efficient.

This year is the ITA's 50th anniversary and the occasion was marked in a special plenary session at which all 17 ITA presidents since its founding in 1974 were honoured. Seven of the 17 were in person at the WTC in Shenzhen – Gu"nter Girnau, Germany, 1980-1983; Alfred Haack, Germany, 1998-2001; Andre Assis, Brazil, 2001-2004; In Mo Lee, S Korea, 2010-2013; Soren Eiskesen, Denmark, 2013-2016; Jenny Jinxiu Yan, China, 2019-2022; and current president Arnold Dix of Australia, 2022-2025.

Four past presidents who attended via a video presentation were Einar Broch, Norway, 1986-1989; Sebastiano Pelizza, Italy, 1995-1998; Martin Knights, UK, 2007-2010; and Tarcisio Celestino, Brazil, 2016-2019.

The founding president, Alan Muir Wood of the UK, 1974-1977; and Heinz Fischer, Switzerland, 1977-1980; Jack Lemley, USA, 1983-1986; Colin Kirkland, UK, 1989-1992; Dan Zdenek Eisenstein, Canada, 1992-1995; and Harvey Parker, US, 2004-2007, were also remembered.

The ITA's 50th anniversary is being celebrated with the launch of a book - "50 Iconic Projects of the last 50 Years". The publication charts the history of the ITA in more than 1,000 photographs, and is supported by a video of the same content.

Source: https://www.tunnelsonline.info/news/, 1.5.2024

Terratec delivers second TBM for Mumbai wastewater project

Terratec has delivered a rock EPBM for the Mumbai Sewer Disposal Project (MSDP) Stage II.

The 3.14m diameter machine, which will build the 4.7km Priority Sewer Tunnel (PST-2), is the second TBM Terratec has provided to J Kumar and Michigan Engineers Private Ltd (MEPL) Joint Venture for the project. In January, a 3.85m diameter rock slurry TBM began excavating the 5.8km Priority Sewer Tunnel (PST-1).

The rock EPBM is designed to operate under a range of geological conditions, including silty sand, silty clay, boulders, breccia, basalt, clay with gravel and thyolite. It features a mixed-type cutter head, 27 back-loading 432mm disc cutters and a high-speed main drive capable of eight RPM.

The TBM has been engineered to function within a wide horizontal radius to meet the challenges of the tunnel alignment, which includes a 90-degree road intersection and working around piles supporting an overhead metro line. The modification has eliminated the need to excavate a shaft at the congested intersection, resulting in time and cost savings while preventing traffic disruptions during construction. The approach, being used for the first time in India, includes using different segment ring lengths (1000mm and 650mm) to enable the TBM to navigate sharp curves with a radius of up to 95m.

The 122m-long machine is equipped with a single-track gantry type back-up system with 17 decks. Muck removal, segment transport and logistics supply are managed via locomotive and muck cars. The MSDP – Stage II includes the construction of a sewer tunnel to the existing Malad Pumping Station, a branch sewer tunnel, and shafts and upstream connections.

The Brihanmumbai Municipal Corporation project will expand sewage collection networks, provide new pumping stations, wastewater treatment facilities and treated effluent disposal systems. These treatment plants are projected to recycle 2,464 million litres of sewage per day, reducing water pollution levels and improving water quality in Mumbai's Mithi and Oshiwara rivers.

In a related development, a refurbished Terratec TBM operated by MEPL has achieved its second breakthrough for the 6.4km Mithi River Quality Improvement Project's Package IV.

Source: https://www.tunnelsonline.info/news/, 2.4.2024

First tunnel in the Kuthiran twin-tube tunnels closed for four months for concrete works in South India

The National Highway Authority of India (NHAI) authorities closed the first tunnel of the Kuthiran twin-tube tunnels on NH 544 to carry out gantry concreting works. Authorities have deviated the traffic through the second tunnel towards the Palakkad side in both directions. It is believed the gantry concreting of 30 cm thick concrete with arched steel bars will begin soon. Vehicles coming from the Palakkad side are currently being blocked on the overbridge near the Villanvalavu. From there, vehicles have to enter the second tunnel (towards Palakkad) through the second bridge. As soon as the vehicle crosses the second bridge, traffic will be changed to six lanes again.

It is understood that the tunnel will be closed for at least four months to carry out the gantry concreting works. The Kuthiran twin-tube tunnel is one of the longest tunnels in South India. The works of the tunnels constructed with the hope of smooth traffic through the Kuthirah hills, which are part of the Peechi-Vazhani Wildlife Sanctuary, were started in 2016 by NHAI. The first tunnel 955 meters long towards Thrissur was opened on July 31, 2021. But there were reports that the tunnel was opened for traffic even before the entire work was completed. Questions had risen about the safety of the tunnel as it experienced massive leakage during the rainy season. The second tunnel towards Palakkad with a length of 944 meters was opened on Jan 20, 2022.

Source:https://www.onmanorama.com/travel/travel-news, 9.1.2024

Two tunnels to be constructed on Chandigarh-Manali national highway in North India

In the aftermath of the devastating rain-related catastrophe in 2023, the National Highways Authority of India (NHAI) is reevaluating its priorities, steering towards a more concentrated effort on tunnel construction. The ongoing four-lane project, marred by extensive damage over a 6-mile stretch between Mandi and Pandoh and other locations, prompted NHAI to reconsider its approach. Initially planning a two-kilometer-long tunnel for one-way traffic, spanning from 4 miles to 7 miles, NHAI is now contemplating the construction of two tunnels instead of one. Recognizing potential dangers on the existing road in the future, NHAI Project Director Varun Chari stated that a survey is underway to assess the feasibility of tunnel construction between Mandi and Pandoh. The decision to proceed with two tunnels will hinge on the findings of this survey, with a commitment to enhancing safety and mitigating risks associated with the highway. The rain-ravaged Chandigarh-Manali National Highway, particularly between Mandi and Pandoh in Mandi

district, experienced substantial damage, leading to a halt in the four-lane project's cutting work near 6 miles. The proposed tunnels aim to address recurring hill cracks caused by cutting activities, minimizing disruptions to the highway and preventing further loss of life and property.

Source: https://www.himachalheadlines.com/news, 16.1.2024

Mehar tunnel excavation work suspended in Kashmir Himalaya

The excavation work for the Mehar tunnel along the 270-km Jammu-Srinagar national highway has been suspended due to the development of "pressure and bulges" on its sidewalls, officials said on 18th Dec 2023.

The construction of the 780-metre C-type tunnel started over one-and-a-half years ago to bypass the slide-prone Mehar-Cafeteria stretch in Jammu and Kashmir's Ramban district. The excavation work on the Cafeteria Morh side of the tunnel was suspended in June this year after its mouth was damaged by a massive landslide. Nearly 400 metres of excavation work has been completed so far.

An official of DMR Construction, which is carrying out the construction work, said for the safety of the workers, the excavation work was suspended after "pressure and bulges" were noticed on the side walls.

"All machinery and manpower were withdrawn from the tunnel project on December 12. The company has informed the National Highways Authority of India (NHAI) and joint teams of experts and designers are likely to visit the tunnel for a thorough investigation," a senior official of DMR Construction Vinay Kumar said.

The work on the four-laning of the Jammu-Srinagar national highway started in 2011 and has already missed several deadlines due to the sluggish pace of work.

Source: https://kashmirreader.com,19.12.2023

Bidding opens for Dr Syama Prasad Mukherjee tunnel project in J&K

The National Highways Authority of India (NHAI) has invited bids for the development of twolane Dr Syama Prasad Mookerjee Tunnel (Chenani Nashri Tunnel) new tube in Jammu & Kashmir (J&K) under NH(O).

The scope encompasses the development, operation and maintenance of the two-lane new tube tunnel, operation and maintenance of the existing tunnel and the existing Udhampur-Ramban section and Ramban-Marog section of NH–44. This would cover a length of 9.358 km including 8.826 km for tunnel and 0.532 km for approaches.

Source: https://www.constructionweekonline.in/projects-tenders, 14.2.2024

A rock fell from space into Sweden! Who owns it on Earth?

The iron rock's journey from the depths of space ended with a thud in a pine forest, north of Stockholm, on a November night four years ago. Its trajectory was caught on several cameras used to track meteoroids. That led to a weeklong hunt and an even longer court fight over an unusual question: Who owns an unearthly object that falls to Earth?

Days after the rock landed, Anders Zetterqvist, a geologist, found the site where it first hit the ground. After several weeks of searching, his friend, Andreas Forsberg, a fellow geologist, found the 30-pound chunk sticking out of the moss where it had ricocheted, about 230 feet away. "It was the find of a lifetime for me," he said. Most meteoroids that make it to the Earth's atmosphere burn up on entry, leaving only a trace of light - called a meteor - in the sky. So-called fresh-fall meteorites are compared to old ones found buried in the ground.

The meteorite north of Stockholm, made of iron, was the 10th fresh-fall meteorite to have been found in Sweden, and one of only a handful of fresh-fall iron meteorites found in the world, Forsberg said. The men took the rock to the Swedish Museum of Natural History, where it has been held since 2020.

A week after the geologists went public with their find, the owner of the estate where the meteorite had been found, Johan Benzelstierna von Engestrom, sent a letter to the museum claiming ownership. Laws regulating the ownership of meteorites vary from country to country. In Sweden, there are none. In France, "the first to put his or her hands on it has ownership of it. In Denmark, they are the property of the state.

In Dec 2022, a district court ruled in favour of the geologists, deeming the meteorite movable property. Judge Robert Green said the appeals court's ruling turned on two questions: whether meteorites could be considered "immovable" property and the extent of a Swedish customary law, known as "Allemansratten," that provides the right of public access. "The point of departure regarding immovable property is that the landowner has the right to it," he said. The geologists have not decided whether to appeal to the Supreme Court.

Source: Times of India, 25.03.2024

'India marked big gains in R&D with very small spend'

India is more than ready to take the next step towards becoming a science powerhouse, science journal Nature has said.

In an editorial published – a day before polling began for the Lok Sabha elections 2024, the journal says whichever political group is elected in the elections, must consider how to increase the country's R&D spending on science, as well as what could be achieved with more money.

From 2014-21, the number of universities increased from 760 to 1,113. In the past decade, seven more Indian Institutes of Technology – the country's network of education and research centres have been established, raising the total to 23. In the same period, two new Indian Institutes of Science Education and Research were also established, the journal says. It adds that these gains were achieved when India spent a very small percentage of its gross domestic product (GDP) on the sector.

In 2020-21, the journal pointed out, India spent just 0.64% of its GDP on R&D. In 2022, the average R&D expenditure of the 38 high-income countries in the Organisation for Economic Co-operation and Development (OECD) was around 2.7%.

"Overall, public, and private investment in science boosts economies and, by extension, societies, health, and well-being. This knowledge has helped the public and private sectors of some of the world's leading economies to prioritise science in their budgets. They know what these research investments can achieve. Whichever group emerges victorious after India's marathon election process closes on 1 June must know that India can and should do the same." Nature added.

Source: Times of India, 20.04.2024

An Indian success story in science and technology!

India's achievements in science and technology under Prime Minister Narendra Modi are no exception to criticism (from different circles). However, there has been significant progress in the Science and Technology (S&T) sector in the last 10 years. Long-term and sustainable financial commitment to S&T is essential as most projects are of a long gestation. Gross R&D expenditure has doubled from ₹60,000 crore in 2010-11 to ₹1.2 lakh crore last year. The total expenditure of the Council of Scientific and Industrial Research (CSIR) has gone up from around ₹3,200 crore in 2013-14 to ₹6,700 crore in 2021-22.

Several forward-looking policy decisions were taken by the Modi government to foster this sector. For instance, the 2015 start-up policy has become a key driver of the rapid growth of start-ups in India. Similarly, the recently announced National Research Foundation will be an integrated funding agency (broadly based on the National Science Foundation, United States) with a sanctioned financial outlay of ₹14,000 crore over the next five years, or 2.5 times the amount approved previously, by the Science and Engineering Research Board. Last year, 14 autonomous biotechnology institutes under the Department of Biotechnology were brought under one apex body (Biotechnology Research and Innovation Council), bringing about significant synergies.

Investment in S&T has resulted in significant enhancement both in quality and quantity of outcomes. In terms of the number of scientific publications, India's ranking went from 7^{th} in 2010 to 5^{th} in 2015 and now 3^{rd} in 2023, behind China and the US. In scientific research, the quality of publications has more value than their quantity. Even on this parameter, India's rank in the Global Innovation Index (based on 80 parameters by the World Intellectual Property Organisation) jumped from 81 in 2013-14 to 40 in 2023.

There have been significant advancements in protecting indigenous technologies in terms of filing patents. India's patent filing has grown significantly in recent years – in 2022, it registered the largest increase of 22%. India is now ranked seventh in terms of resident patent filing. In 2022, 82,000 patent applications were filed in the Indian Patent Office and 34,000 patents were granted. The Indian Patent Office granted over 100,000 patents between March 15, 2023, and March 14, 2024. The central government has also announced significant concessions on capital gains tax if the intellectual property (IP) generated by Indian entities is monetized, further encouraging commercialization of IP. The launch of the Quantum Computing Mission, Semiconductor Mission, India AI Mission, and National Biopharma Mission, further proves India's long-term commitment to cutting-edge technologies.

India now figures in the global telecom standard map with indigenous IP incorporated into "5G and beyond" technologies. The pan-IIT project on 5G has indigenously developed 5G systems and technology that has been transferred to the Tata group. Similarly, India's success in developing indigenous vaccines against COVID-19 would not have been possible without the active support of DBT.

As of April 2024, over 127,0000 start-ups had been officially recognized – close to 30% more than the number last year. The start-up ecosystem received a boost from a sector-specific funding programme. For example, the number of bio incubators (funded by Biotech Industry Research Assistance Council, DBT) has gone up from 6 in 2014 to 95 in 2024. Technologies developed with the support of BIRAC have resulted in the launch of over 800 products in the market. Atal Innovation Mission (AIM) is another unique initiative of the Modi government. From inculcating the spirit of innovation in school students (Atal Tinkering Labs) to funding start-ups, it has created and supported an entire innovation ecosystem. Since its inception, more than 10,000 tinkering labs

have been established in schools. As of now, 86 incubators and more than 4,000 start-ups are supported by AIM. The participation of women in R&D is also growing. There were 67,441 women scientists in 2020-21 as compared to 42,000 in 2014-15.

These are some examples of how the Modi government inculcated a culture of scientific innovation and entrepreneurship in India. Of course, the demands and aspirations of the society are going to grow significantly. The average R&D spend (as a percentage of turnover) by Indian industry is still lower than in developed countries and there is a significant gap in the participation of Indian women in science, technology, engineering and mathematics (STEM). Specific schemes have been launched by the government to address both issues.

In the last 10 years, the Indian mindset has become more entrepreneurial. India is not only among the largest consumers of the latest technologies but also an inventor of world-class, safe, secure and affordable technologies.

- Excerpts of the views expressed by Vijay Chauthaiwale, Source: Hindustan Times, 14.05.2024

The elderly need music more than ever!

Music at any age and stage of human life is a boon. Yale University researchers have found it to be an even greater boon for the elderly. The Lancet recently carried out an exhaustive study on the benefits of music in old age. Music has the potential to drive away 'old age blues' experienced by most senior citizens. The study urges senior citizens to listen to music of their taste and also suggests that they play a musical instrument if they know how to play it.

Writer, Somerset Maugham, a medico who never practised, learnt to play the violin to tide over his loneliness in his old age. Bertrand Russell would regularly listen to Beethoven's ethereal symphonies to fight his sporadic schizophrenic bouts. He too had a long and highly productive life and died at the age of 98. Victorian English poet Alfred Tennyson started playing the piano at 70 when he felt that his poetic prowess was waning. He got that back, thanks to taking to the piano.

Cells and neurons in the human brain tend to relate to the cadences of music, known as 'neural dance' in the parlance of neurobiology. That's why some homes for the elderly and geriatric hospitals in the west have a room meant for listening to slow and lilting music. Freud would advise his elderly patients to listen to Sebastian Bach's minor and major compositions as they've a proven quality to make geriatric patients feel euphoric for a long time.

Contrary to general belief that Mughal emperor Aurangzeb abhorred music, some accounts say that the Mughal court chronicler Khafif Khan mentioned in his court dispatches written in Persian that Aurangzeb's chronic insomnia at the age of seventy-eight was cured by the court musician Ahmad Rasool Khan. He reportedly played a three-stringed modern sarangi-type instrument -- called 'wazaaf' in Persian -- to help the emperor fall asleep and would also sing khayal as he was a trained vocalist. It is said that Aurangzeb gave away 14 villages near Badayun in today's Uttar Pradesh as reward to the gifted musician who induced sleep for the emperor. Aurangzeb died at the age of 89.

The brain may be in an agitated state during old age, reliving unpleasant memories. Music works miraculously to help one forget the (unpleasant) memories.

The frayed nerves during old age feel rejuvenated when music is played. William Shakespeare termed old age as the 'second childhood.' Researchers like Statham and Barnes have noticed that the inmates of homes for the aged often quarrel like children and it's nothing to do with maturity or

the lack of it. The degeneration of cells and weakening of the neuro-responsive system could be the reason behind this child-like behavior among old people living together. Music comes to their rescue and it amazingly gives them a sense of bonhomie and newfound maturity which is called 'MM' or ' musical maturity.' That's the reason, in many old-age homes in the US and UK, their residents are encouraged to listen to a session of vocal and instrumental music. It helps them stay calm.

Yehudi Menuhin and Italian virtuoso Massimo Quarta never missed a single opportunity in their lives to play the violin for old and disabled people. Menuhin often played for homeless old beggars on the streets of New York.

- Sumit Paul Source: Times of India, 06.11.2017

Whatever happens in life, I will be happy

Children, like any other decision, <u>happiness</u> is also a decision: 'Whatever happens in life, I will be happy, I will be strong. Because I am not alone. The whole universe, the power of God, is with me.' Even if we laugh or cry, days will pass. So, let us try to smile and be cheerful in the present moment.

Some people want to know if there is a secret to being happy. The secret is that happiness does not lie in the various objects of the world; it is within us. We ourselves are the only source of happiness. If it were really in the objects of the world, then everyone would find happiness in those objects. But what we see is that some people love cigarettes, but others cannot even remain in the same room with someone smoking one. If happiness were truly in the cigarette, then everyone would love cigarettes. If happiness were in ice cream, then we would all want more and more of it all the time. But after one or two servings, if forced to eat a third, fourth and fifth, the very same ice cream might become a source of sorrow.

Happiness is not in objects; it is within us. This understanding can help us gain control over our desires. When we grasp this truth, we will become more peaceful and that, in turn, will help us to experience our own inner joy.

If we want to cultivate happiness within, there are a few other areas where we can focus on. Firstly, practise being content: This does not mean you have to curb your ambition, nor to stop earning, but also be content with what you possess. Secondly, practise being selfless: Do not be just a taker but be a giver also. Earn as much as you wish, however, learn to return as much as you can to society. Look beyond your own family to the world family. Thirdly, follow dharma - a life of values like truthfulness, kindness, and showing others respect. Before acting, always ask yourself, 'Would I want someone else to do this action to me?'

Fourthly, be more action-oriented rather than result-oriented. When you are anxious about the result of a particular action, it not only prevents you from utilising your full potential but also affects the outcome of your action. On the other hand, when you are completely focused on the action, it helps you tap into your inner capabilities to a great extent, thereby bringing the best out of you. Fifthly, give equal importance to logic and faith - the external world of objectivity and the inner world of subjective reality, the mystery aspect of life. Create a balance between the head and heart. Sixthly, spend some time each day in meditation and pray for divine grace - for the support and blessing of the Whole, of which we are only a small part.

Children, if we can develop these habits, the happiness that is our true inner nature, will manifest

outwardly. It will shine in our hearts and in all of our interactions with other people. "Lokah samastah sukhino bhavantu' - May everyone in the world be happy.

-Mata Amritaanandmayi Source: Speaking Tree, Times of India, 19.03.2024

Humour!

• The other night, I ate at a real nice family restaurant. Every table had an argument going.

- George Carlin

• Santa Claus has the right idea. Visit people once a year.

- Victor Borge

• Politics is the art of looking for trouble, finding it everywhere, diagnosing it incorrectly, and applying the wrong remedies.

- Groucho Marx

• Retirement is like a long vacation in Las Vegas. The goal is to enjoy it to the fullest, but not so fully that you run out of money.

- Jonathan Clement in the Wall Street Journal

• At every party, there are two kinds of people - those who want to go home and those who don't. The trouble is, they are usually married to each other.

- Ann Landers

• People throw stones at you and you turn them into milestone.

- Sachin Tendulkar