Royal Harbinger

Business & Entertainment

Effects of 5G Spectrum on human health

ince the 1980s the evolution of Telecommunications has come a long way. Every generation has its forte. People went berserk when they could communicate with the entire world in the snap of a finger. It all started with 1G with the ability to do voice calls, with 2G we could do voice calls and messages, 3G came with the added advantage of video calling, and then came 4G which skyrocketed the internet speed, gave us the vision for a Digital world and a world where the Internet of things (IoT) and 100 times faster connectivity will be possible with 5G.

Digital transformation across all sectors is enabling an economic revolution. It is well documented that an economic boost for any nation is directly proportional to its rate

Editorial

of digitalization in its business activities. 5G is touted to be the most important enabler to lead this digitalization. 5G will optimize not only internet per-

formance but will also improve productivity, help in cost cutting, and experience real-time feedback. All of these will ensure greater economic output. The primary difference between 4G and 5G is the speed and lesser lag time between the transmission of data between the device and the base

With all of the projections, 5G comes with its health impacts which can be quite hazardous for people's wellbeing. 5G base stations will use lesser power and will be much smaller in size due to which numerous 'Small cells' will be installed in residential and commercial areas to be able to connect to many more devices and offer faster speeds. This rise in small cells will increase the health risk as the electromagnetic waves will penetrate almost each and every square inch of our living, working and public spaces.

The EMR emissions from telecom antennas has proven negative impacts on human health. 5G will lead to a large amount of radiation emission, which would cause higher stress on the human body, lower immunity and result in various short term and long term health issues. 5G will need more tower installations which increases the amount of radiation in the environment. High-speed devices will emit and absorb 100 times more radio frequencies compared to the devices we have now.

World Health Organisation's International Agency for Research on Cancer (IARC) states that more research is needed to make sure whether these radio frequencies trigger certain types of cancer. Other health impacts include eye damage, ageing of the skin and other skin-related issues infertility, slow or abnormal brain development in children, lack of attention, heart diseases, sleep disruption, depression, etc. The health hazards of the 5G spectrum are a controversial topic since it has not been tested as yet through any major research or study, however we can't deny the impacts of EMR emissions, which has been backed up with enough evidence medically in India and Internationally. The Government should make efforts to encourage more research on whether the 5G spectrum causes adverse effects on health parameters before welcoming 5G in India, because India is already suffering from enough social, economic, and political issues. Introducing 5G without proper research might just add up to those issues.

However, we can never unsee the health impacts which initially might feel negligible but can take serious turns. The world has already seen the face of a very massive pandemic and here comes the question of whether we accept 5G in it's current state as it is for the merits it is bringing with it, or modify it with added layers of safety which exists today with health tech organizations working in this domain and having solutions which enable smart devices and technologies like 5G to be used more safely and responsibly

- Mr. Pranav Poddar

Lata Mangeshkar tribute song Vishwa **Swara Mauli**

By Dr Deepak Vaze released by Pt Hariprasad Chaurasia,

"I have never heard such a beautiful poem on Lata didi. I am very touched," said Pt Hariprasad Chaurasia as he released Vishwa Swara Mauli penned by Dr Deepak Vaze, a doctor by profession and a poet by passion. The song marked the 122nd birth anniversary of Master Deenanath Mangeshkar and was composed with the blessings and guidance of Hridaynath Mangeshkar, penned by Dr Deepak Vaze, the cinematography is by Tushar Panke and the label is Times



Lata Mangeshkar had heard Dr Deepak Vaze's poem penned as a tribute to her before Corona and appreciated

Said an emotional Dr Deepak Vaze, "Lata didi had heard my poem penned as a tribute to her before Corona and loved the same. I am glad that today, the poem has turned into a song and will reach millions of people who revere Lata didi."

The song release was followed by a rendition of Lata didi's popular songs by Ketki Mategaonkar, Savani Ravindra, Priyanka Barve and Vibhavari Apte Joshi with composition by Ajay Madan and compered by Smita Gavankar in the presence of Adinath Mangeshkar, Krishna Mangeshkar and Ashish Shelar.

"Vishwa Swara Mauli will mark new beginnings. By next year, we will have one million such songs on YouTube showing our love and respect for Lata didi," averred Ashish Shelar

The event was presented by Aryan Institute of Chess and Art Excellence, with special support from MIT-ADT University and is coordinated by Avinash Prabhavalkar of Hridayesh

Envirochip helps in mitigating adverse impact of mobile phone

joint study conducted by All Indian Institute of Medical Sciences (AIIMS), New Delhi and Gurugram-based Syenergy Environics Ltd has been able to analyse the effect of mobile phone radiations on human brain activity and the efficacy of a patented product Envirochip in mitigating its adverse impact.

As per the joint study, changes in the frequencies Electroencephalography (EEG) test done at AIIMS, New Delhi were being interpreted as scientific evidence of an indication of the impact of the exposure to Radiofrequency Radiations (RFR) used in mobile communication on human brain

activity. "Testing conducted at AIIMS state-of-the-art Electroencephalography (EEG) system established the efficacy/ability of the Envirochip to prevent the damage/stress caused to the brain because of speaking on the mobile phone for prolonged periods," explained Ms Rekha Dwivedi from the Department of Neurology, AIIMS, New Delhi, India. The results of the present study have the same findings as previous EEG studies in the research field confirming and extending their observations. Previous research has shown increases in alpha activity by EMF exposure. Further, the alterations in the theta waves demonstrated here also confirm the results of the previous studies. As a part of the study

protocol, EEG was recorded for 80 minutes with a five minutes interval between each condition for each subject. Cleaned data was extracted

from the Net station tool and

(RFR) than the rest of the body while using Mobile Phone, it becomes all the more important to analyze the effect of these RFR on brain activity or



power spectrum analysis was done. "Since the brain has greater exposure to these

EEG." as per Mr. Ajay Poddar. Managing Director, Syenergy Environics Ltd, the company

Envirochip.According to Mr Aiay Poddar, the Envirochip when fixed at a certain location on the electronic devices works by changing the nature of emitted RFR from systemic to random, rendering them non-bio-effective and neutralizing the harmful impact of the mobile phone radiations on the human body. It was found that there was a statistically significant improvement in the alpha and theta waves during EEG test, which are directly related to the brain and relaxation after fixing the Envirochip on the mobile phone as compared to the results obtained by using the mobile phone without the chip. "Considering the widespread use of mobile

patented the product -

phones and the public's concerns for health and safety, the joint study will add heft to Envirochip credentials as a safe device from the possible harm caused by the RFR emitted by Mobile. The World Health Organization (WHO) International Agency for Research on Cancer (IARC) had also classified radiofrequency electromagnetic fields as Group-2B, possibly carcinogen in 2011.

The present study revealed that prolonged exposure to the RFR emitted by Mobile Phones can affect brain activity and Envirochip has the potential to reduce the excitability in alpha and theta bands," explained Mr. Ajay Poddar, Managing Director, Syenergy Environics Ltd.

ZINC FOOTBALL ACADEMY SPARKLES AT THE NATIONAL LEVEL

Udaipur: Zinc Football Academy have come up with flawless performances to qualify for Round 16 of the coveted Hero Under-17 Youth Cup in Goa. Pooled in Group J alongside some of the best Indian youth teams, Zinc Football Academy defeated Bengaluru FC 2-0 in the opening round followed by wins ver-

sus Churchill Brothers FC 3-0 and ARA FC Guiarat 3-0 to stand at the top of their group with a match against FC Goa left to play.Zinc Football Academy –a CSR intervention of Vedanta-Hindustan Zinc Limited, is unbeaten so far scoring 8 goals and keeping cleansheets in all the matches. Akshat Mehra is the top

scorer with 3 goals while Subhash Damor has scored 2 goals.The Udaipur-based team have bagged all the 9 available points from 3 matches and will play their final group match against FC Goa who are on 4 points, on January 1, 2023. The round of 16 matches of the national tournament will commence later

in January.Zinc Football is an initiative of Vedanta-Hindustan Zinc to usher in a footballing revolution in Rajasthan. It is a one-of-its-kind grassroots development programme using football as a tool for social and community development and ensuring young kids have a platform to express themselves through football



Announces Prices of The All New Innova **HvCross**

Udaipur: Toyota Kirloskar Motor (TKM) announced themuch-awaitedprices of its new Innova HyCross. The new vehicle from Toyotas available in the price range of Rs.18,30,000 to Rs 28,97,000(ex-showroom). The brandnew offering from Toyota was unveiled in November 2022 along with the commencement of bookings.

Commenting on the announcement Mr. Atul Sood, Associate Vice President, Sales, and Strategic Marketing, TKM, said, "The launch of the Innova HyCross is a significant milestone for us in India and we are truly humbled by the overwhelming response received from across the country. This feature packed vehicle demonstrates the spaciousness of an MPV and is perfectly crafted to meet the aspirations of customers.

The new Innova HyCross is powered by 5th Generation Self-Charging Strong Hybrid Electric System with TNGA 2.0 Litre4-cylinder gasoline engine and a monocoque frame with an e-drive sequential shift delivering a max power output of 137 kW (183.7 HP), providing rapid acceleration and best in segment fuel economy of 23.24 kmpl[^]. The vehicle also comes with the option of a TNGA 2.0 Litre 4cylinder gasoline engine mated to a direct shift CVT in select grades delivering an output of 129 kW (171.6 HP)and offering class leading fuel economy of 16.13 kmpl^.

JK Tyre- targets carbon net zero by 2050

Udaipur: JK Tyre with a mission to be the "Greenest Company" has set a benchmark for becoming a carbon neutral by 2050.

For JKTyre – journey of sustainability started years back and has thus achieved many milestones along the way due to its unwavering

• Extensive all round efforts to reduce energy consumption has led to 9 GJ/ton of finished tyre in 2022 - the lowest in India and among the lowest 3 in the world.

• Achieved 53% of energy through renewable sources and targets to cross 75% in next

• Globally lowest WATER consumption in tyre industry with less than 2 KL/ton consumption. Already a Zero discharge compa-



Dr.Raghupati Singhania, Chairman & Managing Director - JK Tyre & Industries Ltd. said. "Thecompany's focus is to work on substituting energy needs with renewable sources. In thisdirection JKTyre is meeting its fair amount of thermal energyre-

quirement through other sources replacing coal. All these efforts have significantly curbed the carbon emissionin its processes and enabled to reduce the emission intensityby almost 57% in last 8 years to meet the aim of beingthe greenestcompany. JK Tyre is now amongst the most energy efficienttyre manufacturersin the world".

JK Tyre is continually striving to achieve efficiency in each of the areas towards sustainability goals for 2030. As one of the greenest tyre manufacturers, JK Tyre follows a lowcarbon strategy, which also forms the basis of our future growth. Our GHG reduction has been over 57% in the lasteight years and we aim to be carbon neutral by 2050.

JK Tyre environment stewardship is driven by goals of zero waste to landfill, single use plastic and zero effluent discharge as well as reduced water use. It is working towards, alignment with the United Nations Sustainable Development Goals, including those on human rights, anti-corruption and upholding of labour

SOUTHERN COM-MAND UNDERTOOK 'GRAM SEVA DESH SEVA ' CAMPAIGN IN **SEVEN STATES**"

Jaipur, Southern Command of Indian Army undertook the "Gram Seva - Desh Seva" campaign in 75 remotely located border villages in the state of Maharashtra, Goa, Karnataka, Telangana, Tamil Nadu, Gujarat & Rajasthan on 30 December 2022.

Under the theme of "Gram Seva - Desh Seva", this day long drive saw the conduct of joint Swachhta Abhiyaan, by the Army personnel and village residents. Medical Camps were also organised by the Army for preliminary screening wherein free medicine worth Rs 15 Lakhs was distributed in remote areas. The village youth were also enlightened about the Agniveer Scheme and motivated to join the



Armed Forces as a career. Sports competitions were conducted between the village youth and the Army Jawans. Post the match, Army Units presented sports items worth Rs 10 Lakhs to the village youth and urged them to develop sportsmen like spirit in life.

Veer Naris of the area were also felicitated and efforts were made to ameliorate their grievances. In order to benefit the youth and students, Southern Army created sports facilities like Volleyball / Kho Kho / Kabaddi fields and organised friendly matches. Officers and soldiers also shared a meal with the locals in an informal interaction to reflect upon the renewed Soldier-Citizen connect & reaffirmed the commitment of Indian Army to stand shoulder to shoulder with the masses. The "Gram Seva - Desh Seva", campaign urged the citizens especially the youth about their duty towards the society and 'Nation Building'

> Punjab Vibe, the **Newest Made in**

Punjab Fashion Store

Chandigarh: Punjab Vibe is excited to announce the launch of its brand-new fashion store, offering unique, Gurmukhi printed clothes inspired by the beautiful and vibrant culture of Punjab. The online store of Punjab Vibe offers multiple winter and summer apparel collections including hoodies and Tshirts.

Punjab Vibe is the first of its kind and offers customers a range of eye-catching and affordable printed ensembles that bring both contemporary and traditional stylings. The brand carefully crafts their designs to bring the fashion luxury through 100% premium fabrics, design elements and the marvellous cuts. The never-seen-before designs are customised to modern trends, yet Punjab Vibe's collections embrace and celebrate the heritage of Punjab.



Avtar Singh, Founder of Punjab Vibe says on the launch of the brand, "We are proud to be an eco-friendly fashion store and are dedicated to making positive steps towards sustainability. All of our clothing is made from organic fabrics and sourced and Made in Punjab only. Our clothes are also free of any toxic chemicals or bleaches, ensuring that customers can enjoy a beautiful, environmentally con-

Uunchai rules the silver screen and still going strong world

Rajshri Production's Uunchai boasts of a lot of firsts. The Sooraj Barjatya-helmed Rajshri Production's film brought audiences back to the theatres post the pandemic, had senior citizens as lead cast and no villains. It followed the old release formula of limited screen



Uunchai breaks the trend of films lasting a single weekend. Crossing its half-century run across India, running for 50 days in over

Director Sooraj Barjatya made this film from his heart to break the compulsion of proving himself with box office numbers. Uunchai has scaled its own Mount Everest, breaking the barometers of so-called success formulae.

Uunchai boasts of a legendary ensemble, a seasoned director, an iconic production house and a story whose heartbeat is friend-

Uunchai is Rajshri's most ambitious film till date. Shot at 17000 plus feet above sea level, with a senior star cast of Amitabh Bachchan, Anupam Kher, Boman Irani, Neena Gupta, Sarika with Parineeti Chopra and Danny Denzongpa. Uunchai is directed by Sooraj R Barjatya, and produced by Rajshri Productions in association with Mahaveer Jain Films and Boundless Media

Go the nearest theatre with your family and friends to experience Uunchai on the silver screen as it crosses 50 days and be part of the story of friendship, hope and happiness - moments that promise to last a lifetime!

VISITED THE AREA ACCOUNT OFFICE, JODHPUR

Jaipur: FA(DS) Smt. Rasika Chaube, IDAS visited the Area Account Office, Jodhpur on 24 December 2022 and reviewed the overall functioning of the AAO(SC) Jodhpur. While expressing her satisfaction with the performance of the office, she passed certain instructions for the betterment of the office and emphasized on superior service delivery to the Armed Forces viz. Payments, audit, accounting and financial advice. She duly accentuated that Forces being positioned near sensitive bor-



der areas, the department should be more sensitive and sentimental towards their needs and at the same time, it should be more vigilant.

She expressed the broadened mandate of the department that has leaped from Transaction based audit to performance and efficiency audit, which is a milestone that would lead to more effective use of tax payer's

She also emphasized that administration should always have a human face, give priority in processing pension related cases through SPARSH, sensitivity be maintained towards veterans and veer-naaris.

She also visited HQ 12 Corps for interaction with Lt. Gen Rakesh Kapoor, GOC Konark Corps and discussed the bottlenecks and challenges being faced by the military formations stationed at border areas and assured complete cooperation from Defence Account Department.

During her visit to Area Account Office, Jodhpur she also inaugurated the Quarterly Hindi Newsletter published by PCDA(SC).

