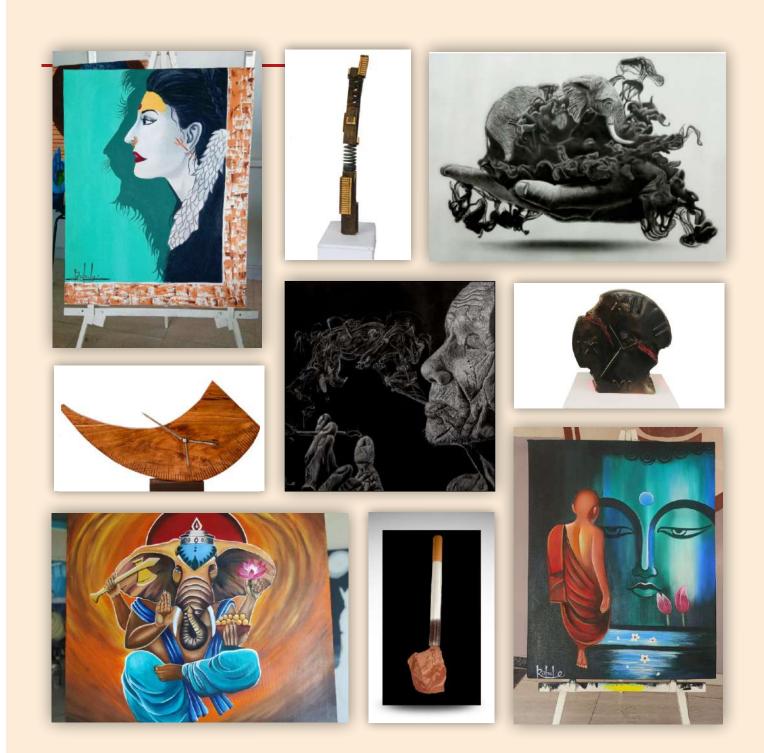


(APPROVED BY UGC, MINISTRY OF EDUCATION, GOVT. OF INDIA)

# अपने विचारों की...

The Bi-Monthly Magazine **JULY-AUG. 2022** 

### ART EXHIBITION



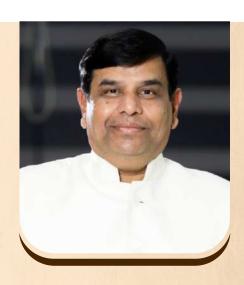
School of PERFORMING AND FINE ARTS

# Chancellor's Message

### Youth power can bring meaningful change

As we stand at the doorstep to welcome the new academic session 2022-23. I pray for our university family and their near and dear ones for good health. It gives me immense pleasure that OSGU E-Magazine 'ABHIVYAKTI' will be available to serve its purpose of infotainment. It will not only give you information rather entertaining content too. The years 2020-2021 have been challenging for all of us

but challenges also brought opportunities to learn. This issue of ABHIVYAKTI is fully dedicated to Engineering & Technology. I hope it will serve the purpose to enlighten the masses. I congratulate to all the ABHIVYAKTI team members.



Dr. Punit Goyal Chancellor OSGU, Hisar





### Youth can take the country to new heights

It's a matter of great pleasure to see the ABHIVYAKTI in final shape. The major resource of any country is its peoples and for optimal utilization of this precious resource, education has to play a key role. In this context, I am much confident that ABHIVYAKTI will cater not only the educational purpose rather information and

entertain too. This issue will explore about the Engineering & Technology. Apart from this, some glimpses of OSGU's activities will disseminate the versatility of the campus. My best wishes to all the team members of ABHIVYAKTI.

Dr. Punam Goyal Pro Chancellor OSGU, Hisar



### The enthusiasm alive in youth

I feel proud to be a member of this prestigious university which not only educating masses through classes rather playing a key role by imparting information through its E-Magazine. It will dedicate to two themes in each issue and major events occurred in the OSGU campus.

A magazine with meaningful message is no mean achievement who knows the importance of information

for the society. ABHIVYAKTI will try to cater the information need of the masses. Well done team ABHIVYAKTI.



Dr. N.P. Kaushik Vice Chancellor OSGU, Hisar





### Youth power must be channelised for positives

Om Sterling Global University Haryana has always been in the forefront of organizing various co-curricular and extra-curricular activities which have sharpened the horizons of knowledge and the confidence of the faculty members and the students. OSGU E-Magazine, published bi-annually is a very innovative initiative in

this direction which would keep the OSGU family connected and informed by capturing some of the memorable moments and showcasing the outstanding activities organized by the University along with some of the exemplary achievements of its fraternity members.

Dr. Ajay Poddar Pro Vice-Chancellor OSGU, Hisar

### OM STERLING GLOBAL UNIVERSITY

Welcome to Om Sterling Global University Haryana where knowledge, discipline and entertainment come together! Situated as a oasis in the semi-arid region of Hisar, the Learning Centre is a treat for the eyes and the mind. Om Sterling Global University Haryana (OSGU) provides a campus to its students for their excellent development. With a vision of being a global university and providing value based contemporary education with emphasis on innovation, research and productivity blended with modernity and tradition, OSGU has risen to the pinnacle of academic excellence and success.











# **Cyber Security** is Important

In 2019 WhatsApp got Hacked. WhatsApp had confirmed that a security flaw in the app let attackers install spy software on their targets' smartphones. That had left many of its 1.5 billion users wondering how safe the "simple and secure" messaging app really is.

Chip-maker Intel confirmed that new problems discovered with some of its processors could reveal secret information to attacks.



This year, people started to realize that their data is hacked, exploited, and manipulated on an industrial scale, either by criminals or the tech companies that power the modern economy. Governments do it too, of course. Just this week, news emerged that hackers linked to China's Ministry of State Security reportedly broke into the networks of Hewlett Packard Enterprise and IBM, and used that access to penetrate their clients' systems.



"Data is the new oil. It's valuable, but if unrefined it cannot really be used. It has to be changed into gas, plastic, chemicals, etc. to create a valuable entity that drives profitable activity; so, must data be broken down, analyzed for it to have value." - Clive Humby,

Article by:-Lovekesh Mishra BCA 6th Sem.

### PAPER BATTERY



There has been a growing demand for thinner and smaller electronic devices. To achieve those demands "Paper Battery" offers the best solution. Paper battery is actually a cellulosebased paper with CNT deposited on either side of paper. A stack of such papers makes a paper battery. Some batteries use Silver Nano Wires instead of CNT. It is extremely thin, flexible, light weight and stores much power in less space. Recently developed paper battery combines the Li-ion based chemicals to make a combination of Li-ion and paper battery.



#### **HISTORY**

The creation of the Paper Battery drew from a diverse pool of disciplines, and these batteries require expertise in materials science, energy storage, and chemistry. However,in August 2007, a research team at Rensselear Polytechnic Institute Led by Drs. Robert Linhardt, John H. Broadbent,Pulickel M. Ajayan, OmkaramNalamasu with a joint meeting in Material Science and engineering developed the Paper Battery, which is also known as Nano Composite Paper. In December 2009,Yi Cui and his team at Stanford University successfully made an actual prototype that gave a terminal voltage of 1.5 V.

#### ISSUES WITH CONVENTIONAL BATTERIES

- Low specific power compared to fuels
- High charging Time
- Weight and size
- Explosion, corrosion, leakage
- Environmental hazards
- High Cost
- Terminal voltage constraint

#### **WORKING OF PAPER BATTERY**

The Paper battery works when the paper is dipped in the ion-based liquid solution; next a chemical reaction occurs between the electrodes and liquid. The electrons move from the cathode to anode to generate electricity.

Article by:-Om Parkash B.Tech. EE

### जीवन एक चुनौती है

# Beauty of Mathematics in Real Life



**MATHEMATICS** 

**Beauty in Real Life** 

जीवन एक चुनौती है, मैंने यह स्वीकार किया। पग-पग अंगारों पर चल, नव प्रभात संस्कार किया।

जूझ रहा है तन-मन ये, धूल धूसरित हुई काया। निरद्वद्व श्वास चलते ये, कैसी है अद्भुत माया।

हार-हार कर जीने में, मुख-दुख का सत्कार किया। जीवन एक चुनौती है, मैंने यह स्वीकार किया।

दिया उसे जो-जो पाया, सदैव रहा हाथ खाली। तुच्छ समझ संघर्षी को, सशक्त गढ़ा मुझे माली।

सह-सह भीतर कष्टों को, समय ने निर्विकार किया। जीवन एक चुनौती है, मैंने यह स्वीकार किया।

भूला अभिलाषा अपनी, औरों को अर्पण किया। खुद के जीवन का मैंने, सुख समुद्र में तर्पण किया।

खाक कर हैसियत अपनी, जन-जन परोपकार किया। जीवन एक चुनौती है, मैंने यह स्वीकार किया।

**डा. सुनीता सिंह 'सुधा'** प्रोफेसर हिंदी मानवीकी संकाय ओएसजीयु, हिसार When I was a Child
I found the number one,
When I got the value of parents,
I splitted into the number of three,
When I came out of my small home,
I found the world as infinity,
With rational & irrational people,
It was the journey, started from you,

Oh! My Darling Mathematics...
Oh! My Darling Mathematics...

When my LIFE was scattered,
It was just you,
Who made me stand on Cartesian plane,
When I walk on positive axes,
I always go forward & raise high,
When I walk on negative axes,
I always go back & downwards,
So, I keep myself in the first quadrant only,

When I am surrounded by problems,
I treat them as differential breakers,
To take my journey smooth on the Life's Road.....!!!!!!!!



### AWARENESS PROGRAMME FOR SPECIAL CHILDREN AT

### OM STERLING GLOBAL UNIVERSITY

School of Teacher Education, Om Sterling Global University organized an awareness programme for special children. On this occasion, the special children and their parents were invited from the nearby villages. In this programme, the techniques for identifying and enhancing the abilities of such children were demonstrated. The university has a special education department with tools and techniques for the teaching and training of such children; with guidance towards their employment and financial freedom. Hon'ble Chancellor Dr. Punit Goyal and Hon'ble Pro- Chancellor Dr. Punam Goyal announced the opening of a vocational centre for special children and said that university will always be ready for the growth and help of such children. In the programme, Vice – Chancellor of the university Dr. N. P. Kaushik, Pro Vice-Chancellor Dr. Ajay Poddar, Registrar Dr. Vinod Kumar were present along with Deans of all schools and other staff. On this occasion, wonder girl of Haryana Ms. Riya and her father Mr. Jitender Jangra demonstrated various practical methods to improve the talent of special children. The children and their parents who participated and attended the programme were happy and optimist about the efforts of the university.









### लोकतंत्र का महत्व और आवश्यकता

भारत में लोकतन्त्र जिसका संस्कृत में अर्थ होता है 'प्रजातन्त्रम्' (शाब्दिक अर्थ "लोगों का शासन") प्रजातन्त्र एक ऐसी शासन व्यवस्था और लोकतान्त्रिक राज्य दोनों के लिये प्रयुक्त होता है। लोकतन्त्र शब्द का प्रयोग राजनीतिक सन्दर्भ में किया जाता है, किन्तु लोकतन्त्र का सिद्धान्त दूसरे समूहों और संगठनों के लिये भी संगत है।

लोकतन्त्र एक ऐसी शासन प्रणाली है, जिसके अन्तर्गत जनता अपनी स्वेच्छा से निर्वाचन में आए हुए किसी भी उम्मीदवार को मत देकर अपना प्रतिनिधि चुन सकती है, तथा उसे विधायिका का सदस्य बना सकती है। लोकतन्त्र दो शब्दों से मिलकर बना है, "लोक + तन्त्र"। लोक का अर्थ है जनता तथा तन्त् का अर्थ है शासन।

लोकतंत्र की परिभाषा बहुत से विद्वानों ने अपने शब्दो में अलग-अलग दिए हैं। उनमें से महान राजनीतिज्ञ है - अब्राहम लिंकन, जो अमेरिका के 16वे राष्ट्रपति थे। उनके अनुसार लोकतंत्र की परिभाषा इस प्रकार हैं। अब्राहम लिंकन के अनुसार लोकतंत्र जनता का, जनता के द्वारा तथा जनता के लिए शासन है। लोकतंत्र में ऐसी व्यवस्था रहती है की जनता अपनी मर्जी से विधायिका चुन सकती है। लोकतंत्र एक प्रकार का शासन व्यवस्था है, जिसमे सभी व्यक्ति को समान अधिकार होता हैं। एक अच्छा लोकतंत्र वह है जिसमे राजनीतिक और सामाजिक न्याय के साथ-साथ आर्थिक न्याय की व्यवस्था भी है। देश में यह शासन प्रणाली लोगो को सामाजिक, राजनीतिक तथा धार्मिक स्वतंत्रता प्रदान करती हैं।

अभिजन सिद्धान्त के अनुसार आज के जटिल समाज में कार्यक्षमता के लिए विशेषज्ञता आवश्यक है और विशेषज्ञों की संख्या कम ही होती है। अतः राजनैतिक नेतृत्व कुछ ऐसे चुनिंदा सक्षम लोगों के हाथों में होनी आवश्यक है।

बहुसंख्यक वर्ग, जनसमुदाय और गैर-अभिजनवर्ग में अधिकांश भावशून्य, आलसी और उदासीन होते हैं, इसलिए एक ऐसा अल्पसंख्यक वर्ग का होना आवश्यक है जो नेतृत्व प्रदान करे।

लोकतंत्र मात्र एक ऐसी कार्यप्रणाली है जिसके द्वारा छोटे समूहों में से एक जनता के न्युनतकम अतिरिक्त समर्थन से शासन करता हैं अभिजनवादी सिद्धान्त यह भी मानता है कि अभिजन वर्गों- राजनीतिक दलों, नेताओं, बड़े व्यापारी व घरानों के कार्यपालकों, स्वैच्छिक संगठनों के नेताओं और यहाँ तक कि श्रमिक संगठनों के बीच मतैक्य आवश्यक है तािक लोकतंत्र की आधारभूत कार्यप्रणाली को गैर जिम्मदार नेताओं से बचाया जा सके।

- सहभागिता सिद्धान्त के समर्थकों के अनुसार लोकतंत्र वास्तविक अर्थ प्रत्येक व्यक्ति की समान सहभागिता है, न कि मात्र सरकार को स्थायी बनाए रखना जैसा कि अभिजनवादी अथवा बहुलवादी सिद्धान्तकार मान लेते हैं। सच्चे लोकतंत्र का निर्माण तभी हो सकता है जब नागरिक राजनीतिक दृष्टि से सिक्रय हों और सामूहिक समस्याओं में निरंतर अभिरूचि लेते रहें। सिक्रय सहभागिता इस लिए आवश्यक है ताकि समाज की प्रमुख संस्थाओं के पर्याप्त विनिमय हों और राजनीतिक दलों में अधिक खुलापन और उत्तरदायित्व के भाव हों।
- सहभागी लोकतंत्र के सिद्धान्तकारों के अनुसार नीतिगत निर्णय लेने का जिम्मा केवल अभिजन वर्ग तक सीमित रहता है तो उसके लोकतंत्र का वास्तविक स्वरूप बाधित होता है। इसलिए वे इसमें आम आदमी की सहभागिता की वकालत करते हैं। उनका मानना है कि यदि लोकतांत्रिक अधिकार कागज के पेजों अथवा संविधान के अनुच्छेदों तक सीमित रहे तो उन अधिकारों का कोई अर्थ नहीं रह जाता। अतः सामान्य लोगों द्वारा उन अधिकारों का वास्तविक उपभोग किया जाना ही आवश्यक है।

लोकतंत्र राज्य का एक स्वरूप है और वर्ग-विभाजित समाज में सरकार अधिनायकवादी और लोकतांत्रिक दोनों होती है। यह एक वर्ग के लिए लोकतंत्र है तो दूसरे के लिए अधिनायकवाद।अतः लोक तंत्र का किसी न किसी रूप में होना आवश्यक है ।

डा. शैलेन्द्र कुमार सिंह एसो प्रो. राजनीति विज्ञान ओ एस जी यु, हिसार

# CALL FOR PROPOSALS FOR INCREASING INCOME OF RURAL AREAS

Om Sterling Global University organized a national conference on the theme of role and importance of technology in human life and businesses. Participants from various universities/institutes presented more than 125 research papers in the conference. Two papers were awarded with the best paper awards in the conference and adorned with the certificates. The conference was inaugurated by Chief Guest Dr. M. P. Poonia, Vice Chairman, AICTE. Dr. B. K. Punia, Former Vice — Chancellor of MDU, Rohtak also graced the occasion with their presence as special guest. Hon'ble Chancellor Dr. Punit Goyal and Hon'ble Pro-Chancellor Dr. Punam Goyal also addressed the audience with their views about the theme of the conference. Chief Guest and Special Guest addressed the presented academic audience with their thoughts on integration of technology in human life and businesses and shared their experiences. Dr. M. P. Poonia called students and faculty members top put forward proposals of rural economic benefits. On this occasion, sports fellowship awarded to Rajni and Nisha.









# What is AI?



### AI stands for Artificial Intelligence.

Many people still don't know about this term as this is a new field. It is still in its development stage. Ten years ago, if you mentioned the term "artificial intelligence" then nobody would've understood the importance of this concept. Most people think of it as a very complicated subject related to high tech sci-fi machines. The glut of data has led to intensified research. Machines being far better suited to humans than this work, the focus was on training machines to do this in as "smart" a way as is possible.

#### What is Artificial Intelligence?

The concept of what defines AI has changed over time, but at the core there has always been the idea of building machines which are capable of thinking like humans.

After all, human beings have proven uniquely capable of interpreting the world around us and using the information we pick up to effect change. If we want to build machines to help us to this more efficiently, then it makes sense to use ourselves as a blueprint! AI, then, can be thought of as simulating the capacity for abstract, creative, deductive thought – and particularly the ability to learn – using the digital, binary logic of computers.

Research and development work in AI is split between two branches. One is labelled "applied AI" which uses these principles of simulating human thought to carry out one specific task. The other is known as "generalised AI" – which seeks to develop machine intelligences that can turn their hands to any task, much like a person. Research into applied AI is already providing breakthroughs in fields of study from quantum physics where it is used to model and predict the behaviour of systems comprised of billions of subatomic particles, to medicine where it being used to diagnose patients based on genomic data.

In industry, it is employed in the financial world for uses ranging from fraud detection to improving customer service by predicting what services customers will need. In manufacturing it is used to manage workforces and production processes as well as for predicting faults before they occur, therefore enabling predictive maintenance.

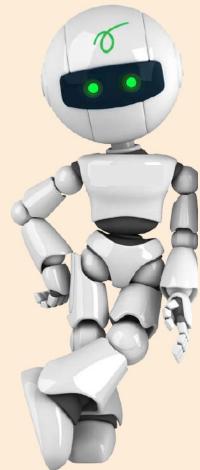
In the consumer world more and more of the technology we are adopting into our everyday lives is becoming powered by AI – from smartphone assistants like Apple's Siri and Google's Google Assistant, to self-driving and

autonomous cars which many are predicting will outnumber manually driven cars within our lifetimes.

#### What is the future of AI?

Real fears that development of intelligence which equals or exceeds our own, but has the capacity to work at far higher speeds, could have negative implications for the future of humanity have been voiced, and not just by apocalyptic sci-fi such as The Matrix or The Terminator, but respected scientists like Stephen Hawking.

Even if robots don't eradicate us or turn us into living batteries, a less dramatic but still nightmarish scenario is that automation of labour (mental as well as physical) will lead to profound societal change – perhaps for the better, or perhaps for the worse. This understandable concern has led to the foundation last year, by a number of tech giants including Google, IBM, Microsoft, Facebook and Amazon, of the Partnership in AI. This group will research and advocate for ethical implementations of AI, and to set guidelines for future research and deployment of robots and AI.



Article by:-Monika B.Tech. CSE (AI)





ग्रामीण क्षेत्र की आय बढ़ाने के

### लिए प्रयोजल लाने का आह्वान

युवाओं में कौशल विकास पर विश्वविद्यालयों द्वारा विशेष ध्यान दिया जा रहा है। इसी के तहत ओम स्टर्लिंग ग्लोबल विश्वविद्यालय में निशलक अंशकालिक कोसिंज की शुरुआत की गई है। इसमें अंग्रेजी भाषा ज्ञान, सामान्य कम्प्यूटर, व्यक्तित्व विकास, तार्किक एवं सामान्य गणित तथा योगा व

ओम स्टर्लिंग ग्लोबल विश्वविद्यालय एवं विजन इंडिया फाउंडेशन ने किया

विश्वविद्यालय, हिसार एवं • विजन इंडिया फाउंडेशन के तत्वाधान में सेंट्रल जेल-1 हिसार में चल रहे पांच दिवसी

में निशुल्क

की शुरुआत

ार डॉ. पुनम गोयल ने बताया ह कोसिंज विद्यार्थियों को

इंडस्ट्रीज की जरुरत के मुताबिक

वांछनीय स्किल प्रदान करते हैं,

जोकि अन्ततः उन्हें उचित रोजगार

पाने में मदद करता है। इन

कक्षाओं को लेकर विद्यार्थियों में

भी विशेष रुचि देखी गई। कोर्सिज

में 400 से ज्यादा विद्यार्थियों ने

अपना पंजीकरण किया है। प्रथम

कक्षा के आरम्भ में कुलपति डॉ.





## NEWS HIGHLIGHTS

बिनार का आयोजन किया टुडे न्यूज । हिसार

14 रवविद्यालय त दिवस पर वैदिक आधारित आयोजन किया गया। यह हर साल 22 दिसंबर को गणितज्ञ श्रीनिवास अयंगर सूत्रों की सहायता से हम शीघ्रता न की याद में मनाया बड़े सवालों का जवाब भी मीखिव रूप से दे सकते हैं। एक अन्य कार्यक्रम में डॉ बी.आर. नटराजन, टैया (गोल्ड मेडेलिस्ट राजस्थान ने इंटरपरनरसिए



बविद्यालय सिलर डॉ. पूनम

नैतिक मूल्यों के

ो सराहना की तथा

तार्यक्रम में श्री राकेश

जी. हिसार रेन्ज, हिसार

ओ.एस.जी यू के सभागर में सांस्कृत जारपुरा प्राप्त किया गया। इसमें शिक्षकों भी आयोजन किया गया।

प्रस्तुतियां देकर सभी का दिल जीत लिया।

अल्पुराज्या पुरा तथा का पुरा के कुलपति डॉ. अवसर पर विश्वविद्यालय के कुलपति डॉ.

सेंट्रल जेल में ओम स्टर्लिंग ग्लोबल विश्वविद्यालय एवं विजन इंडिया फाउंडेशन के गणमान्य सदस्य व पदाधिकारी। *संवाद* 

सेंट्रल जेल-1 में 400 बंदियों ने सीखे योग के गुर

हिसार। ओम स्टर्लिंग ग्लोबल विश्वविद्यालय हिसार एवं विजन

### Organization of Excursion Trip to Amritsar-Jalandhar

A total of 112 students from Om Sterling Global University went on a tour of Amritsar-Jalandhar for three days, visiting Golden Temple, Jalianwala Bagh, Duryana Mata Mandir and Wagha Border. Students also visited Pushpa Gujral Science City, Jalandhar which is the second largest science city in India where it has exhibition of various scientific projects to enhance the knowledge of students. On this occasion, Hon'ble Chancellor Dr. Punit Goyal and Hon'ble Pro- Chancellor Dr. Punam Goyal announced that university will keep doing such trips to different parts of India, for students for increasing their knowledge.









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