SOUVENIR

Multidisciplinary International Seminar On
"Responsible A.I.: Towards Ethics, Governance, Scientific and Global Framework"

28th & 29th January, 2026

Organised by

Internal Quality Assurance Cell (IQAC)

S.R.T. College, Dhamri (Godda)

(A Constituent Unit of Sido Kanhu Murmu University, Dumka)

In Association with

International Vocational Training and Technology Research Institute

Dhanbad, Jharkhand (TRD)

(An Affiliated unit of NWDS, Regd. under Society Act 21 (A) 1860, Govt. of JH and TRD, Indexed under MSMED Act 2006 Govt., of India)

SANTOSH KUMAR GANGWAR
GOVERNOR OF JHARKHAND

सत्यमेव जयते

LOK BHAVAN, RANCHI-834001
JHARKHAND
Phone : 0651-2283465

Message

It gives me immense pleasure to know that S.R.T. College, Dhamri, Godda, a constituent unit of Sido Kanhu Murmu University, Dumka is organizing a Two-Day International Seminar on "Responsible Artificial Intelligence: Towards Ethics, Governance, Scientific and Global Framework" on 28th–29th January, 2026.

Artificial Intelligence has emerged as a powerful tool with the potential to influence governance, education, healthcare and various other sectors. However, its true value lies in its responsible, ethical and inclusive application for the welfare of society. Deliberations on ethics, accountability, governance and global perspectives are therefore essential to ensure that technological advancements remain aligned with human values and social responsibility.

I am confident that this international seminar will provide an effective platform for academicians, researchers and professionals to exchange ideas, share best practices and explore frameworks that promote the responsible use of Artificial Intelligence.

I extend my best wishes to the organizers and participants for the success of this seminar.

(Santosh Kumar Gangwar)

रबीन्द्र नाथ महतो
अध्यक्ष
झारखण्ड विधान सभा
राँची

RABINDRA NATH MAHATO
SPEAKER
JHARKHAND LEGISLATIVE ASSEMBLY
RANCHI

पत्रांक / Letter No.: ....

Message

I am pleased to learn that S.R.T. College, Dhamri (Godda), a constituent unit of Sido Kanhu Murmu University, Dumka, is organizing a two-day International Seminar on *"Importance of Responsible Artificial Intelligence: Towards Ethics, Governance, Scientific and Global Framework"* on January 28–29, 2026.

Artificial Intelligence is rapidly transforming governance, education, healthcare, industry, and society at large. While it's potential to improve efficiency and human well-being is immense, it also raises important questions related to ethics, accountability, transparency, and inclusiveness. In this context, the focus on *responsible* artificial intelligence is both timely and essential, especially for emerging economies striving for balanced and sustainable development.

Such academic platforms play a vital role in fostering informed dialogue among scholars, researchers, policymakers, and practitioners. I am confident that deliberations during this seminar will contribute meaningfully to shaping ethical frameworks and governance mechanisms that ensure technology serves humanity with responsibility and sensitivity.

I extend my best wishes to the organizers, resource persons, and participants for the success of this seminar and commend S.R.T. College for its continued commitment to academic excellence, research, and intellectual engagement.

27.01.26

(Rabindra Nath Mahato)

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Hemant Soren
Chief Minister

MESSAGE

*It gives me immense pleasure to learn that S.R.T. College, Dhamri, Godda is organizing a two-day International Seminar on "**Responsible A.I. Towards Ethics, Governance, Scientific and Global Framework**" on January 28th and 29th, 2026.*

*As we navigate an era of rapid technological transformation, Artificial Intelligence stands as a pivotal force in shaping our future. However, the true value of innovation lies in its responsible application. This seminar's focus on **Ethics and Governance** is both timely and essential to ensure that scientific progress aligns with human values and global welfare.*

I commend the fraternity of the College and the entire organizing committee for creating a platform to discuss these critical frameworks. Such academic initiatives are vital for fostering a spirit of inquiry and guiding our youth toward a technologically balanced world.

I wish the participants, scholars, and organizers a highly productive and successful seminar. I am confident that the insights shared during these two days will contribute significantly to the global discourse on A.I. governance.

With best wishes.

Johar!

(Hemant Soren)

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मंत्री
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तथा पंचायती राज विभाग
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पत्रांक : PRS/PS/1.5.321/2025-26 दिनांक : 25/01/2026

Message

It gives me great pleasure to learn that S.R.T. College, Dhamri is organizing a seminar on the theme "Responsible A.I.: Towards Ethics, Governance, Scientific and Global Framework" on 28th and 29th January 2026.

Artificial Intelligence is transforming every aspect of our lives — from education and governance to health, agriculture, and rural development. As we embrace the opportunities offered by this powerful technology, it is also imperative to reflect upon its ethical dimensions, governance mechanisms, and global responsibilities. Dialogues such as this seminar play a crucial role in bringing together diverse perspectives, fostering critical thinking, and shaping policies that are inclusive, equitable, and forward-looking.

I commend the sincere efforts of the organizers, faculty, and students of S.R.T. College, Dhamri for curating a forum that encourages meaningful discussions on a topic of immense contemporary significance. I am confident that the deliberations will not only deepen understanding but also stimulate innovative ideas that contribute to societal progress.

On this occasion, I extend my heartfelt greetings to all the participants, speakers, and distinguished guests. May this seminar be a source of inspiration and insight, and may it reinforce our collective commitment to responsible and ethical use of technology for the welfare of all. Wishing the seminar abundant success and continued excellence to S.R.T. College, Dhamri in all its endeavors.

Deepika Pandey Singh.
(Deepika Pandey Singh)

सुदिव्य कुमार
मंत्री
नगर विकास एवं आवास विभाग,
उच्च एवं तकनीकी शिक्षा विभाग तथा पर्यटन,
कला-संस्कृति, खेल-कूद एवं युवा कार्य विभाग,
झारखण्ड सरकार

कार्यालयः
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पत्रांक : 850 /सं० फो०

दिनांक : 25-01-26

Message

I am pleased to know that S.R.T. College, Dhamri is organizing a seminar on **"Responsible A.I.: Towards Ethics, Governance, Scientific and Global Framework".** Education today stands at a crucial intersection where technology and human values must move forward together. Artificial Intelligence has the capacity to improve teaching, research, administration, and service delivery yet its growth must be guided by clear ethical principles and responsible governance. Seminars like this encourage meaningful dialogue and help shape an informed academic community capable of making wise decisions for the future.

I commend the initiative of S.R.T. College, Dhamri in bringing experts, academicians, and students to a common platform for constructive discussion. The insights emerging from this seminar will surely contribute to strengthening both academic excellence and social responsibility. I extend my best wishes to the organizers, resource persons, and participants. May this seminar prove insightful, productive, and beneficial for all concerned, and may the institution continue to excel in its noble mission of education.

!!Johar!!

(SUDIVYA KUMAR)

Prof. Kunul Kandir
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दुमका - 814110
झारखण्ड, भारत

Ref. SKMU/VC/ /20 Date .....

Message

It is a matter of special pride to note that SRT College, Dhamri is organizing its first-ever International Seminar since its establishment, marking an important academic milestone in the institution's journey.

The organization of a seminar on the theme "Responsible A.I. Towards Ethics, Governance, Scientific and Global Framework" reflects the institution's commitment to meaningful scholarship and forward-looking academic engagement. Choosing such a contemporary and thought-provoking theme for its inaugural seminar demonstrates intellectual maturity and academic aspiration.

This initiative signifies the beginning of a stronger research culture and scholarly dialogue within the college. I am confident that this seminar will inspire faculty members, researchers, and students to engage more deeply with critical global issues and contribute responsibly to the expanding horizons of knowledge.

I congratulate the college fraternity for taking this significant step and extend my heartfelt best wishes for the successful conduct of the seminar. May this event serve as a foundation for many such academic endeavors in the years to come.

(Prof. Kunul Kandir)
Vice-Chancellor

Dr. Rajeev Ranjan Sharma
Registrar

डा. राजीव रंजन शर्मा
कुलसचिव

Sido – Kanhu Murmu University
Dumka – 814110
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सिदो-कान्हू मुर्मू विश्वविध्यालय
दुमका – 814110
झारखण्ड, भारत

It gives me immense pleasure to congratulate S.R.T. College, Dhamri (Godda), a proud constituent unit of Sido Kanhu Murmu University, for organizing the Two-Day International Seminar on Importance of Responsible Artificial Intelligence: Towards Ethics, Governance, Scientific, and Global Framework on January 28-29, 2026. As we stand at the threshold of a new era defined by rapid technological evolution, Artificial Intelligence has transitioned from a specialized scientific field to a cornerstone of global infrastructure. However, the power of AI brings with it a profound responsibility. The theme of this seminar is not just relevant; it is essential.

The integration of AI into our society must be guided by a robust ethical compass. I urge the participating scholars, researchers, and students to delve deep into the Responsible aspect of AI. Our goal should not only be technical proficiency but also the creation of systems that are transparent, unbiased, and aligned with human values. This seminar is a golden opportunity to bridge the gap between scientific innovation and global governance.

I commend the principal, the organizing committee, and the faculty of S.R.T. College for their vision in bringing together international perspectives to our region. By hosting dialogues of this magnitude, you are placing SKM University at the forefront of the global academic discourse on technology and ethics.

I hope the papers and discussions documented be serve as a roadmap for future research and policy-making. May this seminar inspire all attendees to become advocates for technology that serves humanity with integrity.

I wish the International Seminar every success and hope that the deliberations of these two days yield fruitful insights for the scientific community and society at large.

With Best Wishes,

Registrar

(Dr. R.R. Sharma)

Sido Kanhu Murmu University, Dumka.

जवाहरलाल नेहरू विश्वविद्यालय
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नई दिल्ली-११००६७
NEW DELHI-110067

प्रोफेसर शांतिश्री डी. पंडित
कुलगुरु
Professor Santishree D. Pandit
Vice-Chancellor

21 January 2026

Message

I am pleased to learn that SRT College, Dhamri is hosting a two-day International Seminar on "Responsible A.I. towards Ethics, Governance, Scientific and Global Framework." The initiative reflects an academic sensitivity towards the deeper questions that accompany technological progress. Artificial Intelligence is not merely a technical innovation; it is a social force that reshapes knowledge systems, power relations, and human values. At a time when speed of innovation often outpaces ethical reflection, platforms such as this seminar become intellectually and morally significant. They allow scholars and students to pause, question, and re-imagine the future of technology through the lenses of responsibility, inclusiveness, and public good. Universities have historically served as custodians of critical thought and conscience. In that spirit, I commend the organizers for foregrounding ethics and governance alongside scientific advancement. Such balanced academic engagements are essential for building a future where innovation remains aligned with human dignity and democratic principles.

I extend my sincere appreciation to the organizing committee for this thoughtful endeavor and convey my best wishes for meaningful deliberations, original insights, and enduring academic outcomes.

Santishree Pandit
21/01/26
(Santishree Dhulipudi Pandit)

Message of Encouragement

It gives me immense pleasure to extend my warmest greetings and heartfelt congratulations to S.R.T. College, Dhamri, Godda, on the occasion of its two-day International Seminar: **"Responsible Artificial Intelligence: Towards Ethics, Governance, Scientific and Global Framework"** scheduled for January 28-29, 2026.

We are currently witnessing a defining moment in human history. As Artificial Intelligence (AI) transitions from a visionary concept to a foundational pillar of modern civilization, its transformative role in **governance, healthcare, and education** cannot be overstated. However, with great innovation comes a profound responsibility. The theme of this seminar is both timely and essential, as it addresses the critical need for an ethical compass and a robust global framework to guide the evolution of AI.

The rapid proliferation of algorithmic intelligence necessitates a rigorous intellectual defense of human values. We must ensure that our scientific advancements do not outpace our moral philosophy; rather, they must be harmonized to serve the collective good. By fostering a dialogue that bridges the gap between technical capability and ethical governance, this seminar serves as a crucible for ideas that will protect the dignity of the individual while harnessing the efficiency of the machine.

Furthermore, the academic community holds the sacred duty of preparing the next generation for a hybrid future. This gathering is not merely an exchange of research papers, but a call to action for educators and policymakers to build an inclusive ecosystem where technology acts as a democratizing force. As we deliberate on global frameworks, let us remain mindful that the ultimate success of AI will be measured not by its processing power, but by its ability to alleviate human suffering and expand the horizons of human potential.

I am particularly heartened to see this level of academic discourse taking place at S.R.T. College—a constituent unit of my esteemed former institution, **Sido Kanhu Murmu University**. As Jharkhand advances its vision of becoming a **digitally empowered state**, platforms like this are vital for empowering our students, scholars, and professionals to engage with emerging technologies through the lens of social responsibility and global excellence.

I commend the **Principal, Dr. Shambhu Kumar Singh**, the **Internal Quality Assurance Cell (IQAC)**, and the organizing team for their visionary leadership in bringing together eminent experts from across the globe—including distinguished representatives from Nepal, Uzbekistan, and Denmark—to deliberate on these crucial issues.

I wish all the participants, delegates, and organizers a highly productive and intellectually stimulating seminar. May the deliberations lead to actionable insights that contribute to a safer, more ethical, and more inclusive technological future!

I wish the International Seminar every success.

Prof. (Dr.) M. Basheer Ahmed Khan, Former Vice-Chancellor, S.K.M. University, Dumka

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جامعه ملیه اسلامیه
जामिया मिल्लिया इस्लामिया
(संसदीय अधिनियमानुसार केन्द्रीय विश्वविद्यालय)

MMAJ Academy of International Studies
एम. एम. ऐ. जे. अंतरराष्ट्रीय अध्ययन अकादमी

Faculty of Social Sciences

It gives me immense pleasure to know that S. R. T. College, Dhamri, Godda, a constituent college of Sido Kanhu Murmu Umiversity, Dumka is going to organize a two-day International Seminar on 'Importance of Responsible Artificial Intelligence: Towards Ethics, Governance, Scientific and Global Framework' on 28-29 January 2026.

The topic of the seminar is most appropriate and relevance for the current period. The seminar will bring experts in the field to deliberate upon various aspects of artificial intelligence and bring out policy recommendation for the various stake holders.

My best wishes for the international seminar.

With regards

B. K. Pratihari

Prof. Bijay Ketan Pratihari

S.R.T.COLLEGE, DHAMRI (GODDA)

CONSTITUENT UNIT OF S.K.M.UNIVERSITY, DUMKA (JHARKHAND)

P.O. – MEHERMA, DIST. – GODDA, PINCODE - 814160 (JHARKHAND)

From the Principal Desk

It is my privilege to welcome scholars, practitioners, policymakers, and students to the International Seminar on **"Responsible A.I.: Towards Ethics, Governance, Scientific and Global Framework,"** to be held on 28–29 January 2026 at SRT College, Dhamri. In his recent address at Davos, Hon'ble Prime Minister Shri Narendra Modi articulated a compelling vision of Artificial Intelligence as a cornerstone of Industry 4.0—integrated with connectivity, automation, and real-time data—while firmly rooted in human values, inclusion, and trust. India's expanding digital public infrastructure, strong AI talent base, and commitment to privacy-conscious innovation demonstrate how technology can serve public good, enhance governance, and contribute responsibly to global development. SRT College, located in Dhamri a region of profound historical resonance near the ancient seat of learning at Vikramshila seeks to reconnect with this lost intellectual glory through contemporary, ethical, and socially responsive education. Our aspiration is not limited to institutional growth but extends to empowering marginalized communities of Jharkhand and the wider Indian society, enabling them to engage meaningfully with emerging technologies. As scholars like Prof. Himanshu (JNU, Delhi) remind us, technological progress must address deep structural challenges in agriculture, rural livelihoods, and social equity. This seminar is an effort to reflect collectively on how Responsible A.I. can become an instrument of ethical governance, social justice, and sustainable transformation—locally grounded yet globally relevant.

I wish the seminar every success and hope it fosters thoughtful dialogue and enduring collaboration.

Principal
SRT College, Dhamri

Convenor's Message




It is a great privilege to present this message on the occasion of the International Seminar on "Responsible AI: Towards Ethics, Governance, Scientific and Social Framework." This seminar is an important academic initiative aimed at fostering critical thinking and responsible innovation in the rapidly advancing field of artificial intelligence.

As AI continues to shape our societies, economies, and governance systems, it becomes essential to develop frameworks that ensure ethical use, transparency, accountability, and inclusiveness. This seminar seeks to bring together scholars, researchers, policymakers, and industry professionals to examine these crucial dimensions and promote a human-centered approach to AI development.

I sincerely appreciate the efforts of the Organising Committee, speakers, contributors, and participants for their dedication and commitment. Their collective contributions will undoubtedly enrich academic discourse and guide future research, policy formulation, and practical implementation in the domain of responsible AI.

I hope this seminar serves as a meaningful platform for collaboration, innovation, and the exchange of ideas, leading to sustainable and ethical technological progress.

With best wishes for the success of the seminar,

Convenor

Mr. Nimai Chandra Das
(Assistant Professor, Department of Sociology)
Mr. Neeraj Kumar
(Assistant Professor, Department of Philosophy)
Mr. Maheshwar Ram Indwar
(Assistant Professor, Department of Political Science)
Dr. Devanand Das
(Assistant Professor, Department of History)
S.R.T. College, Dhamri, Godda

Organising Secretary's Message



It gives me immense pleasure to welcome you all to the International Seminar on "Responsible AI: Towards Ethics, Governance, Scientific and Social Framework." This seminar provides a vital platform for scholars, researchers, policymakers, and praDev sirctitioners to engage in meaningful dialogue on the ethical and responsible development of artificial intelligence.

In today's rapidly evolving technological world, AI has the potential to transform societies, economies, and governance systems. However, this transformation must be guided by strong ethical principles, transparent governance structures, scientific integrity, and social responsibility. This seminar aims to critically explore these dimensions and promote a balanced approach that ensures innovation while safeguarding human values, rights, and dignity.

The sessions have been carefully designed to encourage interdisciplinary perspectives and constructive discussions. I am confident that the deliberations, keynote addresses, and research presentations will contribute significantly to the academic community and policy frameworks related to responsible AI.

I extend my sincere gratitude to our esteemed speakers, advisory committee, organizing team, sponsors, and all participants for their valuable contributions and cooperation. Your support and engagement have made this seminar possible.

I wish the seminar great success and hope it inspires thoughtful insights, collaborative efforts, and future research in the field of responsible artificial intelligence.

Warm regards,

Dr. Pallavee Kumari
(Assistant Professor, Department of Sociology)
Dr.Md. Aatif Qaiyum
(Assistant Professor, Department of Chemistry)
Dr. Dhirendra Kumar
(Assistant Professor, Department of Mathematics)
Organising Secretary
S.R.T College Dhamri

Message from the Seminar Coordinators



On behalf of the Seminar Coordinators, we are delighted to extend a warm welcome to all the participants, speakers, academicians, researchers, and students to this academic seminar. It gives us immense pleasure to be part of an event that aims to foster meaningful dialogue, critical thinking, and knowledge exchange in an evolving academic landscape. This seminar has been carefully planned to provide a common platform for sharing ideas, research findings, and innovative perspectives across disciplines. We sincerely believe that such scholarly interactions not only enrich academic understanding but also inspire future research and collaborative efforts. We express our heartfelt gratitude to the distinguished speakers, resource persons, and all contributors whose support and cooperation have made this seminar possible. We also appreciate the enthusiasm and active participation of the delegates, which truly defines the success of any academic gathering.

We hope that this seminar proves to be intellectually stimulating, professionally enriching, and academically rewarding for all.

With best wishes for the grand success of the seminar.

Dr. Devanand Das
(Assistant Professor, Department of History)
Dr. Zeba Anwar
(Assistant Professor, Department of Geography)
Dr. Abhay Dubey
(Assistant Professor, Department of Sociology)
Seminar Coordinators
S.R.T. College, Dhamri, Godda

Mr. Niranjan Kumar Sinha
Director, Sinha Group of Institution

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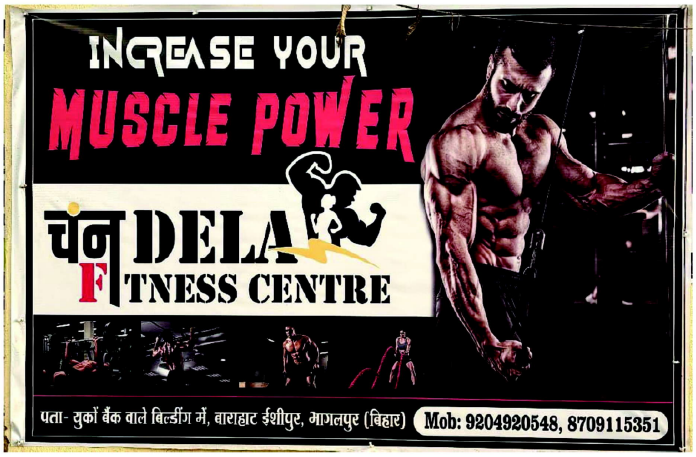

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झारखंड के विकास पुरुष डॉ सीके ठाकुर

- 30 वर्षों से बोकारो की धरती पर लगातार विकास करते आ रहे हैं डॉ सीके ठाकुर
- हिंदुस्तान के माने हुए वास्तु विद, ग्रह दोष निवारक व मानव ऑरा (आभा) विशेषज्ञ भी हैं

बोकारो : डॉ सीके ठाकुर झारखंड के विकास पुरुष हैं. डॉ सीके ठाकुर 30 वर्षों से बोकारो की धरती पर लगातार विकास करते आ रहे हैं. डॉ सीके ठाकुर हिंदुस्तान के माने हुए वास्तु विद, ग्रह दोष निवारक व मानव ऑरा (आभा) विशेषज्ञ भी हैं. उन्होंने जो कार्य किया है, वो सांसद या विधायक सायद ही कर पाते हैं. बोकारो के महान शिक्षाविद डॉ सीके ठाकुर ने एमए (पीएचडी) के अलावा पत्रकारिता भी रांची विश्वविद्यालय से पास किया है. 1994-95 में प्रभात खबर में ब्यूरो रीडर का कार्य छोड़ कर अपने पिता सोहन लाल ठाकुर के नाम पर 1995 में कल्याणपुर-जैनामोड़, बोकारो में सोहन लाल आर्य महाविद्यालय की स्थापना कर विकास की पहली रेखा खींची, जो आज परिचय के मोहताज नहीं है.

सोहन लाल आर्य महाविद्यालय, होटल आर्यन इंटरनेशनल...

महाविद्यालय के नाम में उन्होंने तुपकाडीह भी जोड़ा है, क्योंकि उनको दो गिज निर्माण महतो और कमलेश ठाकुर दोनों तुपकाडीह के रहने वाले हैं और हमेशा उनको मदद भी करते रहे हैं. सोहन लाल आर्य महाविद्यालय से प्रति वर्ष औसतन परीक्षाफल शत प्रतिशत रहा है. यहां के छात्र डॉक्टर, इंजीनियर, रेलवे, बैंक, पारा शिक्षक, शिक्षक, प्रशासनिक अधिकारी के अलावा ब्रिटेन, अमेरिका जैसे देश में भी कार्यरत हैं. डॉ सीके ठाकुर ने सुदूर ग्रामीण क्षेत्रों में शिक्षा का अलख जगाने के साथ-साथ विकास की एक और रेखा तांड़ मोहनपुर, जैनामोड़ में होटल आर्यन इंटरनेशनल की स्थापना कर खींचा है. 2013 में होटल आर्यन के बनते ही तांड़ मोहनपुर, जैनामोड़ का चहुमुखी विकास हो गया.

बॉलीवुड को बोकारो में उतारा, फिल्म "सीके की प्रेम कहानी" में लीड रोल

डॉ सीके ठाकुर में राजनीतिज्ञ क्षमता भी कूट- कूट कर भरा है. एक समय प्रथम मुख्यमंत्री बाबू लाल मरांडी के काफी नजदीकी माने जाने वालों में से एक डॉ सीके ठाकुर आज झारखंड विकास मोर्चा के विघटन के बाद झारखंड प्रदेश कांग्रेस कमिटी (उद्योग एवं व्यापार विभाग) के प्रदेश अध्यक्ष हैं. इतना ही नहीं, नेता के साथ अभिनेता भी हैं डॉ सीके ठाकुर. बचपन से अभिनय का शौक रखने वाले डॉ सीके ठाकुर ने एक प्रोडक्शन हाउस भी बनाया है. उन्होंने बॉलीवुड को बोकारो में उतारने का काम किया है. झारखंड के बहुत सारे कलाकार को भी काम दिया है. इनके द्वारा निर्देशित व अभिनित पाकिस्तानी आतंकवादी के आतंक पर आधारित फिल्म सीके की प्रेम कहानी इन दिनों youtube channel (Aryan infra movie) पर काफी धमाल मचा रहा है.

A Visionary Architect of Development in Jharkhand

CK Thakur is a distinguished personality known for his enduring contribution to the socio-educational, cultural, and developmental landscape of Jharkhand. For over three decades, he has worked with unwavering commitment for the progress of Bokaro and adjoining regions, shaping institutions and initiatives that continue to benefit society.

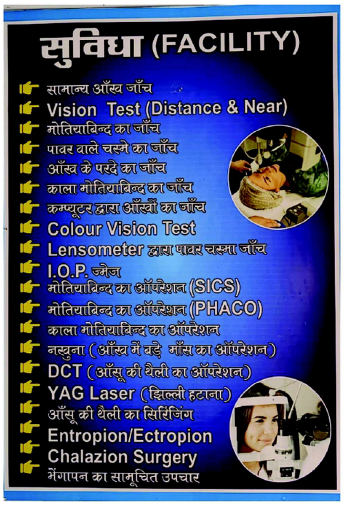
A nationally recognized Vastu Consultant, Grah Dosh Nivarak, and Human Aura (AMA) Specialist, CK Thakur seamlessly blends traditional wisdom with a modern vision of development. Academically accomplished, he completed his post-graduation and pursued journalism from Ranchi University. Guided by a deep sense of social responsibility, he founded Sohan Lal Arya College in 1995 at Kalyanpur–Jainamore, Bokaro, in memory of his father, Late Sohan Lal Thakur.

Over the years, the institution has maintained excellent academic standards, producing professionals serving as doctors, engineers, teachers, administrators, and skilled professionals in India and abroad. Extending his vision of regional development beyond education, CK Thakur also established Aryan International Hotel at Dang Mohanpur, Jainamore, which has played a significant role in local economic and infrastructural growth.

Apart from education and development, CK Thakur has made notable contributions in public life and creative fields. He is currently serving as the State President (Industry & Trade Wing) of the Jharkhand Pradesh Congress Committee. His passion for cinema led him to establish a production house and actively promote filmmaking in Bokaro, creating opportunities for local talent. His film "C K Ki Prem Kahani", based on the theme of terrorism, has received wide appreciation on digital platforms.

The journey of CK Thakur reflects visionary leadership, dedication to society, and a lifelong commitment to development, making him a respected and inspiring figure in Jharkhand

Mr. Niranjan Kumar Sinha
Director, Sinha Group of Institution



हिन्दुस्तान

दीप हायर एडुकेशन सेंटर: नर्सिंग की पढ़ाई सितम्बर से

वार्षिक सम्मेलन

साहिबगंज। लोहंडा स्थित दीप हायर एडुकेशन सेंटर में इस साल सितम्बर से नये सत्र का शुभारम्भ हो जाएगा। इस सेंटर में संबंधित विद्यार्थियों को एएनएम, जीएनएम व बीएससी नर्सिंग की पढ़ाई की सुविधा मिलेगी। यह जानकारी दीप हायर एडुकेशन सेंटर (दीप नेत्र अस्पताल) के निदेशक डॉ. पीएन कुलदीप ने यहां पत्रकारों को दी है। उन्होंने बताया कि प्रोफेसर डॉ. राजवर्द्धन आजाद के सौजन्य से दीप नेत्र अस्पताल परिसर में रेटिना सेंटर खोला जाएगा। इस सेंटर में आंख के रेटिना से संबंधित तमाम बीमारी का इलाज संभव हो सकेगा। पहले इस बीमारी के इलाज के लिए यहां के लोगों को दूसरे राज्यों में जाना पड़ता था। उन्होंने बताया कि इस साल यहां अबतक करीब सात हजार लोगों का मोतियाबिंद ऑपरेशन हो चुका है। इससे पहले जिला मुख्यालय से करीब दो किमी दूर लोहंडा स्थित दीप हायर एडुकेशन सेंटर (दीप नेत्र अस्पताल) का फस्ट एनुअल मीट 2026 का आयोजन अस्पताल सभागार में धूमधाम से हुआ।


दीप हायर एडुकेशन का फस्ट एनुअल मीट का उद्घाटन करते मुख्य व विशिष्ट अतिथि।

कार्यक्रम में बतौर मुख्य अतिथि सिविल सर्जन डॉ. रामदेव पासवान और विशिष्ट अतिथि अस्पताल के निदेशक डॉ. पीएन कुलदीप व रश्मि भगत मौजूद थे। कार्यक्रम में दीप नेत्र अस्पताल के एक दर्जन से अधिक कर्मियों को उत्कृष्ट कार्य के लिए सम्मानित किया गया। कार्यक्रम का संचालन अस्पताल के तकनीकी प्रभारी जीनी हुसैन ने किया। कार्यक्रम में अस्पताल के मैनेजर मोहम्मद सकील खान, डॉ. शक्तिनाथ सिंह, डॉ. राहुल वर्मा समेत अन्य अन्य डॉक्टर व गणयमान्य लोगों ने शिरकत की।

आंख के बिना जिंदगी अधूरी : डॉ. कुलदीप

दीप नेत्र अस्पताल के निदेशक डॉ. पीएन कुलदीप ने कहा है कि आंख इंसान के शरीर का सबसे महत्वपूर्ण अंग है। आंख के बिना जिंदगी अधूरी है। उनका प्रयास आंख के असाध्य बीमारी का यहां इलाज कर मरीज की जिंदगी में खुशी लौटाने का है। इसी प्रयास को जमीन पर उतारने के मकसद से अस्पताल परिसर में हायर एजुकेशन सेंटर व संबंधित विद्यार्थियों के लिए छात्रावास का निर्माण कराया जा रहा है।

SHIVAM EDUCATIONAL SOCIETY
SIS
Sinha International School

Mr. Niranjan Kumar Sinha
Director, Sinha Group of Institution

Multidisciplinary International Seminar On

"Responsible A.I.: Towards Ethics, Governance, Scientific and Global Framework"

28th & 29th January, 2026

Program Schedule

Organised by

Internal Quality Assurance Cell (IQAC)

S.R.T. College, Dhamri (Godda)

(A Constituent Unit of Sido Kanhu Murmu University, Dumka, Jharkhand)

In Association with

International Vocational Training and Technology Research Institute

Dhanbad, Jharkhand (TRD)

(An Affiliated unit of NWDS, Regd. under Society Act 21 (A) 1860,
Govt. of JH and TRD, Indexed under MSMED Act 2006 Govt., of India)

Day 1:- 28th January, 2026

Time	Program
9:30 A.M Onward	Spot Registration
11:00A.M. to 1:00 P.M.	Inauguration Session: -
11:00A.M. to 11:00 A.M.	Nomination of president & Welcome Song.
11:00 A.M to 11:20 A.M	Lota-Pani, Lighting the lamp, Kulgeet song of SKMU
11:20 A.M. to 11:30A.M.	Escorts of Guest to the Dias / Badges/plantation
11:30 A.M. to 11:40 A.M	Welcome Speech by the Principal
11:40 A.M. to 11:50A.M.	Honour with Angvastram
11:50 A.M. to 11:55 A.M	Release of Souvenir
11:55 A.M. to 12:00 P.M	Keynote Speaker
12:00 P.M. to 12:30 A.M	Speech By the Dignitaries
12:30 P.M. to 12:40 P.M.	Speech By the Chief Guest
12:40 P.M. to 12:50 P.M.	Presidential Address
12:50 P.M. to 1:00 P.M.	vote of Thanks by the president
1:00 P.M to 1:45 P.M.	Lunch Break
2:00 P.M. to 3:30P.M	Technical Session -I
3:30 P.M. to 3:35P.M.	Vole of Thanks for Technical Session-I
3:35 P.M. to 3:45P.M.	Tea Break
3:45P.M. to 4:25 P.M.	Technical Session - 1
4:25 P.M. to 4:30 P.M.	Vote of Thanks for Technical session-II

Multidisciplinary International Seminar On

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Day 2:- 29th January, 2026

Time	Program
10:30 A.M. to 11:00 A.M.	**Welcome Session**
11:00 A.M. to 12:30 P.M.	**Technical Session-III & IV**
	I. Offline Mode (11.00am-11:45am)
	II. Online Mode (11.45am-12.30pm)
12:30 P.M to 1:00 P.M.	**Valedictory Session: -**
	Distribution of Medal, Certificates
1:00 P.M. to 1:05 P.M.	**Vote of Thanks**
1:05 P.M. to 1:25 P.M	**Press Conference**
1:25 P.M. to 1:45 P.M	**Hi-Tea**

Contents

Impact of Fluorogenic Compounds on Biotic Production of Citric Acid

Abhishek Raj
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Department of Chemistry
S.K.M. University, Dumka (Jharkhand)

Registration No: - SKMU-SRTC/IVTTRI-026-020-D1

Dr. Ved Prakash Sahay
Assistant Professor
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S.P. College, Dumka (Jharkhand)

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Abstract

Fluorogenic compounds, i.e., coumarins when used as biotic elicitors or in fermentation media can impact citric acid production by fungi like *Aspergillus niger*. Research on the impact of coumarins on citric acid fermentation is important for developing new strategies to improve the production of this valuable industrial product. The impact of fluorogenic compound, i.e., 7-hydroxy-4-(trifluoromethyl) coumarin on biotic production of citric acid by *Aspergillus fumigatus* AR-902, *Aspergillus parasiticus* AR-904, *Aspergillus awamori* AR-861, *Aspergillus oryzae* AR-962 and *Aspergillus niger* AR-953 has been assessed. It has been found that the fungal strain *Aspergillus niger* AR-953 has been found most effective for the upgradation of citric acid production. It has been found that the fluorogenic compound, i.e., 7-hydroxy-4-(trifluoromethyl) coumarin has stimulatory impact at molar concentration of 4×10{ u M and enhances the yield of citric acid to an extent of 6.487% higher in comparison to control, i.e., 6.859 gm/100 ml under the optimized parameters viz. 29°C temperature, 1.8 pH, 11 days of incubation period and 20% (w/v) molasses solution.

(Keywords: Citric acid fermentation, fluorogenic compound, 7-Hydroxy-4-(trifluoromethyl) coumarin, *Aspergillus niger* AR-953).

Evaluating the Socio- Economic Impact and Evolution of MGNREGA

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Abstract

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), enacted in 2005, stands as a landmark in global social policy, representing a transition from discretionary welfare to a rights-based legal framework. By guaranteeing 100 days of unskilled manual labor per financial year to every rural household, the Act aims to enhance livelihood security while creating durable community assets. This paper examines the dual role of MGNREGA as both a poverty alleviation tool and a catalyst for rural structural transformation. Over two decades, the scheme has proven instrumental in increasing rural wage floors, reducing distress migration, and providing a critical economic buffer during periods of national crisis, such as the COVID-19 pandemic and subsequent inflationary shocks.

A significant focus of this study is the empowerment of marginalized groups, particularly women and Scheduled Castes/Tribes. With female participation rates consistently exceeding the statutory 33% mandate, the program has fostered financial independence and increased the bargaining power of women within the rural labor market. However, the scheme's effectiveness is frequently challenged by structural inefficiencies, including chronic wage payment delays, complex digital attendance requirements (NMMS), and the variable quality of assets created. The research concludes that while MGNREGA remains a vital lifeline for millions, its future success depends on modernizing its implementation. Key recommendations include the integration of climate-resilient "Green Jobs," enhanced synergy with Self-Help Groups (SHGs), and a more flexible budgetary approach to accommodate regional demand fluctuations. As India moves toward the goal of "Viksit Bharat," the evolution of MGNREGA from a simple safety net to a productivity-enhancing mission remains essential for inclusive and sustainable rural growth.

Understanding Linear Differential Equation of First Order and First Degree

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Abstract

Linear differential equations of the first order and first degree constitute a foundational pillar within the study of ordinary differential equations (ODEs). These equations are characterized by a structure where the dependent variable and its first derivative appear linearly, typically expressed in the standard form $\frac{dy}{dx}$ + P(x)y = Q(x). Due to their inherent linearity, they possess well-defined mathematical properties, such as the principle of superposition and the existence of closed-form solutions via the integrating factor method .These characteristics render them uniquely amenable to both rigorous analytical derivation and robust numerical approximation, providing a reliable framework for understanding dynamic change.

Beyond their theoretical elegance, these equations serve as the mathematical backbone for modeling diverse physical and stochastic systems. In physics, they describe fundamental phenomena such as radioactive decay and Newton's Law of Cooling; in engineering, they are indispensable for analyzing transient responses in electrical circuits (RL and RC) and fluid dynamics; and in economics, they facilitate the modeling of continuous interest, price fluctuations, and capital growth.

My paper provides a comprehensive synthesis of first-order linear ODEs, bridging the gap between abstract theory and applied practice. It offers a detailed exploration of solution techniques —ranging from the method of integrating factors to Bernoulli transformations—while establishing a repository of theoretical references for advanced study. Furthermore, the paper provides practical guidance for researchers by illustrating case studies across various scientific domains, ultimately serving as a versatile pedagogical and professional resource for the mathematical modeling of real-world systems.

Keywords : Linear; Differential Equations; Order and Degree; Derivative; Physical System; Dynamic; Electrical; Integrating Factors; Circuits; Analytical method; Numerical Methods; Engineering; Economics.

Impact of Artificial Intelligence across Chemical Sciences, Social Sciences, Economics, Psychology and Literature in the Modern Era

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Registration No: - SKMU-SRTC/IVTTRI-026-041 D4

Abstract

Artificial Intelligence (AI) has become one of the most powerful technologies of the modern era. It is changing the way knowledge is created, analysed and shared across many academic fields. In the present time, AI is not limited to engineering or computer science. It has a strong and growing influence on Chemical Sciences, Social Sciences, Economics, Psychology and Literature. This interdisciplinary use of AI improves research quality, saves time, increases accuracy, and supports innovation and creativity.

In **Chemical Sciences**, AI plays an important role in speeding up research and development. Machine learning models help scientists predict molecular structures, chemical reactions and material properties with better accuracy. AI is widely used in drug discovery to reduce time and cost in developing new medicines. It helps in analysing large experimental data, optimizing laboratory conditions and improving safety through automation. In environmental chemistry, AI supports pollution monitoring, climate-related chemical studies and the design of eco-friendly materials. Overall, AI helps chemists make faster and smarter scientific decisions.

In **Social Sciences**, AI is used to study human behaviour and social systems. Researchers analyse large data from surveys, social media and government records to understand social trends, public opinion, and policy impacts. AI supports planning in governance, education, healthcare and urban development. However, issues like data privacy, bias and transparency highlight the need for responsible use of AI.

In **Economics**, AI helps in market analysis, economic forecasting and policy evaluation. It supports decision-making in banking, finance, trade and employment by analysing large economic data. AI helps governments and businesses improve productivity, manage risks and design better economic policies.

Keywords: Artificial Intelligence, Chemical Sciences, Social Sciences, Economics, Psychology, Literature, Interdisciplinary Research, Digital Humanities, Ethical AI, Modern Technology

Influence of Parenting Styles on Adolescents' Emotional Intelligence and Social Adjustment

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Abstract

Adolescence represents a transitional phase marked by multidimensional changes encompassing biological growth, emotional maturity, cognitive development, and social expansion. During this sensitive period, parental behaviour patterns exert a profound influence on how adolescents perceive themselves, relate to others, and respond to life situations. The present study examines the impact of parental behaviour patterns on adolescents' adjustment and their locus of control, an essential personality construct that reflects whether individuals attribute life outcomes to internal factors or external circumstances.

Parental behaviour patterns generally manifest through various parenting styles, including authoritative, authoritarian, permissive, and neglectful approaches. Each style carries distinct emotional and behavioural implications for adolescents. For instance, authoritative parenting—characterized by warmth, responsiveness, and consistent discipline—is associated with healthier emotional regulation, academic motivation, and interpersonal competence. In contrast, authoritarian parenting, which emphasizes strict control and limited emotional expression, may hinder adolescents' autonomy, encourage fear-based compliance, and contribute to lower self-esteem. Permissive parenting, while warm, tends to lack structure, which can result in impulsivity and difficulty following rules. Neglectful parenting, marked by limited involvement, is often linked with feelings of insecurity, behavioural problems, and weak coping skills. These varied patterns significantly shape adolescents' adjustment in multiple domains, including emotional well-being, social relationships, academic performance, and behavioural conduct.

The study further explores the association between parenting behaviour and adolescents' locus of control, which plays a central role in shaping motivation, decision-making, stress management, and resilience. Adolescents raised in supportive and communicative family environments are more likely to develop an internal locus of control, where they believe that personal effort, planning, and persistence influence outcomes. This sense of agency encourages responsible behaviour, goal-oriented actions, and better psychological adjustment. Conversely, adolescents exposed to inconsistent discipline, unpredictable parental responses, or overly controlling environments may develop an external locus of control. Such individuals tend to attribute success or failure to external forces such as fate, luck, or powerful others, which can reduce motivation, increase learned helplessness, and heighten vulnerability to stress.

The findings of this study highlight that positive parental involvement, balanced discipline, emotional warmth, and open communication serve as protective factors promoting healthy adolescent adjustment. They also reinforce the development of an internal locus of control, which contributes to higher self-efficacy, improved academic performance, and stronger coping strategies. On the other hand, parental rejection, harshness, and inconsistency function as risk factors that negatively affect adjustment outcomes and increase the likelihood of adolescents developing an external locus of control.

Responsible Artificial Intelligence (RAI): Using Technology with Care for People and Science

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Abstract

Responsible Artificial Intelligence (RAI) means using AI in a fair, safe and ethical way to help people and society. Today, AI affects human behaviour, society and scientific research, not just computers. Therefore, AI should be studied across many fields so that it supports human values and sustainable development.

From an ethical view, RAI means being fair, open, and respectful of human rights. Biased data can cause unfair results, so ethical AI reduces discrimination, protects privacy, and makes decisions easy to understand. Humans must always stay responsible for AI decisions, especially in healthcare, education, law, and governance.

In psychology, AI affects how people think, feel and behave. Social media algorithms, recommendation systems and virtual assistants influence attention, emotions and decision-making. Overuse of AI can cause stress, addiction and reduced critical thinking. Responsible AI promotes human-centred design, where AI supports mental well-being and helps people make informed choices rather than replacing human judgement.

Social sciences study how AI affects society, economy, culture and public systems. AI is widely used in education, employment, public services and governance. Responsible AI helps ensure social justice, inclusion and equal access to technology. It also prevents the misuse of AI in surveillance, misinformation and unfair automated decisions. Good laws, policies and public awareness are essential for guiding responsible AI use in society.

In chemical sciences, AI is used in drug discovery, material development, reaction prediction, environmental monitoring and laboratory automation. Responsible AI improves accuracy, saves time, reduces cost and increases safety in research. Ethical use of AI in chemistry requires reliable data, proper validation and transparent reporting of results.

RAI is everyone's responsibility. When used ethically and carefully, AI can help people, society and science in a positive way.

Keywords: Responsible Artificial Intelligence, Ethics, Psychology, Social Sciences, Chemical Sciences, Physical Sciences, Human-Centred AI, Transparency

Fake News, Media, and Ethical Concerns

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Abstract

In today's digital age, the media has played an unprecedented role in information dissemination. However, along with this, the spread of fake news has also increased rapidly, giving rise to confusion, division, and misconceptions in society. Fake news not only questions the credibility of the media but also challenges ethical concerns and the principles of responsible journalism. This research paper presents an analysis of the origin of fake news, its social and psychological impact, its role in the media, and the ethical concerns it raises. The research also examines the types of measures that the media, policymakers, and society can adopt to prevent the spread of fake news.

Keywords: Fake news, digital media, ethical concerns, journalism, information credibility, social impact

Responsible AI: Towards Ethics, Governance, Scientific and Global Framework

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Abstract

Responsible AI refers to the development, deployment and use of AI systems in a way that is transparent, accountable, fair and beneficial to the society. It involves designing and implementing AI systems that prioritize human values, safety and well-being while minimizing potential risks and negative impacts.

Transparency, accountability, fairness, explainability, privacy, security and human centricity are the key principles of responsible AI. As AI transforms industries and societies, ensuring its responsible development and deployment is crucial. The rapid growth of AI raises concerns about ethics, accountability and governance.

Ethics: AI systems can perpetuate biases, infringe on privacy, and lack transparency. A responsible AI approach prioritizes fairness, accountability, and transparency, ensuring AI aligns with human values.

Governance: Effective governance structures are essential to regulate AI development and deployment. This includes standards for AI safety, security, and compliance with laws and regulations.

Scientific Framework: A scientific approach to AI development emphasizes explainability, interpretability, and robustness. Researchers and developers must prioritize these aspects to build trust and ensure AI systems are reliable and safe.

Global Framework: AI's global impact necessitates international cooperation and standards. A unified framework can facilitate collaboration, share best practices, and address cross-border challenges.

To achieve responsible AI, stakeholders must collaborate to develop and adopt ethical guidelines, establish effective governance and regulatory frameworks, and advance scientific research for safe and beneficial AI. In addition, global cooperation and dialogue are essential to address shared challenges and ensure AI development serves the common good.

By prioritizing responsible AI, we can harness its benefits while mitigating risks and ensuring AI aligns with human values and societal needs.

Retail Revolution & Its Impact on Global Trade

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Abstract

The retail industry has undergone a significant transformation in recent decades, drivenbytechnological advancements, changing consumer preferences, and the globalization of trade. This "Retail Revolution" has redefined the way goods are produced, marketed, and distributed worldwide. E-commerce, the rise of Omnichannelretailing, and the digitalization of consumer behaviour have fundamentally altered global trade dynamics, influencing both developed and emerging markets.

The proliferation of digital platforms, mobile apps, and advanced data analytics has created new opportunities for businesses to engage with consumers directly, bypassing traditional retail models. Asaresult, businesses now facethe challengeofadapting to arapidlyevolving digital landscape while also navigating global supply chains that are more interconnectedthan ever before. The growth of cross-border e-commerce, coupled with the rise of direct-to- consumer (DTC) models, has expanded markets for both large corporations and small businesses, democratizing access to global trade.

This retail revolution has also introduced new challenges, including concerns over cyber security, data privacy, and the ethical implications of global supply chains. Furthermore, the shift toward sustainability and ethical sourcing is reshaping consumer expectations and driving new trade policies. Governments, businesses, and international organizations are grappling with the implications of these changes, seeking to balance innovation with regulation.

This paper explores the key drivers behind the retail revolution, examines its impact onglobal trade flows, and analyses the opportunities and challenges it presents for stakeholders across the value chain. Additionally, it looks at the future of retail and trade in a hyper connected, digital-first world, and how businesses can strategically navigate this complex landscape to remain competitive in the global market.

This study make sanattempttoanalysetheimpactofruralmarketingstrategies.

Key words: Retail Trade, Retail Revolution, Marketing Strategies, Importance of Rural Market, Opportunities

Urban Growth and Agglomeration Monitoring Using Remote Sensing and GIS Techniques in Dehradun, India

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Abstract

With an emphasis on conservation, protection, and sustainable management, this study assesses theeffects of soil aridity, climatic change, population changes, and environmental factors on Dehradundistrict, Uttarakhand, India. It examines how Dehradun land use and land cover (LULC) changedbetween the years 1994 and 2024, classifying the region into Built-Up, water, forest, and fallow land. LandsatETM+ and OLI TIRS data from 1994, 2004, 2014, and 2024 were analysed for the study using GIS, remote sensing (IMPACT toolkit), and quantitative techniques. The findings show remarkable urbanexpansion and LULC dynamism, especially in the previous ten years (2014–2024). In 1994, built-upareas grew by 3.85%, and by 2024, they had grown by 10.64%. At the same time, there was an increase inwater bodies, forests, and fallow land. The study shows that forest resources are being rapidly depletedby highlighting quantitative changes over geographical shifts. This irreversible loss requires immediateaction. Urban expansion and agglomeration are also examined in the study, with a focus on theimportance of recognizing present and emerging tendencies. A confusion matrix and the Kappacoefficient, which were obtained from LULC data tables, were used to evaluate the accuracy of LULCclassification, guaranteeing accurate and dependable classification. These results highlight the necessityof targeted interventions to slow down environmental deterioration and encourage sustainable land use in Dehradun.

Keywords: Remote sensing and GIS; Land use land cover (LULC); Accuracy assessment; Urbanagglomeration; Environment impact.

Paradigm Shifts and Sociological Challenges in the Age of Artificial Intelligence: A Critical Examination

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Abstract

The rapid growth of Artificial Intelligence (AI) has brought about significant paradigm shifts, reshaping social structures, institutions, and daily life. This article critically examines the sociological challenges arising from AI's increasing integration into various domains like work, governance, education, surveillance, and cultural production. Drawing on classical, modern, and contemporary sociological perspectives, the study situates AI within broader debates on technological determinism, social change, power dynamics, and inequality. While technological optimists focus on efficiency, innovation, and progress, this article reveals how AI simultaneously perpetuates and amplifies existing social hierarchies related to class, caste, gender, and global inequalities. The paper argues that AI represents not just a technological transformation but a paradigm shift in knowledge production, social interaction, and institutional functioning. Algorithmic decision making, data capitalism, and automated governance challenge fundamental sociological concepts like agency, rationality, labour, and social control. From a critical perspective, AI-driven systems raise ethical concerns about privacy, surveillance, bias, accountability, and democratic participation. Moreover, the unequal access to digital resources and algorithmic literacy exacerbate the digital divide, particularly in the Global South. The article delves into interpretive and critical traditions to explore how AI-mediated environments reconfigure meanings, identities, and social relations. By highlighting power, reflexivity, and resistance, the study underscores the necessity of sociological imagination to scrutinise the longterm impact of AI on human autonomy and social cohesion. Ultimately, it advocates for an interdisciplinary and reflexive sociological framework to navigate the complexities of AI, promoting socially responsible, inclusive, and ethically grounded technological futures.

Keywords: Artificial Intelligence, Paradigm Shift, Sociological Theory, Hyperreality, Social Inequality, Power, Ethics, Digital Society

The Effect of Artificial Intelligence on Level of Aspiration among Male and Female College Students: A Meta-Analysis

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Abstract

The present study aimed to investigate the effect of artificial intelligence on level of aspiration of college students in connection the scale developed by Mahesh Bhargava &M.A. Shah (1987) has been used to examine the degree of level of aspiration among male and female college students. Today developments in artificial intelligence (AI) have revolutionized the field of education as its presence and benefits enable new methods for teaching and learning. Therefore, many empirical studies have been conducted to evaluate the effectiveness of using AI on students' academic achievement through level of aspiration in the field of education. For the purpose, (60 male and 60 female) college students of this meta-analysis study were to examine the overall effect of AI on level of aspiration among college students. The academic achievement depends on level of aspiration, goal setting behavior, through AI networking educational sites and a set of moderator variables including educational level, role of AI, intervention duration, sample size, learning strategy, subject area, and type of AI.

The data were collected through Questionnaire Schedule and the obtained data were analyzed by correlation, and t-test was found significant at .01 level of confidence both male and female college students. The result indicates that Artificial Intelligence has a significant positive effect on level of aspiration among male and female college students. Female college students significantly higher degree of level of aspiration than that of male college students relation to artificial intelligence.

The level of aspiration is directly linked to academic achievement, acting as an internal motivator that drives students to set goals, persevere through challenges, and strive for success, with the level reflecting how high (realistic vs. idealistic) and specific those educational goals are, influenced by personal (self-concept, interests) and environmental factors (family, peers, culture).Level of aspiration is the path of academic achievement overall learning outcomes, with a combined effect size of 0.79 ($p < 0.001$).

Keywords: Artificial Intelligence, Level of Aspiration, Male and Female College Students

Mathematical Foundations for Responsible Artificial Intelligence: Ethics, Governance, and Global Scientific Frameworks

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Abstract

Artificial Intelligence (AI) has emerged as a transformative force in science, industry, governance, and society. At its core, AI is a mathematically driven discipline, relying on formal models, optimization techniques, probabilistic reasoning, and algorithmic structures. As AI systems increasingly influence critical domains such as healthcare, finance, education, governance, and national security, concerns related to ethics, fairness, transparency, accountability, and governance have become paramount. This paper examines the foundational role of Mathematics in developing Responsible Artificial Intelligence. We explore how mathematical rigor underpins ethical compliance, algorithmic fairness, explainability, robustness, and global governance frameworks. Mathematical tools including probability theory, optimization, statistical inference, fairness metrics, formal verification, and information theory are analyzed as essential mechanisms for ensuring trustworthy and accountable AI systems. The study further highlights how mathematical structures support international standards, reproducibility, and sustainable innovation, thereby enabling global cooperation in AI governance. The paper argues that responsible AI cannot be achieved through policy or ethics alone; instead, it must be grounded in strong mathematical foundations that ensure reliability, transparency, and societal trust.

Keywords: Responsible Artificial Intelligence, Mathematical Modeling, Ethics in AI, Algorithmic Fairness, AI Governance, Explainable AI

The Role of Digital Learning in Bridging the Urban Rural Divide in Ranchi, Jharkhand

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Abstract

Digital learning has emerged as a transformative force in education, especially in regions where traditional education systems struggle due to infrastructure and resource gaps. In places like Ranchi, Jharkhand, digital education initiatives help reduce the educational disparities that exist between urban and rural schools by providing access to quality learning tools, content, and opportunities irrespective of a student's location. In the quiet, rural corners of Jharkhand, where life moves to the rhythm of the land and daily wage work, attending school is itself a challenge. Children travel long distances to reach under-resourced schools, often juggling household responsibilities. Amid this reality, the concept of digital literacy may seem far removed but it's precisely in these spaces that access to technology can be most transformative. E-learning is a fairly broad notion. The term "technology enhanced learning mechanism through the Internet" was first used in the late 1990s. To make the learning process more adaptable and user-friendly, it now records a wide variety of electronic media, including the Internet, intranets, extranets, satellite broadcasts, audio/video tape, interactive TV, and CD-ROM. Due to elearning's flexibility, more and more people in our nation are requesting it, and this demand is growing daily. The moment has come to properly standardise the entire e-learning system and raise the calibre of the current standards in light of the growing demand. Many academics, institutions, and organisations have already adopted a large number of existing standards; however, there are still significant gaps, and efforts are ongoing to close these gaps and improve the standards' practicality and systematicity. This study examines the current state of e-learning and highlights future directions in this field that build upon the most significant and underutilised research topics to date. It also examines the significance of the e-learning system and the current e-learning procedure market. Digital learning plays a central role in bridging the educational divide between urban and rural areas in Ranchi, Jharkhand. By providing equitable access to high-quality educational resources, empowering students with technological skills, and enhancing teacher support, digital education helps level the educational playing field. While infrastructure and accessibility challenges persist, continued investment and policy focus on digital inclusion can transform how students learn and succeed regardless of where they live.

Contraceptive Effects of Bougainvillea Spectabilis on Male Mice

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Abstract

Fertility control is an issue of global and national concern. Fertility regulation with plants preparation has been reported in the ancient literature of indigenous system of medicine. A large number of plants species with contraceptive effect have been screened both for men and women.ÿþ Bougainvellia spectabilis is the most common evergreen ornamental woody plant belonging to the family Nyctaginacea. The mature leaves of this plant are attributed with different medicinal properties. Recently it has been reported that it also show contraceptive effects on male and female mice. This research was undertaken on Swiss albino male mice to understand the effect of aqueous leaf extract of B.spectabilis (800mg/ kg BW/day) on seminal profile and electrophoretic seminal proteins. On seminal parameters significant alteration was seen during the experiment. Sperm counts, seminal pH and sperm motility decreases significantly ($p<0.001$) while sperm mortality increases significantly after 30 days of exposure in treated mice than the control group of mice. Seminal proteins on separation by gel electrophoresis also show significant alteration. Seminal LDH Isozymes show significant increased level along with increased activity of M- Isozymes of LDH ($p<0.001$). This alteration in seminal LDH Isozymes may leads to accumulation of lactate which may impair cellular respiration and finally leads to decrease seminal pH and increase sperm mortality. Significant increase in seminal electrophoretic anodic protein was also observed during the experiment. This may add more negative charges on sperm surface membrane that will inhibit capacitation and fertilizing ability and thus regulate the fertility, showing contraceptive effect.

Keywords: B.spectabilis, contraceptive effects, seminal parameters, seminal electrophoretic proteins and LDH Isozymes.

Artificial Intelligence in Drug Discovery: Ethical Challenges and Responsible Innovation

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Abstract

The expanding use of artificial intelligence in drug discovery has transformed molecular screening, target identification, drug repurposing, and toxicity prediction, offering opportunities for faster and cost-effective pharmaceutical innovation while simultaneously raising ethical and governance concerns. In the Indian context, including underserved regions such as Godda and the wider Jharkhand area, AI-driven biomedical research has the potential to contribute to affordable healthcare solutions, yet demands careful oversight to avoid misuse, inequity, and scientific irresponsibility. The primary objective of this study is to examine the ethical challenges associated with AI applications in drug discovery and to explore how Responsible AI principles can guide innovation toward socially beneficial and trustworthy outcomes. Existing literature documents the technical efficiency of AI models in chemical and biological prediction tasks but reveals a clear gap in structured academic analysis addressing dataset bias, algorithmic transparency, accountability in life-critical predictions, and ethical governance within AI-assisted pharmaceutical research, particularly in the Indian academic and institutional context. The study adopts a qualitative methodology based on conceptual analysis, critical review of interdisciplinary literature, and synthesis of ethical frameworks proposed in biomedical AI research. The findings suggest that biased datasets, opaque decision-making models, and insufficient regulatory clarity can result in unreliable predictions and potential harm during clinical translation. The analysis highlights the importance of explainability, data integrity, and sustained human oversight in AI-assisted drug development. The study concludes that embedding ethical governance into AI-based pharmaceutical innovation is essential for public trust and scientific credibility and recommends institutional guidelines, interdisciplinary ethics committees, and Responsible AI training for researchers.

Keywords: Artificial intelligence, drug discovery, research ethics, Responsible AI, dataset bias, biomedical innovation

Reimagining the Future: The Expanding Role of Artificial Intelligence in Modern Society

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Abstract

Artificial Intelligence (AI) is rapidly reshaping the foundations of modern society by redefining how knowledge is created, decisions are made, and services are delivered. No longer limited to technical laboratories, AI has become an integral part of daily life, influencing sectors such as healthcare, education, governance, industry, and environmental management. Its capacity to process complex data, recognize patterns, and automate tasks has significantly improved operational efficiency and decision accuracy.

In healthcare, AI supports advanced diagnostics, predictive healthcare, and personalized treatment, enabling better patient care and resource utilization. In education, intelligent learning systems encourage student engagement, adaptive instruction, and digital inclusion, ensuring that education evolves with diverse learner needs. Agriculture and environmental sectors benefit from AI-driven monitoring systems, climate modeling, and sustainable resource management, helping to balance development with ecological responsibility.

AI also contributes to the modernization of governance and administration by enabling evidence-based policymaking, smart public services, and improved citizen engagement. In the economic sphere, AI fosters innovation, entrepreneurship, and productivity by enhancing industrial processes, strengthening business intelligence, and supporting emerging digital economies. These developments highlight AI's potential to act as a key driver of social and economic transformation.

Despite its immense benefits, AI presents complex challenges related to ethics, equity, privacy, and workforce transitions. The increasing reliance on intelligent systems requires strong institutional frameworks, transparent policies, and inclusive strategies to ensure that technological advancement does not deepen social inequalities or compromise human dignity.

This abstract underscores the importance of a thoughtful and responsible approach to AI development and deployment. By aligning innovation with ethical values, social responsibility, and sustainable goals, AI can serve as a powerful instrument for building a more just, resilient, and future-ready society.

Keywords: Artificial Intelligence, Digital Transformation, Ethical Technology, Smart Governance, Innovation, Social Development, Sustainability.

Analysis of MHD Williamson Micropolar Fluid Flow by Using AI Passing Through Non-Darcian Porous Media in Presence of Variable Thermal Conductivity

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Abstract

Artificial intelligence is one of the biggest tools to investigate the MHD flow of Williamson fluid through a non-Darcy porous medium with micro-rotation. The governing equations are first converted into a coupled system of ODEs with initial and boundary conditions.Artificial intelligence plays pivotal role to solve initial value ODE's by the shooting procedure with the Runge-Kutta method and determine the impact of various parameters for heat and momentum transfer of boundary layer flow more accurate rather than previous findings. Finally, all findings are graphed and compared with earlier results to ensure that the current outputs are perfectly valid. Furthermore, it can be seen from the characteristics graph that the system parameters, magnetic field M and non-Darcy F tend to reduce the fluid velocity. Also, a comparison between the two fluid models, Williamson fluid and micropolar fluid have been obtained via the effects of various parameters on skin friction and Nusselt number.

The Power of Innovation in the Study of Economics: The Growing Role of Artificial intelligence (AI)

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Abstract

The contemporary era is widely recognized as the age of innovation and digital technology. In this period, Artificial Intelligence (AI) has profoundly influenced not only economics but almost all fields of knowledge. No discipline remains untouched by its impact. Similarly, economics—traditionally grounded in data, mathematical models, and theoretical frameworks—is increasingly becoming more scientific, accurate, practical, and future-oriented with the integration of AI. At present, AI-based technologies such as machine learning, big data analytics, neural networks, and data mining have provided new momentum and direction to economic analysis, policy formulation, forecasting, development studies, and behavioural economics. This study presents a comprehensive analysis of the expanding role of AI in the study of economics, highlighting its advantages, challenges, and future prospects. Such an examination is essential to meet the demands and requirements of the digital age.

Keywords: Innovation, Artificial Intelligence, Economics, Big Data, Machine Learning, Economic Analysis, Economic Development, Efficiency, Economic Activity

Art and Ethics in an Age of AI

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Abstract

As we have stepped into a world inescapable from the use and influence of Artificial Intelligence, the role of ethics and moral principles have become important than ever. This does not undermine the use of AI in any way. Rather, the obligation of the user cum consumer is put to test at every step. In the domain of art and literature like any other discipline, the elements of creativity and originality stand out as core characteristic essentials. The beauty of art precisely lies in its pristine conception followed by its actualisation. This offers an acute sense of satisfaction to both artists as well audience. Unfortunately, the easy access to AI prompts writers and young learners to fall prey to these resources in a negative method which subsequently nullifies their creative energy over the course of time. Drastic consequences lie ahead. This paper will attempt to address this issue and look forward towards the adoption of a healthy and ethical use of Artificial Intelligence.

Keywords: Creative Energy, Originality, Artistic Block

Role of Artificial Intelligence in Different Fields

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Abstract

It is needless to say that AI is playing an important role in every field of life, whether the fields related to education, health, industry, computer, banking, economic sector or any other fields, its role is supreme. We can't progress without it.

It has brought a great revolution in the fields of Science, commerce and communication.

It is the ability of machines to perform such tasks which usually require original entrepreneurship. Learning in education involves leveling up problems, solving and decision making. There is no concept of the future anymore.AI is already present in everyday life.

The impact of AI shows that it is being used in every field and why it is important to understand its impact. In healthcare AI helps doctors detect diseases like cancer by analysing medical reports which is much faster to install than manual methods. It is used in personal learning apps in education that are customised to the students' strengths and weaknesses.

In the field of automobiles, automated tasks use AI to understand intelligence about traffic and make right decision. It decreases human's fault, saves time and increases productivity. It can help the professionals make better decisions based on set information.

The biggest advantage of AI is its ability to efficiently handle large amount of data. As the hype around artificial intelligence grows, it's crucial to responsibly guide its development. Automated system can change the nature of some jobs but it also opens up a new creative everyday skills set by the characters.

In the field of communication AI is playing a crucial role. All the written or spoken forms are being organised or serialised in comprehensive and systematic manner. All educationists, doctors, engineers, professionals use its techniques and are progressing in every walk of life.

Conclusion: The specific note is written on the AI shows that it can change our living style and understanding power.

As a student to learn about AI, we get ready where industries smart plays an important role. Whether to write an essay on AI or to read a small paragraph on this topic, being aware of its uses and challenges is the first step towards responsible innovation and trend.

Thanks a lot to everyone.

Ethically Guided Artificial Intelligence in Wildlife Behaviour Monitoring and Conservation

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Abstract

The increasing use of artificial intelligence in wildlife behaviour monitoring and biodiversity conservation has enabled capabilities such as automated species identification, habitat mapping, movement tracking, and real-time threat detection, offering tools for ecological protection while raising ethical and governance concerns. In the Indian context, including ecologically sensitive regions such as Jharkhand with its rich forest cover and biodiversity, AIdriven conservation technologies have potential to support forest management, reduce human– wildlife conflict, and improve data-driven decision making, yet require oversight to prevent ecological harm, surveillance misuse, and exclusion of local communities. The primary objective of this study is to examine how principles of Responsible and ethically guided AI can be integrated into wildlife monitoring systems to ensure ecological sensitivity, transparency, and accountability. Existing literature highlights the technical success of AI models in cameratrap analysis, acoustic monitoring, and drone-based observation but reveals a gap in structured academic discussion on ethical governance, community consent, data ownership, and algorithmic bias in conservation-focused AI, particularly within developing regional contexts. The study adopts a qualitative methodology based on conceptual analysis, review of interdisciplinary literature, and synthesis of ethical frameworks from environmental science and AI governance studies. The findings suggest that unchecked deployment of AI technologies may lead to ecological disturbance, biased conservation priorities, and ethical conflicts involving indigenous knowledge systems. The analysis emphasizes the need for explainable models, participatory governance, and human oversight in conservation technology. The study concludes that embedding ethical principles into AI-based wildlife monitoring is essential for conservation outcomes and recommends guidelines and training.

Keywords: Artificial intelligence, wildlife conservation, ethical AI, biodiversity monitoring, Responsible AI, environmental governance

Responsible A.I.: Towards Ethics, Governance, Scientific and Global Framework

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Abstract

Artificial Intelligence (AI) has become one of the most influential technologies of the twenty-first century, profoundly transforming systems of governance, economic production, scientific research, security, and everyday social interactions. Governments increasingly rely on AI for policy formulation, surveillance, welfare distribution, law enforcement, and military decision-making, while private corporations deploy AI to optimize markets, labor, and consumer behavior. Despite its immense potential to enhance efficiency, innovation, and problem-solving capacities, the rapid and largely unregulated expansion of AI has generated significant ethical, scientific, and political concerns. These include algorithmic bias and discrimination, erosion of privacy, opacity in automated decision-making, concentration of technological power, accountability gaps, and the deepening of global and social inequalities.

In response to these challenges, the concept of Responsible Artificial Intelligence (Responsible AI) has emerged as a comprehensive framework aimed at ensuring that AI systems are designed, developed, and deployed in ways that are ethically grounded, scientifically robust, and socially accountable. Responsible AI emphasizes core ethical principles such as fairness, transparency, explainability, accountability, human autonomy, and respect for fundamental human rights. It also underscores the importance of scientific governance mechanisms, including responsible research and innovation, human-in-the-loop systems, safety and reliability standards, and interdisciplinary oversight involving technologists, social scientists, ethicists, and policymakers.

This study critically examines the ethical foundations of Responsible AI and explores the institutional and scientific governance structures necessary to operationalize these principles in practice. Furthermore, it analyzes emerging global frameworks and international initiatives—led by organizations such as the United Nations, UNESCO, OECD, and regional regulatory bodies—that seek to establish common norms, standards, and regulatory approaches for AI governance. Particular attention is given to the challenges faced by developing countries, including the digital divide, data colonialism, and asymmetries in technological capacity and regulatory power.

The paper argues that Responsible AI should be understood not merely as a technical or regulatory response, but as a broader ethical and political project that reflects competing visions of global order, power, and justice in the age of intelligent machines. It concludes that the future of AI governance depends on sustained global cooperation, inclusive and democratic policymaking, and continuous ethical scrutiny, ensuring that AI development ultimately serves human well-being, social equity, and sustainable global development rather than narrow economic or strategic interests.

The Epistemic Engine: How (Artificial Intelligence) AI is Forging a New Logic of Discovery in Biomedicine

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Abstract

Artificial Intelligence (AI) has evolved from a computational tool to a foundational pillar of modern scientific methodology, catalyzing a paradigm shift in the epistemology and practice of research. Across the Chemical, physical and life sciences, AI—particularly through deep learning, generative models, and reinforcement learning—serves as a force multiplier for human intellect. It excels in navigating high-dimensional, complex datasets to uncover latent patterns, generate novel hypotheses, and perform autonomous experimentation, thereby accelerating the traditional discovery cycle from years to days.

Nowhere is this transformation more profound than in biomedical innovation. Here, AI operates as a multidisciplinary architect: it designs de novo therapeutic proteins and small molecules with bespoke properties; interprets multi-omic landscapes to reveal novel disease subtypes and therapeutic targets; and enables precision oncology through the integration of histopathology, genomics, and clinical data. Advanced architectures, such as graph neural networks and transformers, model biological systems as dynamic interactomes, moving beyond reductionist models to a holistic understanding of disease. Concurrently, AI-driven autonomous laboratories are closing the loop between in-silico design and physical validation, compressing the drug discovery pipeline.

This ascendancy, however, introduces profound challenges. The interpretability of AI-generated insights, the perils of biased training data, and the ontological status of machine-originated hypotheses demand new frameworks for validation and trust. Ultimately, AI is not merely automating science but augmenting and redefining it, forging a collaborative partnership between human intuition and machine intelligence that promises to unlock a new era of rapid, reproducible, and revolutionary innovation aimed at elucidating fundamental biology and eradicating human disease.

Inclusive Education and Special Needs Support

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Abstract

Education, in particular initial school education is a systematic learning experience for all. Here, when we refer to 'inclusive' education, it stands out as a typical set-up where all students, including those with special needs, get the opportunity to learn and grow and receive necessary support to thrive in their lives. Special education ensures that children with special needs comprehend their full potential, encompassing academics, life skills, social integration, and psychological support. Special needs support comprises providing individualized instruction differentiated teaching strategies, accommodations, and assistive technology to guarantee equal access and participation for all students, and collaboration between teachers, specialists, and parents to foster a welcoming environment and address diverse learning needs. Main policies like the Rights of Persons with Disabilities Act (RPwD) and the National Education Policy (NEP) focus on inclusive education, aiming to deliver a supportive and equitable learning environment.

Equitable education and inclusion go hand in hand and promote invaluable traits like empathy, respect and good understanding and cooperation amongst the learners. Inclusion supports disabled and disadvantaged learners as well by creating a fair and just environment where they can wholly participate and reach their max potential and contribute to the society. Equity and Inclusion are key principles which lay the groundwork for fair and just global community — "Every learner matters and matters equally" (UNESCO).

Apart from overcoming socio-economic hurdles, cultural and language gaps need to be addressed by undertaking extra initiatives such as offering resource materials and free tutorials to ensure academic achievement. Also, culturally responsive teaching methodologies and language support can go a long way in promoting overall success. Learning differences can also be bridged to address the unique learning needs of differently abled learners, where personalized learning plans and accessibility to resources are crucial to helping them boom. Inclusive curricula and diverse teaching methods, like one-on-one or small-group instruction are effective teaching tools to begin with. Social inclusion and development of self-esteem for students with special needs ensure academic success for all students in a diverse environment, and better readiness for all students to thrive in a diversified and inclusive society.

Keywords: Inclusive Education, Learning Behaviour, Special Needs, CWSN, Diverse Learning, Inclusive Society, Inclusive Education Programs, Special Educator, Barkhas, Samagra Shiksha, Learning Barriers, Equitable Access to Resources, Quality Education, Global Education, Specialized Education, Fair Education.

Harnessing Artificial Intelligence for Human-Centered Progress and Global Development

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Abstract

Artificial Intelligence (AI) has emerged as one of the most powerful and transformative technologies of the twenty-first century, significantly influencing almost every sector of human life. From healthcare and education to agriculture, governance, industry, and communication, AI has reshaped how tasks are performed, decisions are made, and services are delivered. By enabling machines to analyze vast amounts of data, recognize patterns, and make intelligent decisions, AI enhances efficiency, accuracy, and productivity across diverse domains.

In healthcare, AI supports early disease detection, personalized treatment plans, and efficient management of medical resources, thereby improving patient outcomes and accessibility. In education, AI-driven tools facilitate personalized learning experiences, adaptive assessments, and improved administrative processes, making education more inclusive and effective. Similarly, in agriculture, AI contributes to precision farming, crop monitoring, and resource optimization, helping farmers increase yield while ensuring sustainability.

AI also plays a vital role in governance and public administration by promoting smart governance, transparency, and efficient service delivery. Automated systems, data analytics, and intelligent decision-support tools assist policymakers in making informed decisions and improving public services. In industry and business, AI enhances automation, quality control, customer experience, and innovation, leading to economic growth and global competitiveness.

Moreover, AI has become a key instrument in addressing complex global challenges such as climate change, disaster management, cybersecurity, and urban planning. By providing predictive insights and real-time analysis, AI enables timely interventions and better resource management. However, the growing importance of AI also raises concerns related to data privacy, algorithmic bias, accountability, and the impact on employment. Therefore, the ethical and responsible development of AI is essential to ensure that technological progress aligns with human values and social well-being.

This abstract highlights the importance of AI not only as a technological advancement but also as a catalyst for sustainable development, social progress, and human empowerment. When guided by ethical principles, transparent governance, and scientific responsibility, AI has the potential to create a more efficient, inclusive, and equitable future for society.

Keywords: Artificial Intelligence, Innovation, Healthcare, Education, Governance, Automation, Sustainable Development, Ethics.

Ethical AI in Drug Discovery Balancing Speed with Molecular Safety

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Abstract

The integration of artificial intelligence into drug discovery has accelerated molecular screening, lead optimization, and predictive modelling, promising faster and cost-efficient pharmaceutical development. However, reliance on AI methods introduces ethical challenges involving biased datasets, limited transparency of generative models, and accountability in lifecritical predictions. In the Indian context, especially for public health systems serving diverse populations, responsible AI use is essential to ensure innovation does not compromise equity, safety, and accessibility. This study examines ethical implications of AI-assisted drug discovery and explores how governance frameworks can guide socially responsible outcomes. The objective is to analyze the tension between speed-driven innovation and the need for molecular safety, fairness, and accountability. Literature reports strong technical performance of AI models in predicting chemical properties and biological interactions but reveals gaps in ethical analysis addressing dataset bias, algorithmic opacity, and risks of unvalidated predictions entering clinical pipelines. The study adopts a qualitative approach using critical literature review, conceptual analysis, and examination of policy frameworks including India's NITI Aayog Responsible AI guidelines. Findings suggest biased data marginalize neglected diseases and underrepresented populations, while black-box models undermine reproducibility and trust. The analysis highlights the need for explainable models, ethical data curation, and interdisciplinary oversight, globally applicable. Keywords: Ethical AI, drug discovery, Responsible AI, dataset bias, molecular safety, AI governance

Field Survey on the Number, Intensity and Types of Trees affected by *Dendrophthoe falcata* inside Godda College, Godda District of Jharkhand

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Abstract

The hemiparasitic plant *Dendrophthoe falcata* (L.f.) Ettingsh. Commonly known as Honey Suckle Mistletoe belonging to the family Loranthaceae cause significant ecological and economic threat to existing flora of Jharkhand. Previous researches had shown that *D. falcata* being most prevalent species under parasitic plants affected most of timber and fruit yielding trees including Mango (*Mangifera indica*) and Sal (*Shorea robusta*). The present study focus on field survey on the number, types, causes, intensity, recurrency and solutions related to the infestation of *D. falcata* on the local flora of Godda College, Campus. Each sites of Godda College campus were selected for observations randomly in different seasons for three successive years from tenure 2023-2025. For data collection Quesstionnaire method and repeated field visit was done. Mango growers and Agriculturists were consulted. The present findings showed that the trees which were highly infected by this parasitic plant were Mango (all varieties) followed by Sheesham (*Dalbergia latifolia*), *Casuarina equisetifolia*, Ber (*Zizyphus mauritiana*), Neem (*Azadirachta indica*), Bakain (*Melia azedarach*), Banyan (*Ficus benghalensis*) and many more. Among sixty mango trees randomly observed near three hostel areas (ST, SC and OBC), B.Ed and front and back land areas of college campus; it was found; in total 32 trees were severely infected. One mango tree showing outgrowth, drying up and infection in twenty two branches with minimal flower and fruit set was observed near college ground requiring immediate attention. Similarly several branches of trees of economic value like fruit, timber yielding etc. showed severe infestation by this plant parasite. Findings showed the dispersal of this parasite from tree to tree occured by birds like Mynah, Sparrow, Flowerpecker, Sunbirds and Monkeys. The present findings draws attention of the College Administration, teachers, NSS volunteers, students, Botanists, Mango growers and Gardeners to uproot this stem parasite as soon as it comes in view as it leads to death of its host trees and its branches through parasitism, vulnerability to disease causing organisms and nutrition deficiency. Present study would also help in conservation of trees, eco-management and sustainable development through awareness.

Keywords: Hemiparasitic, Mango, infection, vulnerability, eco- management.

Responsible AI in Space Technology: ISRO's Framework and Global Standards

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Abstract

The integration of intelligence into space science and technology has transformed satellite operations, remote sensing, navigation, mission planning, and autonomous decision-making, necessitating an ethical and governance framework for responsible deployment. In the Indian context, institutions such as ISRO increasingly adopt AI-driven systems for Earth observation, climate monitoring, disaster management, and space missions, with relevance for socially impactful applications in regions like Godda and the Jharkhand area, where satellite-based data supports agriculture, resource management, and infrastructure planning. The primary objective of this study is to examine the emerging framework of Responsible AI within ISRO's technological ecosystem and to compare it with standards such as the OECD AI Principles, UNESCO's recommendations on AI ethics, and governance models in space agencies like NASA and ESA. Existing literature discusses ethical AI across domains but reveals a gap in structured analysis addressing AI governance in space technology, especially within the Indian context. The study adopts a qualitative methodological approach based on policy document analysis, comparative framework mapping, and thematic synthesis of reports, studies, and official guidelines. The findings indicate that while ISRO's practices emphasize safety, reliability, and societal benefit, articulation of transparency, accountability, and ethical AI principles remains underdeveloped relative to benchmarks. The analysis highlights the need for a Responsible AI framework tailored to space missions, where algorithmic autonomy can produce consequences. The study concludes that embedding ethical governance into AIenabled space systems is essential for sustaining public trust and collaboration and recommends national guidelines, oversight, and institutional policy integration within Indian space research efforts.

Keywords: Responsible AI, ISRO, space technology, AI governance, ethics in science, global standards

Islamic Perspective as a Causative factor of Artificial Intelligence among Muslim Male College Students

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Abstract

This study aims to explore students motivates of AI-based discipline assessments among Muslim male college students. The Islamic perspective and propose a conceptual framework of Muslim students bonded behavior incollege campus. Artificial intelligence (AI) is increasingly adopted in higher education, including in student discipline assessment. However, AI's inability to capture spiritual aspects such as intention, sincerity, and God-consciousness creates a gap between technological efficiency and the moral values of Muslim male college students. For this purpose, self-constructed questionnaire was employed, involving 60Muslim male college students purposively selected students from Government Degree College, Bagaha. The data were collected through in-observations, depth interviews and document analysis, and analyzed using the Miles and Huberman data analysis model.

The results reveal that the male Muslim college students' distrust toward AI's fairness, particularly its failure to assess inner spiritual dimensions, and highlight the irreplaceable role of educators in moral guidance. I conclude with the argument that more scholars from the Islamic Perspective tradition should engage in the debates about the development of artificial intelligence and its implications, given that many Muslim countries are among the leaders in this development and its application in everyday life.

Keywords: Islamic Perspective, Artificial Intelligence, Muslim Male College Students.

The Role of Explainability in Building Trustworthy AI Systems

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Abstract

As artificial intelligence (AI) systems increasingly shape decisions in critical domains, the issue of trustworthiness has become essential. Explainability—the capacity of AI systems to make their logic and decisions understandable to humans—stands at the center of this debate. Explainable AI (XAI) is not only pivotal for fostering stakeholder trust but is also necessary for robust accountability, regulatory compliance, and ethical use. The absence of explainability in "black box" models raises concerns about fairness, bias, and user acceptance, particularly in high-stakes environments such as healthcare, finance, and law. This paper explores the multifaceted role of explainability in building trustworthy AI systems, drawing on interdisciplinary literature and recent advances in both theory and practice. By examining technical methods, stakeholder perspectives, regulatory frameworks, and real-world applications, this study highlights how explainability bridges the gap between complex machine intelligence and human values. The findings suggest that while challenges remain in balancing explainability with model performance, advances in interpretability techniques and growing regulatory emphasis on transparency are catalysing the development of more responsible and trustworthy AI.

Keywords: Explainable AI, Trustworthy AI, Transparency, Accountability, Ethics, Regulation

Transforming Society through Artificial Intelligence: Opportunities, Challenges, and Responsibilities

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Abstract

Artificial Intelligence (AI) has emerged as a transformative force shaping the future of societies across the globe. Its growing integration into healthcare, education, governance, industry, and everyday life has redefined the way humans interact with technology. By enabling intelligent data analysis, automation, and predictive decision-making, AI improves efficiency, accuracy, and accessibility in various sectors.

In healthcare, AI assists in early diagnosis, personalized treatment, and effective management of medical resources, leading to improved patient outcomes and public health systems. In education, AI-powered platforms promote personalized learning, digital inclusion, and administrative efficiency, helping institutions respond better to diverse learner needs. Agriculture and environmental management benefit from AI through precision farming, resource conservation, and climate monitoring, contributing to sustainable development and food security.

AI also plays a vital role in governance and public administration by enabling data-driven policymaking, transparent service delivery, and citizen-centric governance models. In industry and business, AI enhances productivity, innovation, customer engagement, and quality assurance, supporting economic growth and global competitiveness. These advancements demonstrate AI's potential to act as a powerful engine for social and economic progress.

However, the expanding influence of AI also raises critical ethical, social, and legal concerns. Issues such as data privacy, algorithmic bias, job displacement, and unequal access to technology demand responsible governance and ethical oversight. Ensuring transparency, accountability, and inclusivity in AI systems is essential to maintain public trust and protect human values.

This abstract emphasizes the need for a balanced and responsible approach to AI that integrates technological innovation with ethical responsibility and social welfare. When guided by strong governance frameworks and human-centered values, AI can become a transformative tool for sustainable development, social equity, and global well-being.

Keywords: Artificial Intelligence, Social Transformation, Innovation, Governance, Ethics, Sustainable Development, Digital Society.

Corrosion and Contamination: Rethinking Equipment Choices in Small to Medium Jaggery Manufacturing Units

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Abstract

Jaggery production is a vital rural agro-industry in India particularly dominated by small and medium-scale units that rely heavily on traditional processing practices. In many of these traditional units iron and mild-steel equipment are still widely used, despite growing concerns related to corrosion, food safety, metal contamination and operational inefficiency. The research examines the suitability of food-grade stainless steel (SS 304 and SS 316) as an alternate to traditional iron-based equipment in jaggery manufacturing. Using evidence from existing literature, regulatory standards, corrosion studies and lifecycle cost analysis, the research evaluates metal leaching behaviour, microbial hygiene risks, equipment durability and operational cost under long-term jaggery manufacturing conditions in Muzaffarnagar district of Uttar Pradesh state. The research suggests that iron and mild-steel equipment undergo rapid corrosion in acidic sugarcane juice having (pH 3.5–5.0) which leads to significant leaching of iron, nickel and chromium into the final product which is sugarcane jaggery. In contrast stainless steel equipment exhibits negligible metal leaching, superior cleanability and longer service life due to its stable chromium oxide passive layer. Economic analysis further demonstrates that stainless steel requires higher initial investment cost but its lifecycle cost is substantially low. It is due to its reduced maintenance, fewer replacements and minimal downtime. The study concludes that adopting stainless steel equipment offers a sustainable way for improving food safety, compliance with regulatory standards, and long-term profitability in the jaggery sector.

Keywords: Jaggery processing; Stainless steel equipment; Metal leaching; Lifecycle cost analysis.

Impact of Artificial Intelligence and Social Networking Sites on the Adolescents: A Comparative Study of Higher Secondary School Students of Muzaffarpur District

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Abstract

The present study aimed to effects of Artificial Intelligence (AI) and social networking sites on the adolescences; Aself-structured questionnaire was used to collect information on socio-demographic characteristics.This comparative study was done with objective to find out the effects of Artificial Intelligence and social networking sitesof school going Adolescents [16-19 years] in the Urban area of Muzaffarpur city, Bihar. Social networking sites significantly impact adolescents by offering personalized learning (AI) and social connection, but also raise concerns about reduced critical thinking, increased anxiety/depression, privacy issues, decreased interpersonal skills, and potential social isolation.The results revel that uses heavy social networking of adolescent demanding a balanced approach from parents, educators, and policymakers to harness benefits while mitigating risks, especially in areas like emotional intelligence and digital citizenship.

Keywords: Artificial Intelligence, Adolescents, Social Networking sites, Higher Secondary School

Impact of Artificial Intelligence in the Field of History

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Abstract

Artificial Intelligence (AI) has emerged as a transformative force in the field of history, reshaping traditional methods of historical research, analysis, preservation, and dissemination. Historically, the study of history relied heavily on manual examination of texts, artifacts, and archival materials, which was often time-consuming and limited in scope. The integration of AI technologies has significantly enhanced historians' ability to handle vast and complex datasets with greater speed, accuracy, and depth. One of the most significant contributions of artificial intelligence lies in historical research and documentation. AI-powered tools such as machine learning algorithms and natural language processing enable the digitization, transcription, and translation of ancient manuscripts, inscriptions, and handwritten records. These technologies assist historians in decoding lost or obscure languages and identifying patterns across historical sources that were previously difficult to detect. As a result, AI has expanded the scope of historical inquiry and improved the reliability of interpretations. Artificial intelligence also plays a crucial role in the preservation and restoration of historical heritage. Through image recognition and digital reconstruction, damaged documents, faded texts, and deteriorating artifacts can be restored virtually. In archaeology, AI-supported analysis of satellite imagery and geospatial data has led to the discovery of hidden settlements, trade routes, and monuments, revolutionizing archaeological methodologies while reducing physical intervention at sites. In addition, artificial intelligence has enhanced the teaching and public presentation of history. Interactive simulations, virtual reconstructions, and AI-driven museum exhibits provide immersive learning experiences, making history more accessible and engaging. However, the application of artificial intelligence in historical studies also raises concerns related to data bias, ethical use, and overdependence on technology. Therefore, while artificial intelligence serves as a powerful analytical tool, it must complement rather than replace human critical thinking. In conclusion, artificial intelligence has significantly impacted the field of history by modernizing research methods, preserving cultural heritage, and improving historical understanding. When used responsibly, it offers unprecedented opportunities to reinterpret the past and connect it meaningfully with the future.

Advances in Green Energy Systems: Renewable Technologies, Storage Solutions, and Sustainable Power Integration

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Abstract

Green energy systems have emerged as a cornerstone of sustainable power generation in response to increasing energy demands and environmental concerns. This study explores recent developments in renewable energy technologies, including solar photo-voltaic, wind turbines, and bio-energy systems, with a focus on performance optimization and system integration. Particular emphasis is placed on energy storage technologies and grid management strategies that address the inherent variability of renewable sources. The role of green energy in reducing greenhouse gas emissions, improving energy efficiency, and supporting long-term sustainability goals is analyzed. The findings indicate that continued technological innovation, combined with effective regulatory frameworks, is essential for the large-scale deployment of green energy systems worldwide.

Responsible Artificial Intelligence: An Ethical Perspective

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Abstract

Artificial Intelligence (AI) has witnessed unprecedented growth over the past decade, emerging as one of the most transformative technologies of the twenty-first century. Leading technology companies such as NVIDIA, Tesla, Apple, Meta, and IBM have invested substantial resources in developing increasingly sophisticated and productive AI systems. It is widely anticipated that by 2030, AI will significantly reshape global socio-economic structures. Proponents argue that AI has the potential to address complex human challenges by automating routine tasks, analysing vast datasets with high efficiency, and delivering highly personalized user experiences. Despite these advancements, the rapid deployment of AI systems raises profound ethical concerns. Central among these are questions related to moral values traditionally embedded within human judgment and social practice. The field of AI ethics draws heavily upon established philosophical traditions, including deontology (duty-based ethics), utilitarianism (consequence-based ethics), and virtue ethics (character-based ethics). Each of these frameworks contributes essential principles for guiding the responsible design, development, and deployment of AI technologies in ways that promote human well-being. However, ethical governance in AI remains at a nascent or embryonic stage. One of the most significant challenges arises from the cultural and moral diversity of the global population. Human societies are shaped by varied traditions, belief systems, moral values, and individual identities. For AI systems to function responsibly and fairly, they must demonstrate sensitivity to these differences—an objective that remains difficult to achieve with current technological and regulatory capabilities. Therefore, it is crucial to remember the significance of the term "artificial" in Artificial Intelligence. AI systems are human-made constructs and should remain tools that augment, rather than replace, human reasoning and ethical judgment. Excessive dependence on AI risks diminishing critical thinking and moral agency, underscoring the need for a balanced, human centred approach to AI developments.

Keynotes: Artificial Intelligence, Deontology, Virtue Ethics, Utilitarianism Ethics.

AI and the Governance of Liberal Democracy

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Abstract

The integration of Artificial Intelligence (AI) into the governance of liberal democracies represents a dual-edged transformation, reshaping the relationship between the state and its citizens. Globally, AI applications are increasingly leveraged to enhance administrative efficiency, optimize public service delivery, and foster more inclusive civic engagement. By utilizing predictive analytics for evidence-based policymaking and generative tools for public consultation, democratic institutions can potentially increase responsiveness and transparency. However, these advancements occur against a backdrop of a "crisis in democracy," where the same technologies pose existential threats to core liberal values. The primary tension lies between the drive for technocratic optimization and the preservation of democratic processes. While AI can streamline the "output" of government—such as detecting fraud in social benefits or forecasting public health needs—it risks undermining the "input" and "throughput" of democracy. Key challenges include algorithmic bias that reinforces social disparities, the "black-box" nature of deep learning which obscures accountability, and the erosion of the information environment through AI-driven disinformation and "astroturfing." Furthermore, the shift of authority from human intuition to automated systems threatens the separation of powers and judicial independence, potentially sliding toward "digital authoritarianism" even within established democracies. As of 2026, global governance frameworks are shifting from a narrow focus on AI safety to a broader emphasis on democratic oversight and regulation. To safeguard liberal democracy, a multi-stakeholder approach is required—one that ensures transparency, protects privacy, and maintains the "human-in-the-loop" principle. This paper argues that the futures of democratic governance depends not merely on adopting AI for efficiency, but on subordinate these tools to the rule of law and fundamental human rights, ensuring that technological progress serves to empower rather than displace the citizenry.

Keywords: AI, Governance, Liberal Democracy,

Artificial Intelligence and the Parsonian Social System

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Abstract

This analysis examines the integration of Artificial Intelligence (AI) through the lens of Talcott Parsons' Structural Functionalism, specifically utilizing the AGIL paradigm to evaluate how algorithmic autonomy reshapes social equilibrium. In Parsonian theory, a social system maintains stability through four functional imperatives: Adaptation, Goal Attainment, Integration, and Latency. Adaptation: AI radically enhances the system's adaptive capacity by optimizing resource allocation and economic productivity. However, it risks creating a "cybernetic strain" where the pace of technological evolution outstrips the system's ability to redistribute labor and capital. Goal Attainment: Political and organizational decision-making is increasingly delegated to predictive analytics. This shifts the "primary goal" from human-centric consensus to algorithmic efficiency, potentially alienating the "personality system" from the collective objectives. Integration: The "societal community" faces fragmentation. While AI facilitates global connectivity, algorithmic echo chambers threaten the shared normative framework required for social cohesion, leading to a breakdown in the "integrative" function. Latency (Pattern Maintenance): AI influences the socialization process and the transmission of values. As AI mediates education and cultural consumption, the "fiduciary system" shifts from traditional institutions to tech-driven platforms, altering the internalisation of core societal values. Ultimately, AI acts as a high-velocity "generalized symbolic medium of exchange," similar to money or power, but with the capacity to bypass traditional human agency. This abstract posits that while AI offers unprecedented evolutionary potential for social systems, it necessitates a recalibration of the "homeostatic" mechanisms to prevent systemic dysfunction or "anomie" in the digital age.

Keywords: Talcott Parsons, AGIL Paradigm, Structural Functionalism, Social Equilibrium, Algorithmic Governance, Cybernetic Hierarchy, Systemic Integration.

Theoretical Modelling of Shape and Size Effect for the Debye Temperature and Young's Modulus of $Sn_x Ce_{1-x}$ Nanomaterial

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Abstract

A theoretical modeling based on the evaluation of cohesive energy of the nanomaterial $Sn_x Ce_{1-x}$ has been achieved to investigate the shape and size dependence of the Debye temperature and Young's modulus (Y_n)on the mixed nanomaterial. Here x is the concentration of doping with $0 < x < 1$. It is observed that on the decreasing size down to Nanoscale, Debye temperature and Young's modulus both decrease with particle size of different shapes of nanomaterial. When the size is less than 10 nm, the change in Debye temperature and Y_n is drastic but a gentle change is observed and it tends to be constant for bigger sizes. The drastic change can be attributed to high surface area to volume ratio. The mechanism for size and shape dependency of Young's modulus and Debye temperature in nanomaterials is to be understood through systematic effort. The model so employed is compared with Lindeman's criterion.

Keywords: Nanoscale, cohesive energy, surface to volume ratio, Lindeman's criterion.

Artificial Intelligence and the Future of Ethics and Environment

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Abstract

Artificial Intelligence (AI) has become an inseparable part of modern human life. It is used in mobile phones, classrooms, and hospitals, banking systems, courts and government administration. AI helps people perform tasks faster and more accurately, yet it also raises serious philosophical, ethical and environmental concerns. This paper discusses the future of human life and environment in relation to AI from different philosophical perspectives. AI creates ethical problems about responsibility. When it makes mistakes, it is unclear who is to blame. Since AI learns from biased human data, it can also increase injustice. Epistemology, the study of knowledge, is challenged by AI. Earlier, knowledge was linked with human understanding and awareness. But AI gives information without consciousness or experience. Therefore, it is questionable whether AI outputs are real knowledge or only complex data processing. From a metaphysical perspective, AI changes our concept of reality. Digital identities, virtual assistants and artificial personalities create new forms of existence which are neither fully human nor fully mechanical. Existentialism highlights the fear of loss of purpose due to automation. When machines replace human labour, individuals may feel useless and alienated. Therefore, AI should be designed to support human creativity and dignity rather than replacing humans entirely. In social and political life, AI is used for surveillance, data collection and influencing public opinion. This threatens privacy and democratic freedom. At the same time, unequal access to AI increases the gap between the rich and the poor. Indian philosophy offers guidance. Vedanta teaches that real intelligence is rooted in the soul, which machines cannot possess. Buddhism explains consciousness as a living process, not a mechanical function. Gandhian philosophy insists that technology must serve human values. AI also affects the environment. Data centres consume huge amounts of electricity and electronic waste damages nature. Therefore, AI must be developed in an ecofriendly way. AI is powerful but risky. Without ethical, epistemological and existential guidance, it may harm humanity and the environment. Philosophy can help in using AI responsibly for the future of life on Earth.

India's Sugar Export Incentives and International Trade Distortion

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Abstract

The global sugar trade remains a critical arena where domestic agricultural support policies intersect with World Trade Organisation (WTO) disciplines. India's sugar export subsidies from the year 2018-2021 catalysed a seismic shift in global trade patterns and transformed the country from a marginal player of 3.2% global share to the world's second-largest exporter with 12.3% share. It generated a 433.3% volume surge (2.16 to 11.5 MMT), amid WTO challenges from Australia, Brazil, and Guatemala. The study focused on the two interrelated aspects that require thorough analysis, one is, to what extentIndia's export incentives resolve the structural bottleneck of surplus sugar management. And second, how did India's domestic policy shocks propagate through global supply chains, quantitatively displacing competitors and influencing world price formation, ultimately precipitating WTO litigation. This study employed a multi-method econometric framework, utilising the OLS model as a benchmark, error correction modeling, and quantile regression, integrated with secondary datasets to comprehensively dissect the domestic transmission and international spillovers. The Error correction modeling identifies a significant short-run export boost (0.985 MMT, $p = 0.088$) with strong co-integration dynamics, rejecting the null static OLS results. The trade statistics demonstrate the export displacement effect of subsidies in the global market, along with the distortion in the sugar price. The analysis advances trade policy evaluation by bridging dynamic econometrics with policy timelines, offering a replicable framework for emerging markets.

Keywords: Sugar trade; India's Export Subsidy; Sugar price; World Trade Organisation (WTO); Global competitors.

The Role of Self Help Groups in Socio Economic Development of Women in Dumka District, Jharkhand

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Abstract

This paper explores the transformative impact of self help groups (SHGs) on women's lives in j Dumka district Jharkhand, India SHGs serve as a catalyst for economic empowerment, social cohesion, and personal development among women in Dumka rural areas. By facilitating access to credit, skill training, and entrepreneurial opportunities, these groups enable women to become financially independent and actively participate in community decision making. The study highlights success stories that illustrate the significancant changes in women's self – esteem, health, and social status. Furthermore, it examines the challenges faced by SHGs, including resource constraints and societal norms. Ultimately, the findings under -score the essential role of SHGs in promoting gender equality and improving the overall quality of life for women in Dumka district, Jharkhand. As of 2023, Jharkhand has over 1.5 million SHGs, with approximately 20 million women actively participating. SHGs in jharkhand have mobilized R.s, 10,000 crores through savings, significantly increaseing women's access to credit. Various government initiatives, such as the National Rural Livelihood Mission (NRLM), have led to SHGs focused on enhancing livelihoods through skills training and income generating activities. Approximately 30% of SHGs members have started their own businesses, contributing to local economy and Job creation. SHGs have played a vital role in improving health and nutritional practices among women and their families, contributing to better health outcomes in communities. These data reflect the ongoing growth and impact of SHGs in jharkhand, emphasizing their importance in women's empowerment and community development.

Artificial Intelligence and the Evolution of a Knowledge-Driven Society

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Abstract

Artificial Intelligence (AI) is redefining the structure of contemporary society by transforming how information is processed, knowledge is applied, and solutions are developed. As intelligent systems become increasingly integrated into human activities, AI is influencing major sectors such as healthcare, education, governance, industry, and environmental management. Its ability to learn from data, adapt to complex situations, and support informed decision-making has enhanced the effectiveness and reach of modern systems.

In healthcare, AI strengthens diagnostic accuracy, supports preventive care, and improves healthcare delivery through data-driven insights. In education, AI enables personalized instruction, learner analytics, and digital accessibility, contributing to more responsive and inclusive learning environments. In agriculture and environmental planning, AI supports sustainable practices through predictive modeling, resource optimization, and climate monitoring.

AI also plays a growing role in governance by improving administrative efficiency, enabling evidence-based policymaking, and strengthening transparency in public institutions. In the economic domain, AI stimulates innovation, reshapes labor markets, and enhances industrial productivity, positioning societies to compete in an increasingly digital global economy.

However, the expansion of AI also introduces significant ethical and social challenges. Issues such as data protection, algorithmic fairness, workforce transitions, and unequal access to digital resources require careful consideration. Responsible governance, ethical design, and inclusive policy frameworks are essential to ensure that AI development aligns with human values and social justice.

This abstract highlights AI not merely as a technological tool, but as a transformative force shaping a knowledge-driven society. When guided by ethical responsibility, scientific integrity, and social awareness, AI can contribute meaningfully to sustainable development, human well-being, and long-term societal progress.

Keywords: Artificial Intelligence, Knowledge Society, Digital Innovation, Governance, Ethics, Social Change, Sustainable Development.

Artificial Intelligence in Behavioral and Mental Health Care

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Abstract

Artificial Intelligence (AI) has emerged as a powerful technological innovation with significant potential to transform behavioral and mental health care across global health systems. The integration of machine learning, natural language processing, computer vision, and wearable-sensor analytics has enabled new approaches to early detection, diagnosis, intervention, and long-term management of mental health conditions. AI systems can analyze speech patterns, facial expressions, behavioral cues, and physiological signals to identify subtle indicators of depression, anxiety, stress, and other psychological disorders. These capabilities support clinicians with timely insights, improve diagnostic accuracy, and allow for personalized and data-driven treatment planning.

The rapid growth of AI-powered mobile applications, virtual therapists, and conversational agents has increased accessibility to mental health support, particularly for underserved populations and remote communities. These digital tools provide continuous monitoring, self-help interventions, and crisis-response mechanisms, empowering individuals to manage their mental well-being beyond the limitations of traditional clinical settings. Additionally, predictive analytics using large-scale datasets helps identify at-risk individuals, forecast symptom progression, and optimize resource allocation in mental health services.

However, despite remarkable advancements, the adoption of AI in behavioral health care presents several challenges. Issues such as data privacy, security, algorithmic bias, and insufficient clinical validation raise ethical and regulatory concerns. Cultural differences and linguistic variations can also affect the accuracy and fairness of AI models. Ensuring transparency, accountability, and adherence to ethical guidelines is crucial to building trust among patients, clinicians, and institutions.

Overall, AI holds tremendous promise in enhancing mental health care delivery by bridging critical gaps in accessibility, affordability, and personalization. With responsible design, interdisciplinary collaboration, and robust governance frameworks, AI can play a transformative role in advancing global mental health and promoting holistic human well-being.

Responsible Artificial Intelligence ((RAI): A Human-Centered Approach Integrating Ethics, Governance, Science, Psychology and Politics

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Abstract

Artificial Intelligence (AI) is one of the most important technologies of the present time. It is changing how people live, work, learn and communicate. AI is widely used in different areaslike healthcare, education, agriculture, industry, banking, governance, media and daily life. AI systems can analyse data, identify patterns and support decision-making faster than humans. Although AI offers many benefits, it also raises serious concerns related to ethics, safety, fairness, mental healthand political influence. Due to these challenges, the concept of **Responsible Artificial Intelligence (RAI)** has become very important across the world.

RAI means developing and using AI in a way that is ethical, fair, transparent safe and beneficial to society. It ensures that technology supports human values and does not harm individuals or communities. RAI focuses on people first, not just technology.

Ethical AI respects human dignity, equality and rights. RAI works to reduce bias and ensure fairness. Privacy is also important, as AI uses personal data that must be protected with consent. Transparency and accountability help people understand AI decisions and know who is responsible for harm. Governance is important for guiding and controlling the use of Artificial Intelligence. It includes laws and rules that ensure AI is used in a legal and ethical way. Good governance prevents misuse of AI and builds public trust. International cooperation is needed because AI works across countries. Science helps make AI accurate, safe and easy to understand. RAI supports explainable systems so people can understand AI decisions. Testing and validation reduce errors and increase trust. Psychology is linked to RAI because AI affects human behaviour and mental health. Too much use of AI can cause stress and reduce thinking ability. RAI supports human-centred design, where AI helps people instead of replacing them. Political science is also important because AI affects democracy and governance. While AI can improve public services, it can also be misused for surveillance and control. RAI protects fairness, accountability and democratic values. RAI has many benefits. It promotes fairness, transparency and respect for human values. However, it also faces challenges like lack of awareness, need for skilled experts and difficulty in making global rules. In conclusion, RAI is not only technical but also ethical and social. It helps ensure AI is safe, fair and useful for society.

Keywords: Responsible AI, Ethical AI, Fairness, Transparency, Data Privacy, Democracy, Human Values, Safe AI.

Theoretical Behaviour of Shape, Size and Temperature dependent thermodynamics of Cux Fe1-x nanomaterial

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Abstract

The investigation of thermodynamic behaviour of nanomaterials has been an inductive path of research in Physics, Material Science and Bioengineering. In the present study, a simple theoritical modeling has been employed to examine the impact of shape, size and temperature on the thermo physical behaviour of **Cux Fe1-x** mixed nanomaterial. Here, x is the doping concentration with $0<x<1$. An isobaric Tait equation of state is combined with Guisbiers model and the resulting model is applied to analyse the shape, size and temperature effect on Young's modulus and thermal expansivity in **Cux Fe1-x** nanomaterial. The Young's modulus is observed to decrease with reduction in partical size while the thermal expansivity increases with decrease in size of the nanomaterial. Also, the Young's modulus shows decrease with increase in temperature and decrement is maximum in spherical nanomaterial and minimum in nanofilms. A good consistency is observed with the results obtained in this study with the corresponding values obtained by other models. The work may find future applicability in the design and the developement of smart nanomaterial.

Keywords: Isobaric equation of states, Thermal expansivity.

Seasonal Variations in Physico-Chemical Parameters and Water Quality of Gangasagar Pond, Darbhanga, Bihar

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Abstract

Darbhanga district, situated in North Bihar, has a large number of ponds and is therefore known as the *City of Ponds*. The present investigation was undertaken to study the physico-chemical conditions of a perennial freshwater fish culture pond, Gangasagar Pond, located in Darbhanga city. The pond receives sewage from the surrounding densely populated areas of the city. The study revealed seasonal fluctuations in various physico-chemical parameters of the pond water. Water samples were analyzed for temperature, transparency, total dissolved solids (TDS), pH, free CO., chloride, calcium, alkalinity, magnesium, sulphate, dissolved oxygen (DO), biological oxygen demand (BOD), and chemical oxygen demand (COD). Higher values of BOD, COD, free COs, and chloride were recorded during the monsoon and summer seasons. Dissolved oxygen showed higher values in winter, while lower values were observed during summer these results indicate sewage-induced water pollution leading to eutrophication, which adversely affects fish productivity in the pond

Keywords: physical parameters, chemical parameters, BOD, pond water pollution, Gangasagar pond, Darbhanga city pond.

Responsible A.I.: Towards Ethics, Governance, Scientific and Global Framework

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Abstract

Artificial Intelligence (AI) is not just a technological achievement; it is becoming a deep social process changing the nature of human thought, decision and governance. In areas such as education, health, governance, industry, and global policy-making, A.I. has opened up new possibilities, but it has also raised the question of whether technological progress in itself can guarantee human well-being. This question brings the concept of Responsible AI to the centre.

The basic idea of responsible A.I. is that technology cannot be seen in isolation from human values. When A.I. systems begin to make decisions, principles such as transparency, accountability, and ethics become not just conceptual ideals, but practical requirements. If A.I. is developed solely on the basis of efficiency and profit, it could increase the risks associated with privacy breaches, algorithmic bias, social inequality, and human rights.

This study emphasizes that A.I. requires a sound policy and governance framework that balances scientific prudence, legal clarity, and social responsibility. Equal importance should be given to data protection laws, ethical guidelines, human oversight, and international cooperation to build responsible A.I. At the same time, the participation of academia, scientists, policy makers and civil society in the policy-making process is imperative.

Ultimately, this research leads to the conclusion that responsible artificial intelligence is an attempt to establish a balance between technology and humanity. It reminds us that the purpose of technology should not be to control human life, but to make it more just, ethical and meaningful.

Keywords: Artificial Intelligence, Responsible AI, Ethics, Policymaking, Governance, Global Framework, Human Values.

Revolutionizing the Future: Artificial Intelligence Transforms Climate, Chemical Science, Environment, Medicine and Computer Science

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Abstract

Artificial Intelligence (AI) has proven to be one of the most powerful and revolutionary technologies in the current age, dramatically changing the face of scientific research, technological development and sustainable innovation. Machines learn from a vast amount of complicated data in order to understand it better. After analysing the data, machines are able to discover hidden patterns that are difficult for humans to recognize and utilize these patterns to accurately forecast future occurrences. AI has proven to be a necessary interdisciplinary technology in the field of climate science, chemical science, environmental conservation, medical research and computer science. Climate science has greatly benefited from the use of AI, which has improved the analysis of a vast amount of data collected from satellites, sensors and global monitoring networks, significantly improving the accuracy of climate models, weather predictions and the forecast of extreme weather events, thereby facilitating evidence-based policymaking in the area of climate change mitigation and adaptation. The use of AI has also improved the work efficiency of scientists in the area of chemical science, improving chemical reactions, the properties of molecules and the development of new materials. Rather than depending on the tedious trial-and-error method, AI has proven to be a smarter approach that saves time and resources. This has significantly reduced the use of energy, chemicals and environmental waste, thereby supporting the objectives of green and sustainable chemistry. Environmental conservation has also significantly improved with the development of AI-powered sensors, remote sensing and image recognition technology that enables the real-time monitoring of environmental pollutants, loss of biodiversity, deforestation and ecosystem deterioration, thereby facilitating early intervention and efficient environmental conservation strategies.

Keywords: Artificial Intelligence, Climate Science, Chemical Science, Environmental Conservation, Medical Research, Computer Science, Sustainability and Modern Technologies.

Boosting Molasses-to-Ethanol conversion by Saccharomyces cerevisiae NCIM-1267 exposed to Sodium Taurochlolate

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Abstract

Molasses, an abundant agro-industrial by-product, serves as an economical substrate for bioethanol production. The present study investigates the influence of sodium taurocholate on molasses-to-ethanol conversion by Saccharomyces cerevisiae NCIM-1267. Exposure to optimized concentrations of sodium taurocholate significantly enhanced ethanol yield compared to untreated controls. The stimulatory effect is attributed to improved membrane permeability, facilitated sugar uptake, and enhanced fermentative metabolism, leading to accelerated glycolytic flux and higher ethanol productivity. Fermentation parameters including sugar consumption, biomass formation, and ethanol concentration were systematically evaluated. The findings demonstrate that sodium taurocholate acts as an effective biochemical modulator, promoting efficient ethanol bioproduction without adversely affecting yeast viability. This approach offers a promising strategy for improving industrial bioethanol fermentation using low-cost molasses substrates. Furthermore, ST exposure appeared to mitigate the inhibitory effects of high osmotic pressure and ethanol toxicity, common challenges in molasses-based fermentation. These findings suggest that Sodium Taurocholate serves as an effective chemical additive for industrial-scale bioethanol intensification, offering a cost-effective strategy to improve the fermentation kinetics of S. cerevisiae. In the present communication efficacy of Sodium Taurochlolate on boosting of molasses-to-Ethanol conversion by Saccharomyces cerevisiae NCIM-1267 has been studied. It has been observed that the compound under trial has stimulatory effect on production of ethanol by Saccharomyces cerevisiae NCIM-1267 and enhances the yield of ethanol to an extent of 6.069 % higher in comparison to control when 25 % molasses solution is allowed to ferment at pH 5.2 temperature 30ºC and incubation period of 50 hours along with some other significant rich ingredients required by the Saccharomyces cerevisiae NCIM-1267.

Keywords: Molasses, ethanol, Sodium Taurochlolate and Saccharomyces cerevisiae NCIM-1267

Impact of Peer Relationship on Self-Learning Pressure and Motivation of Secondary School Students of Dhanbad District

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Abstract

The high school stage is an important period for students' lifelong development. During this period, students' physiology and psychology is undergoing dramatic changes, gradually transitioning from immaturity to maturity. During this period, teenagers' learning tasks have significantly increased, students' school hours have lengthened, and thus they spend far more time interacting with peers than their parents and family. In other words, campus Life makes the transition of their social interaction objects from elders to peers. Therefore, peer relationships play a crucial role in the development of students' mental health and academic performance at this stage. For junior high school students, the target audience is no longer just parents and family, but more classmates and partners of their own age. Many studies have shown that peer relationships have a profound impact on students' socialization, personality development, and academic performance. Peer relationships play a significant role in adolescents' educational experiences. For secondary school students, peers are more than just friends they become social references, emotional support systems, and academic role models whose influence affects students' learning pressure and motivation. In a school context like Dhanbad district, where academic expectations and peer interactions are deeply embedded in students' daily lives, the nature of peer relationships can significantly shape how students view learning, handle academic stress, and sustain motivation. Peer relationships are a powerful influence in shaping how secondary students experience self-learning pressure and motivation. When peers are supportive, students feel encouraged, confident, and intrinsically motivated. However, when these relationships are competitive or stressful, the result can be increased anxiety and reduced motivation. Therefore, understanding and fostering positive peer interactions is essential for promoting healthy academic and psychological outcomes among students in Dhanbad's secondary schools.

आर्टिफिशियल इंटेलिजेंस के साथ मानवाधिकार की चुनौतियां

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सहायक प्राध्यापक
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Abstract

कृत्रिम बुद्धिमत्ता (एआई) में तेजी से हो रही वृद्धि ने वैश्विक स्तर पर कई अवसर पैदा किए हैं, जिनमें स्वास्थ्य संबंधी निदान को सुविधाजनक बनाना, सोशल मीडिया के माध्यम से मानवीय संबंधों को सक्षम बनाना और स्वचालित कार्यों के माध्यम से श्रम दक्षता बढ़ाना शामिल है।

हालांकि, इन तीव्र परिवर्तनों से गंभीर नैतिक चिंताएं भी उत्पन्न होती हैं। ये चिंताएं कृत्रिम बुद्धिमत्ता (एआई) प्रणालियों में पूर्वाग्रहों को समाहित करने, जलवायु परिवर्तन में योगदान देने, मानवाधिकारों को खतरे में डालने आदि की क्षमता से जुड़ी हैं। एआई से जुड़े ऐसे जोखिम पहले से मौजूद असमानताओं को और भी बढ़ा रहे हैं, जिसके परिणामस्वरूप पहले से ही हाशिए पर पड़े समूहों को और अधिक नुकसान हो रहा है।

तकनीक दिन-प्रतिदिन विकसित हो रही है और इसके उपयोग के साथ ही मानवाधिकारों की चिंता भी बढ़ रही है। आर्टिफिशियल इंटेलिजेंस जैसी तकनीक ने मानव कार्य को आसान बना दिया है और निकट भविष्य में यह मानव द्वारा किए जाने वाले प्रत्येक कार्य को प्रतिस्थापित कर सकता है, जिससे दक्षता और प्रभावशीलता बढ़ सकती है। वर्तमान में बिग डेटा का उपयोग बढ़ रहा है। मानवाधिकारों का उल्लंघन वैश्विक चिंता का विषय है। दुनिया भर के कई देशों ने यह सुनिश्चित करने के लिए कानून और नियम अपनाए हैं कि आर्टिफिशियल इंटेलिजेंस और इसका उपयोग प्रचलित मानवाधिकारों का उल्लंघन न करे। भारत में, जब हम मानवाधिकारों की बात करते हैं, तो बिग डेटा और तकनीक के संबंध में निजता और भेदभाव का अधिकार दो प्रमुख अधिकार हैं। भारत में इसके लिए कोई विशेष कानून नहीं है, लेकिन निजता में बाधा न आए, यह सुनिश्चित करने के लिए डिजिटल व्यक्तिगत डेटा संरक्षण विधेयक, 2023 (DPDP) जैसे कुछ विधेयक पारित किए गए हैं। हालांकि आर्टिफिशियल इंटेलिजेंस के नियमन के लिए पुख्ता भारतीय कानून अभी तक नहीं बना है। इस पर कानून बनाने के लिए भारत सरकार ने नागरिकों से सुझाव मांगे हैं। इस आर्टिफिशियल इंटेलिजेंस और इसके विकास और यह किस प्रकार मानवाधिकारों का उल्लंघन करता है, इस पर चर्चा की गई है। नए डेटा संरक्षण विधेयक के विश्लेषण के साथ आर्टिफिशियल इंटेलिजेंस के उपयोग से जुड़ी चुनौतियों और उसके समाधान के बारे में बताया गया है।

कृत्रिम बुद्धिमत्ता प्रणालियों का उपयोग वैध उद्देश्य की प्राप्ति के लिए आवश्यक सीमा से अधिक नहीं होना चाहिए। ऐसे उपयोगों से होने वाले नुकसानों को रोकने के लिए जोखिम मूल्यांकन किया जाना चाहिए।

एआई क्षेत्र में काम करने वाले लोगों को सामाजिक न्याय, निष्पक्षता और गैर-भेदभाव को बढ़ावा देना चाहिए, साथ ही एक समावेशी दृष्टिकोण अपनाना चाहिए ताकि एआई के लाभ सभी के लिए सुलभ हों।

Keywords: कृत्रिम बुद्धिमत्ता/आर्टिफिशियल इंटेलिजेंस, मानव अधिकार/ मानवाधिकार, गोपनीयता, बिग डेटा, भारतीय कानून

नैतिकता के प्रतिकृत्रिम बौद्धिकता की जिम्मेवारीयाँ : व्यवहारिक समस्याएँ एवं समाधान

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कृत्रिम बुद्धिमता की वैचारिक पृष्ठ भूमिमानव संज्ञान की नकल करने वाले तकनीकी प्रयासो से विकसित हुई है, जिसका उद्देश्य मशीनों को सीखने, विश्लेषण करने और निर्णय लेनेमें सक्षम बनाना रहा है। प्रारंभिक चरण में कृत्रिम बुद्धिमता को तर्क-आधारित गणनात्मक प्रणाली के रूप में देखा गया, किंतु समय के साथ डेटा, सांख्यिकी ओर एल्गोरिदिमक संरचनाओं के समावेशन ने इसे सामाजिक प्रक्रियाओं से गहराई से जोड़ दिया। आज कृत्रिम बुद्धिमता केवल तकनीकी दक्षता का उपकरण नहीं रह गई है, बल्कि यह नीति-निर्माण, संसाधन प्रबंधन और जोखिम आकलन जैसे क्षेत्रों में निर्णाय क भूमिका निभा रही है। इसकी वैचारिक संरचना यह संकेत देती है कि यह तकनीक मूल्य-निरपेक्ष नहीं है बल्कि इसमें मानव निर्मित मान्यताएँ प्राथमिकताएँ और शक्ति संबंध अंतर्निहित रहते हैं। कृत्रिम बौद्धिकता एल्गोरिदिमक के आधार पर कार्य करते हैं। यदि एल्गोरिदिमक प्रणालियाँ पारदर्शिता और जवाबदेही से वंचित हों तो वे सामाजिक रूप से कमजोर वर्गों के लिए दमनकारी परिणाम उत्पन्न कर सकती है।

कृत्रिम बुद्धिमता तर्क शीलता का उन्नत रूप है, जो जटिल समस्याओं को डेटा, मॉडल और एल्गोरिथिम के माध्यम से सरल बनाने का दावा करती है। किंतु मानवीय मूल्य केवल तर्क और गणना से निर्धारित नही होते वे करूणा, न्याय, उत्तरदायित्व और नैतिक विवके जैसे गुणों से निर्मित होते हैं। कृत्रिम बुद्धिमता का उद्देश्य निर्णयों को स्वचालित करना नहीं, बल्कि उन्हें अधिक न्यासंगतपारदर्शी और उत्तरदायी बनाना है। कृत्रिम बुद्धिमता जिन निर्णयों और अनुशंसाओं को प्रस्तुत करती है, उनका प्रभाव प्रत्यक्ष रूप से मानव जीवन अवसरों और भविष्य की दिशा पर पड़ता है।

निष्कर्षतः कृत्रिम बुद्धिमता की वैचारिक पृष्ठभूमि को समझना आवश्यक हो जाता है ताकि उसके प्रयोग को सामाजिक और नैतिक उत्तरदायित्व के दायरे में रखे जा सके।

बीज शब्द : कृत्रिम बुद्धिमता, नैतिकता, न्यायसंगत, एल्गोरिदिमक, डेटा।

आत्मनिर्भर भारत : चुनौतियाँ तथा अवसर एक समीक्षात्मक अध्ययन

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1929-30 की महान आर्थिक मंदी को समझने के लिए तथा अर्थव्यवस्था को उससे बाहर निकालने के लिए जे.एम.केन्ज अर्थशास्त्र की एक नई अवधारणा दुनिया के सामने रखा जिस कारण अर्थव्यवस्था मंदी के दौर से बाहर निकल पाई। कोविड 19 महामारी ने भारत समेत दुनिया भर में स्वास्थय और जीवन के लिए गंभीर चुनौतियॉ लाया था। भारत की लगभग आधी आबादी प्रतिदिन तीन डॉलर से कम कमाती है,जिसके कारण वे गरीबी रेखा के काफी करीब है । भारत में 40 प्रतिशत लोग इतना ही कमा पाते हैं कि दो वक्त की रोटी खा सके, बचत के नाम पर उसके पास कुछ नहीं हैं। 90 प्रतिशत से अधिक कार्यशील जनसंख्या असंगठित क्षेत्र में कार्यरत है जिन्हे अवकाश और सामाजिक बीमा जैसे कार्यस्थल आधारित सामाजिक सुरक्षा लाभ तक प्राप्त नहीं हो पाते है। करोडो प्रवासी मजदूर और कामगार, जो प्रत्येक वर्ष कार्य और एक अच्छे सामाजिक जीवन की तलाश में राज्य की सीमाओ को पार करते है,वे गंभीर जोखिम का सामना कर रहें है क्योंकि शहरो में मलिन बस्तियों में जीवनयापन तथा भागमभाग ने जीवन की गुणवता को बदतर बना दिया है।

आत्मनिर्भर भारत का वास्तविक अर्थ स्वदेशी अर्थव्यवस्था है। आत्मनिर्भरता का अर्थ अंतर्राष्ट्रीय व्यापार से अलग होना नही अपितु अपनी घरेलु उधोग को ज्यादा मजबूत बनाना है। गॉधी के हिन्द स्वराज में स्वदेशी मॉडल को अपनाया गया तथा ग्रामीण अर्थव्यवस्था को संरचनात्मक आधार प्रदान करने की बात कि गई। आत्मनिर्भरता आधुनिक तकनीकी का विरोध नही करता अपितु अवांछित आयात पर नियंत्रण लगाने की कोशीश करता है, जिसका अर्थ है आधुनिकीकरण आवश्यक है लेकिन पश्चिमीकरण नहीं। स्वदेशी पर जोर ही भारत की शक्ति का मुख्य केन्द्र हो सकती है। भारतीय उधमियों को भूमि ,श्रम,पूंजी तथा कानून के मामलें में ज्यादा स्वतंत्रता मिलना चाहिए। स्वदेशी, स्थानीयता तथा वैश्वीकरण के बीच एक सेतु बन सकती है। हाल के वर्षों में भारत का विदेशी व्यापार घाटा लगातार बढ़ रहा है। अमेरिका की टैरिफ निति ने पुरी दुनिया के व्यापार को असंतुलित कर दिया है। चीन से भी व्यापार घाटा लगातार बढ़ती जा रही है। इन कारणों से रूपये का मूल्य डॉलर की तुलना मे तेजी से गिर रहा है तथा रूपया कमजोर होता जा रहा है। चीन अपनी मजबूत अर्थव्यवस्था के कारण टैरिफ वार से निपटने में सक्षम है लेकिन भारत के समक्ष अनेक चुनौतियां है। स्टार्टअप इंडिया, मेक इन इंडिया, नवाचार, स्किलड इंडिया जैसे कार्यक्रम भारत को इससे बाहर निकाल सकती है। कोरोना काल में शुरू हुआ आत्मनिर्भर भारत अभियान इस चुनौति से निपटने में एक महत्वपुर्ण औजार बन सकती है।

Kewwords: स्वदेशी, टैरिफ वार, प्रवासी मजदुर, उघमी।

कृत्रिम बुद्धिमता और नैतिकता

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सारांश

समय व तकनीक के साथ मानव का परिवर्तित होना एक नैसर्गिक प्रकिया है। तकनीक का विकास हमें अवसरों के विस्तार द्वारा समृद्धि एवं विकास की ओर उन्मुख करता है। कृत्रिम बुद्धिमता (एआई) एक ऐसी ही तकनीक है जिसने मानवीय जीवन की नैतिकता को प्रभावित किया है किन्तु विविध प्रकार के लाभों के साथ- साथ यह हमारे लिए नैतिकता से सम्बन्धित कई समस्याएँ भी उत्पन्न कर रहा है। इसी कारण इसे लाभ- हानि का मिला जुला उपकरण कहना अधिक उचित होगा। एक ओर इसने शिक्षा, चिकित्सा, परिवहन, विनिर्माण, इंजीनियरिंग, सुरक्षा व सामरिक क्षेत्र में अप्रत्याशित उन्नति तथा विकास का कार्य किया है वहीं दूसरी ओर रोजगार अवसरों की कमी, गोपनीयता के अभाव, प्रतिस्पर्धा साइबर क्राइम, अपूर्ण व भ्रामक जानकारी से इसने हमारे सामने संकट भी उत्पन्न किया है।

यद्यपि कृत्रिम बुद्धिमता अपने उन्नत आँकड़ों के प्रसंस्करण एवं पूर्वानुमान क्षमताओं के माध्यम से उद्योगों को रूपांतरित करने और मानवीय क्षमताओं में वृद्धि करने की प्रतिज्ञा करती है। यद्यपि जैसे-जैसे कृत्रिम बुद्धिमत्ता दैनिक जीवन का अभिन्न अंग बनता जा रहा है, जिससे इसके नैतिक निहितार्थों पर तत्काल ध्यान देने की आवश्यकता का अनुभव होने लगी है। साथ ही कृत्रिम बुद्धिमत्ता की तेज गति प्रायः मौजुदा नियामक ढाँचों को सुलझा नहीं पाती, जिससे इसके उपयोग की कई समस्याएँ उत्पन्न हो गई हैं।

कृत्रिम बुद्धिमता बहुत शक्तिशाली है लेकिन यह कभी भी सर्वोत्तम साधन नहीं हो सकता है। इससे कई मॉडल विकसित होते हैं, नये आँकड़ों से सीखते हैं, और इसके उपयोगकर्ता के साथ सम्पर्क स्थापित करता है जिनसे अनचाहे परिणाम मिल सकते हैं इसलिए कृत्रिम बुद्धिमत्ता के परिणामों पर हमेशा ध्यान देने की जरूरत होती है।

महिला सशक्तिकरण में झारखड राज्य में मैया सम्मान योजना का योगदान

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सार

महिलाओं का विकास राष्ट्र के आर्थिक और सामाजिक विकास के लिए एक पूर्व शर्त है महिलाओं की भूमिका और उन्हें सशक्त करने की आवश्कता, मानव विकास कार्यक्रमों, जिनमे गरीबी उन्मूलन भी शामिल है केंद्र में है. सशक्तिकरण समानता और सभी महिलाओं को शोषण से मुक्ति दिलाने के आदर्शो का साकार करने की एक सतत प्रक्रिया है. इस प्रकार सशक्तिकरण का तात्पर्य लिंग, जाति समूह, सामाजिक वर्ग के बीच अवसरों की समानता और निष्पक्षता, जीवन की सम्भावनाओ को सुदृढ़ करना, जीवन के विभिन्न क्षेत्रों-सांस्कृतिक, सामाजिक, राजनीतिक, आर्थिक विकास प्रक्रिया, निर्णय लेने आदि में सामूहिक भागीदारी है. सशक्तिकरण वह प्रक्रिया है जिसके द्वारा सभी महिलाओं को सशक्त बनाया जासकता है.

मुख्य शब्दः महिला सशक्तिकरण, गरीबी उन्मूलन, मैया सम्मान योजना।

परिचयः 3 अगस्त 2024 में शुरू हुई मैंया सम्मान योजना जिसमे प्रदेश की प्रत्येक महिलाओं और बेटियों को जो 18 वर्ष से 50 वर्ष की उम्र की है को हर महीने 2500 की आर्थिक मदद मिलती है। इस योजना के द्वारा गरीबी उन्मूलन में सहायता मिली है. जिनसे महिलाओं के सामजिक एवं आर्थिक स्थिति में काफी सुधार हुआ है। इस योजना से महिलाओं एवं लड़कियों की व्यक्तिगत स्थिति में भी बेहतर सुधार हुवा है। किसी भी देश के बेहतर भविष्य के लिए महिलाओं का सशक्त होना बहुत ही अनिवार्य है क्योंकी देश के विकास के लिए ये आधी आबादी सामान योगदानकर्ता है। देश की महिलाएं स्वस्थ रहेंगी, सशक्त रहेंगी तो परिवार में महत्पूर्ण भूमिका निभायेंगी। मईया सम्मान योजना प्रदेश में बेहतर विकल्प बनकर उभरा है। नारी को सशक्त बनाने में और आत्म निर्भर बनाने में यह योजना महत्वपूर्ण भूमिका निभा रहा है।

वर्तमान समय में कृत्रिम बुद्धिमत्ता का प्रभाव

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कृत्रिम बुद्धिमत्ता वह गतिविधि है जिसके द्वारा मशीनों को बुद्धिमान बनाने का काम किया जाता हैऔर बुद्धिमत्ता वह गुण है जो किसी इकाई को अपने वातावरण में उचित और दूरदर्शिता के साथ कार्य करने में सक्षम बनाता है।

जब कोई मशीन या उपकरण परिस्थितियों के अनुकूल सीखकर समस्याओं को हल करता है तो उसे ही कृत्रिम बुद्धिमत्ता अर्थात आर्टिफिशियल इंटेलिजेंस (AI) कहां जाता है। AI शब्द का आशय मशीनों द्वारा मानव बुद्धि का अनुकरण करना है। इसे विचार करने, नियोजन, सीखने, भाषा प्रोसेसिंग,अवधारणा,गति,रचनात्मकता आदि का मिश्रण कहा जा सकता है। कृत्रिम बुद्धिमत्ता महत्वपूर्ण है क्योंकि यह संगठनों को उनके संचालन के बारे में पहले से अज्ञात अंतर्दृष्टि प्रदान कर सकती है और कुछ स्थितियों में, मनुष्यों की तुलना में कार्यों को बेहतर ढंग से कर सकती है।

कृत्रिम बुद्धिमत्ता इस विचार पर आधारित है कि मानव बुद्धि को इस प्रकार परिभाषित किया जा सकता है कि एक कंप्यूटर उसकी हूबहू नकल कर सके और सबसे बुनियादी से लेकर सबसे जटिल कार्यों को पूरा कर सके।

कृत्रिम बुद्धिमत्ता (AI) आजकल हमारे जीवन का एक अभिन्न हिस्सा बन गई है। इसका प्रभाव विभिन्न क्षेत्रों में देखा जा सकता है, जैसे कि स्वास्थ्य सेवा, शिक्षा, कृषि, और उद्योग कृत्रिम बुद्धिमत्ता अर्थात AI ने चिकित्सा निदान, दवा खोज, और व्यक्तिगत उपचार योजनाओं में प्रगति के माध्यम से स्वास्थ्य सेवा में क्रांति ला दी है।

इसने शिक्षा को अधिक व्यक्तिगत और प्रभावी बनाया है। यह कृषि में उत्पादकता बढ़ाने और संसाधनों का बेहतर उपयोग करने में मदद करता है। AI ने उद्योगों में स्वचालन और उत्पादकता बढ़ाने में मदद की है।

कृत्रिम बुद्धिमत्ता का प्रभाव हमारे जीवन पर गहरा पड़ रहा है। आने वाले समय में इसका प्रभाव और भी अधिक व्यापक रूप से देखने को मिलेगा।

AI में मानव बुद्धि से परे जाने की पूरी संभावना है। यह किसी भी विशेष कार्य को पूरी सटीकता के साथ कर सकता है।

इसमें भी कोई संदेह नहीं है कि ।स में अपार क्षमता है। हालाँकि किसी भी चीज पर अधिक निर्भरता अच्छी नहीं होती है और कुछ भी पूर्ण रूप से मानव मस्तिष्क के समान नहीं हो सकता है।इसलिये ।स का अत्यधिक उपयोग नहीं किया जाना चाहिये क्योंकि बहुत अधिक स्वचालन और मशीनों पर निर्भरता. वर्तमान मानव जाति और आने वाली पीढियों के लिये खतरनाक साबित हो सकती है।

अंतर को पाटनाः एआई प्रणालियों में तकनीकी उत्कृष्टता और नैतिक निरीक्षण

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सारांश

कृत्रिम बुद्धिमत्ता (Artificial Intelligence–AI) आज अभूतपूर्व तकनीकी उत्कृष्टता के शिखर पर पहुँच चुकी है, किंतु इसके समानांतर नैतिक पर्यवेक्षण और सुदृढ़ शासन-तंत्र का विकास अपेक्षाकृत धीमा रहा है। तकनीकी नवाचार और नैतिक उत्तरदायित्व के बीच बढ़ता यह अंतर एल्गोरिथ्मिक पक्षपात, पारदर्शिता की कमी, उत्तरदायित्व का अभाव, डेटा गोपनीयता के उल्लंघन तथा गहरे सामाजिक प्रभाव जैसे गंभीर और जटिल प्रश्नों को जन्म दे रहा है। इन चुनौतियों के समाधान हेतु यह विमर्श तकनीकी प्रगति को नैतिक विवेक के साथ संरेखित करने की आवश्यकता पर बल देता है।

AI के संपूर्ण जीवन-चक्र डेटा संग्रह, मॉडल विकास, तैनाती तथा सतत निगरानी में नैतिक मूल्यों को तकनीकी उत्कृष्टता के साथ एकीकृत करना अब अनिवार्य हो गया है। उत्तरदायी एवं विश्वसनीय AI प्रणालियाँ, व्याख्येय (Explainable) मॉडल, प्रभावी शासन-ढाँचे तथा अंतरराष्ट्रीय नैतिक दिशानिर्देश ऐसे आधार हैं, जिनके बिना AI का सतत और न्यायसंगत विकास संभव नहीं है। साथ ही, वैश्विक नियामक ढाँचों और मानव-केंद्रित AI विकास की आवश्यकता निरंतर अधिक प्रासंगिक होती जा रही है।

शोधकर्ताओं, इंजीनियरों, नीति-निर्माताओं और शिक्षाविदों के बीच सहयोग और संवाद के माध्यम से ऐसी व्यावहारिक व दूरदर्शी रूपरेखाएँ विकसित की जा सकती हैं, जो तकनीकी रूप से सशक्त होने के साथ-साथ नैतिक, उत्तरदायी और सामाजिक रूप से विश्वसनीय AI प्रणालियों के निर्माण का मार्ग प्रशस्त करें।

कृत्रिम बुद्धिमता और समसामयिक ऐतिहासिक शोध की चुनौतियां

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शोध सारांश

वर्तमान समय में ऐतिहासिक अनुसंधान में कृत्रिम बुद्धिमता का प्रयोग बढ़ा है। कृत्रिम बुद्धिमता ऐतिहासिक अनुसंधान को अधिक तेज, सटीक और व्यापक बनाने में सहयोग कर रही है। यह शोधकर्ताओं के लिए प्राचीन स्रोतों के अध्ययन, विश्लेषण और संरक्षण में सहायक है। यह उपलब्ध ऐतिहासिक श्रोतों, जैसे पांडुलिपियों, अभिलेखों इत्यादि के डिजिटलीकरण और संरक्षण के साथ ही ऐतिहासिक आंकड़ों के विश्लेषण को भी सरल बनाता है।

कृत्रिम बुद्धिमता के प्रयोग से उपलब्ध पुरातात्विक स्रोतों का काल निर्धारण और वर्गीकरण सरल हो गया, इसके साथ ही कृत्रिम बुद्धिमता भौगोलिक एवं स्थानिक इतिहास लेखन के लिए भी महत्वपूर्ण है। विशेषकर ऐतिहासिक मानचित्रों का निर्माण एवं व्यापारिक मार्गों की पहचान को आसान बना दिया है। हालांकि कृत्रिम बुद्धिमता की अपनी कुछ सीमाएं भी है। कृत्रिम बुद्धिमत्ता पर अधिक निर्भरता ने अनुसंधान कर्ताओं को दद्वितीयक स्रोतों पर निर्भरता को बढ़ाया है।

झारखंड के दुमका जिला में प्रधानमंत्री जनधन योजना के आर्थिक प्रभाव का मूल्यांकन

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2022 पंजीयन संख्या-19068/(2015)
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सार (Abstract)

प्रधानमंत्री जनधन योजना (PMJDY) भारत सरकार की एक प्रमुख वित्तीय समावेशन योजना है, जिसका उद्देश्य देश के प्रत्येक नागरिक को औपचारिक बैंकिंग व्यवस्था से जोड़ना है। इस अध्ययन का उद्देश्य झारखंड राज्य के दुमका ज़िले में प्रधानमंत्री जनधन योजना के अंतर्गत लाभार्थियों की आर्थिक स्थिति का मूल्यांकन करना है। दुमका ज़िला, जो मुख्यतः आदिवासी बहुल एवं सामाजिक-आर्थिक दृष्टि से पिछड़ा क्षेत्र माना जाता है, वहाँ वित्तीय समावेशन की भूमिका विशेष रूप से महत्त्वपूर्ण हो जाती है।

अध्ययन में प्राथमिक एवं द्वितीयक दोनों प्रकार के स्रोतों का उपयोग किया गया है। प्राथमिक आँकड़े चयनित जनधन खाताधारकों से साक्षात्कार एवं प्रश्नावली के माध्यम से प्राप्त किए गए, जबकि द्वितीयक आँकड़े बैंक अभिलेखों, सरकारी रिपोर्टों तथा प्रकाशित शोध-सामग्री से संकलित किए गए। अध्ययन के निष्कर्ष बताते हैं कि जनधन योजना के माध्यम से दुमका ज़िले में बड़ी संख्या में लोगों के बैंक खाते खुले हैं, जिससे बचत की प्रवृत्ति में वृद्धि हुई है और नगद लेन-देन पर निर्भरता में कमी आई है।

योजना के अंतर्गत मिलने वाली प्रत्यक्ष लाभ अंतरण (DBT), बीमा सुविधा एवं ओवरड्राफ्ट जैसी व्यवस्थाओं ने लाभार्थियों की आर्थिक सुरक्षा को सुदृढ़ किया है। विशेषकर महिलाओं, अनुसूचित जनजातियों एवं निम्न आय वर्ग के परिवारों को इससे प्रत्यक्ष लाभ मिला है। हालाँकि, अध्ययन में यह भी पाया गया कि वित्तीय साक्षरता की कमी, निष्क्रिय खाते तथा बैंकिंग सेवाओं की सीमित पहुँच जैसी समस्याएँ अभी भी मौजूद हैं।

निष्कर्षतः यह कहा जा सकता है कि प्रधानमंत्री जनधन योजना ने दुमका ज़िले में आर्थिक समावेशन को बढ़ावा देने में महत्त्वपूर्ण भूमिका निभाई है, किंतु इसकी प्रभावशीलता को और अधिक सशक्त बनाने के लिए वित्तीय जागरूकता कार्यक्रमों, स्थानीय स्तर पर बैंकिंग ढाँचे के विस्तार तथा नियमित निगरानी की आवश्यकता है।

महिला सशक्तिकरण, शिक्षा, आर्थिक विकास, सामाजिक सहभागिता, बिहार, लिंग समानता

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सारांश

इस शोध का उद्देश्य बिहार राज्य में महिला शिक्षा और उनके आर्थिक एवं सामाजिक सशक्तिकरण के बीच संबंध का विश्लेषण करना है। अध्ययन से ज्ञात होता है कि शिक्षा महिलाओं के रोजगार अवसरों, निर्णय लेने की क्षमता, सामाजिक सहभागिता, और आत्मनिर्भरता में महत्वपूर्ण भूमिका निभाती है। सरकारी योजनाओं, साक्षरता दर, और सामाजिक संरचना का तुलनात्मक विश्लेषण भी प्रस्तुत किया गया है। परिणाम संकेत देते हैं कि शिक्षा में सुधार से महिलाओं का संपूर्ण विकास संभव है। भारत के सामाजिक विकास में महिलाओं की भूमिका अत्यंत महत्वपूर्ण रही है। विशेषकर बिहार जैसे राज्यों में महिला शिक्षा का स्तर सीधे उनके सामाजिक एवं आर्थिक स्थिति को प्रभावित करता है। शिक्षा केवल रोजगार का माध्यम नहीं है, बल्कि यह आत्मविश्वास, स्वतंत्र निर्णय और सामाजिक भागीदारी का आधार भी है। शिक्षा महिलाओं को केवल नौकरी के अवसर ही नहीं प्रदान करती, बल्कि सामाजिक ढांचे में उनकी आवाज़ को भी मज़बूत करती है। बिहार में पारंपरिक सोच, गरीबी, बाल विवाह, और संसाधनों की कमी जैसी बाधाएँ अभी भी महिला शिक्षा में रुकावट पैदा करती हैं। फिर भी, पिछले दो दशकों में स्थिति में काफी सुधार हुआ है। अध्ययन स्पष्ट करता है कि शिक्षा महिलाओं के समग्र विकास का आधार है। बिहार में महिलाओं के आर्थिक और सामाजिक सशक्तिकरण को गति देने के लिए शिक्षा एक मुख्य कुंजी है। सरकार, समाज और परिवार तीनों स्तरों पर सहयोग से महिला शिक्षा में और अधिक सुधार संभव है।

वर्तमान समाज में आर्टिफिसियल इंटेलिजेंस की भूमिका

प्रेम रोशन एक्का
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मधुपुर महाविद्यालय, मधुपुर, देवधर

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आधुनिक युग विज्ञान और तकनीक का युग है। और इस युग की सबसे क्रांतिकारी उपलन्धियों में से एक आर्टिफिशियल इंटेलिजेंस (कृत्रिम बुद्धिमता) है। आर्टिफिशियल इंटेलिजेंस वह तकनीक है, जिसके माध्यम से से मशीनों को मानव जैसी सोचने, सीखने निर्णय लेने और समस्याओं को हल करने की क्षमता प्रदान की जाती है। वर्तमान समाज में आर्टिफिशियल इंटेलिजेम केवल एक तकनीकी अवधारणा नहीं रह गया है, बल्कि यह हमारे दैनिक जीवन का अभिन्न अंग बन चुका है।

सबसे पहले शिक्षा के क्षेत्र में आर्टिफिशियल इंटेलिजेंस की भूमिका पर दृष्टि डाले, तो यह स्पष्ट होता है कि शिक्षा प्रणाली में व्यापक परिवर्तन आए है। आर्टिफिशियल इंटेलिजेस आधारित ऑनलाइन पोटफॉर्म छा की सीखने की गति और रधि के अनुसार अध्ययन सामग्री उपलब्ध कराते हैं। स्वास्थ्य क्षेत्र में भी आर्टिफिशियल इंटेलिजेंस ने उल्लेखनीय योगदान दिया है। इसकी सहायता से रोगों की शीघ्र पहचान, मेडिकल रिपोटी का विश्लेषण, रोबोटिक सर्जरी तथा दवाओं के शोध में तेजी आई है। इससे उपचार की गुणवत्ता में सुधार हुआ है।

अर्थव्यवस्था और रोजगार के क्षेत्र में आर्टिफिशियल इंटेलिजेंस ने कार्यप्रणाली को व्यापक रूप से प्रभावित किया है। जहाँ एक ओर मशीनों द्वारा स्वचालन से उत्पादन क्षमता में में वृद्धि हुई है. वहीं दूसरी ओर कुछ पारंपरिक नौकरियों पर संकट भी उत्पन्न हुआ है। तथापि, आर्टिफिशियत इंटेलिजेंस ने डेटा साइस, साइस, मशीन लर्निंग और तकनीकी अनुसंधान जैसे क्षेत्रों में नए रोजगार के अवसर भी सृजित किए हैं। इससे यह स्पष्ट होता है कि भविष्य में कौशल विकास और पुन प्रशिक्षण (री-स्किलिग) अत्यंत आवश्यक होगा।

हालांकि, आर्टिफिशियल इंटेलिजेंस के बढ़ते उपयोग के साथ नैतिक और सामाजिक चुनौतियों भी सामने आई है। डेटा गोपनीयता, साइबर सुरक्षा, एल्गोरिदमिक पक्षपात तथा मानव निर्णय की जगह मशीनों पर बढ़ती निर्भरता गभीर चिताओं का विषय है।

निष्कर्षतः, वर्तमान समाज में आर्टिफिशियल इंटेलिजेंस एक शक्तिशाली साधन के रूप में उभरा है. जो विकास और प्रगति के नए आयाम स्थापित कर रहा है। यदि आर्टिफिशियल इंटेलिजेस का उपयोग मानव कल्याण, समानता और नैतिकता को ध्यान में रखकर किया जाए, तो यह समाज को एक उज्ज्वाल और समृद्ध भविष्य की ओर ले जा सकता है।

ग्रामीण क्षेत्र की महिलाओं के जीवन में वर्तमान समस्या एवं चुनौतियांः देवघर जिला के संदर्भ में एक समाजशास्त्रीय अध्ययन

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शोध की समस्याः-भारत गांव का देश ग्रामीण समाज प्रकृति की गोद में बसवा मानव समूह है जिसमें सादगी स्पष्ट रूप से झलकता है यहां के अधिकांश लोग कृषि कार्य के द्वारा जीवनोपार्जनकरते हैं अतः संयुक्त परिवार देखने को मिलती है। ग्रामीण समाज मेंसड़क, बिजली, पानी, शिक्षा जैसे बुनियादी सुविधाओं का अभाव देखने को मिलता है। यहां तक की भोजन, आवास, शौचालय जैसी मूलभूत आवश्यकता की भी कमी है।शिक्षा के अभाव में ग्रामीण समाज में कई कुप्रथाएं छुआछूत, बाल-विवाह, पर्दा-प्रथा, डायन-प्रथा, दहेज- प्रथा, सती-प्रथा जौहर–प्रथा, आदि ग्रामीण समाज की महिलाके जीवन को और नीचे की ओर धकेल रही है।

गांव की महिलाएं सीधी, सरल,सुलझी एवं शर्मीले स्वभाव की होती है। ग्रामीण महिलाओं में यह गुण बचपन से ही उनकी मां एवं परिवार के द्वारा प्रदान की जाती है ग्रामीण समाज की लड़कियों को बचपन से ही घरेलू कार्यों में लगा दिया जाता है जिसके कारण ग्रामीण महिलाओं की दुनिया पति परिवार और संतान तक सीमित होकर रह जाता है।शिक्षा के अभाव में यह महिलाएं खुद अपने अधिकार को नहीं समझ पाती हैं और अगर जानकारी हो भी जाए तो उसका उपयोग नहीं कर पाती है। वे इन प्रथाओं को मर्यादा का नाम देकर जीवन भर निभाती है, उन्हें ईंधन जैसी बुनियादी जरूरतों को पूरा करने के लिए जंगल या पहाड़ से लकड़ी जलावन के लिए काट कर लाती है, जिसमें इन महिलाओं का समय, शक्ति और श्रम तीनों ही नष्ट होते हैंतथाइनसमस्या से ग्रामीण समाज की नारी का जीवन कष्ट और संघर्ष से भर जाता है।

शोध परिचय (भूमिका)ः- किसी भी परिवार या समाज की वास्तविक वास्तुकार स्त्रियां हैं, जो मौत से जूझकर अपने बच्चों को जन्म देती हैं।स्त्री ईश्वर का अनुपम देन मानी जाती है, जिसमें संसार के सृजन एवं संचालन की क्षमता होती है। वैदिक काल में स्त्रियों के लिए स्वर्णिम युग माना जाता था।"नारी यत्र पूज्यते रमन्ते तत्र देवता,, की अवधारणा प्रचलित थी, किंतु उत्तर वैदिक काल में नारी के जीवन में सारी स्वतंत्रता छीन ली गई तथा उन्हें कई प्रकार के वांछनाओं से जकड़ दिया गया।मध्यकालीन भारत में इस्लामी शासन होने के कारण नारियों को कई सामाजिक कुप्रथाओं से जकड़ दिया गया। बाल-विवाह, सती-प्रथा, जौहर-प्रथा, पर्दा-प्रथा जीवन का अभिन्न अंग बन गया। वर्तमानसमय में ग्रामीण महिलाओं को भोजन जैसी बुनियादी जरूरत का अभाव है, जिनके कारण कुपोषण तथा अन्य शारीरिक रोगों का शिकार होना पड़ता है। ग्रामीण क्षेत्रों में पानी का अभाव होने के कारण महिलाओं को कई किलोमीटर की दूरी तय करनी पड़ती है। फिर भी स्वच्छ जल नहीं मिल पाता है। रूढ़िवादिता और अंधविश्वास इस गहराई तक फैला हुआ है, कि स्वास्थ्य बिगड़ने पर डॉक्टर से पहले झाड़ू कराई जाती है। बात यहां खत्म नहीं होती, शिक्षा की कमी के कारण अपने स्वास्थ्य और अधिकार के प्रति जागरूक नहीं हो पाती है।शौच करने के लिए भी महिलाओं को दूर खेतों में जाना पड़ता है, मासिक-धर्म जैसी सामान्य प्रक्रिया में अछूत जैसा व्यवहार किया जाता है।अगर बात उनकेमान सम्मान की हो तो किसी भी परिस्थिति में महिलाओं को ही दोषी मानकर चरित्रहीन, कुल्टामानलिया जाता है।अगर किसी दुर्घटना या रोग से स्त्री का पति की मृत्यु हो जाती है तो उसे कुलक्ष्णा, अशुभ, अभागिन, एवं डायन मानकर प्रताड़ित किया जाता है। गर्भवती स्त्रियों को पुत्र प्राप्त करने की मशीन मानी जाती है।कई बार गर्भपात कराया जाता है एवं लिंग परीक्षण कराकर मादा भ्रूण हत्या करवा दी जाती है।

कृत्रिम बुद्धिमत्ताः एक आधुनिक क्रांति

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परिचय

कृत्रिम बुद्धिमत्ता जिसे अंग्रेजी में Artificial Intelligence (AI) कहा जाता है। कंप्यूटर विज्ञान की एक शाखा है जिसका उद्देश्य ऐसी मशीनें या सॉफ़्टवेयर बनाना है जो मानव मस्तिष्क की तरह सोचने, समझने और सीखने की क्षमता रखते हों। यह टेक्नालॉजी केवल गणना तक ही सीमित नहीं है, बल्कि इसमें समस्याओं को हल करने, भाषा को समझने और निर्णय लेने की क्षमता भी है।आज के युग में कृत्रिम बुद्धिमत्ता हमारे जीवन के हर पहलू में समाहित हो गई है। यहाँ कुछ महत्वपूर्ण उदाहरण दिए गए हैं। दैनिक जीवन में स्मार्टफोन में निहित आवाज से सक्रिय होने वाले एसिस्टेंट (जैसे सिरी या गूगल असिस्टेंट) और फेसबुक एवं यूट्यूब के अनुशंसाएं (Recommendations) कृत्रिम बुद्धिमत्ता (AI) द्वारा संचालित होती हैं।

शिक्षा एवं अनुसंधान : कृत्रिम बुद्धिमत्ता जटिल सेजटिलडेटा के विश्लेषण करनेऔर वैज्ञानिक अनुसंधान में सहयोगीसाबितहो रही है।

चिकित्सा (Medicine) : रोगों के निदान और उपचार के नए तरीके खोजने में AI महत्वपूर्ण भूमिका निभा रहा है।

कृत्रिम बुद्धिमत्ता (AI) के अनेक गुण हैं, कुछ दोष भी जिसके दुष्प्रभाव भीदेखने को मिला है यह कार्यों को शीघ्रता और सटीकता से पूरा करता है, जिससे मानवीय श्रम और समय की बचत होती है।

विशेषज्ञों का मानना है कि कृत्रिम बुद्धिमत्ता के बढ़ते उपयोग से भविष्य में बेरोजगारी की समस्या उत्पन्न हो सकती है क्योंकि मशीनें मनुष्यों की जगह ले रही हैं।

निष्कर्षः कृत्रिम बुद्धिमत्ता AI 21वीं शताब्दी की सबसे शक्तिशाली टेक्नालॉजी है। यदि इसका सही और सकारात्मक उपयोग किया जाए, तो यह मानवता के विकास में एक नया मील का पत्थर साबित हो सकती है। हालांकि, हमें इसके नैतिक उपयोग और मानवाधिकारों की रक्षा का भी ध्यान रखना होगा।

माध्यमिक विद्यालयों के विद्यार्थियों पर वातावरण का उनके मानसिक समायोजन एवं व्यक्तित्व पर प्रभाव

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सारांश

माध्यमिक विद्यालय के विद्यार्थियों के मानसिक समायोजन और व्यक्तित्व निर्माण में परिवेश की अत्यंत महत्वपूर्ण भूमिका होती है। किशोरावस्था विकास की एक संवेदनशील अवस्था है, जिसमें शारीरिक, भावनात्मक, सामाजिक तथा बौद्धिक स्तर पर तीव्र परिवर्तन होते हैं। इस अवस्था में विद्यार्थी अपने आसपास के वातावरण से अत्यधिक प्रभावित होते हैं, जिसमें परिवार, विद्यालय, सहपाठी समूह तथा व्यापक सामाजिक-सांस्कृतिक परिवेश सम्मिलित होता है। सहायक, सुरक्षित एवं सकारात्मक वातावरण स्वस्थ व्यक्तित्व के विकास तथा प्रभावी मानसिक समायोजन को प्रोत्साहित करता है, जबकि प्रतिकूल एवं नकारात्मक वातावरण भावनात्मक असंतुलन और व्यवहार संबंधी समस्याओं को जन्म दे सकता है। मानसिक समायोजन से तात्पर्य व्यक्ति की अपनी आंतरिक आवश्यकताओं तथा बाह्य परिस्थितियों एवं अपेक्षाओं के साथ संतुलन स्थापित करने की क्षमता से है। माध्यमिक स्तर के विद्यार्थियों के संदर्भ में मानसिक समायोजन के प्रमुख आयाम निम्नलिखित हैं–

- भावनात्मक समायोजन : तनाव एवं भावनाओं का उपयुक्त प्रबंधन
- सामाजिक समायोजन : सहपाठियों एवं शिक्षकों के साथ प्रभावी अंतःक्रिया
- शैक्षिक समायोजन : शैक्षणिक आवश्यकताओं एवं अपेक्षाओं के अनुरूप स्वयं को ढालना
- व्यक्तिगत समायोजन : सकारात्मक आत्म-अवधारणा एवं आत्मविश्वास का विकास

व्यक्तित्व मनोवैज्ञानिक विशेषताओं का वह गतिशील संगठन है, जो व्यक्ति के व्यवहार, विचारों एवं भावनाओं के प्रतिरूपों को निर्धारित करता है। किशोरावस्था में व्यक्तित्व का विकास न केवल आनुवंशिक कारकों से, बल्कि परवरिश, शिक्षा, सामाजिक संपर्क तथा सांस्कृतिक मूल्यों जैसे पर्यावरणीय कारकों से भी गहराई से प्रभावित होता है। इस प्रकार यह स्पष्ट है कि परिवेश माध्यमिक विद्यालय के विद्यार्थियों के मानसिक समायोजन एवं व्यक्तित्व के निर्माण में निर्णायक भूमिका निभाता है। एक स्वस्थ, सहायक एवं प्रेरणादायक वातावरण मनोवैज्ञानिक कल्याण तथा सकारात्मक व्यक्तित्व विकास को सुदृढ़ करता है। अतः किशोरों के सर्वांगीण विकास को सुनिश्चित करने हेतु परिवार, विद्यालय एवं समाज के समन्वित और सतत प्रयास अत्यंत आवश्यक हैं।