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क्षे.शि.सं. पुरतकालय, खजूरि  
दिनांक 10/11/2022  
हस्ताक्षर  
ISSN 0970-6607

आविष्कार

अक्टूबर 2022 वर्ष 52 अंक 10

अध्यक्ष एवं प्रबंध निदेशक  
कमोडोर अमित रस्तोगी (से.नि.)

प्रमुख  
एन.जी. लक्ष्मीनारायण

संपादक  
डॉ. अंकिता मिश्रा

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प्रकाशन अधिकारी  
खेमचंद

अधीक्षक  
बी. वी. मुरालीकृष्णन

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अरविन्द कोशिक  
दीपक तुली  
प्रवीन राजौरा  
जयसिंह



नेशनल रिसर्च डिवेलपमेंट  
कारपोरेशन

[वैज्ञानिक और औद्योगिक अनुसंधान विभाग,  
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• 'आविष्कार' नेशनल रिसर्च डिवेलपमेंट कारपोरेशन (एनआरडीसी) द्वारा प्रकाशित विज्ञान और प्रौद्योगिकी की लोकप्रिय विज्ञान मासिक पत्रिका है। • 'आविष्कार' में किसी लेख के प्रकाशन हेतु चयन के संदर्भ में संपादक का निर्णय अंतिम होगा। प्रकाशित लेखों और लेखकों द्वारा भेजे गए चित्रों की मौलिकता के संबंध में लेखक स्वयं उत्तरदायी होंगे। • 'आविष्कार' में प्रकाशित सामग्री का किसी भी रूप में उपयोग करने से पूर्व संपादक की अनुमति लेना आवश्यक है। • 'आविष्कार' में प्रकाशित किसी यांत्रिक, वैद्युत, इलेक्ट्रॉनिक आदि युक्ति के काम न करने की स्थिति में पत्रिका/एनआरडीसी उसके लिए उत्तरदायी नहीं होगी। • 'आविष्कार' में प्रकाशित विज्ञापनों में किए गए दावों के लिए पत्रिका और एनआरडीसी उत्तरदायी नहीं होगी।  
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अनौपचारिका, वर्ष 49 अंक 10, अक्टूबर, 2022

क्षेत्रीय शिक्षण समिति, अजमेर  
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समानमस्तु वो मनो यथा वः सुसहासति॥ ऋग्वेद

# अनौपचारिका

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वर्ष : 49 अंक : 10 आश्विन-कार्तिक वि.सं. 2078 अक्टूबर, 2022

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हंस, वर्ष 37 अंक 3, अक्टूबर, 2022

संपादक  
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प्रबंध निदेशक  
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दूरभाष : 011-41050047  
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मूल्य : 50 रुपए प्रति  
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की सहमति अनिवार्य नहीं है. साथ ही उनके मौलिक  
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मुद्रित. संपादक-संजय सहाय.

अक्टूबर, 2022

मूल संस्थापक : प्रेमचंद : 1930  
पुनर्संस्थापक : राजेन्द्र यादव : 1986

पूर्णांक-432 वर्ष : 37 अंक : 3 अक्टूबर 2022



आवरण: लाल रत्नाकर



क्षेत्र.शि.सं. पुस्तकालय, अजमेर.  
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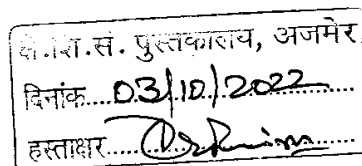
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International Journal of Science Education Vol.44, No. 5-6 May, 2022



**INTERNATIONAL JOURNAL OF SCIENCE EDUCATION**

Volume 44 Issue 5-6 2022

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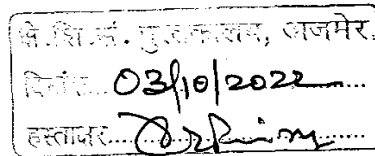
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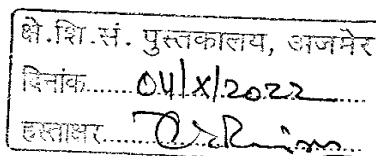
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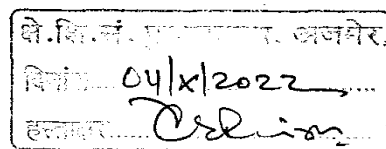
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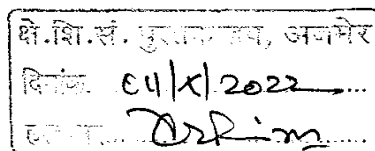
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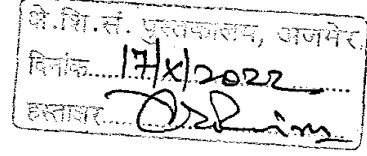
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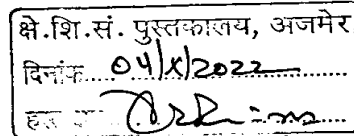
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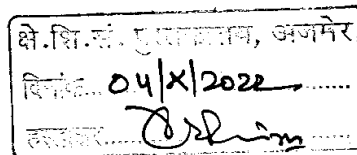
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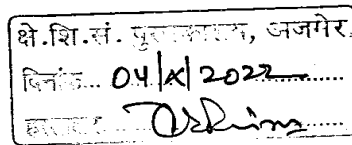
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के. वि. सं. पुस्तकालय, जयपुर  
दिनांक: 03/10/2022  
व्यक्ति: T.R. Singh

वर्ष-२८ ❖ अंक-३ ❖ पृष्ठ ८४

यू.जी.सी.-केयर लिस्ट में उल्लिखित

ISSN 2455-1171

<p>संस्थापक संपादक <b>पं. विद्यानिवास मिश्र</b> निवर्तमान संपादक <b>डॉ. लक्ष्मीमल्ल सिंघवी</b> <b>श्री मिलोकी नाथ चतुर्वेदी</b> संस्थापक संपादक (प्रबंध) <b>श्री श्यामसुंदर</b> प्रबंध संपादक <b>पीयूष कुमार</b> संपादक <b>लक्ष्मी शंकर वाजपेयी</b> संयुक्त संपादक <b>डॉ. हेमंत कुकरेती</b> उप संपादक <b>उर्वशी अग्रवाल 'उर्वी'</b> कार्यालय ४/१९, आसफ अली रोड, नई दिल्ली-०२ फोन : ०११-२३२८९७७७ ०८४४८६९२२६९ ई-मेल : sahyayaamrit@gmail.com शुल्क एक अंक—₹ ३० वार्षिक (व्यक्तियों के लिए)—₹ ३०० वार्षिक (संस्थाओं/पुस्तकालयों के लिए)—₹ ४०० विदेश में एक अंक—चार यू.एस. डॉलर (US\$4) वार्षिक—पैंतालीस यू.एस. डॉलर (US\$45) साहित्य अमृत के बैंक खाते का विवरण बैंक ऑफ इंडिया खाता सं. : 600120110001052 IFSC : BKID0006001 प्रकाशक, मुद्रक तथा स्वत्वाधिकारी पीयूष कुमार द्वारा ४/१९, आसफ अली रोड, नई दिल्ली-२ से प्रकाशित एवं न्यू प्रिंट इंडिया प्रा. लि., ८/४-बी, साहिबाबाद इंडस्ट्रियल एरिया, साइट-IV, गाजियाबाद-२०१००० द्वारा मुद्रित।</p>	<p>साहित्य अमृत</p> <p>❖ संपादकीय रामकथा ४ ❖ प्रतिस्मृति अवतार/ पांडेय बेचन शर्मा 'उग्र' ६ ❖ कहानी अज्ञात/ मीरा सीकरी १० अंशदान/ तुलसी देवी तिवारी २० पटाखों का पेड़/ मंजरी शुक्ला ३२ मैंने अपना नाम बदल लिया है/ कमलेश भारतीय ४० सफेद सियाह/ भावना शेखर ५४ रथ यहाँ पर रुका क्यों/ शोभा माथुर ब्रिजेंद्र ६६ ❖ लघुकथा भविष्यफल/ शेफालिका सिन्हा ४२ बासी रोटी/ प्रियंका द्विवेदी ५२ उजड़ी खेती/ हरीशचंद्र पांडे ५९ देश का भविष्य/ शेफालिका सिन्हा ६७ ❖ आलेख दीपावली : रोशनी का दिव्यबोध/ शास्त्री कोसलेंद्रदास १६ क्या है समुद्र-मंथन का वैज्ञानिक रहस्य?/ डी. डी. ओझा २४ प्रेमचंद का एक अज्ञात लेख : 'जाँज इलियट'/ कमल किशोर गोयनका ३४ लंदन में महात्मा बुद्ध की अस्थियाँ/ कादंबरी मेहरा ४४ ❖ कविता इतना ध्यान रहे/ बी.एल. गौड़ ९</p>	<p>गीत/ सुरेश अवस्थी १५ 'मैं शबरी हूँ राम की'/ उर्वशी अग्रवाल 'उर्वी' १९ गजलें/ बालस्वरूप राही २७ कविताएँ/ कीर्ति काले ३१ कविताएँ/ पुष्पा राही ३९ गजलें/ सुरेंद्र चतुर्वेदी ४३ हिंदी है माथे की बिंदी/ नीता सक्सेना ४६ गजलें/ सीमाब सुल्तानपुरी ४७ मंजिल तो शमशान है/ चंद्रपाल मिश्र 'गगन' ५३ जागो माँ!/ ऋता शुक्ल ६३ मुक्तक/ दिनेश रघुवंशी ६४ इक-दूजे के नाम/ हरकीरत हीर ६९ संघर्ष की धूप में/ ऋतु डिमरी नौटियाल ७५ ❖ राम झरोखे बेट के अग्निवीर से लेकर ताशवीर तक/ गोपाल चतुर्वेदी ३६ ❖ यात्रा-संस्मरण एकदा धर्मक्षेत्रे कुरुक्षेत्रे/ प्रेमपाल शर्मा ४८ ❖ लोक-साहित्य धनतेरस पर्व और लोक-संस्कृति/ कुभषण सोनी ६८ ❖ साहित्य का भारतीय परिपार्श्व कविताएँ/ मानस रंजन महापात्र ६० ❖ निबंध झर रहा है पारिजात/ सुमन चौरे २८ ❖ व्यंग्य समस्या दीवाली की/ पूरन सरमा ६२ ❖ साहित्य का विश्व परिपार्श्व जिगरी चार/ लुइगी पिरॉदेलो ७० ❖ बाल-संसार इस बार की दीवाली/ प्रिया देवांगन 'प्रियू' ७६ ❖ वर्ग-पहेली ७७ ❖ पाठकों की प्रतिक्रियाएँ ७८ ❖ साहित्यिक गतिविधियाँ ७९</p>
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साहित्य अमृत में प्रकाशित लेखों में व्यक्त विचार एवं दृष्टिकोण संबंधित लेखक के हैं। संपादक अथवा प्रकाशक का उनसे सहमत होना आवश्यक नहीं है।

University News Vol.60, No. 39, September 26- October 02, 2022

UNIVERSITY NEWS

Vol. 60 September 26-  
No. 39 October 02, 2022  
Price Rs. 30.00

A Weekly Journal of Higher Education  
Published by the Association of Indian  
Universities

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2 years	2200.00	900.00	400.00	300.00

Subscription is payable in advance by Bank  
Draft/MO only in favour of Association of  
Indian Universities, New Delhi.

Opinions expressed in the articles are those of  
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क्ष.शि.स. पुस्तकालय, जयपुर  
दिनांक 03/10/2022

## Developments in University Level Institutions in India

Sunil Behari Mohanty\*

Nations throughout the world realise the truth that higher education plays a crucial role in the development of nations. "Higher Education has given ample proof of its viability over the centuries and of its ability to change and to induce change and progress in society" (UNESCO 1998, p.2). Yash Pal (2009, p. 9) stated,

*"A university is a place where new ideas germinate, strike roots and grow tall and sturdy. It is a unique space, which covers the entire universe of knowledge. It is a place where creative minds converge, interact with each other and construct visions of new realities. Established notions of truth are challenged in the pursuit of knowledge."*

"In today's lifelong-learning framework, tertiary education provides not only the high-level skills necessary for every labor market but also the training essential for teachers, doctors, nurses, civil servants, engineers, humanists, entrepreneurs, scientists, social scientists, and myriad personnel." (Ramphèle 2002, p. ix). However, Van der Zwaan (2017, p.19, commenting on the transformation of the university concept stated that " Many believe that the old university has been transformed into a teaching factory, where students, as modern consumers, protest against the value for money they receive." Globally, there has been exponential expansion of universities (Frank and Meyer 2007, p. 289). "Higher education drives and is driven by globalisation. It trains highly skilled workers and contributes to the research base and capacity for innovation that determine competitiveness in the knowledge-based global economy. It facilitates international collaboration and cross-cultural exchange" (OECD 2009, p.13). "Governments pursue reforms to build world-class systems of higher education, which assure quality in both research and teaching" (Kearney, 2009, p. 11). According to OECD (2014), "Within education, higher education – is much more innovative than the primary and secondary levels – and is one of the most innovative sectors of the economy in terms of innovation in knowledge or methods." "Universities, in particular, are essential to achieving the SDGs because they can equip the next generation with the skills, knowledge and understanding to address sustainability challenges and opportunities and perform research that advances the sustainable development agenda". (Ahmadein, 2019, p.18). EUA 2021, pp 6-7) stated,

*"The higher education learning experience will nurture and enable the development of learners as creative and critical thinkers,*

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University News Vol.60, No. 40, 03-09 October, 2022

UNIVERSITY NEWS  
Vol. 60 October 03-09  
No. 40 2022  
Price Rs. 30.00

A Weekly Journal of Higher Education  
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दिनांक 10/10/2022  
हस्ताक्षर

## Gandhi, Field Work and Curricular Challenges: Experiences from *Padyatra*

Punita Harne\*

Communication for harmony in the rural area of Gujarat, India is a bare need today. How a *padyatra* (walk) in 4 villages of rural Gujarat can play a pivotal role in the development of that particular village and the life of journalism and mass communication students, their understanding of rural issues, problems, and challenges in the remote areas of Gujarat can be seen from the journey through this case study. What sort of communication is done in the rural areas of Gujarat, what is the pattern of the communication, and what is the vocabulary of the rural families in Gujarat observed and noted in this *padyatra*. This may not sound like a thematic research paper, but this is a document of first-hand fieldwork data.

Gandhi literally walked his way to independence. His innovative concept of Foot marches/*padyatras* was one of the many tactics that fetch India its freedom. In Gandhi's scheme of things, these foot marches were a vital part of Satyagraha, or passive, non-violent resistance. This created a nationwide ground-swell of potent, non-violent energy, which ultimately became the strength of the independence movement.

Gandhi travelled the length and breadth of India and then formed a firm opinion that India was predominantly an agrarian society. It cannot get lasting freedom from hunger, poverty, and wanting unless its villages became respectfully employed and self-reliant. Rural India was and is the foundation on which the superstructure of the Indian nation has rested. Gandhi's pioneering work in the village and social sector welfare through the practice of *Sarvodaya* has left an indelible mark on everyone, may it be an individual or an institution. Gujarat Vidyapith (Deemed-to-be-University founded by Mahatma Gandhi in 1920) is one to whom society is looking with hope.

In Gujarat Vidyapith as a part of its curricular activity students and teachers from every department have to go to the villages for five days. As per the need and demand of curricula, each department with its own methods of understanding the villages and ground realities, they come out with different data. This paper is based on such experiences.

### Communication and Extension: An Unbreakable Inter-dependency

Extension plays an important role in bringing about a change in human behavior and is closely related to communication, which acts

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University News Vol.60, No. 41, 10-16 October, 2022

UNIVERSITY NEWS  
Vol. 60 October 10-16  
No. 41 2022  
Price Rs. 30.00

A Weekly Journal of Higher Education  
Published by the Association of Indian  
Universities

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दिनांक 17/10/2022

## Dr. A P J Abdul Kalam: A Human Being Par Excellence

M S Kurhade\*

*We are all born with a divine fire in us. Our efforts should be to give wings to this fire and fill the world with the glow of its goodness.*

Dr. APJ Abdul Kalam

(15<sup>th</sup> October, 1931- 27<sup>th</sup> July, 2015)

Bharat Ratna Dr. Avul Pakir Jainulabdeen Abdul Kalam, the former President of India was born to a little educated boatman Jainulabdeen in Rameshwaram (Tamil Nadu). The family of Jainulabdeen was of ordinary means. However, they were determined to give young Kalam, the best of proper education. As life unfolded itself, Abdul Kalam not only grew in years but also grew in stature to become one of the best scientific brains of not just India but of international repute. "He is one of India's most distinguished scientists. He was responsible for the development of India's first satellite launch vehicle, SLV – 3 of strategic missiles, weaponization, and building local capability in critical technologies. Held senior positions in ISRO (Indian Space Research Organisation) and DRDO (Defence Research and Development Organisation) and PURA (Providing Urban Amenities in Rural Areas) before becoming Principal Scientific Advisor to the Government of India, a cabinet rank. He had the rare honor of being the recipient of all three highest civilian awards of Padma Bhushan, Padma Vibhushan, and Bharat Ratna, besides receiving some 30 honorary doctorates from all over the world," (Penguin Books writes on him).

The rocket scientist that he grew up to be called propelled him to be the Bharat Ratna in India, which took immense pride in making him the 11<sup>th</sup> President of India on 25<sup>th</sup> July, 2002. In India where 80% of the population consists of Hindus, Abdul Kalam was the 3<sup>rd</sup> Muslim President. He conveyed what he had learned from the above three programmes based on his personal experience.

- Whenever there is a dream in life, that transforms into a vision and the vision takes shape as many missions.
- The necessity of high-level thinking to transform the vision into missions.
- Acquisitions of knowledge from all sources.
- Working and working without boundary conditions till the realization of the mission.
- Leader absorbs the failure and takes responsibility and gives the credit for success to his team while executing the mission.
- Teachers and educationists should create leaders with these qualities in their students.

*The article is being published to commemorate the Birth Anniversary of the Former President of India, Dr. Avul Pakir Jainulabdeen Abdul Kalam.*

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