

**Automobile Engineering**

**Futuristic Classroom**

**Diet Trends in Gen Z**

**Automotive Safety**

**Devanagari Script**

**Mixed Reality**

**ISSN (Online): 2584-2749**

**December 2024**

**VOLUME-2 | ISSUE-12**



# for Advertisement



**Please Contact**  
**[managing-editor@entechonline.com](mailto:managing-editor@entechonline.com)**

# ENTECH

## Explore Your Passion

December 2024 | VOLUME 2 | ISSUE 12

ISSN (Online): 2584-2749

**CAREER PLANNING COMPANION FOR  
GRADE 8 to 12 STUDENTS**

**for aspiring**  
**Scientists**  
**Technocrats**  
**Engineers**  
**Mathematicians**

### About the Magazine

ENTECH is a magazine that comes out every month. It is for teenagers between the ages of 13 and 18. The magazine focuses on Science, Technology, Engineering, and Mathematics (STEM). It helps teens find out what they are interested in and what they love. ENTECH shows them how to turn their passion into a career. The magazine has short articles. These are written by professionals, innovators, researchers, and teachers.

### Magazine Particulars

<b>Title</b>	ENTECH
<b>Frequency</b>	Monthly
<b>ISSN</b>	2584-2749
<b>Publisher</b>	Coneixement INDIA (OPC) Pvt Ltd
<b>Address</b>	Fl 201, BLD A2, Shivsagar City, PH 1, SN 17, Wadgaon Bk, Pune 411041 Maharashtra INDIA
<b>Editor In Chief</b>	Dr. Charudatta Subhash Pathak
<b>Copyright</b>	www.entechonline.com
<b>Starting Year</b>	2023
<b>Subject</b>	Science, Technology, Engineering and Mathematics (STEM)
<b>Language</b>	English
<b>Publication Format</b>	Online
<b>Email ID</b>	editor@entechonline.com
<b>Mobile Number</b>	+918788123422
<b>Website</b>	https://entechonline.com



# ENTECH

## Explore Your Passion

December 2024 | VOLUME 2 | ISSUE 12

ISSN (Online): 2584-2749

for aspiring  
Scientists  
Technocrats  
Engineers  
Mathematicians

## Editorial Board

### Dr. Charudatta S. Pathak, Editor In Chief

Director, Coneixement INDIA Pvt Ltd PUNE  
FL 201, BLDG A2, Shivsagar City, PH I, S.N. 17/1, Wadgaon BK, Pune - 411041  
director@coneixement.in

### Dr. Mani S Manivasagam

Technical Director, 3D Engineering Automation LLP  
4th floor, Shreyas Crest Office 404-5, 1/5-7,  
Pashan – Sus Rd, Baner, Pune - 411045  
Mani.s@3dengg.com

### Dr. P. P. Deshpande

Faculty, Department of Metallurgy and Materials Engineering, COEP  
Tech University  
Wellesely Rd, Shivajinagar, Pune-411 005  
ppd.meta@coeptech.ac.in

### Dinesh Joshi

Principal Consultant, Prolific Consultants  
C - 4, Shreeram Apartments, Suvarna Baug Colony, Kothrud, Pune - 411038  
dinesh.joshi@prolificconsultants.co.in

### Mrs. Reshu Aggarwal

Principal Consultant, Coneixement INDIA Pvt Ltd  
A 701 Prestige Heights, Near Daulat Petrol Pump  
Bhugaon Pune - 411215  
reshu.aggarwal@coneixement.in

### Dr. Sandeep Mukund Shiyekar

Professor of Civil Engineering, D Y Patil College of Engineering, Sector 29,  
Nigdi Pradhikaran,  
Pimpri-Chinchwad, near Akurdi Railway Station,  
Pune - 411044  
smshiyekar@dypcoeakurdi.ac.in

### Dr. Akbar Ahmad

Visiting Faculty, Britts Imperial University College  
Flat no 15, Golden Court Society, Aundh Road,  
Pune - 411020  
akbar.ahmad@brittsimperial.com

### SV Raman. MSc, BEd, MBA, MRSC

A member of Royal society UK having 17 years of teaching experience  
with innovative teaching methods. Currently, he is working as PGT  
Physics; Air force School; Jalahalli.  
svraman2040@gmail.com

### Dr. Ganesh Kakandikar

Professor of Mechanical Engineering, MIT WPU  
S.No.124, Paud Road, Kothrud, Pune - 411038  
ganesh.kakandikar@mitwpu.edu.in

### Dr. Syed Alay Hashim

Associate Professor, Alliance University  
Chikkahagade Cross, Chandapura - Anekal Main Road, Anekal, Bengaluru  
– 562 106  
syed.hashim@alliance.edu.in

### Dr. Sunita Singh

Assistant Professor, Navyug Kanya Mahavidyalaya  
Deen Dayal Marg, Lucknow - 226004  
dksunita1402@gmail.com

### Mrs. Jaya Ghosh

Scientific Advisor, Coneixement INDIA Pvt Ltd  
AVJ Heights, I - 1703  
Plot No. GH 12/2 Sector Zeta 1  
Greater Noida, UP, PIN 201306

### Dr. Andleeb Zehra

Visiting Professor, MIC, Maldives  
Flat no 15, Golden Court Society, Aundh Road, Pune - 411020  
andleeb.zehra@miccollege.edu.mv

### Dr. Archana Ainapure

Vice President at Texas School of Mental Health  
Pune  
archanaainapure41@gmail.com

### Nida E Falak

Assistant Professor at the Department of Biotechnology, Khalsa College,  
Patiala.  
nidaefalak380@gmail.com

### Mohini Modak, Executive Editor

Director - Horizon Web Technologies  
vmmodak@gmail.com





[www.indiaasha.org](http://www.indiaasha.org)

Give a helping hand to those who need it  
**BRING HOPE!**  
Don't Delay Give Today!

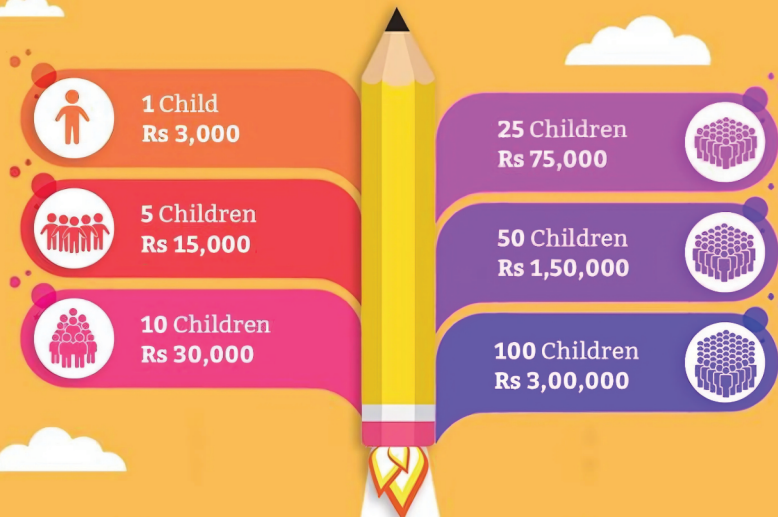
## About Us

IndiaAsha (Asha Foundation) is a nonprofit organization that actively promotes education, civic duties, healthcare, sustainable livelihood, and other social causes since 2001. With our vast experience & deep local expertise, our projects address critical issues affecting India in the 21st century like economic development, women's empowerment, environment, education, and personality development.



## Help us to create a Social and Emotional Impact!!

Support our children by contributing Just **Rs. 250/-** monthly



Scan To Help

Donations made to  
**IndiaAsha (Asha Foundation)**  
will qualify for a **50% tax exemption** under  
section **80 G** of the income tax act, 1961

**JOIN US**

**HELP FOR A CAUSE**



## What We Do

Our objective is to contribute towards economic development, capacity building, social and physical well being of people in need.

For more than **20 years** we have touched lives of **7 Lakhs +** people and moving ahead with a stronger force and enhanced vision!

**How can you support us ? Reach our Team of enthusiast**

+91-705 864 7180

info@indiaasha.org

www.indiaasha.org

# ENTECH

for aspiring  
Scientists  
Technocrats  
Engineers  
Mathematicians

## Explore Your Passion

December 2024 | VOLUME 2 | ISSUE 12

ISSN (Online): 2584-2749

19  
Redefining Automotive Safety

27  
Science  
News

43  
Technology  
News

7  
EDITORIAL  
DEMOCRATIZING SCIENTIFIC LITERATURE FOR ALL

9  
EESHAN RANADE  
AUTOMOBILE ENGINEERING: MY JOURNEY FROM PASSION TO PROFESSION

13  
NAVIN KABRA  
THE SOUND SCIENCE OF THE DEVANAGARI SCRIPT

16  
DR. MEENAL SOMAN  
DIET TRENDS IN GEN Z

19  
LAKSHMI PRASAD BHATTA AND NARASIMHA K  
REDEFINING AUTOMOTIVE SAFETYG AI AND ML

22  
DINESH JOSHI  
AR, VR, XR, AND MIXED REALITY: THE FUTURE OF LEARNING SCIENCE

27  
SCIENCE NEWS

43  
TECHNOLOGY NEWS

### EESHAN RANADE

"THE HANDS-ON LEARNING IN MY AUTOMOBILE ENGINEERING PROGRAM GAVE ME THE CONFIDENCE TO TACKLE REAL-WORLD CHALLENGES IN THE INDUSTRY."

