



# **.B. INSTITUTE OF ENGINEERING & TECHNOLOGY**

**(UGC AUTONOMOUS)**

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**Bhaskar Nagar, Moinabad Mandal, R.R. District, Hyderabad -500075**

## **J Bhaskar Rao Memorial 1st International Conference on Advanced Applications of Technology and Management (AATM-2023)**

**Date: 10<sup>th</sup> to 11<sup>th</sup> March, 2023**

**Mode: Offline**

## IMPORTANT DATES

Date	Action
15th Feb 2023	Last Date of paper submission
25th Feb 2023	Notification of acceptance
26th Feb 2023	Date of registration
1st Mar 2023	Last date for camera ready paper submission

## REGISTRATION CHARGES

S.No	Participants	Fees (INR)	Fees (USD)
1.	Registration for Author (Faculty)*	2000	25
2.	Registration for Author (Student)*	1500	20
3.	Participants from Industry	2200	30
4.	Participants from Academia	500	6

\*If the paper is selected to be published in any peer reviewed journal then charges will be applicable as per the journal publication fee.

## PAPER SUBMISSION

Submit your paper

<https://easychair.org/my/conference?conf=aatm2023>

## VISIT OUR WEBSITE

<https://www.jbiet.edu.in/aatm>



SCAN TO REGISTER

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### STUDENT COORDINATOR

DIKKALA NEMISH, 4TH B TECH.  
HARSHITH KOUNDINYA, 4TH B TECH



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## J BHASKAR RAO MEMORIAL 1ST INTERNATIONAL CONFERENCE ON “ADVANCED APPLICATIONS OF TECHNOLOGY AND MANAGEMENT” (AATM-2023)

10<sup>th</sup> - 11<sup>th</sup> March, 2023

## DEPARTMENT OF ECE

J. B. INSTITUTE OF ENGINEERING  
& TECHNOLOGY  
(UGC AUTONOMOUS)  
HYDERABAD



# J BHASKAR RAO MEMORIAL 1ST INTERNATIONAL CONFERENCE ON “ADVANCED APPLICATIONS OF TECHNOLOGY AND MANAGEMENT”

AATM-2023 will take place in JBIET, Hyderabad, the capital of Telangana, India on 10th March- 11th March, 2023. AATM - 2023 is a multi-disciplinary, peer review international conference on ADVANCED APPLICATIONS OF TECHNOLOGY AND MANAGEMENT that provides a forum for the exchange of latest technical information, the dissemination of the high-quality research results, the presentation of the new development area and the debate and shaping of future directions and priorities for advanced system development, modern communications and applications. Towards this end, the conference will be a venue in which experts, scholars, and practitioners can present new findings.

All Accepted papers will be published in peer reviewed journal with ISBN number indexed with open access and google scholar. Best Paper Awards will be presented to encourage the participants.

## CONTACT US

### Department of Electronics & Communication Engineering, JBIET.

Bhaskar Nagar, Yankapally Village, Moinabad  
Mandal, R.R. Dist.-75, Telangana  
Phone Nos: 8919589187, 7978876463  
Website: <http://www.jbiet.edu.in/aatm/>  
Email: [aatm2023.ece@jbiet.edu.in](mailto:aatm2023.ece@jbiet.edu.in)

## OBJECTIVE

The primary objective of the conference is to provide opportunity for academicians, industry experts, practitioners, professionals, researchers and policy makers from different fields to engage in discussion based on issues related to the different fields in Engineering and Technology. It will also provide a platform to get acquainted with latest developments and trends in the field of science and Technology. This forum will facilitate interaction among members inside and outside their own respective disciplines to enjoy the fellowship of other professionals and scholars in the field.

## CONFERENCE TOPICS

Conference topics are given below, but not limited.

- Wireless Communication
- Sensor Networks
- VLSI
- Nano Technology
- Robotics
- Control Systems
- MIC Technology
- Signal Processing (Generic, Biomedical, Speech, Image, Vision)
- Smart control, Green energy, Smart Grid
- Artificial intelligence, Deep learning, Big Data.
- Automation/ Smart control Industry Automation.
- IOT based Social and industrial
- High Performance Computing.

Technical Support by the HEI Student Branches



## ABOUT JBIET

Spread across huge green and clean cinematic campus, The J.B. Institute of Engineering and Technology is a UGC Autonomous Institute accredited by NAAC and NBA, approved by AICTE & permanently Affiliated by JNTU, Hyderabad, Telangana, India. JBIET is one among the best 10 Engineering Colleges of the Telangana State, continues to strive to impart technical and professional education of high standards. The institute is also the most preferred institution for aspiring students and their parents and has earned itself the reputation of being a center of academic excellence in many ways over the years. The Placement record of JBIET over the years is a proof of our right efforts in enabling the best in the class engineering, technical and professional education to aspirants.

## ABOUT THE DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

The Department of ECE is best known for its talented and dedicated professionals renowned for their excellence in various specializations in the field of Electronics & Communication Engineering. The Department is provided with state of the art technological tools incorporated in all the existing laboratories. For the last ten years, the students of ECE, who walked out of the portals of the institute successfully, holding their degrees, were immediately inducted into the MNCs of high reputation in India & abroad. The intake of B.Tech Program is 120 and of M.Tech program in VLSI System Design is 24. Department of ECE is having professional societies like IETE & IEEE student chapters etc.





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HYDERABAD



## SILVER JUBILEE CELEBRATIONS

J.BHASKAR RAO MEMORIAL 1<sup>st</sup> INTERNATIONAL CONFERENCE  
ON

ADVANCED APPLICATIONS OF TECHNOLOGY  
AND MANAGEMENT  
(AATM-2023)

10 - 11 March



**Chief Guest**  
**Dr. T. Raghu**

Scientist "H"

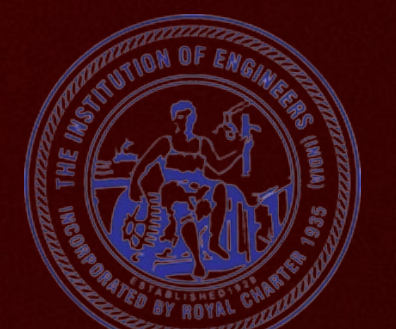
NNSG, DMRL, DRDO Fellow (Formerly  
Outstanding Scientist "H" & Associate Director)  
DMRL Hyderabad, Kanchan Bagh Hyderabad.



**Keynote Speaker**  
**Dr. Kamol Wasapinyokul**

College of Advanced Manufacturing Innovation King  
Mongkut's of Technology  
Soi Chalongkrung Ladkrabang, Bangkok

DEPARTMENT OF CSE,IT,AIIML,AIDS,ECM,ECE,EEE,MECH,CIVIL,MBA,S&H.





**Brief BIODATA of Dr. T. RAGHU**  
**Outstanding Scientist & Associate Director, DMRL - HYDERABAD**



Dr T. Raghu was born on 14<sup>th</sup> June 1962 in Sadasivpet, Sangareddy District of Telangana. He obtained

- B.E. (Metallurgy) with Honors from NIT, Durgapur in 1984
- M. Tech. (Materials Technology) from IIT - Bombay, Mumbai in 1986.
- Ph.D. from the metallurgical engineering department of IIT- Bombay, Mumbai in 1998

In the last 34 years he is engaged in active scientific research in DRDO and contributed significantly for the advancement of Defence Science and Technology. Currently he is a DRDO Fellow. Formerly he was Scientist 'H' (Outstanding Scientist), Associate Director and leading the Near Net Shape Group, Aeronautical Materials Division at DMRL.

He has steered several programs on processing of materials and development of several product technologies through extensive applied research.

- Development of materials includes advanced high temperature Al-alloys by powder metallurgy; Synthesis and processing of advanced alloys by Mechanical alloying (such as copper-tungsten, Al-alloys, Al-composites etc).
- Notable among the product technologies are
  1. Aero engine Ti-alloy components (Discs & Shafts) for Adour Engine (Jaguar Aircraft), Kaveri Engine (Tejas, LCA Aircraft), Laghushakti Engine (UAV).
  2. Karabiner – a mountaineering accessory, lightweight made from Al-alloy for Indian Army. TOT to OF-Dehradun and its bulk production is established

Currently he is steering programs on

1. Development of metallic thermal protection system for hypersonic cruise vehicles.
2. Development of Aeroengine components (Discs & Blisks out of advanced Ni- alloys)
3. Development of innovative and upcoming severe plastic deformation techniques like ECAP, RUE, CGP, MAIF and several others for producing fine grained structure in bulk materials.

His research field of interest includes: Thermo-mechanical Processing of Materials (Bulk/sheets/powders), Process modeling & Simulations, Additive manufacturing.

Among various awards the prominent are the (a) '**Metallurgist of the year**' presented by Ministry of Steel, Govt. of India - 2016 (b) DRDO '**Scientist of the year**' award presented by Ministry of Defence, Govt. of India- 2016 (c) '**Agni Award for excellence in Self Reliance – 2007**' from DRDO for the Research and development activities on Titanium and (d) '**DRDO Technology Group Award-2003**' for the Development of Disc Forgings of Aero engines by near isothermal forging (e) DRDO prestigious award for Performance Excellence – 2020.

He has published a number of papers (112 Nos.) in peer reviewed journals of international repute and also guided many engineering students for their research projects in B. Tech.(20 batches), M. Tech. (12 batches), and Ph.D (8 students). He is a life member of IIM Kolkata (currently he is a member of its National Council) and PMAI, Pune.



# Profile

## Kamol Wasapinyokul

kamol.wa@kmitl.ac.th

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### Educations

- **Ph.D.**, Electrical Engineering, University of Cambridge, UK
- **M.Sc. (with Distinction)**, Optics and Photonics, Imperial College London, University of London, UK
- **B.Eng.** (2001), Mechanical Engineering in Automotive Engineering, Chulalongkorn University, Thailand

### Works

- **Assistant Professor in Electronics Engineering** (2016 – )  
College of Advanced Manufacturing Innovation  
King Mongkut's Institute of Technology Ladkrabang, Thailand

### Executive positions

- **Head of Program Committee, Doctor of Philosophy in Advanced Manufacturing Innovation** (2021 – )  
College of Advanced Manufacturing Innovation,  
King Mongkut's Institute of Technology Ladkrabang, Thailand
- **Associate Dean for Planning and Financial Affairs** (2020 – )  
Faculty of Information Technology,  
King Mongkut's Institute of Technology Ladkrabang, Thailand
- **Head of Department of Manufacturing System Technology** (2019 – 2020)  
College of Advanced Manufacturing Innovation,  
King Mongkut's Institute of Technology Ladkrabang, Thailand
- **Assistant to the Dean for Planning and Financial Affairs** (2016 – 2019)  
College of Advanced Manufacturing Innovation,  
King Mongkut's Institute of Technology Ladkrabang, Thailand

### Publications:

- Whongsatorn Pawong, Kamol Wasapinyokul, "Impressive response of spin-coated ZnO nanoparticle UV-sensitive devices with various thicknesses under different UV intensities", *Journal of Electronic Materials*, 50(9), 5375-5386, 2021. DOI: 10.1007/s11664-021-09061-w.
- Sarunrit Kesornkhup, Adisorn Tuantranont, Tanom Lomas, Chakrit Sriprachuabwong, Kamol Wasapinyokul, "Accuracy of Swanepoel method in calculation of polymer film thicknesses", *Acta Physica Polonica A*, 140(2), 113-121, 2021. DOI: 10.12693/APhysPolA.140.113.
- Kamol Wasapinyokul, Tanakrit Panjasamanwong, Worathat Ponkasemsuk, Chakrit Sriprachuabwong, Tanom Lomas, "Mathematical model for thickness of off-center spin-coated



polymer films”, *Journal of Applied Polymer Science*, 137(6), 48356, 2020. DOI: 10.1002/app.48356.

- Kamol Wasapinyokul, Santhad Chuwongin, Ajchara Charoensook, “Effects of baffle reflection and shadow in an integrating sphere on the total luminous flux measurement of a linearly-shaped lamp”, *Acta Imeko*, 6(4), 105–112, 2017. DOI: 10.21014/acta\_imeko.v6i4.443.
- Kamol Wasapinyokul, W. I. Milne, D. P. Chu, “Origin of the threshold voltage shift of organic thin film transistors under light illumination”, *Journal of Applied Physics*, 109(8), 084510, 2011. DOI: 10.1063/1.3575334.
- Xuhua Wang, Kamol Wasapinyokul, Wei D. Tan, Ruth Rawcliffe, Alasdair J. Campbell, Donal D. C. Bradley, “Device physics of highly sensitive thin film polyfluorene copolymer organic phototransistors”, *Journal of Applied Physics*, 107(2), 024509, 2010. DOI: 10.1063/1.3273332.
- Kamol Wasapinyokul, W. I. Milne, D. P. Chu, “Photoresponse and saturation behaviour of organic thin film transistors”, *Journal of Applied Physics*, 105(2), 024509, 2009. DOI: 10.1063/1.3068359.



## REPORT

### **J Bhaskar Rao Memorial 1st International Conference on Advanced Applications of Technology and Management (AATM) 2023**

10<sup>th</sup> & 11<sup>th</sup> MARCH, 2023, JBIET

#### **ABOUT AATM-2023**

##### **Chief Guest:**

*Dr. T Raghu Scientist 'H', Director NNSG, DRDO Fellow (Formerly Outstanding Scientist & Associate Director @ DMRL, Hyderabad*

##### **Keynote Speaker:**

*Dr. Kamol Wasapinyokul, Faculty of College of Advanced Manufacturing Innovation King Mongkut's Institute of Technology Ladkrabang Bangkok, Thailand.*

J Bhaskar Rao Memorial 1st International Conference on Advanced Applications of Technology and Management (AATM) 2023 was organized in JBIET, Hyderabad, Telangana, India on 10<sup>th</sup> March-11<sup>th</sup> March, 2023.

AATM - 2023 is a multi-disciplinary, peer review international conference on recent trends in applications of engineering and management. The Aim of this conference is to provide a forum for the exchange of latest technical information, the dissemination of the quality research results, on field application, on set of new development area and the debate, also shaping of future directions based on artificial intelligence system development, modern communications, technology in health sector.

The Conference started by the inaugural function chaired by, Dr. T. Raghu, Scientist 'H', Director NNSG, DRDO, Sri.J.V. KrishnaRao, Secretary, JBES, Maj. Gen. Dr. S. S. Dasaka, CEO, JBGEI, Dr. P.C. Krishnamachary, Principal, JBIET, Dr. Towheed Sultana, HOD, ECE, Dr. Anindya Jana, Dean, IIC.

Welcome address was delivered by Dr. Sultana, HOD, ECE. She explained the significance of the Conference name. She welcomed all the authors and participants for the two days long conference sessions.



Sri. J.V. Krishna Rao, Secretary, JBES, welcomed all the Participants and authors along with Chief Guest Dr. T. Raghu. He thanked Dr. P.C. Krishnamachary and Dr. Towheed Sultana for their initiatives of organizing the conference.

Dr. T. Raghu, delivered his lecture on latest communication technologies. He also focused on recent trends in research for Defence sectors.

After the Speech of Principal, CEO and Dean R&D, the participants and the guests went for a lunch break. Post of that lunch break the sessions started. There were 8 tracks hosted by different eminent persons from Industry and Academia.

The first day of the conference ended by 5:00 PM.

The Second Day of the conference started by the Keynote Speech of Dr. Kamol Wasapinyokul, Faculty of College of Advanced Manufacturing Innovation King Mongkut's Institute of Technology, Ladkrabang Bangkok, Thailand. He discussed about the Biosensors and recent trends in Biosensor based Devices.

Post speech the sessions started.

The conference sessions were ended by 5:00 PM. Post of that the Best Paper Awards from different tracks were announced.

Dr. Anindya Jana delivered Vote of Thanks to all the present members after the Cultural events.

AATM 2023 received about 215 articles by 481 authors. Out of this 117 papers by 214 authors were accepted for presentation. After successful presentation, all presented papers were communicated to International Journal of System Design and Information Processing journal for publication. Around 50 participants from various industry and academia attended the conference.



## Gallery



AATM 2023 Inauguration by honorable chief guest Dr. T Raghu, Scientist (H), DRDO Hyderabad on 10-03-2023

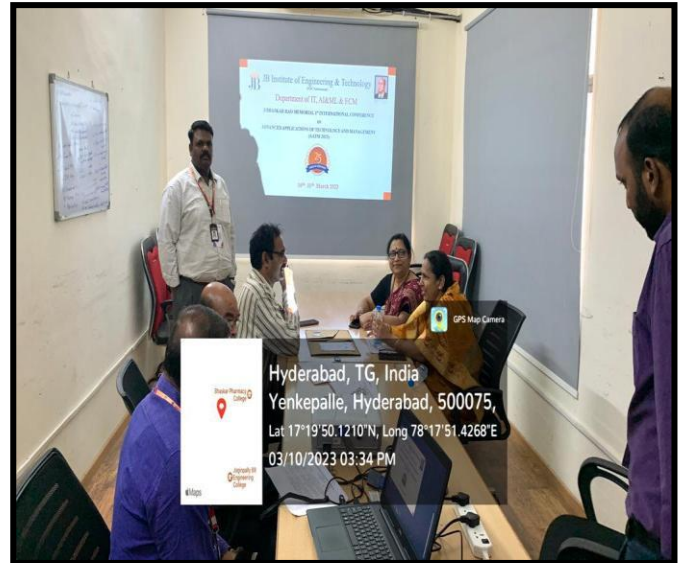
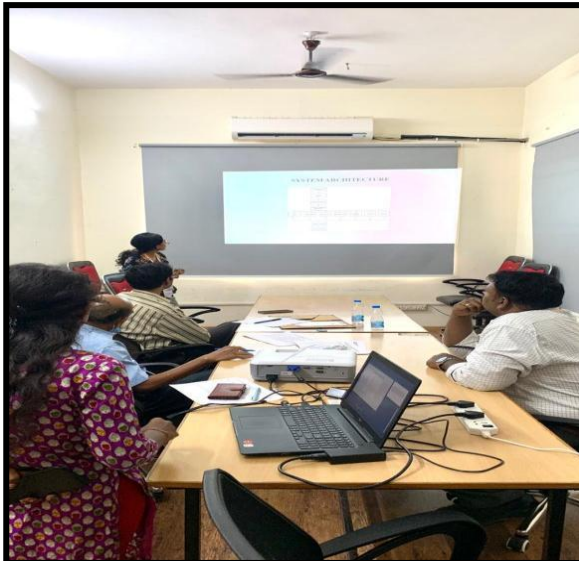


Key Note Speech by Dr. Kamol Waspinyokul on Biosensors and recent trends in Biosensor based Devices



Paper Presentation by Students





**Paper Presentations by Faculty's**



**Felicitation to Dr. Kamol Waspinyokul, Bangkok by Honorable Secretary Sri J V Krishna Rao Garu and Other dignitaries**



**Faculty's and Students at Lunch**



**Presenting Best Paper Award**



ఆయా మండలాల నాయకులు ఉన్నారు.

## అవగాహన సదస్సులతో విజ్ఞానం

• డిఆర్డీఓ శాస్త్రవేత్త డా.రఘు



**మన తెలంగాణ/మొయినాబాద్:** అవగాహన సదస్సులతో విజ్ఞానం పెంపొందుతుందని డిఆర్డీఓ శాస్త్రవేత్త డాక్టర్ టి.రఘు అన్నారు. మండలంలోని అమ్మపూర్ చౌరస్తాలో గల జేబీ ఇన్స్టిట్యూట్ ఆఫ్ ఇంజనీరింగ్ అండ్ టెక్నాలజీ కళాశాలలో జేబీ విద్యా సంస్థల కార్యదర్శి కృష్ణారావు ఆధ్వర్యంలో ఏర్పాటు చేసిన అంతర్జాతీయ అవగాహన సదస్సులో డిఆర్డీఓ శాస్త్రవేత్త డాక్టర్ టి.రఘు పాల్గొని మాట్లాడారు. సదస్సులు నిర్వహించడం ద్వారా

విద్యార్థుల్లో ఆలోచనాశక్తితోపాటు సృజనాత్మక పెంపొందుతుందన్నారు. ఆయా సదస్సుల ద్వారా విద్యార్థులు ఒకరిలో ఉన్న అనుమానాలను ఇతరులతో పంచుకొని నివృత్తి చేసుకుంటారన్నారు. ప్రపంచంలో అత్యధిక జనాభా గల దేశాల్లో మన దేశం ప్రథమ స్థానంలో ఉందని, అత్యధిక శాతం యువత ఉన్న దేశం ఏదైనా సాధించాలనుకుంటే ఇట్టే సాధిస్తుందన్నారు. రెండు రోజులపాటు సాగే అవగాహన సదస్సులతో ఎన్నో విషయాలను అవగతం చేసుకుంటారన్నారు. అదేవిధంగా థాయిలాండ్ దేశానికి చెందిన బ్యాంక్ కళాశాల ప్రొఫెసర్ డాక్టర్ కమలేష్ మాట్లాడుతూ.. పరిశోధనల్లో టెక్నాలజీలు కీలక పాత్ర పోషిస్తాయన్నారు. కొత్త టెక్నాలజీలు విద్యార్థులకు ఎంతో మేలు చేస్తాయని, ఈ అవకాశాలను పూర్తిస్థాయిలో సద్వినియోగం చేసుకోవాలని కోరారు. ఈ కార్యక్రమంలో ప్రిన్సిపాల్ కృష్ణమూచారి, డాక్టర్ నీరజ్ ఉపాధ్యాయ, డాక్టర్ సుల్తానా, డాక్టర్ పీకే ప్రసాద్, శ్రీరాజ్ కుమార్ పాల్గొన్నారు.

Date: 11/03/2023, Edition: Hyderabad Main, Page: 6  
Source : <https://epaper.manatelangana.news/>

## వైజ్ఞానిక సదస్సులతో నైపుణ్యం



మాట్లాడుతున్న డిఆర్డీఓ సైంటిస్ట్ రఘు

**మొయినాబాద్ రూరల్:** వైజ్ఞానిక సదస్సులు నిర్వహించడం ద్వారా విద్యార్థులలో నైపుణ్యం పెరుగుతుందని డిఆర్డీఓ సైంటిస్ట్ డాక్టర్ టి రఘు అన్నారు. శుక్రవారం మండలంలోని అమ్మపూర్ జేబీ ఇన్స్టిట్యూట్ ఆఫ్ ఇంజనీరింగ్ అండ్ టెక్నాలజీ కళాశాలలో జేబీ విద్యా సంస్థల కార్యదర్శి కృష్ణారావు ఆధ్వర్యంలో అడ్వాన్స్డ్ అప్లికేషన్స్

డిఆర్డీఓ సైంటిస్ట్ రఘు

ఆఫ్ టెక్నాలజీ, మేనేజ్మెంట్ (ఎమిటిఎం)-2023 పేరుతో అంతర్జాతీయ సదస్సు నిర్వహించారు. ఈ కార్యక్రమానికి రఘు ముఖ్యఅతిథిగా హాజరై మాట్లాడారు. సదస్సులు నిర్వహించడం వల్ల విద్యార్థుల్లో ఉన్న సమస్యలు పరిష్కారమవుతాయని పేర్కొన్నారు. ఇలాంటి కార్యక్రమాల్లో నిర్వహించడం వల్ల విద్యార్థుల్లో స్వేచ్ఛా భావం పెరిగి కొత్త కొత్త విషయాలు తెలుసుకునే అవకాశం ఉంటుందన్నారు. అనంతరం థాయిలాండ్ దేశ బ్యాంక్ కళాశాల ప్రొఫెసర్ డాక్టర్ కమలేష్ మాట్లాడుతూ.. పరిశోధనలో టెక్నాలజీలు ఎంతో పెరిగిపోయాయని తెలిపారు. విద్యార్థులు నూతన టెక్నాలజీలో కొత్త విధానాలతో దూసుకుపోవాలన్నారు. ఈ సదస్సులో దాదాపు 200 మంది విద్యార్థులు పాల్గొన్నారు. కార్యక్రమంలో ప్రిన్సిపాల్ కృష్ణమూచారి, డాక్టర్ నీరజ్ ఉపాధ్యాయ, డాక్టర్ సుల్తానా, డాక్టర్ పీ.కె. ప్రదాన్, శ్రీరాజ్ కుమార్ తదితరులు పాల్గొన్నారు.

రాండమ్

సాక్షి