

National Workshop on  
**“EMBEDDED SYSTEMS DESIGN USING ARDUINO”**  
Organized by Physics & Electronics Association, KBN College  
(PEAK)

29<sup>th</sup> September 2016 – 1<sup>st</sup> October 2016.  
Inaugural Session on 29<sup>th</sup> September 2016



**Dr. V. Narayana Rao, Principal  
addressing the gathering**



**Sri U. Sambasiva Rao, President  
explaining the importance of workshops**



**Sri S. V. S. M. Razith Kumar, Secretary &  
Correspondent addressing the gathering**



**Sri. Ravuri Subba Rao, Committee  
Member KBNC, addressing the gathering**



**Staff & Students at the Workshop**



**Dr. P. B. Sandhya Sri, Head, Dept. of Physics, explaining the theme of the Workshop**



**Dr. J. Lakshmana Rao, HOD, ECE, PSR & CMR Eng. College is explaining about arduino**



**Introduction of the Chief Guest by Ms. Jwala Poornima, Lecturer, Dept. of Physics**



**Keynote Address by Dr. J. Chandra Bose, Director, Yagnamayaya Tech Suit, Chennai**



**Felicitation to Dr. J. Chandra Bose,**



**Felicitation to Dr. J. Lakshmana Rao**



**Vote of thanks by Sri Ch. Nagabhushanam, Lecturer, Dept. of Physics**

TECHNICAL SESSION - I (30.09.2016)



**Dr. J. Chandra Bose, Director, Yagnamayaya Tech Suit, Chennai explaining students queries**



TECHNICAL SESSION - II (01.10.2016)  
Staff Monitoring the Technical Session



**Valedictory Session on 01.10.2016**



**Dr. V. Narayana Rao, Principal honored with a bouquet**



**Sri U. Sambasiva Rao, President honored with a bouquet**



**Sri S.V.S.M. Razith Kumar, Secretary & Correspondent honored with a bouquet**



**Sri M. Trinadh, Committee Member honored with a bouquet**



**Dr. J. Chandra Bose, Director, Yagnamayaya Tech Suit, Chennai honored with a bouquet**



**Sri J. Panduranga Rao, Director, Academic & Planning honored with a bouquet**



**Dr. P.B. Sandhya Sri, Head, Dept. of Physics honored with a bouquet**



**Prayer Song**



**Dr. V. Narayana Rao, Principal addressing the students**



**Sri U. Sambasiva Rao, President addressing the students**



**Sri. M. Trinadh, giving his message to students**



**Speech by Dr. J. Chandra Bose**



**Report of the Workshop by Dr. PB Sandhya Sri, HOD Physics**



**Staff & Students at the seminar hall**



**Feedback from students**



**Certificate presentation to students**



**Certificate presentation to students**





**Certificate presentation to students**



**Vote of thanks by Sri OJR  
Sudhakar, Lecturer, Electronics**

శుక్రవారం, 30 సెప్టెంబర్ 2016

ఆంధ్రప్రదేశ్

### విద్యార్థుల నూతన ఆవిష్కరణలు మనో వికాసానికి బాసట

వన్ టౌన్, సెప్టెంబర్ 29 (పీవీఎన్): ప్రస్తుత పోటీ ప్రపంచంలో విద్యార్థులు నూతన ఆవిష్కరణలపై దృష్టి సారించాలని అటువంటి ఆవిష్కరణలు మానవ వికాసానికి బాసటగా నిలుస్తాయని యగ్గువాయి టిక్సాట్ (పెన్సె) డైరెక్టర్ ప్రొఫెసర్ జే. చంద్రబోస్ అన్నారు. పాఠశాలలోని కెటిఎస్ కళాశాల ఫిజిక్స్, ఎలక్ట్రానిక్స్ విభాగాల సంయుక్త ఆధ్వర్యంలో ఎంబెడెడ్ సిస్టమ్స్ డిజైన్ యుజింగ్ ఆర్కిటే ఆనే ఆంశంపై మూడు రోజుల పాటు నిర్వహించనున్న వర్క్ షాప్ ను గురువారం ఆంశంపై ప్రారంభించారు. ఈ సందర్భంగా ప్రారంభ సభకు ముఖ్యఅతిథిగా విచ్చేసిన చంద్రబోస్ మాట్లాడుతూ ఫిజిక్స్, ఎలక్ట్రానిక్స్



మాట్లాడుతున్న చంద్రబోస్

రంగాల్లో విద్యార్థులు చేసే నూతన ఆవిష్కరణలు మానవ వికాసానికి బాసటగా నిలుస్తాయన్నారు. ఇటువంటి

రంగాలకు చెందిన విద్యార్థులు మరిన్ని ఆవిష్కరణలు నాంది కావాలన్నారు. మరిన్ని ప్రయోగాలు నిర్వహించి మానవ

వ ఆభ్యున్నతికి, సామాజిక వికాసానికి బాసటగా నిలవాలన్నారు. కళాశాల కమిటీ సభ్యుల అండ్ కరస్పాండెంట్ శ్రీరాం రజితీ కుమార్ మాట్లాడుతూ మానవ మనగడ ఫిజిక్స్, ఎలక్ట్రానిక్ రంగాలకు ముడిపడి ఉందన్నారు. విద్యార్థులను అభ్యుత్సాహంగా తీర్చిదిద్దడకు ఇటువంటి వర్క్ షాపులు రోహదపడతాయని ఆయన వివరించారు. కార్యక్రమంలో కళాశాల పాలకవర్గ సభ్యులు దత్త సుబ్బారావు, ప్రొఫెసర్ పాల్ డాక్టర్ పి. నారాయణరావు, పి.ఎన్. సీఎం ఇంజనీరింగ్ కళాశాల ఈసీఈ విభాగాధిపతి ప్రొఫెసర్ లక్ష్మీనారాయణ, కళాశాల విభాగాధిపతి డాక్టర్ పి.బి. సంధ్యశ్రీ తదితర అధ్యాపకులు పాల్గొన్నారు.

epaper Fri, 30 September 2016  
epaper.prabhanees.com/c/13624958

### మానవ వికాసానికి ఆవిష్కరణలు తోడ్పడాలి

వన్ టౌన్ : మానవ వికాసానికి నూతన ఆవిష్కరణలు బాసటగా నిలవాలని యగ్గువాయి టిక్ సూట్ (పెన్సె) డైరెక్టర్ ప్రొఫెసర్



జే.చంద్రబోస్ అన్నారు. కేటీఎన్ కళాశాల ఫిజిక్స్, ఎలక్ట్రానిక్స్ విభాగాల సంయుక్త ఆధ్వర్యంలో చేపట్టిన 'ఎంబెడెడ్ సిస్టమ్స్ డిజైన్ యుజింగ్ ఆర్కిటే' ఆంశంపై మూడు రోజుల జాతీయ స్థాయి వర్క్ షాప్ గురువారం ప్రారంభమైంది. ప్రొఫెసర్ జే.చంద్రబోస్ మాట్లాడుతూ ఫిజిక్స్, ఎలక్ట్రానిక్ రంగాల ఆవిష్కరణలు సమాజానికి అండగా ఉంటాయన్నారు. అటువంటి రంగాలకు సంబంధించి మానవ అభ్యున్నతికి, సామాజిక వికాసానికి అవసరమైన మరిన్ని ప్రయోగాలను విద్యార్థులు నిర్వహించాలన్నారు. కళాశాల అధ్యక్ష, కార్యదర్శులు ఉప్పల సాంబశివరావు, ఎస్.రజితీకుమార్ మాట్లాడుతూ మానవ జీవితంలో వినియోగించే అనేక వస్తువులు ఫిజిక్స్, ఎలక్ట్రానిక్స్ రంగాలకు చెందిన ప్రయోగాల ఫలితమేనన్నారు. కళాశాల ప్రెసిసిపాల్ డాక్టర్ పి.నారాయణరావు మాట్లాడారు. కార్యక్రమంలో కళాశాల పాలకవర్గ సభ్యులు దత్త సుబ్బారావు, పొట్టి శ్రీరాములు కాలేజీ ఆఫ్ ఇంజనీరింగ్ అండ్ టెక్నాలజీ ఈసీఈ విభాగాధిపతి ప్రొఫెసర్ లక్ష్మీనారాయణ, కళాశాల విభాగాధిపతి డాక్టర్ పి.బి.సంధ్యశ్రీ తదితరులు ప్రసంగించారు. సీనియర్ అధ్యాపకులు సీహెచ్ నాగభూషణం, ఎ.కాంతారావు పాల్గొన్నారు.

సాక్షి Fri, 30 September 2016  
epaper.sakshi.com/c/13623760

**GIST**  
**Three Day National Work**  
**On**  
**“Embedded System Design Using Arduino”**  
**From 29<sup>th</sup> to 01<sup>st</sup> October 2016**

PEAK, Physics Electronics Association, KBN College organised a three day National Workshop on “Embedded System Design Using Arduino” from 29<sup>th</sup> September to 1<sup>st</sup> October 2016 for B.Sc. Students of Computers and Electronics with the financial support of our esteemed management in association with YagnamayA Tech Suite of Chennai. The Director Dr. J. Chandra Bose of YagnamayA Tech Suite is the resource person for this programme. 78 students from B.Sc Computers and Electronics groups registered for the workshop.

The inaugural function of the program started at 10.00AM on 29<sup>th</sup> September. The Principal Dr.V.Narayana Rao presided over the programme. Sri.U. Samba Siva Rao, President & Sri S.V.S.M. Razith Kumar the function. Dr. J. Lakshmi Narayana, HOD, ECE Dept. of PSR & CMR Engineering College was the chief guest. The President Sri. U. Sambasiva Rao addressed the students and advised them to utilise the programme. Sri S.V.S.M. Razith Kumar Secretary& Correspondent suggested students to design such type of programmes of their own with the knowledge acquired through this programme. Sri. Datta. Subbarao explained how this knowledge may be useful in their future and blessed the students to enhance their intellectual property through such types of programmes. Dr. J. Lakshmi Narayana explained about the research applications of arduino in the present scenario.

The technical sessions was started from 11.30AM on the 1<sup>st</sup> day. 78 students were trained in this workshop in 15 projects in 6 technical sessions. The technical assistants Veera Pandi and Selava Kumar worked with students and trained them. Dr. Chandrabose monitored each and every students work and took special interest in students who cannot understand.

Valedictory session was arranged at 4.00PM on 1<sup>st</sup> October 2016. Principal Dr.V.Narayana Rao presided over the function and he appreciated the students for their sincerity and hard work in learning the projects. President Sri. Uppala Sambasiva Rao blessed the students to learn more and more projects in future. Secretary & Correspondent Sri SVSM Razith Kumar advised the staff members to start R&D. Sri M. Trinadh, member KBN College Committee suggested the students to participate in more and

more workshops and enhance their knowledge. Sri.Ch. Nagabhushanam and Sri. A. Kantha Rao, members of the Department, explained briefly how the technical sessions were organised. Dr. P. B. Sandhyasri, HOD Physics& Electronics gave the final report of the seminar.

Dr. Chandra Bose, Resource person of the workshop advised students to work hard and also promised to help the students in their future plans towards Project Making. Some students shared their experiences in the workshop and how they were benefited through this workshop. Certificates were distributed by the Principal, committee members and members of the department to the students.The Department of Physics is very grateful to the management for their continuous and constant support at each and every step in organising the seminar. Our special thanks to Principal Dr. V. NarayanRao, Dr. V. Subhashini, Co -ordinator IQAC for their valuable advices and P. L. Ramesh, HOD, Computer Science, and technical staff, Dept of Computer Science for their help in arranging necessary requirements in the laboratory.

# BROCHURE

## CHIEF PATRONS

**Sri U. Sambasiva Rao**  
President, KBNC

**Sri S.V.S.M Razith Kumar**  
Secretary & Correspondent, KBNC

**Sri T. Veeriah Guptha**  
Treasurer

## PATRONS

**Dr. V. Narayana Rao**  
Principal - FAC,

**Sri J. Panduranga Rao**  
Director, Academic & Planning

## CONVENOR

**Dr. P. B. Sandhya Sri**  
HOD, Physics & Electronics

## RESOURCE PERSON

**Dr. J. Chandra Bose**  
Director  
Yagnamayaya Tech Suit, Chennai.

## ADVISORY COMMITTEE

Dr. V. Subhashini, HOD, Zoology  
Smt. A. Durga, HOD, Economics  
Sri. M. Venkateswara Rao, HOD,  
Mathematics & Statistics  
Sri E. Vasa Prasad, HOD, English  
Dr. B. Ramaiah, HOD, Commerce  
Sri. P. L. Ramesh, HOD, Computer Science  
Sri. J. V. Chalapati Rao, HOD, Telugu  
Sri. T. Bhagya Kumar, HOD, Chemistry  
Sri. P. Deva Raj Kumar, HOD, Hindi

## ORGANIZING COMMITTEE

**Sri. Ch. Nagabharanam**  
**Sri. P. Anjaneyulu**  
**Smt. P. Sandhya Rani**  
**Ms. G. Jwala Peornima**  
**Sri. A. Kanika Rao**  
**Sri. OJR Sudhakar**

## PARTICIPANTS

Students from  
Final Year B.Sc., Electronics & Computers

Registration Fee: **RS.700/-**  
Last Date for Registration: **28.9.2016**

## CONTACT US

Ph. No. 94940 51548

ISO: 9001:2008 Certified Institution NAAC 'A' Grade



## & NATIONAL WORKSHOP

On

## "Embedded Systems Design Using Arduino"

IN ASSOCIATION WITH  
YAGNAMAYAYA TECH SUIT, CHENNAI

29<sup>th</sup> Sep - 1<sup>st</sup> Oct, 2016



Venue:

Vivekananda (UG) Seminar Hall

## Organized by

Physics Electronics Association of KBN College  
(PEAK)  
KAKRAPARTI BHAVANARAYANA COLLEGE  
(AUTONOMOUS)  
Kothavada, Vijayawada - 520 001  
A College with Potential for Excellence (CPE)

## ABOUT KEN:

"Kakraparti Bhavanarayana College is renowned for striving towards transforming every student into a great leader by imparting rich and qualitative education for last 5 decades". The college is being sponsored by century old renowned society-SKPVV Hindu High Schools Committee, whose motto-"Tejasvina Vaidheharasthu" clearly portrays its commitment.

Since its inception in 1965, the college has won many laurels to its credit and has created many a responsible citizen. The college is spread across a vast and sprawling land in the heart of the city with a good infrastructure.

The college has been conferred with the Autonomous status by UGC, New Delhi from the academic year 2010-11. It has been Re-Accredited by NAAC with 'A' grade. The college is presently affiliated to Krishna University, Machilipatnam. The college is one of the very few megalithic structures providing education in Krishna District.

## ABOUT DEPARTMENT:

The Department of Physics, KBN College, Vijayawada was established in the 1965. It has a great reputation and distinction of producing many scholars, Administrators, Scientists, Physicists, mathematicians, chemists and other illustrious personalities in various fields.

The Department is having the pride possession of some rare and exclusive instruments. One such instrument is Astronomical Telescope to observe celestial bodies. Another notable instrument is a working model of the Super Heterodyne Radio receiver which is used to have a clear view of the electronic components.

The Department has been declared as a Model Department by the Andhra University.

The year 2003 happens to be a land mark in the history department when the course BSc Electronics was started. The students of Electronics exhibit their prowess in many live projects every year especially during the National Science Day celebrations

## Theme of the Workshop:

The main theme of the workshop is to learn about the embedded system by using arduino. An Arduino is an assembled board of Atmel 8-bit AVR microcontroller with additional components to facilitate programming.

An important aspect of the Arduino is the standardized way in which the connectors are exposed, providing a facility to the CPU board to get connected to a variety of

interchangeable add-on modules known as shields.

The hardware consists of an open-source hardware board designed around an 8-bit Atmel AVR microcontroller.

The software consists of a standard programming language compiler and a boot loader that executes on the microcontroller



## Sub Themes:

1. Working with LED, LCD.
2. Digital Clock
3. Relay working, stepper motor.
4. Matrix keypad, sounding sensor
5. Motion detector, Metal detector.
6. IR Sensor, LDR
7. Bluetooth controls
8. Finger scanner with GSM/SMS.
9. Home automation.
10. Buffer time

# INVITATION

ISO 9001-2008 CERTIFIED

Accredited with NAAC 'A' Grade



**KAKARAPARTI BHAVANARAYANA COLLEGE**

(Autonomous)

(Sponsored by S.K.P.V.V Hindu High Schools Committee)

Kolhapur, Vijayawada-520001

A College with Potential for Excellence(CPE)



ISO 9001-2008 CERTIFIED

Accredited with NAAC 'A' Grade



**KAKARAPARTI BHAVANARAYANA COLLEGE**

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Kolhapur, Vijayawada-520001

A College with Potential for Excellence(CPE)



## PEAK

(PHYSICS ELECTRONICS ASSOCIATION OF KBN COLLEGE)

We solicit your gracious presence in the Inaugural function of  
**National Workshop on**

**EMBEDDED SYSTEMS DESIGN USING ARDUINO**

**(29<sup>th</sup> Sep - 1<sup>st</sup> Oct, 2016)**

29.09.2016 At 10.00A.M

**CHIEF PATRONS**

**Sri U. Sambasiva Rao**

President, KBN College Committee

**Sri S.V.S.M Razith Kumar**

Secretary & Correspondent, KBN College

**Sri. Datta Subbarao**

Member, KBN College Committee

**PATRON**

**Dr. V. Narayana Rao,**

Principal - FAC

**Resource Person**

**Prof. J. Chandra Bose**

Director, Yagnamayya Tech Suit, Chennai

**CONVENOR**

**Dr. P. B. Sandhya Sri**

HOD, Physics & Electronics

**Venue: Vivekananda Seminar Hall**  
KBN College - Campus



## PEAK

(PHYSICS ELECTRONICS ASSOCIATION OF KBN COLLEGE)

We solicit your gracious presence in the Inaugural function of  
**National Workshop on**

**EMBEDDED SYSTEMS DESIGN USING ARDUINO**

**(29<sup>th</sup> Sep - 1<sup>st</sup> Oct, 2016)**

29.09.2016 At 10.00A.M

**CHIEF PATRONS**

**Sri U. Sambasiva Rao**

President, KBN College Committee

**Sri S.V.S.M Razith Kumar**

Secretary & Correspondent, KBN College

**Sri. Datta Subbarao**

Member, KBN College Committee

**PATRON**

**Dr. V. Narayana Rao,**

Principal - FAC

**Resource Person**

**Prof. J. Chandra Bose**

Director, Yagnamayya Tech Suit, Chennai

**CONVENOR**

**Dr. P. B. Sandhya Sri**

HOD, Physics & Electronics

**Venue: Vivekananda Seminar Hall**  
K.B.N. College - Campus



# ***K.B.N. College (Autonomous): Vijayawada***

*National Work Shop On*

## ***“Embedded Systems Design Using Arduino”***

*Organized by*

***Physics & Electronics Association KBN College (PEAK)***

*(In Association with YagnamayayA Tech Suit, Chennai)*

***29<sup>th</sup> Sept -1<sup>st</sup> Oct, 2016***

***Inaugural Function (29<sup>th</sup> Sept, 2016 at 10.00 am)***

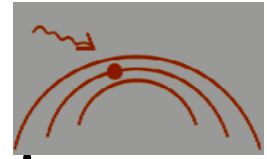
### ***Programme sheet***

- Inviting the guests on to the daís :*      *Sri J.Panduranga Rao,*  
*Director, Academic & Planning*
- Prayer*      *:*      *Ms, G. L Sarvani, A. Ramalaksmi*
- President’s Remarks*      *:*      *Dr V.Narayana Rao,*  
*Principal - FAC*
- Speeches by*      *:*      *Sri U.Sambasiva Rao,*  
*President, KBN College Committee*  
*Sri S.V.S.M.Razith Kumar,*  
*Secretary & Correspondent,*  
*KBN College Committee*  
*Sri T. Veeraiah Gupta*  
*Treasurer, KBN College Committee*  
*Sri Datta Subbarao*  
*Member, KBN College Committee*
- Theme of the Seminar*      *:*      *Dr. P.B.Sandhya Sri*  
*HOD, Dept of Physics & Electronics*
- Introduction of the Chief Guest*      *:*      *Ms G.J. Poornima,*  
*Lecturer in Physics*
- Address by the Resource Persons :*      *Dr. J. Chandrabose*  
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