**3.2.1:** Overview Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell.

## INDEX

# 1. Research and Development (R&D) Committee

The following table illustrates the team member composition of CBIT Research and Development Committee to exclusively monitor the entire innovation, Entrepreneurial and Research related activities.

| Sl. No | Committee members | Designation | Role |
|---|---|---|---|
| 1 | Dr. Vasudeva R | HOD (CSE) | Convener |
| 2 | Prof. Sukumar B S | Asst. Prof (ECE) | Members |
| 3 | Prof. GM Jagadish Kumar | Asst. Prof (ECE) | |
| 4 | Prof. Vedavathi R P | Asst. Prof (CV) | |
| 5 | Prof. Sathish M | Assoc. Prof (ME | |
| 6 | Prof. Kavitha. KN Prof. | Asst. Prof (CSE) | |
| 7 | Prof. Swathi J A | Asst. Prof (CSE) | |

# 2. Research and Development Centres

The R&D centre would encourage undergraduate students, post graduate students, research scholars and faculties to pursue research in their area of interest and participate in undergoing research activities @ CBIT.

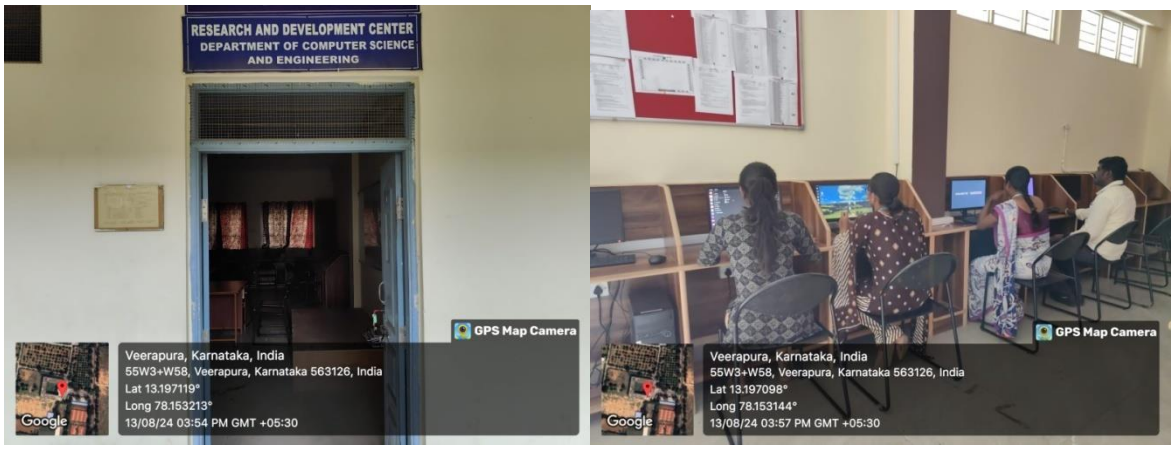
There are three Research and Development Centres

a. **R & D Centre Computer Science and Engineering.**
b. **R & D Centre Electronics and Communication Engineering.**
c. **R & D Centre Mechanical Engineering.**

The Research and Development Centres has been established in the Departments which are having a working area of about 250 square feet. This centre has facilities for carrying out Research related activities.

## a. R & D Centre Computer Science and Engineering

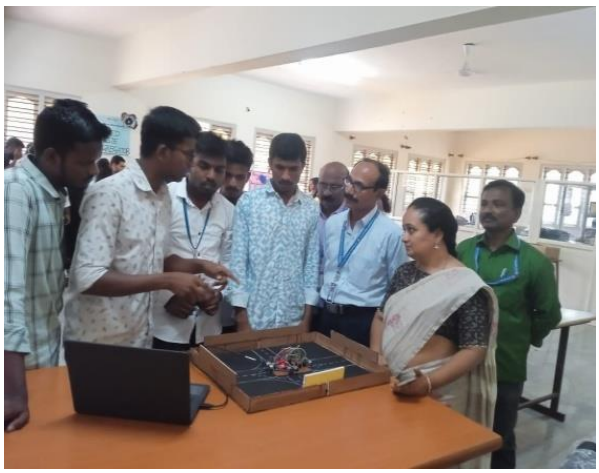
A Computer Science and Engineering (CSE) R&D Centre focuses on research and development in various aspects of computer science and engineering.




Photograph shows R & D Centre Facility to carry out research related activities for both students and staff.

## b. R & D Centre Electronics and Communication Engineering

An Electronics and Communication Engineering (ECE) R&D Centre focuses on research and development in the fields of electronics, communication technologies, and related areas.

Photograph shows R & D Centre Facility to carry out research related activities for both students and staff.



NASHAPPA CHANDRASHEKAR SEESANDRA

## c. R & D Centre Mechanical Engineering.

A Mechanical R&D Centre (Research and Development Centre) focuses on advancing technologies and innovations related to mechanical engineering.



Photograph shows R & D Centre Facility to carry out research related activities for both students and staff.



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## 3. Institution Innovation Council (IIC)

The Institution Innovation Council (IIC) is a platform set up by the Ministry of Education in India to foster a culture of innovation and entrepreneurship in higher education institutions. It aims to promote innovative thinking, support start-up initiatives, and bridge the gap between academia and industry for societal impact.


Ministry of Education Government of India
MoE's INNOVATION CELL (GOVERNMENT OF INDIA)
INSTITUTION'S INNOVATION COUNCIL
AICTE

CERTIFICATE OF ESTABLISHMENT

This is to certify that

C. Bairegouda Institute of Technology, Kolar

has established an Institution's Innovation Council (IC201912122) in the campus as per the norms of Innovation Cell, Ministry of Education, Govt. of India during the academic calendar year 2018-19

Prof. Anil D. Sahasrabudhe
Chairman
AICTE

Shri. R. Subrahmanyam
Secretary
Ministry of Education

Dr. Abhay Jere
Chief Innovation Officer
Ministry of Education's Innovation Cell

Certificate No: 1671

Aishe Code: C-1318

Date: 29-08-2019

The above Photograph shows Institution's Innovation Council registration certificate.

## 4. Intellectual Property Rights (IPR)

IPR protect creators' and inventors' innovations, ideas, and artistic works. These legal rights include patents, copyrights, trademarks, and trade secrets, ensuring exclusive use and control over creations. IPR encourages innovation by providing financial incentives and legal protection against unauthorized use or infringement.

**Patent Publications:**

| SI. No | Patent Application No | Name of the Faculty | Department | Publication Date & Year |
|---|---|---|---|---|
| 1 | 202141016601 A | Dr. S N Chandrashekara | CSE | 23/04/2021 |
| 2 | 202141021977 A | Prof. Sukumar B S | ECE | 11/06/2021 |
| 3 | 202441002257 A | Prof. Chowda Reddy C | CSE | 16/02/2024 |

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(21) Application No.202141016601 A

(22) Date of filing of Application :08/04/2021

(43) Publication Date : 23/04/2021

(54) Title of the invention : A SYSTEM OF INTEGRATED BLOCKCHAIN IN IOT FOR NETWORKS AND SMART HOUSES

| | |
|---|---|
| (51) International classification | :G06Q0020060000, H02J0003140000, G06F0021640000, H02J0003000000, G06F0017180000 |
| (31) Priority Document No | :NA |
| (32) Priority Date | :NA |
| (33) Name of priority country | :NA |
| (86) International Application No | :NA |
| Filing Date | :NA |
| (87) International Publication No | : NA |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

(71)**Name of Applicant :**
**1)Dr. CHANDRASHEKARA S N**
Address of Applicant :S/o. DODDANASHAPPA, PROFESSOR & HEAD OF THE DEPARTMENT, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, C BYREGOWDA INSTITUTE OF TECHNOLOGY, KOLAR 563101, KARNATAKA, INDIA. Karnataka India
**2)RAKSHITHA PRABHU**

(72)**Name of Inventor :**
**1)Dr. CHANDRASHEKARA S N**
**2)RAKSHITHA PRABHU**


(57) Abstract :

The power industry is going to reach a turning point for increasing the penetration of these sources due to concerns pertaining to climate changes and world-wide ever-growing demand for energy. The pervasive renewable energy in small-scale poses new challenges for operators to manage an abundant number of small-scale generation sources, called microsources. The current banking structures are unable to handle such massive high-frequency transactions. Thus, the incorporation of cryptocurrencies is inevitable. Besides, the utilization of IoT-enabled devices produces a large body of data that must be securely transferred, stored, processed, and managed to boost the grid™s observability, controllability, and autonomy. Artificial intelligence and big data techniques should be used to analyze the data for quasi-real-time decision making. This study delves into the aforementioned controversial challenges and opportunities, and the corresponding solutions for the incorporation of IoT and blockchain in power systems, particularly in the distribution level, residential section, smart buildings, smart homes, energy hubs schemes, and the management of residential electric vehicle supply equipment are addressed.


No. of Pages : 16 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/05/2021

(21) Application No.202141021977 A

(43) Publication Date : 11/06/2021


(54) Title of the invention : A SYSTEM FOR MONITORING IMPACT OF SACRED CHANTS ON PLANTS AND TREES THROUGH EMW RADIATIONS

| | |
|---|---|
| (51) International classification | :H04L0012240000, H04B0017210000, G06F0016600000, G06F0016638000, G10H0001000000 |
| (31) Priority Document No | :NA |
| (32) Priority Date | :NA |
| (33) Name of priority country | :NA |
| (86) International Application No | :NA |
| Filing Date | :NA |
| (87) International Publication No | : NA |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |


(71)**Name of Applicant :**

**1)Dr.S.Thenappan**

Address of Applicant :Professor of ECE, Department of ECE, KNS Institute of Technology, Bengaluru, Karnataka, India. Pin Code:560064 Karnataka India

**2)Mr.N.Manoj Kumar**

**3)Dr.S.Anantha Padmanabhan**

**4)Dr.K.Senthil Babu**

**5)Dr. Pradeep Kumar N.S**

**6)Dr.S.Mani Naidu**

**7)Mr.Sukumar B.S**

**8)Dr.R.Bhargava Rama Gowd**

(72)**Name of Inventor :**

**1)Dr.S.Thenappan**

**2)Mr.N.Manoj Kumar**

**3)Dr.S.Anantha Padmanabhan**

**4)Dr.K.Senthil Babu**

**5)Dr. Pradeep Kumar N.S**

**6)Dr.S.Mani Naidu**

**7)Mr.Sukumar B.S**

**8)Dr.R.Bhargava Rama Gowd**



(57) Abstract :

ABSTRACT A SYSTEM FOR MONITORING IMPACT OF SACRED CHANTS ON PLANTS AND TREES THROUGH EMW RADIATIONS [031] This invention provides a system for monitoring impact of sacred chants on plants and trees through Electromagnetic waves (EMW) radiations. The system includes, but not limited to, a plurality of audio devices for producing sacred chants such as Slokas, Mantras, Duas and Music in the form of Audio; a converting unit designed to convert audios (Mantras, Slokas, Duas and Music) into Electromagnetic waves (EMW), by using an antenna; a processing unit to receive input from the audio devices and antenna, which is further processed and analysed with different antenna parameters, accordingly. Further, the audio is simulated with a user interface or software to determine different antenna parameters provided on a computing device. In addition, the user interface is configured to view and further analysing different antenna parameters. Accompanying drawing [FIGS. 1-4]


No. of Pages : 18 No. of Claims : 8

THE PATENTS ACT, 1970

(39 of 1970)

&

The Patent Rules, 2003

**COMPLETE SPECIFICATION**

(See section 10 and rule 13)

**TITLE OF THE INVENTION**

"A SYSTEM FOR MONITORING IMPACT OF SACRED CHANTS ON PLANTS AND TREES THROUGH EMW RADIATIONS"

We, Applicant(s)

| NAME | NATIONALITY | ADDRESS |
|---|---|---|
| 1. Dr.S.Thenappan | Indian | Professor of ECE, Department of ECE, KNS Institute of Technology, Bengaluru, Karnataka, India. Pin Code:560064 |
| 2. Mr.N.Manoj Kumar | Indian | Researcher, Department of Physics, SCSVMV Deemed University, Enathur, Kanchipuram, Tamil Nadu, India. Pin Code: 631561 |
| 3. Dr.S.Anantha Padmanabhan | Indian | Professor and Head, Department of ECE, Gopalan College of Engineering and Management, Hoodi, Bengaluru, Karnataka, India. Pin Code: 560048 |
| 4. Dr.K.Senthil Babu | Indian | Professor, Department of Electronics and Communication Engineering, K.S.School of Engineering and Management, Mallasandra, Bengaluru, Karnataka, India. Pin Code:560109 |
| 5. Dr. Pradeep Kumar N.S | Indian | Associate Professor, Department of E&CE, S.E.A College of Engineering and Technology, Bengaluru, Karnataka, India. Pin Code:560049 |
| 6. Dr.S.Mani Naidu | Indian | Professor of Physics, Department of Physics, Vel Tech, Rangarajan Dr. Sagunthala R & D Institute of Science and Technology, Deemed to be University, Avadi , Chennai, Tamil Nadu, India. Pin Code:600062 |
| 7. Mr.Sukumar B.S | Indian | Assistant Professor , Department of Electronics and Communication, C.Byregowda Institute of Technology, Srinivasapur Road, Kolar, Karnataka, India. Pin Code:563101 |
| 8. Dr.R.Bhargava Rama Gowd | Indian | Assistant Professor, Door.No. 6/4/317,5th Cross, Ramnagar, Anantapur, Andhra Pradesh, India. Pin Code:515001 |



The following specification particularly describes the nature of the invention and the manner in which it is performed:

NASHAPPA CHANDRASHEKAR SEESANDRA

# पेटेंट कार्यालय
# शासकीय जर्नल

# OFFICIAL JOURNAL
# OF
# THE PATENT OFFICE

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|---|---|---|
| निर्गमन सं. 07/2024 | शुक्रवार | दिनांक: 16/02/2024 |
| ISSUE NO. 07/2024 | FRIDAY | DATE: 16/02/2024 |

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

# C BYREGOWDA INSTITUTE OF TECHNOLOGY

**(Approved by AICTE, New Delhi, Recognized by Govt. of Karnataka & Affiliated to VTU, Belagavi.)**

**KOLAR – SRINIVASAPUR ROAD, KOLAR – 563101, KARNATAKA.**

**E-Mail:** cbitkolar@gmail.com, **Website:** www.cbitkolar.edu.in **Mobile No:** 6360281836



(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :11/01/2024

(21) Application No.202441002257 A

(43) Publication Date : 16/02/2024


(54) Title of the invention : A HYBRID POWER GENERATION SYSTEMS AND METHODS


(51) International classification :F03B13/10, F03D1/00, H02J3/32, H02J3/38, H02J7/00, H02S10/12, H02S40/38

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA



(71)**Name of Applicant :**

**1)Dr. Srikumar Biradar**
Address of Applicant :Assistant Professor Department of Mechanical Engineering, Atria Institute of Technology, Bangalore – 560024 Bangalore Urban ---------- ----------

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)**Name of Inventor :**

**1)Dr. Srikumar Biradar**
Address of Applicant :Assistant Professor Department of Mechanical Engineering, Atria Institute of Technology, Bangalore – 560024 Bangalore Urban ---------- ----------

**2)Dr Shivashankar Hiremath**
Address of Applicant :Associate Professor, Department of Mechatronics Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal-576104 Udupi ---------- ----------

**3)Dr. N V Sararthbabu Goriparti**
Address of Applicant :Associate Professor Department of Electrical and Electronics Engineering, Ramachandra College of Engineering, Eluru - 534001 West Godavari ---------- ----------

**4)Prof. Prem Chand R**
Address of Applicant :Assistant Professor Department of Robotics & Artificial Intelligence Bangalore Institute of Technology- 560004 Bengaluru Urban ---------- ----------

**5)Dr. Chandra Shekar A**
Address of Applicant :Assistant Professor Department of Robotics & Artificial Intelligence Bangalore Institute of Technology -560004 Bengaluru Urban ---------- ----------

**6)Prof. Chowda Reddy C**
Address of Applicant :Assistant Professor Department of Mechanical Engineering C Byregowda Institute of Technology, Kolar - 563101 KOLAR ---------- ----------

**7)Prof. Chandrasekhar G L**
Address of Applicant :Assistant Professor Department of Mechanical Engineering, Sri Sai Ram College of Engineering, Anekal, Bengaluru - 562106 Bengaluru Urban ---------- ----------

**8)Dr. Harish Kumar N S**
Address of Applicant :Assistant Professor Department of Mechanical Engineering, Atria Institute of Technology, Bangalore – 560024 Bengaluru Urban ---------- ----------

**9)Dr. Manjunatha C J**
Address of Applicant :Assistant Professor Department of Mechanical Engineering, Atria Institute of Technology, Bangalore – 560024 Bengaluru Urban ---------- ----------

**10)Prof. Ansar Shaik Satulur**
Address of Applicant :Associate Professor Department of Electrical and Electronics Engineering, Tirumala Engineering College Jonnalagadda-522601 GUNTUR ---------- ----------



(57) Abstract :

A hybrid power generation system (100) and method (200), comprising:a plurality of renewable energy unit (102) for acquiring renewable source of energy from a plurality of renewable energy source, wherein the plurality of renewable energy unit (102) comprises of:a photovoltaic unit (102a) for collecting solar energy and converting the collected solar energy into electrical energy;a wind turbine (102b) for collecting wind energy and converting the collected wind energy into electrical energy; anda hydro turbine (102c) for collecting hydro energy and converting the collected hydro energy into electrical energy; anda battery unit (104) for storing the generated electrical energy, wherein the stored electrical energy is supplied to a power grid (106) for distribution of the energy across a load (108).

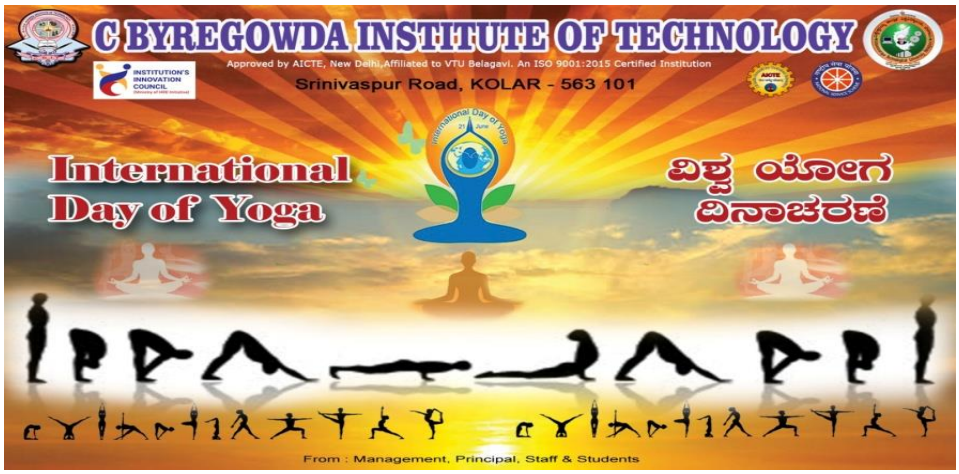

No. of Pages : 22 No. of Claims : 10

# 5. Indian Knowledge Systems (IKS)

IKS encompass a vast and diverse array of traditional wisdom, practices, and innovations developed over millennia within the Indian subcontinent. These systems include ancient philosophies, scientific achievements, medical practices, and cultural traditions. IKS offers sustainable practices and innovative solutions that complement modern approaches, fostering a deeper appreciation of cultural heritage and contributing to global knowledge. Integrating IKS into contemporary contexts enriches education, environmental sustainability, and cultural understanding.

## 5.1: Yoga Day Celebrations:

Yoga is a comprehensive system of physical, mental, and spiritual practices that originated in ancient India. It is designed to bring harmony between the mind, body, and spirit, promoting overall well-being. Yoga involves various disciplines, including physical postures (asanas), breathing techniques (pranayama), meditation, and ethical principles.




**Photographs shows Yoga Classes conducted for the staff**

## 5.2: Ayudha Pooja Celebrations:

Ayudha Pooja is a traditional Hindu festival celebrated primarily in the southern states of India, such as Karnataka, Tamil Nadu, Andhra Pradesh, and Kerala. It typically falls on the ninth day of Navaratri, also known as Maha Navami. Ayudha Pooja is a day dedicated to worshipping tools, instruments, vehicles, and other implements that people use in their daily lives and work.


The above Photos show the ayudha pooja celebrations every year.

## 5.3 Kannada Rajyothsava Celebrations

This day is marked by cultural events, the hoisting of the Karnataka state flag, and the singing of the state anthem, "Jaya Bharata Jananiya Tanujate." It celebrates the heritage, culture, and achievements of the Kannada-speaking people.

The photos show Kannada Rajyothsava Celebrations every year 1st Novenber.

## 5.4: Onam Celebrations

Onam is a vibrant harvest festival in Kerala, marked by elaborate feasts, floral decorations, traditional dances, boat races, and cultural festivities.


**Photos shows Onam Celebrations on 26/08/2023**

## 5.5: Rama Navami celebration

Rama Navami is a Hindu festival celebrating the birth of Lord Rama, the seventh incarnation of Vishnu. It typically falls in the Hindu month of Chaitra (March-April) and marks the end of the nine-day Chaitra Navaratri celebrations.

**Photo shows Rama Navami Celebrations**

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