Research and development (R&D) is a process intended to create new and improved technology that can provide a competitive advantage at the business, industry, or national level. To promote research in newly emerging and frontier areas of science and engineering including multidisciplinary fields taking into account the capability of the host institution and to encourage young scientists to take up challenging R&D activities, we have established an R&D centre in our Institute.

**Vision**

Investigative activities that a business chooses to conduct with the intention of making a discovery that can either lead to the development of new products or procedures, or to improvement of existing products or procedures. Research and development is one of the means by which business can experience future growth by developing new products or processes to improve and expand their operations.

**Mission**

Our mission is to change the way we understand the world. In the past decade, an abundance of data has become available, such as online data on the Web, scientific data such as the transcript of the human genome, plant genome, and sensor data acquired by robots or by the buildings we inhabit. The list is endless. Turning data into information pertaining to problems that people care about is the central core of any
research. We seek to develop the next generations of theory, algorithms, and systems that help us attach meaning to bits and bytes.

**Objective:**

The R&D centre is dedicated for:

1. Publishing papers in National and International journals
2. Presenting papers in National and International Conferences
3. Proposed funding projects from AICTE, UGC, DST and Foreign Companies etc.
4. Inviting Resource persons for improvement of the work in the relevant field.
5. Conducting National and International Conferences in our Institute.
6. Involving staff members in the research activity
7. Involving students to take part in research work
8. Ph.D. Scholars and M. Tech students from other Universities for carrying out thesis work.

**Present Strength of Research:**

List of papers published during in Journals and Conferences:

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LIST OF PUBLICATIONS


**Dr. S. S.Agrawal**

**LIST OF PUBLICATIONS**

2. “ENHANCING THE SECURITY OF PUBLIC KEY CRYPTOSYSTEM BASED ON DLP ON $\gamma = \alpha^\beta \pmod{p}$”, International Journal of Research and Reviews in Computer Science (IJRRCS), Vol. 1, 2010, No. 4 pp. 67-70.


Mr. S. Dhavala

LIST OF PUBLICATIONS

1. “Brain Gate Technology” G. Rajendra Kumar, SamuelVara Prasad Raju, D. Santosh Kumar*

2. “Effect of Sintering Temperature on Electrical properties of Mn$_{0.5}$Zn$_{0.5}$Fe$_2$O$_4$ Nanoscale Particles Prepared by Co-Precipitation Method” D. Santhosh Kumar*, K. Chandra Mouli
   International Journal of Pure and Applied Physics, Volume 5, Number 2 (2009),pp. 149-155

3. “Studies on Mn$_{1-x}$Zn$_x$Fe$_2$O$_4$ Nanoparticles Synthesized by Co-Precipitation Method D. Santhosh Kumar*, K. Chandra Mouli
   International Journal of Nanotechnology and Applications (IJNA), Volume 4, Number 1 (2010), pp. 51-59

4. “A Real Time EEG Signals for Brain and Computer Interface” Dr. Samuel VaraPrasadaRaju, G. Rajendra Kumar, D. Santosh Kumar
5. “Classification of EEG Signals for Drowsiness Detection in Brain and Computer Interface”
G. Rajendra Kumar, Dr. Samuel VarapradasaRaju, D. Santhosh Kumar
GESJ: Computer Science
and Telecommunications 2011\No. 3(32)

and B. Surya Narayanaindustrial Symposium on Multifunctional Nanomaterials, Nanostructures and
Applications (MNNA 2007), 19 –21 December 2007, at Department of Physics & Astrophysics, University
of Delhi, Delhi – 110 007.

and B. Surya NarayanaInternational Conference on Interdisciplinary approaches in Physical
Sciences: Growing Trends and Recent and Recent Advances (CONIAPS-X), 12-14 January, 2008, at
Department of Pure & Applied Physics, Guru Ghasidas University, Bilaspur - 495009.

8. “Studies on Piezoelectric PBN transducer materials” K. Chandra Mouli, G. Srinivas Reddy, P.V. Acharya,
D. Santhosh Kumar, B. Surya Narayana and I. Shyam KishoreInternational Conference on Interdisciplinary
approaches in Physical Sciences: Growing Trends and Recent and Recent Advances (CONIAPS-X), 12-14

9. “Studies on Modified Co-Zn Ferrite Nano Particles” K. Chandra Mouli, D. Santhosh Kumar,
T. Joseph, B. Surya Narayana, V. Srinivasa, Soumen KarNational Seminar on
Advances in Materials Science (NSAMS-2008), 4-5 Feb, 2008, Department of Physics,
Manonmaniam Sundaranar University, Tirunelveli – 627 012.

10. “Synthesis and Studies on magnetic and electrical properties of Ni0.5Zn0.5Fe2O4 nanoparticles”
K. Chandra Mouli, B. Surya Narayana and Santhosh Kumar DhavalaNational Conference on Emerging Materials,
Devices and Technologies (EMDT-2009), Feb 24& 25, 2009, Department of Physics, Sri Venkateswara
University, Tirupati- 517502.

11. “Studies on magnetic and electrical properties of Mn0.8Zn0.2Fe2O4 nanoparticles” K. Chandra Mouli, Santhosh
Kumar Dhavala and B. Surya NarayanaNational Conference on Emerging Materials,
Devices and Technologies (EMDT-2009), Feb 24& 25, 2009, Department of Physics, Sri Venkateswara
University, Tirupati- 517502.

12. “Synthesis, Characterization and Studies on magnetic and electrical properties of
Ni0.6Zn0.4Fe2O4 nanoparticles” K. Chandra Mouli, D. Santhosh KumarThird National Seminar on
13. Studies on Lithium modified BSNN Ceramics for Transducer Materials

K. Chandra Mouli, P. Viswarupachary, D. Santhosh Kumar

Third National Seminar on Advances in Materials Science (NSAMS-2009), 16-17 March, 2009, Department of Physics, Manonmaniam Sundaranar University, Tirunelveli – 627 012.

Dr. Uma Dash

LIST OF PUBLICATIONS


Er. A.K. Mohapatra

LIST OF PUBLICATIONS

1. Fuzzy Logic Controller-Based Dynamic Voltage Restorer for Mitigating of Voltage Sag A K Mohapatra

Er. Purnendu Mishra

LIST OF PUBLICATIONS

Miss. Sasmita Tripathy

LIST OF PUBLICATIONS


Mr. R. C. Barik

List of publications


Proposed Research Area to be undertaken but not limited to these:

1. Bioinformatics
2. Digital signal processing
3. Numerical Methods
4. Image processing
5. Data structure and Algorithm
6. Plant genomics and proteomics
7. Speech & language Processing
8. Mechatronics
9. Machine designing
10. Machine learning
11. Automation & Control
12. Reconfigurable architecture design
13. Computer security and cryptography
14. Communication technology
15. Power system management
16. Nanotechnology
17. Materials & Molecular Science
18. Photonics
19. Soil Mechanics