## **6. Area / Group Name:** Computer Architecture & Embedded Systems

Design and development of home and industrial automation are fuelled by researches in this area. Systems level algorithm implementations and their analysis vis a vis underlying hardware architecture are scrutinized through specialized software. Defense Research & Development Organization of India acknowledges robotics and intelligent systems as emerging areas. Research in Parallel Architectures & Super Computing is promoted by Science and Engineering research council. CSIR Centre for Mathematical Modeling and Computer Simulation (C-CMMACS) funds research in High Performance Computing. Department of Information Technology promotes work in development of unmanned robotic soldiers. Advanced Numerical Research & Analysis Group of DRDO has parallel processing as one of the major thrust area. ACM promotes research in this area and initiated Transactions on Accessible Computing (since 2008). IEEE setup technical Committee on Scalable Computing (estd. 2008).

Department offers courses like Parallel Processing, Microprocessor and Controllers, Computer Organization and Architecture, Computer Organization, Systems Programming and Embedded Systems Design in this area. Many post graduate students do their dissertations under this research group. The research activity is mentored by a group of 20 faculty actively involved in research in parallel programming and multi core architectures. One Ph.D. has been completed and One in progress. 5 M.Tech. and more than 83 B. Tech projects have been completed in this area. Our work in this area is supported by publications including 2 books and 24 research papers.

## **Faculty Group:**

- 1. Satish Chandra
- 2. Chetna Dabas
- 3. Mukta Goyal
- 4. K.Rajalakshmi
- 5. Tribhuwan Tiwari
- 6. Hema N
- 7. Kavita Pandey
- 8. Pawan Kumar Upadhyay
- 9. Raghu Vamsi P
- 10. Shikha Jain
- 11. Dhanalekshmi G.
- 12. Ambalika Sarkar
- 13. Rohit Pal Singh
- 14. Prashant Kaushik
- 15. Shardha Porwal
- 16. Himanshu Mittal
- 17. Amarjeet Kaur
- 18. OM PRAKASH PATEL
- 19. SHAILESH KUMAR
- 20. VIKAS HASSIJA