# **Publications based on this work**

#### **International Journal**

- Amruta Mujumdar, Bhagyashri Tamhane, Shailaja Kurode, "Observer based Sliding
   Mode Control for a Class of Non-commensurate Fractional Order Systems", IEEE/
   ASME Trans on Mechatronics, Year: 2015, Volume: 20, Issue: 5, DOI:10.1109/TMECH.2014.2386914
- Amruta Mujumdar, Shailaja Kurode, "Output Feedback Control for a Two Link Flexible Manipulator - A Second Order Sliding Mode Approach", International Journal of Control- Paper in communication, first review communicated.

#### **International Conference**

- Amruta Mujumdar, Bhagyashri Tamhane, Shailaja Kurode, "Fractional Order Sliding mode control for Single Link Flexible Manipulator", IEEE International Conference on Multi-Conference on Systems and Control (MSC) Aug 2013, Hyderabad, India.
- Amruta Mujumdar, Bhagyashri Tamhane, Shailaja Kurode, "Control Of 2LFM Using Higher Order Sliding Modes and Disturbance Estimation", IFAC Proceedings Volume 47, Issue 1, 2014, Pages 95-102. International Conference on Advances in Control and Optimization of Dynamical Systems (ACODS) Mar 2014, IIT Kanpur, India
- Amruta Mujumdar, Shailaja Kurode, "Second Order Sliding Mode Control for Single Link Flexible Manipulator", IEEE International Conference on Machines and Mechanisms (iNaCoMM) Dec 2013, IIT Roorkee, India.

Amruta Mujumdar, Bhagyashri Tamhane, Shailaja Kurode, "Fractional Order Modeling and Control of a Flexible Manipulator using Sliding Modes", International Conference on American Control Conference (ACC) June 2014, Portland, USA.

### **National Journal**

• Amruta Mujumdar, "Fractional Calculus: An Introduction", Army Sapper Magazine, June 2015

## **National Conference**

- Amruta Mujumdar, Shailaja Kurode, "Fractional Order PID Controller for Position Control of a DC Motor", National Conference on Advances in electrical engg' July13, Bharati Vidyapeeth College of Engg, Pune, India.
- Amruta Mujumdar, Shailaja Kurode, "Application of Advanced Control Techniques
  in Military Robotics", National Conference on Seminar On Power System And Energy
  Management, July 2014, College of Military Engg, Pune, India.