

## FACULTY PROFILE

### **Dr. Anirudhan P.**

Associate Professor( NC), (Mech. Engg.)  
Government Engineering College, Kozhikkode, Kerala  
Former Scientist, SO/D, Reactor Engg. Div., BARC, Trombay.  
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Academic Details: Ph.D. (IISc, B'lore), M.Tech (IISc, B'lore), B.Tech (Uni. Of Calicut)

Areas of interest: **Surface Interactions, Surface Chemistry, Tribology, Lubrication, Wear.**

### **Patents and Publications:**

**Patent:** 1728/CHE/2010, Title: "[METHOD AND APPARATUS FOR ASSESSING LUBRICITY OF CUTTING FLUIDS](#)", Patent No. 1728/CHE/2010, Sanjay Kumar Biswas, Anirudhan Pottirayil, Godugunur Vasudev, Debashish Ganguli

### **Publications: International Journals:**

Pottirayil, Anirudhan and Menezes, Pradeep L and Kailas, Satish V (2010) [A parameter characterizing plowing nature of surfaces close to Gaussian](#). In: Tribology International, 43 (1-2). pp. 370-380.

Simha, KRY and Pottirayil, Anirudhan and Menezes, Pradeep L and Kailas, Satish V (2008) [Friction tensor concept for textured surfaces](#). In: Sadhana, 33 (3). pp. 203-206.

Pottirayil, Anirudhan and Kailas, Satish V and Biswas, SK (2010) [Experimental estimation of friction force in lubricated cutting of steel](#). In: Wear, 269 (7-8). pp. 557-564.

Pottirayil, Anirudhan and Kailas, Satish V and Biswas, SK (2011) [Lubricity of an oil in water emulsion in metal cutting: The effect of hydrophilic/lypophilic balance of emulsifiers](#). In: Colloids and Surfaces A: Physicochemical and Engineering Aspects, 384 (1-3). pp. 323-330.

## **International Conferences:**

Pottirayil, Anirudhan and Menezes, Pradeep L and Kailas, Satish V (2006) [A Parameter to Characterise the Plowing Nature of Surfaces which are close to Gaussian.](#) In: 5th International Conference on Industrial Tribology (ICIT 2006), Nov.30- Dec.2, 2006, IISc, Bangalore, India.

Pottirayil, Anirudhan and Menezes, Pradeep L and Kailas, Satish V (2009) [Correlating The Features Of Topography To Friction By Sliding Experiments.](#) In: 9th Biennial Conference on Engineering Systems Design and Analysis, JUL 07-09, 2008, Haifa, Israel, pp. 361-364.

Anirudhan P., Ashita K. B., Antony Neeraj Pius, Ajai Ghosh A. V. and Satish V. Kailas, *Vegetable Oil based Metal Working Fluids and Testing*, Proceedings of 1st International Conference on Mechanical Engineering: Emerging Trends for Sustainability, C. M. Krishna, A. R. Siddiqui, M. K. Pradhan (eds.), January 29-31, 2014, MANIT Bhopal (IC MEETS - **2014**), pp-196-202.

Anirudhan P., Sanjay K. Biswas and Satish V. Kailas, *Surface Studies related to Lubricity of Oil In Water Emulsions*, Proceedings of International Conference on Advances in Tribology, K. Prabhakaran Nair, P. K. Rajendra Kumar, M. L. Joy (eds.), February 21-24, **2014**, NIT Calicut (ICAT 14), pp-229-232.

### **Experience:**

Teaching (B.Tech, M.Tech) –14 Years (2000-2014)

Industry- 1 Year (1999-2000)

Research – 5 years, Scientist D (BARC) (1993-1999)

Professional Society Membership : **Life Member, Indian Society for Heat & Mass Transfer (IJHMT)**

Professional Association: **American Society of mechanical Engineers (ASME)**

### **Ongoing research:**

1. Particulate added, FSP processed NAB as bearing materials for sea energy convertors.
2. Dry Sliding wear of Ti-6Al-4V against stainless steel at constant contact pressure.