# INVITED TALK / GUEST LECTURE

#### 2025

1. Invited talk on "Limit Cycle Predictions for System with Nonlinearity", ATAL FDP on Design for Manufacturing & Advanced Automation for Industry 4.0", PTU, Puducherry (25–1–2025)

### 2024

 Key note address, 'Fractional Order CVS Model with Baroreflex Control', International Conference on Latest Advances, Contributions & Applications in Nonlinear Analysis (LACANA), GVP College of Engineering, Visakhapatnam (15-3-2024)

### 2022

- 1. Invited talk on "Design Methods for PID-type (i.e. P, PI, PD, PID) Controllers", High end workshop on Recent Trends in Soft sensing and State Estimation RTSSE-2022, NIT Calicut (21-7-2022)
- 2. Invited talk on "Limit Cycle Predictions for System with Nonlinearity", High end workshop on Smart Energy Systems For Sustainable Smart Cities A Research Perspective, NIT, Puducherry (22-2-2022)

# 2021

- Invited talk on "Nonlinearity" BIT-Mesra, Ranchi, Online ATAL Faculty Development Programme (FDP), Trends in Measurement and Control for System Automation. (2-7-2021)
- Invited talk on "Limit Cycle Predictions for Systems Containing Separable Nonlinearity" RAIT, Mumbai, STTP on Mathematical Modeling and Control System Design (1-7-2021)
- 3. Invited talk on "Tuning of PID controllers", NIT, Calicut (AICTE sponsored FDP), 2020 (3-2-2021)

### 2020

4. Invited talk on "Control System Design -System with Nonlinearity", SCET, Chennai (AICTE sponsored), 2020 (21-11-2020)

- Keynote talk on "Fractional-Order Controllers for Plants Containing Separable Nonlinearity", TEQIP III sponsored International conference on ICAES 2020, PEC, Pondicherry. (13-8-2020)
- 6. Invited talk on" Limit cycle prediction and suppression using Integer and Fractional-Order Controllers for system with Backlash/Relay Nonlinearity", Gudlavalleru Engineering College (AICTE sponsored), 2020 (8-8-2020)

- 1. Invited talk on 'Eliminating the limit cycle oscillation for digitally controlled DC-DC converter', NPEC, 2018 (8-3-2018)
- Invited talk on 'Shaping Limit Cycle Performance of Integer and Fractional-Order Controllers for system with Backlash/Relay Non-linearity', NIT, Rourkela, 2018 (14-12-2018)

### 2017

- 1. Delivered a talk on 'Nonlinearity and its behavior in power circuits', Faculty development program, Mepco Schelenk Engineering College, Sivakasi (24-11-2017)
- 2. Invited talk on 'Shaping Limit Cycle Performance of Fractional-Order Controllers for Plants Containing Backlash/Relay' Govt. College of Engineering, Thrissur (8-12-2017)

- 1. Delivered a talk on 'Non linearity', Faculty development program, GVP Prof. V. Lakshmikantham Institute for Advanced Studies, Visakhapatnam (27-10-2016)
- 2. Invited talk on 'Nonlinearity and its behavior in power circuits' FDP, NIT, Trichy (29-8-2016)
- 3. Invited talk on 'Control System Design For Space Transportation Systems' EEE Association, Muthayammal Engineering College, Namakkal (23-12-2016)
- 4. Delivered a talk on 'Non linearity Simulation and Analysis and fractional controller design', FCSD 2016, IIST (16-12-2016).
- 5. Delivered a talk on 'Non linearity', Faculty development program, CIT, Coimbatore (20-2-2016)
- 6. Invited talk on 'Limit cycle computation' DST sponsored workshop, NSN College of Engineering, Karur (26-2-2016)

- 7. Invited talk on 'Shaping Limit Cycle Performance of Fractional-Order Controllers for Plants Containing Relay Nonlinearity' Faculty development program, College of Engineering, Pune (4-3-2016)
- 8. Delivered a talk on 'Non linearity Simulation and Analysis', nCSD 2016, IIST (20-6-2016).

- 1. Delivered a talk on 'Frequency Response Analysis', Indian Naval Academy, Ezhimala (7-2-2015)
- Delivered a talk on 'Control System Design -Conventional to fuzzy and AI based Fault Identification for Electrical Machines' ISTE Approved Short Term Training Programme on 'Soft Computing Techniques & Applications in Electrical Engineering' MBCE, Trivandrum (24-4-2015)
- 3. Delivered a talk on' Controller design using Bode, AICTE Sponsored Two Weeks FDP on "Topics of Research in Electrical Engineering" (TREE'15), MSEC, Sivakasi. (16-5-2015)
- 4. Delivered a talk on 'Fuzzy Observer For Chaotic Based Secure Communication', IETE zonal Seminar on Space communication technology, Trivandrum(13-6-2015)
- 5. Delivered a talk on 'Research Methodology in Engineering Education' Department of Electronics, Amritha University (25-7-2015)

- 1. Delivered a talk on' Controller design using frequency domain technique', CSD, 2014, IIST.
- Delivered a talk on "System identification conventional to intelligent", ISTE Advance control theory for electrical engineering, CIT, Coimbatore (17-10-2014).
- 3. Delivered a talk on 'Industrial Automation- Overview', IPRC, Mahendragiri (21-7-2014)
- 4. Delivered a key not lecture titled 'Sweep Command For Nonlinear System Identification', IEEE-ICCICCT, NI University (11-7-2014).
- 5. Delivered a talk on 'Ensuring Model Matching Using Sinusoidal Sweep Command' IEEE-ICACCT, Ramanathapuram. (10-5-2014)
- 6. Delivered a talk on' Frequency Domain Analysis 'Techtronix-2014, Lourdes Matha College of Science & Technology, Trivandrum. (21-3-2014)

- 7. Delivered a talk on 'Fuzzy Observer For Chaotic Based Cryptography' National conference on Communication and Instrumentation at Marian Engineering College, Trivandrum. (19-3-2014)
- 8. Delivered a key note lecture titled 'Advanced controller structure for power electrics circuits and drives' IEEE-ICGCCEE, Dr.NGP Institute of Technology, Coimbatore (8-3-2014).
- 9. Delivered a lecture 'Fractional Control of Precision Modular Servo Setup for Better Limit Cycle Suppression 'FDP on Signal processing and control systems, Mar Baselios Christian College of Engineering and Technology, Peermade. (1-2-2014)
- 10. Delivered a talk on 'Introduction to System Modeling', Mechanical Engineering Association, College of Engineering, Trivandrum (21-1-2014)

- 1. Delivered a technical lecture titled 'Certain Topics in Control System' FDP program, KLN College of Engineering (14-12- 2013).
- 2. Delivered a technical lecture titled 'Fractional Control of Precision Modular Servo Setup for Better Limit Cycle Suppression, FDP Program, College of Engineering, Trivandrum (7-12-2013).
- 3. Delivered a technical lecture titled 'Advanced controller structure for power electrics circuits and drives, NIT, Trichy, (9-11-2013).
- 4. Delivered a technical lecture titled 'Control System Desing Conventional to Fuzzy, FDP Program, TKM Engineering College, Kollam (22-6-2013).
- 5. Delivered a technical lecture titled 'Conventional Control to Fractional control' KSR Institute of Engineering and Technology, AICTE sponsored FDP, Tiruchengode (11-5-2013).
- 6. Delivered a technical lecture titled 'AI based Controller Design and Fault Identification for Switched Reluctance Machine' DRDO Sponsored workshop, Pavai Engineering College, Salem (5-1-2013).

- 1. Delivered a Key note address titled "Fractional Control Design", INCOST-12, JJ Engineering College, Trichy (13-12-2012).
- 2. Delivered a guest lecture at 'Surge 2k12' Adhiparaakthi Engineering College, Chennai (27-7-2012).
- 3. Delivered a lecture on 'Introduction to Fractional control', ICCPEIC-12, Adhiparaakthi Engineering College, Melmaruvathur, Chennai, (18-4-2012).

- 4. Delivered a technical lecture titled 'fraction controller design for a simple cart servo plant', Workshop on Applications of fractional calculus in Engineering, Ramrao Adit Institute of Technology, Mumbai (9 to 11- 3- 2012).
- 5. Delivered a keynote address titled 'Advanced control system design', Sumpulse'12, Syad Ammal Engineering College, Ramanathapuram on Feb-18, 2012.

- 1. Delivered a technical lecture titled 'Fuzzy Modeling with Examples', Workshop on Soft and Evolutionary Computing, IIST. (19 to21-12- 2011).
- 2. Delivered a technical lecture titled "System Identification", ISA Student Chapter, Noorul Islam Centre for Higher Education, Kumaracoil, (20-8-2011).
- 3. Delivered a lecture titled" Experiencing System Identification in Matlab Conventional to Intelligent", Bio Inspired Computation", IIST, 6 July, 2011.

### 2010

- 1. Chief Guest- at the inaugural functions of the International Conference Advances in Engineering and Technology (ACT 2010), Trivandrum (21-12-2010).
- 2. Delivered a lecture titled "Control system Design Conventional to Intelligent" in the Workshop on Matlab at TERLS, IIST(12-8-2010).
- 3. Delivered a lecture titled "Research in engineering education" held at Oxford Engineering College, Trichy (June, 2010).
- 4. Delivered a Special Lecture on "Intelligent instrument" in the National level technical symposium cum workshop RADIENT\_EISA at JJ College of Engineering, Trichy (19-2-2010).
- 5. Chaired a session in the international conference IEEE-ICRAES'10 at KSR College of Technology (9-1- 2010).

- 1. Delivered a Special Lecture on "Neural fault parameter identification in process engineering" in the UGC Sponsored short term course on "Goal Oriented System Modeling and Identification" held at Annamalai University, Chidambaram(7-1-2009).
- Inaugurated and delivered a key note address in the National Conference on Emerging Investigations in Electrical Engineering titled "fault diagnosis in electrical and process systems" held at Dhanalakshmi Srinivasan Engineering College, Perambalur (3-3-2009).

- 3. Delivered two lectures to VSSC Engineers/Scientists titled "Conventional method of identification of linear /non-linear; Neural based identification" held at IIST(9-7-2009).
- Control System session in the international conference on "Control, Automation, Communication and Energy Conservation" at Kongu Engineering College, Erode during June 4-6, 2009.
- 5. Delivered a key note address in the inauguration of first year titled "Research in engineering education" held at Maha College of Engineering in Salem on Sep 5,2009.
- 6. Delivered a special lecture on "Fuzzy in electrical and power circuits" held at EEE department, Kongu Engineering College, Erode (25-9-2009).
- 7. Delivered a Special Lecture on "Fault diagnosis and control for SR Motor" in the short term course on "Control system" held at Kongu Engineering College, Erode (5-12-2009).
- 8. Inaugurated and presented a technical speech titled "Intelligent observer for Cryptography systems" held at Oxford Engineering College, Trichy (21-12-2009).