

2016 Indian Control Conference (ICC 2016)

**Hyderabad, India
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Content List of 2016 Indian Control Conference

Technical Program for Monday January 4, 2016

MoATutorial	SH2
Control Over Networks: Theory and Practice (Tutorial Session)	
09:00-12:30	MoATutorial.1
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Gupta, Amitava	Jadavpur Univ
Potluri, Ramprasad	IIT Kanpur
MoBTutorial	SH2
Model-Based Design of Control Systems (Tutorial Session)	
14:00-17:30	MoBTutorial.1
<i>Model Based Design of Control Systems*</i> .	
Pemmaraju, Naga	Mathworks

Technical Program for Tuesday January 5, 2016

TuAM_Plenary	SH2
Feedback and Control in Biological Circuit Design (Plenary Session)	
Chair: Vidyasagar, Mathukumalli	The Univ. of Texas at Dallas
09:00-10:00	TuAM_Plenary.1
<i>Feedback and Control in Biological Circuit Design*</i> .	
Murray, Richard M.	California Inst. of Tech
TuAT1	SH2
Emerging Areas in Control (Regular Session)	
Chair: Palanthandalam-Madapusi, Harish	Indian Inst. of Tech. Gandhinagar
Co-Chair: Vidyasagar, Mathukumalli	The Univ. of Texas at Dallas
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Relan, Rishi	Vrije Univ. Brussel
Firouz, Yousef	Department: ETEC, Vrije Univ. Brussel
Vanbeylen, Laurent	Vrije Univ. Brussel
Timmermans, Jean-Marc	Department: ETEC, Vrije Univ. Brussel
Schoukens, Johan	Vrije Univ. Brussels
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Misganaw, Burook	Univ. of Texas at Dallas
Vidyasagar, Mathukumalli	The Univ. of Texas at Dallas
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Vasudevan, Varsha	INDIAN Inst. OF SCIENCE
Padhi, Radhakant	Indian Inst. of Science
Murthy, Aditya	INDIAN Inst. OF SCIENCE
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Shah, Vrutangkumar	IIT Gandhinagar
Goyal, Sachin	Univ. of California, Merced
Palanthandalam-Madapusi, Harish	Indian Inst. of Tech. Gandhinagar
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Tare, Bhupendra	Vjti, Mumbai
Waghmare, Sumit	Student (VJTI, Mumbai)
Siddavatam, Irfan	Veermata Jijabai Tech. Inst
Kazi, Faruk	Indian Inst. of Tech. Bombay
Singh, Navdeep	Veermata Jijabai Tech. Inst
12:10-12:30	TuAT1.6
<i>Sensor Health Monitoring Using Simple Data Driven Approaches</i> , pp. 32-38.	
Mathew, Vipin	Manipal Inst. of Tech

Sengupta, Somnath
Chatterjee, Mayurika
Kamath, Srikanth

KPIT Tech. Ltd
KPIT Tech. Ltd
Manipal Inst. of Tech

TuAT2	SH3
Adaptive and Optimal Control (Regular Session)	
Chair: Kazi, Faruk	Indian Inst. of Tech. Bombay
Co-Chair: Bhikkaji, Bharath	IIT Madras
10:30-10:50	TuAT2.1
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Guha Majumder, Chiranjib	Indian Space Res. Organization
L, Ravi Kumar	Indian Space Res. Organization
Philip, N.K.	Indian Space Res. Organization
10:50-11:10	TuAT2.2
<i>Adaptive Control of a Class of Networked Linear Time-Varying Systems</i> , pp. 47-53.	
Makam, Rajini	PES Inst. of Tech
George, Koshy	PES Inst. of Tech
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Tiwari, Shivendra Nath	DRDO
Dwivedi, Prasiddha Nath	DRDO
Bhattacharya, Abhijit	DRDO
Padhi, Radhakant	Indian Inst. of Science
11:30-11:50	TuAT2.4
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Kp, Karthikeyan	Indian Space Res. Organisation
M.S, Harsha Simha	Indian Inst. of Space Science and Tech
H, Priyadarshan	Indian Inst. of Space Science and Tech
11:50-12:10	TuAT2.5
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Mane, Sneha	VJTI
Jagtap, Pushpak	VJTI
Kazi, Faruk	Indian Inst. of Tech. Bombay
Singh, Navdeep	Veermata Jijabai Tech. Inst
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Lagisetty, Ravi Kumar	Indian Space Res. Organization
Padhi, Radhakant	Indian Inst. of Science
Philip, N.K.	Indian Space Res. Organization
Bhat, M Seetharama	Indian Inst. of Science
TuAT3	SH4
Control Applications I (Regular Session)	
Chair: Kapila, Vikram	NYU Tandon School of Engineering
Co-Chair: Potluri, Ramprasad	IIT Kanpur
10:30-10:50	TuAT3.1
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Surendran, Swathi	IIT Bombay
Chandrawanshi, Ritesh	IIT Bombay
Kulkarni, Sanjeet	IIT Bombay
Bhartiya, Sharad	IIT Bombay, Chemical Engineering Department
Paluri S. V., Nataraj	Systems and Control Engineering, IIT Bombay
Sampath, Suresh	Power, Propulsion and Aerospace, Cranfield Univ. UK

10:50-11:10 TuAT3.2

Interactive Mobile Interface with Augmented Reality for Learning Digital Control Concepts, pp. 85-92.

Frank, Jared Alan	NYU Pol. School of Engineering
Brill, Anthony S	NYU Pol. School of Engineering
Kapila, Vikram	Pol. Univ

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Walambe, Rahee	PVG's Coll. of Engineering and Tech
JOshi, Vrunda	PVG's Coll. of Engineering and Tech

11:30-11:50 TuAT3.4

Optimal PID Design for Voltage Mode Control of DC-DC Buck Converters, pp. 99-104.

Seshagiri, Sridhar	San Diego State Univ
Block, Ethan	San Diego State Univ
Laarea, Inigo	Univ. Publica De Navarra
Soares de Oliveira da Silva, Luana	San Diego State Univ

11:50-12:10 TuAT3.5

Disturbance Observer for Multivariable Speed-Dependent Disturbance in DC Motors, pp. 105-110.

Neeraj, Matiyali	Indian Inst. of Tech. Kanpur
Potluri, Ramprasad	IIT Kanpur

12:10-12:30 TuAT3.6

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Zanoli, Silvia Maria	Univ. Pol. Delle Marche
Pepe, Crescenzo	Univ. Pol. Delle Marche
Rocchi, Matteo	Univ. Pol. Delle Marche

TuAT4 LH10

Process Control (Regular Session)

Chair: Rengasamy, Raghunathan	Texas Tech. Univ
Co-Chair: Bhatt, Nirav	Indian Inst. of Tech. Madras

10:30-10:50 TuAT4.1

Dynamic Optimization of a Batch Transesterification Process for Biodiesel Production, pp. 117-122.

De, Riju	IIT Bombay
Bhartiya, Sharad	IIT Bombay
Shastri, Yogendra	Indian Inst. of Tech. Bombay

10:50-11:10 TuAT4.2

Decoupling of Linear Multivariable System Using PD Output Feedback, pp. 123-127.

Arati, Devi C	National Inst. of Tech.
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Narayanan, S	Tiruchirapalli National Inst. of Tech.
Dr. N., Sivakumaran	Tiruchirappalli National Inst. of Tech

11:10-11:30 TuAT4.3

Design and Implementation of Remote Triggered LabVIEW Based PI Controller for Level Setup, pp. 128-133.

Jadhav, Sangram	Ramrao Adik Inst. of Tech. Nerul, Navi Mumbai-400706
Jadhav, Sharad	Ramrao Adik Inst. of Tech
Parihar, Mahesh Narayan	MUMBAI, RAIT, DY PATIL Univ

11:30-11:50 TuAT4.4

Optimal Sensor Network Design for Early Intrusion Detection and Identification in Water Distribution Networks, pp. 134-139.

Palleli, Venkata Reddy	IIT Madras
Narasimhan, Shankar	Inst. of Tech. Madras
Rengasamy, Raghunathan	Texas Tech. Univ

11:50-12:10 TuAT4.5

Diagnosis and Rectification of Model-Process Mismatch in Chemical Reaction Systems, pp. 140-145.

Dhurvas, Darsha Kumar	Indian Inst. of Tech. Madras
Narasimhan, Shankar	Inst. of Tech. Madras
Bhatt, Nirav	Indian Inst. of Tech. Madras

12:10-12:30 TuAT4.6

Sliding Mode Control of Coupled Tank Systems Using Conditional Integrators, pp. 146-151.

Prusty, Sankata Bhanjan	National Inst. of Tech. Rourkela
Seshagiri, Sridhar	San Diego State Univ
Pati, Umesh Chandra	National Inst. of Tech. Rourkela
Mahapatra, Kamalakanta	National Inst. of Tech. Rourkela

TuPM_Plenary SH2

Nonlinear Control with Limited Information (Plenary Session)

Chair: Vidyasagar, Mathukumalli	The Univ. of Texas at Dallas
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14:00-15:00 TuPM_Plenary.1

*Nonlinear Control with Limited Information**.

Liberzon, Daniel	Univ. of Illinois at Urbana-Champaign
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TuBT1 SH2

Linear Systems and Robust Control (Regular Session)

Chair: Gandhi, Prasanna	Indian Inst. of Tech. Bombay
Co-Chair: Datta, Subashish	Indian Inst. of Tech. Mandi

15:30-15:50 TuBT1.1

Optimization Based State Feedback Control Design for Impulse Elimination in Descriptor Systems, pp. 152-156.

Datta, Subashish	Indian Inst. of Tech. Mandi
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15:50-16:10 TuBT1.2

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Thakar, Parth S	IIT Bombay, Mumbai
Bandyopadhyay, Bijan	IIT Bombay
Bandyopadhyay	
Gandhi, Prasanna	Indian Inst. of Tech. Bombay

16:10-16:30 TuBT1.3

A Linear Discrete Time Controller for Spacecraft Attitude Dynamics on Lie Group, pp. 165-169.

Kp, Karthikeyan Indian Space Res. Organisation
M.S, Harsha Simha Indian Inst. of Space Science and Tech
H, Priyadarshan Indian Inst. of Space Science and Tech

16:30-16:50 TuBT1.4

Modeling and Robust Diagnosis of Power System Protection Failures Using Observations in Discrete Event System Model, pp. 170-175.

S, Reshmila Sree Narayana Gurukulam Coll. of Engineering, Kerala
R, Devanathan Hindustan Inst. of Tech. and Science

16:50-17:10 TuBT1.5

On Input-Output Negative-Imaginary Systems and an Output Strict Negative-Imaginary Lemma, pp. 176-181.

Bhowmick, Parijat Indian Inst. of Tech. Kharagpur
Patra, Sourav Indian Inst. of Tech. Kharagpur

TuBT2 SH3
Networked Control Systems (Regular Session)

Chair: Belur, Madhu N. Indian Inst. of Tech. Bombay
Co-Chair: Diwadkar, Amit Iowa State Univ

15:30-15:50 TuBT2.1

Achieving a Desired Collective Centroid by a Formation of Agents Moving in a Controllable Force Field, pp. 182-187.

Jain, Anoop Indian Inst. of Science, Bangalore
Ghose, Debasish Indian Inst. of Science
Prathyush, Purushothama Univ. of Exeter
Menon

15:50-16:10 TuBT2.2

Selection of Driver Nodes Based on Region of Attraction for Single-Input Complex Networks, pp. 188-193.

Mahia, Ram Niwash INDIAN Inst. OF Tech. JODHPUR
Singh, Mahaveer Indian Inst. of Tech. Jodhpur
Fulwani, Deepak Indian Inst. of Tech. Jodhpur

16:10-16:30 TuBT2.3

Synchronization of Nonlinear Systems with Dissipative Nonlinearity Over Large-Scale Stochastic Networks, pp. 194-199.

Diwadkar, Amit Iowa State Univ
Vaidya, Umesh Iowa State Univ

16:30-16:50 TuBT2.4

Stability Analysis of a Two-Channel Feedback Networked Control System, pp. 200-207.

Gupta, Nirupam Univ. of Maryland
Chopra, Nikhil Univ. of Maryland, Coll. Park

16:50-17:10 TuBT2.5

Robust Stability of Networked Control Systems with Dynamic Controllers in the Feedback Loop, pp. 208-213.

Vilela, João Vítor Cavalcanti Univ. of Brasilia
Figueredo, Luis Felipe da Cruz Univ. of Brasília
Ishihara, João Yoshiyuki Univ. of Brasília

TuBT3 SH4
AI and Neural Networks (Regular Session)

Chair: Mitra, Kishalay Indian Inst. of Tech. Hyderabad
Co-Chair: Rani, K Yamuna CSIR-Indian Inst. of Chemical Tech. Hyderabad

15:30-15:50 TuBT3.1

Enabling Online Optimization and Control of Complex Models through Smart Surrogates Based on ANNs, pp. 214-221.

Miriyala, Srinivas Soumitri INDIAN Inst. OF Tech. HYDERABAD

Pantula, Devi Priyanka INDIAN Inst. OF Tech. HYDERABAD

Majumdar, Saptarshi INDIAN Inst. OF Tech. HYDERABAD

Mitra, Kishalay Indian Inst. of Tech. Hyderabad

15:50-16:10 TuBT3.2

Adaptive ANN Model Based Nonlinear Control of a Semi-Batch Polymerization Reactor Challenge Problem, pp. 222-229.

Reddi, Kamesh CSIR-Indian Inst. of Chemical Tech. Hyderabad

Rani, K Yamuna CSIR-Indian Inst. of Chemical Tech. Hyderabad

16:10-16:30 TuBT3.3

Use Genetic Programming for Selecting Predictor Variables and Modeling in Process Identification (I), pp. 230-237.

Verma, Devendra Chemical Engineering and Process Development Div. CSIR-Natio

Goel, Purva Chemical Engineering and Process Development Div. CSIR-Natio

Patil-Shinde, Veena Chemical Engineering and Process Development Div. CSIR-Natio

Tambe, Sanjeev Chemical Engineering and Process Development Div. CSIR-Natio

16:30-16:50 TuBT3.4

Development of Genetic Programming Based Softsensor Model for Styrene Polymerization Process and Its Application in Model Based Control (I), pp. 238-244.

Ghugare, Suhas Res. Fellow, Chemical Engineering and Process Development Di

Tambe, Sanjeev Chemical Engineering and Process Development Div. CSIR-Natio

16:50-17:10 TuBT3.5

Precision Controller for Segmented Mirror Telescope Actuator: Control and Tuning, pp. 245-252.

Deshmukh, Prasanna Indian Inst. of Astrophysics
Parihar, Padmakar Indian Inst. of Astrophysics

TuAwardsA SH2
The Transformative Fusion of Sensing, Computing, Communication, and Control (Invited Session)

18:15-18:45 TuAwardsA.1

*The Transformative Fusion of Sensing, Computing, Communication, and Control**.

Vijayalayan, R Mathworks

TuAwards2A SH2

Technical Program for Wednesday January 6, 2016

WeAM_Plenary	SH2
Acrobatic Flight (Plenary Session)	
Chair: Vidyasagar, Mathukumalli	The Univ. of Texas at Dallas
09:00-10:00	WeAM_Plenary.1
<i>Acrobatic Flight*</i> .	
D'Andrea, Raffaello	ETH Zurich
WeAT1	SH2
Spacecraft and Flight Control (Regular Session)	
Chair: Sanyal, Amit	Syracuse Univ
Co-Chair: Jain, Shikha	NAL
10:30-10:50	WeAT1.1
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Jain, Shikha	NAL
C, Kamali	National Aerospace Lab
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Mukherjee, Bijoy K.	IIT Kharagpur
Thomas, P.Ranju	IIT Kharagpur
Sinha, Manoranjan	IITKGP
11:10-11:30	WeAT1.3
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Pakala, Suresh Kumar	Univ
H, Priyadarshan	Indian Inst. of Space Science and Tech
M.S, Harsha Simha	Indian Inst. of Space Science and Tech
11:30-11:50	WeAT1.4
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Sachan, Kapil	Indian Inst. of Science
Padhi, Radhakant	Indian Inst. of Science
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Chalikonda, Sai Vamsi	Vellore Inst. of Tech
Kale, Alexander	Scientist Fellow, National Aerospace Lab
Shanmugham, Viswanathan	Scientist, National Aerospace Lab
P, Kavitha	Vellore Inst. of Tech
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Viswanathan, Sasi Prabhakaran	New Mexico State Univ
Sanyal, Amit	Syracuse Univ
WeAT2	SH3

Aerospace Applications (Regular Session)

Chair: Talasila, Viswanath	M.S. Ramaiah Inst. of Tech
Co-Chair: Mony, Abhilash	Indian Space Res. Organization
10:30-10:50	WeAT2.1
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Ailneni, Sanketh	National Aerospace Lab
Kashyap, Sudesh Kumar	National Aerospace Lab
Kumar, Shantha	National Aerospace Lab
10:50-11:10	WeAT2.2
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B Sankar, Ram	DRDL Hyderabad
Bandyopadhyay, Bijnan	IIT Bombay
Arya, Hemendra	IIT Bombay
11:10-11:30	WeAT2.3
<i>Steering Laws of Single Gimbal Control Moment Gyros Applied to Spacecraft Manoeuvres and Tracking - a Comparison</i> , pp. 304-311.	
Mony, Abhilash	Indian Space Res. Organization
Hablani, Hari	IIT Gandhinagar
Sukumar, Srikant	IIT Bombay
11:30-11:50	WeAT2.4
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C, Kamali	National Aerospace Lab
Bayadi, Ramaprakash	Indian Inst. of Tech. Bombay
Deodhare, Girish	ADA, Bangalore
Patel, Vijay	Aeronautical Development Agency
11:50-12:10	WeAT2.5
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Kandath, Harikumar	Indian Inst. of Science
Dhall, Sidhant	Indian Inst. of Science
Bhat, M Seetharama	Indian Inst. of Science
12:10-12:30	WeAT2.6
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P, Anjaly	Indian Inst. of Science
Swaminathan, Shriram	VSSC
WeAT3	SH4
Autonomous and Cooperative Systems (Regular Session)	
Chair: Vachhani, Leena	Indian Inst. of Tech. Bombay
Co-Chair: Sahoo, Soumya Ranjan	Indian Inst. of Tech. Kanpur
10:30-10:50	WeAT3.1
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Sen, Arijit	IIT Kanpur
Sahoo, Soumya Ranjan	Indian Inst. of Tech. Kanpur
Kothari, Mangal	Indian Inst. of Tech. Kanpur
10:50-11:10	WeAT3.2
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Tiwari, Kunal	IIT, Madras
Waghmare, Laxman	S.R.T.M.U.Nanded

Krishnankutty, P	IIT, Madras
11:10-11:30	WeAT3.3
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Gurusamy, Kumaresan	National Aerospace Lab. Bangalore, India
Singh, Giresh Kumar	National Aerospace Lab
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<i>Rendezvous of Heterogeneous Robots Amidst Obstacles with Limited Communication</i> , pp. 347-353.	
Vundurthy, Bhaskar	IIT Madras
More, Aniketh	TVS Motors
Saladi, Veera Venkata Raju	Bosch
K, Sridharan	Indian Inst. of Tech. Madras
11:50-12:10	WeAT3.5
<i>Empirical Waypoint Navigator for Overactuated Autonomous Underwater Vehicle Using Novel Kinematic-Dynamic Controller Pair and Control Allocation Techniques</i> , pp. 354-361.	
Chachada, Mohit	Indian Inst. of Tech. Bombay
Vachhani, Leena	Indian Inst. of Tech. Bombay
Kartik, V	Indian Inst. of Tech. Bombay
12:10-12:30	WeAT3.6
<i>Gamma and Velocity Tracking for UAV Obstacle Avoidance in Pitch Plane</i> , pp. 362-368.	
Arya, Sulakshan R	Jain Univ
Ashokkumar, Chimpalthradi	Jain Univ
Arya, Hemendra	IIT Bombay
WeAT4	LH10
Control Applications II (Regular Session)	
Chair: Bhat, Sanjay P.	Tata Consultancy Services Limited
Co-Chair: Barve, Jayesh	Inst. of Tech. Nirma Univ
10:30-10:50	WeAT4.1
<i>Intuitionistic Fuzzy Expected Value Model for Industrial Grinding Process</i> , pp. 369-376.	
Virivinti, Nagajyothis	Indian Inst. of Tech. Hyderabad
Mitra, Kishalay	Indian Inst. of Tech. Hyderabad
10:50-11:10	WeAT4.2
<i>A Dynamical Systems Approach to Systemic Risk in a Financial Network</i> , pp. 377-384.	
Bhat, Sanjay P.	Tata Consultancy Services
Murali, Uday Kumar	Tata Consultancy Services
Mohammed, Shariq	Univ. of Connecticut
11:10-11:30	WeAT4.3
<i>Towards Teleoperation-Based Interactive Learning of Robot Kinematics Using a Mobile Augmented Reality Interface on a Tablet</i> , pp. 385-392.	
Frank, Jared Alan	NYU Pol. School of Engineering
Kapila, Vikram	NYU Tandon School of Engineering
11:30-11:50	WeAT4.4
<i>Modelling, Simulation and Validation of Continuous Sedimentation Process</i> , pp. 393-398.	
Patel, Nital	Inst. and Control Engineering, Inst. of Tech
Patel, Neel	Nirma Univ
Barve, Jayesh	Inst. of Tech. Nirma Univ

11:50-12:10	WeAT4.5
<i>Transparency Enhancement of Haptic Interface Using Model Matching Approach</i> , pp. 399-404.	
Desai, Indrajit	IIT Bombay
Gupta, Abhishek	IIT Bombay
Chakraborty, Debraj	Indian Inst. of Tech. Bombay
12:10-12:30	WeAT4.6
<i>Control with Side Information</i> , pp. 405-411.	
Ranade, Gireeja	Microsoft Res
Sahai, Anant	UC Berkeley
WeABB_Plenary	SH2
Improving Thermal Energy Efficiency in Process Plants with Monitoring, Diagnostics and Optimization (Invited Session)	
12:35-13:00	WeABB_Plenary.1
<i>Improving Thermal Energy Efficiency in Process Plants with Monitoring, Diagnostics and Optimization*</i> .	
Gugaliya, Jinendra	ABB
WePM_Plenary	SH2
The P <> NP Hypothesis (Plenary Session)	
Chair: Vidyasagar,	The Univ. of Texas at Dallas
Mathukumalli	
14:00-15:00	WePM_Plenary.1
<i>The P <> NP Hypothesis*</i> .	
Agrawal, Manindra	IIT Kanpur
WeBT1	SH2
Identification and Estimation (Regular Session)	
Chair: Jain, Shikha	NAL
Co-Chair: Pasumarthy,	Indian Inst. of Tech. Madras
Ramkrishna	
15:30-15:50	WeBT1.1
<i>GPS Aided Attitude and Heading Reference System Using MEMS Sensors</i> , pp. 412-417.	
Ailneni, Sanketh	National Aerospace Lab
15:50-16:10	WeBT1.2
<i>Drag Assessment of a High Performance Aircraft Using System Identification Techniques</i> , pp. 418-425.	
Tk, Khadeeja Nusrath	CSIR-NAL
Singh, Jatinder	CSIR-NAL
K, Basappa	CSIR-NAL
16:10-16:30	WeBT1.3
<i>An Improved Tracking Algorithm for Underwater Vessels Using the Passive Sonar</i> , pp. 426-431.	
Allahparast, Mohammad	PhD Student at Scuola Superiore Sant'Anna Univ. Italy
Sadegh	
Allahparast, Soroush	Sapienza Univ. of Rome
Laschi, Cecilia	Full Professor of Scuola Superiore Sant'Anna Univ
16:30-16:50	WeBT1.4
<i>Calibration of Static Pressure Sensors Using Extended Kalman Filter at High Angles of Attack and Transonic Mach Numbers</i> , pp. 432-437.	
C, Kamali	National Aerospace Lab
Jain, Shikha	NAL

Saraf, Amitabh	Aeronautical Development Agency
Goyal, Anup	Aeronautical Development Agency

16:50-17:10 WeBT1.5

Limit Cycle Based Identification of Second Order Processes with Time Delay, pp. 438-443.

Pandey, Saurabh	Indian Inst. of Tech. Guwahati
Majhi, Somanath	Indian Inst. of Tech. Guwahati

17:10-17:30 WeBT1.6

Projection Based Constrained Nonlinear State Estimation Using Gaussian Sum Filters, pp. 444-449.

Kottakki, Krishna Kumar	Res. Scholar, Chemical Engineering, IIT Bombay
Bhushan, Mani	Indian Inst. of Tech
Bhartiya, Sharad	IIT Bombay

WeBT2 SH3

Control Applications III (Regular Session)

Chair: Chellaboina, VijaySekhar	Mahindra Ec. Centrale
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Co-Chair: Patre, B. M.	SGGS Inst. of Engineering and Tech
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15:30-15:50 WeBT2.1

Fractional Order PID Controller Design for an SOPDT Model by Online Tuning Method, pp. 450-455.

Baruah, Gargi	Indian Inst. of Tech. Guwahati
Majhi, Somanath	Indian Inst. of Tech. Guwahati
Mahanta, Chitralakha	IIT Guwahati

15:50-16:10 WeBT2.2

Fast Output Sampling Based Controller for Three Time Scale Systems, pp. 456-460.

Munje, Ravindra	K K Wagh Inst. of Engineering Education and Res
Patre, B. M.	SGGS Inst. of Engineering and Tech

16:10-16:30 WeBT2.3

Dimensionality Reduction Based IMC-PI Tuning for DC Servomotor, pp. 461-466.

Saxena, Sahaj	Indian Inst. of Tech. Roorkee
Hote, Yogesh Vijay	IIT, Roorkee

16:30-16:50 WeBT2.4

Congestion Management in Deregulated Electricity Market Using FACTS & Multi-Objective Strength Pareto Evolutionary Algorithm, pp. 467-473.

Khatavkar, Vrushali	BHARATI VIDYAPEETH, Coll. OF ENGINEERING, DEEM Univ. PUNE
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Namjoshi, Madhuri	SAVITRIBAI PHULE PUNE Univ. EDUCATION SOCIETY
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Dharme, Anjali	Coll. of Engineering Pune, MAHARASHTRA
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16:50-17:10 WeBT2.5

Evaluation of Control Strategies for a Semi Batch Copolymerization Reactor, pp. 474-480.

Reddi, Kamesh	CSIR-Indian Inst. of Chemical Tech. Hyderabad
Anand, Polumati	CSIR-Indian Inst. of Chemical Tech. Hyderabad
Rani, K Yamuna	CSIR-Indian Inst. of Chemical Tech. Hyderabad

WeBT3 SH4

Optimization (Regular Session)

Chair: Chopra, Nikhil	Univ. of Maryland, Coll. Park
Co-Chair: Detroja, Ketan	Indian Inst. of Tech. Hyderabad

15:30-15:50 WeBT3.1

Analytical Optimal Guidance Algorithm for Lunar Soft Landing with Terminal Control Constraints, pp. 481-486.

Balivada, VenkataRamkiran	ISRO Satellite Centre
R, Preethi	Vellore Inst. of Tech
M P, Rijesh	Isro Satellite Centre
G V P, Bharat	ISRO Satellite Centre
N K, Philip	ISRO Satellite Centre, Bangalore
P, Natarajan	Isro Satellite Centre

15:50-16:10 WeBT3.2

Microgrid Economy through Optimal Design, pp. 487-492.

Prathapaneni, Dimple Raja	IIT Hyderabad
Detroja, Ketan	Indian Inst. of Tech. Hyderabad

16:10-16:30 WeBT3.3

Sensitivity Analysis of Pareto Solution Sets of Multiobjective Optimization for a Batch Cooling Crystallization Process, pp. 493-498.

Hemalatha, Kilari	CSIR-Indian Inst. of Chemical Tech. Hyderabad
Rani, K Yamuna	CSIR-Indian Inst. of Chemical Tech. Hyderabad

16:30-16:50 WeBT3.4

Multi-Objective Optimization of Energy Generation and Noise Propagation: A Hybrid Approach, pp. 499-506.

Mittal, Prateek	Indian Inst. of Tech. Hyderabad
Kulkarni, Kedar	Fixstream Networks Inc
Mitra, Kishalay	Indian Inst. of Tech. Hyderabad

16:50-17:10 WeBT3.5

A New Formulation for Co-Design of Linear Systems with System Matrices Having Affine Design Variables, pp. 507-513.

Chanekar, Prasad Vilas	Univ. of Maryland, Coll. Park
Chopra, Nikhil	Univ. of Maryland, Coll. Park
Azarm, Shapour	Univ. of Maryland, Coll. Park