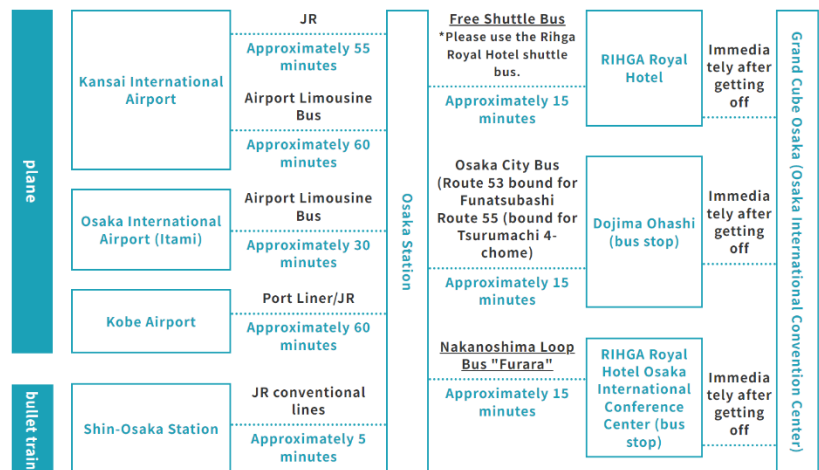


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5-3-51 Nakanoshima, Kita-ku, Osaka City, Osaka
Prefecture, 530-0005 Japan

www.pset.org

Welcome Message

Dear Participants,

On behalf of the Organizing Committee, it is our great pleasure to welcome you to the 2026 5th International Conference on Power Systems and Electrical Technology (PSET 2026), which will be held in Osaka, Japan, from August 17 to 21, 2026.

PSET 2026 brings together researchers, engineers, scholars, and professionals from around the world to exchange innovative ideas, share cutting-edge research findings, and discuss emerging developments in the fields of power systems and electrical technology. As a global forum for academic and technical exchange, the conference aims to promote collaboration and inspire new advances in areas including power system engineering, automation, electrical machinery, power electronics, energy systems, and related technologies.

This year's program features a series of keynote speeches, tutorial, and parallel sessions, providing participants with valuable opportunities to explore the latest breakthroughs and engage in meaningful discussions with experts from diverse backgrounds. Through these interactions, we hope to foster new partnerships and contribute to the future development of sustainable, intelligent, and reliable power systems.

We sincerely appreciate the contributions of all authors, reviewers, speakers, committee members, and participants whose dedication has made this conference possible. Your support and participation are essential to the success of PSET 2026.

We hope you enjoy the inspiring special sessions, fruitful discussions, and the unique cultural experiences that Osaka has to offer. We look forward to welcoming you and sharing an exciting and memorable conference experience together.

Welcome to PSET 2026!

PSET 2026

Organizing Committee

Conference Schedule

DAY 01 Monday, August 17th, 2026



14:00-17:00

Sign in & Collecting Materials



Room 803-8F



15:00-17:00
(GMT+9)

Test for Online Sessions



ID: 862 2114 2549

DAY 02 Tuesday, August 18th, 2026



Keynote Speeches — Onsite Venue: Room 1202-12F

HOST	Assoc. Prof. Bo Jie, The University of Tokyo, Japan
9:00-9:40	Keynote Speech I <i>Prof. Hassan Bevrani, University of Kurdistan, Iran</i>
9:40-10:20	Keynote Speech II <i>Prof. Takao TSUJI, Yokohama National University, Japan</i>
10:20-11:00	Coffee Break & Group Photo
11:00-12:00	Conference Tutorial <i>Advanced Dynamic Modelling of Electrical Machines for Nonlinear Control of Variable Speed Drives</i> <i>Prof. Marcello Pucci, INM-CNR, Italy</i>
12:00-13:30	Lunch Break



Parallel Presentation-8F

	Room 803	Room 804	Room 805
13:30-15:10	Best Student Paper Competition 1	Best Student Paper Competition 2	Poster Session 1
15:10-15:40	Coffee Break		
15:40-17:40	Oral Session 1	Oral Session 2	Poster Session 2
19:00-21:00	Conference Dinner	Barbacoa Umeda Branch 日本〒530-0001 Osaka, Kita Ward, Umeda, 2 Chome-2-22 ハービス PLAZA ENT 5F	

DAY 03
Wednesday, August 19th, 2026

Parallel Presentations-8F

	Room 803	Room 804	Room 805
09:30-11:45	Oral Session 3	Oral Session 4	Oral Session 5

DAY 04
Thursday, August 20th, 2026 (GMT+9)

Online Session — Platform: ZOOM

	Online Room 1 ID: 862 2114 2549	Online Room 2 ID: 874 5015 2333
10:00-12:30	Oral Session 6 (Online)	Oral Session 7 (Online)
15:00-17:30	Oral Session 8 (Online)	Oral Session 9 (Online)

Session Information

Onsite Presentations	
Best Student Paper 1	Power Systems and Smart Grids
	P2722, P2879, P3450, P7587, P7678
Best Student Paper 2	Renewable Energy and Power Electronics
	P2207, P3655, P4288, P5611, P7938
Oral Session 1	Smart Grid, Power System Operation and Energy Management
	P4944, P4009, P6297, P6416, P7394, P7562, P8576, P9107
Oral Session 2	Renewable Energy, Distributed Energy and Microgrids
	P0029, P6752, P7006, P2263, P6786, P9020, P9273-A, P0601
Oral Session 3	Energy Storage and Battery Technologies
	P7733, P1111, P1989, P2074, P5619, P5896, P5903-A, P9488
Oral Session 4	Power Electronics, Electrical Equipment and Industrial Applications
	P1671, P0352, P1819, P2518-A, P5252, P7171-A, P8337, P7076, P4414
Oral Session 5	Intelligent Monitoring and Electromagnetic Applications
	P8211, P3467, P6469-A, P3910-A, P5321, P7890, P8298, P8371
Poster Session 1	Power Electronics and Energy Conversion
	P0628-A, P2290, P2616, P3243, P8951-A, P9920-A
Poster Session 2	Renewable Energy and Intelligent Energy Systems
	P0109-A, P0819-A, P4049, P3956-A, P4167-A, P6949, P7445, P2100, P0002, P4950
Online Presentations	
Oral Session 6 (Online)	Power Systems and Smart Grid
	P3574, P3653, P8314, P4825, P1906, P5945, P6376, P7838, P8254, P7497
Oral Session 7 (Online)	Renewable Energy and Energy Storage
	P1540, P0346, P5886, P3757, P5088, P4251, P6980, P8042, P8457, P0001, P5816-A
Oral Session 8 (Online)	Power Electronics and Electrical Equipment
	P2504, P4625, P5438, P3715, P5821, P6124, P7335, P8130, P1715, P1724
Oral Session 9 (Online)	Intelligent Control and Energy Applications
	P5743, P6336, P7238, P3683, P7275, P7602, P5346, P9466, P5723, P4250

Conference Venue



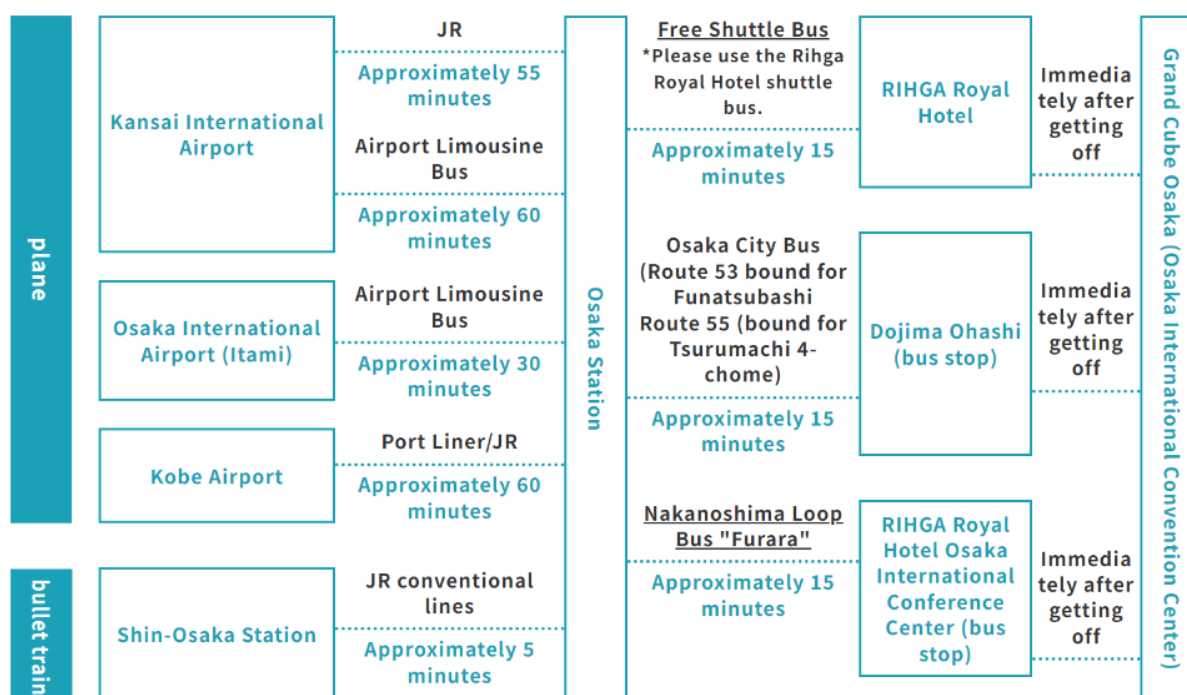
Osaka International Convention Center



Address: 5-3-51 Nakanoshima, Kita-ku, Osaka City, Osaka Prefecture, 530-0005 Japan

● Access Map

Please check more details from: <https://www.gco.co.jp/visitor/access/>



● Explore Osaka



Located in the heart of Japan, Osaka is a dynamic city where tradition and innovation come together. From the tranquil beauty of Osaka Tenmangu Shrine, a historic site celebrating Japanese culture and traditions, to the world-famous Universal Studios Japan, offering exciting entertainment experiences, Osaka welcomes visitors with its diverse attractions, creativity, and warm hospitality.

Take a moment to explore the city, experience its unique charm, and create unforgettable memories beyond the conference.



Osaka Moment



Discover the unforgettable charm of Osaka through its iconic landmarks and vibrant city life. From the historic Tenshukaku at Osaka Castle, showcasing Japan's rich cultural heritage, to the lively streets of Dōtonbori, famous for its dazzling lights and local cuisine, and the panoramic views from Tsutenkaku Tower, Osaka offers a perfect blend of tradition, entertainment, and modern energy. Take a stroll through the city, experience its unique atmosphere, and create memorable moments beyond the conference.

Organizing Committees

● Advisory Chairs



Akiko Kumada
The University of Tokyo, Japan



Ruijin Liao
Chongqing University, China



Jumpei Baba
The University of Tokyo, Japan

● Conference Chairs



Atsushi ISHIGAME
Osaka Metropolitan University, Japan



Takao TSUJI
Yokohama National University, Japan



Sidun Fang
Chongqing University, China

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Osaka Metropolitan University,
Japan



Bo Jie
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University of Electronic Science and
Technology of China, China



Yunjie Gu
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Péter Tamás Szemes
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● Technical Program Committee



Komla Folly
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Hongjian Lin
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Zhonglei Li
Tianjin University, China



Liang Du
Villanova University, USA



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Beijing Jiaotong University, China



Leijiao Ge
Tianjin University, China

● WIE (Women in Engineering) Chairs



Yuqing Li
The University of Osaka, Japan



Jie Shi
Jinan University, China

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Junhua Zhao
The Chinese University of Hong Kong, Shenzhen, China



Yu Wang
Chongqing University, China



Jiashen Teh
Universiti Sains Malaysia, Malaysia

● Publicity Chairs



Guanhong Chen
Chongqing University, China



Qinghu Tang
Tsinghua University, China
University of Washington, USA



Yue Zhou
Cardiff University, UK

● Panel Track Chairs



Haoou Ruan
The University of Tokyo, Japan



Xu Wang
Shanghai Jiao Tong University,
China



Peipei Yu
Shanghai University of Electric Power,
China

● Doctoral students Track Chairs



Shanghong XIE
Waseda University, Japan



Litao Zheng
University of Tokyo, China

History Overview

Since its establishment, PSET has been dedicated to creating an international platform for researchers, engineers, and professionals to exchange ideas and explore the latest advances in power systems and electrical technology.

Over the years, PSET has brought together experts and scholars from around the world, fostering academic collaboration and promoting innovation in the field of energy and power technologies.

Through continuous development and global engagement, PSET has grown into a recognized conference series, connecting communities and inspiring future advancements toward a smarter and more sustainable energy future.



PSET2025 | Tokyo, Japan



PSET2022 | Online



PSET2023 | Milan, Italy



PSET2024 | Tokyo, Japan



Global Platform



Global Experts



IEEE Xplore



**Power & Energy
Innovation**



**International
Collaboration**

Onsite Conference Notice

About Onsite Presentation

- Keynote Speakers are limited to 40 minutes. (including Question & Answer).
- Best Student Paper Speakers are limited to 20 minutes. (including Question & Answer).
- Oral Presentations are limited to 15 minutes (including Question & Answer).
- Each speaker is required to meet her / his session chair in the corresponding session rooms 10 minutes before the session starts and copy the slide file (PPT or PDF) to the computer.
- It is suggested that you email a copy of your presentation to your personal in box as a backup. If for some reason the files can't be accessed from your flash drive, you will be able to download them to the computer from your email.
- Please note that each session room will be equipped with a LCD projector, screen, point device, microphone, and a laptop with general presentation software such as Microsoft Power Point.

Name Badge

For security purposes, delegates, speakers, exhibitors and staff are required to wear their name badge to all sessions and social functions. Lending your participant card to others is not allowed. Entrance into sessions is restricted to registered delegates only. If you misplace your name badge, please ask the staff at the registration desk to arrange a replacement.

Gentle Reminder

- Please ensure that you take all items of value with you at all times when leaving a room. Do not leave bags or laptops unattended. The conference organizer does not assume any responsibility for the loss of personal belongings of the participants.
- Accommodation is not provided. Delegates are suggested make early reservation.
- Please show the badge and meal coupons when dining.

Poster Presentations

- We expect that at least one author stands by the poster for (most of the time of) the duration of the poster session. This is essential to present your work to anyone interest into it.
- If you wish to leave your poster to attend a lecture, please leave a message on the board to inform visitors.
- Posters should be set-up at least 15 minutes before the session starts and removed at the end of the session. Left behind posters at the end of the session will be disposed of.
- The size of poster is A1, approximately 60cm*80cm in color print. Posters must be in portrait format(height>width). This cannot be modified.
- Materials to hang the poster will be made available on-site. Our staff will be available onsite to assist you.

Online Conference Notice

Test before Formal Meeting



15:00-17:00 | ZOOM ID: 862 2114 2549 Link: <https://us02web.zoom.us/j/86221142549>

Time Zone

Tokyo Time (GMT+9)

You're suggested to set up the time on your laptop in advance.

Equipment & Environment Needed

- A laptop with stable internet connection and camera
- Headphones
- A quiet place
- Proper lighting and background

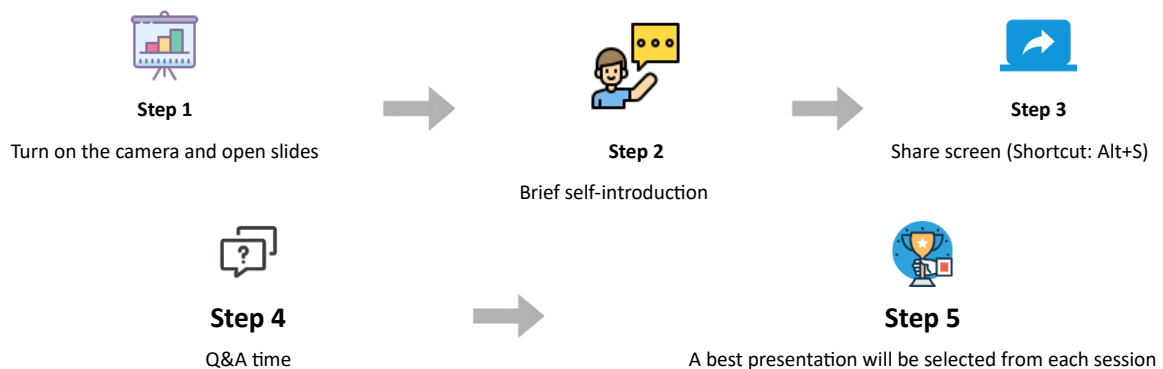
Presentation Tips

- Parallel Presentation Timing: a maximum of **15 minutes** in total, including 3 minutes for Q&A.
- It is suggested that the presenter email a copy of his/her video presentation to the conference email as a backup in case any technical problem occurs.

Online Room Information

Online Session: Room Information	
ROOM1	ID: 862 2114 2549 Link: https://us02web.zoom.us/j/86221142549
ROOM2	ID: 874 5015 2333 Link: https://us02web.zoom.us/j/87450152333

Presentation Process by Zoom



Keynote Speaker I



Prof. Hassan Bevrani

University of Kurdistan



09:00-09:40
August 18, 2026



Room 1202



Speech Title: How Grid-Forming Converters Shape Modern Power System Dynamics?

The grid-forming converters (GFMs) offer an attractive solution for addressing the dynamic challenges of integrating renewable energy sources and distributed generators into the power systems. Advances in control, computing, and data communication technologies have significantly aided this process.

This speech presents the concepts, terms, and methodologies for those dynamic characteristics that can be provided by the GFMs to improve the power system stability and performance. It will be discussed how cyber dynamics can emulate the required properties and dynamics, which in the past could only be taken from physical systems. This speech opens a new window on how GFMs can create desirable characteristics to shape the power system behavior in a soft and flexible manner. The presentation will be supported by several examples.



Short Biography:

Hassan Bevrani received a Ph.D. degree in Electrical Engineering from Osaka University in 2004. Currently, he is a full professor and the Founder of Micro/Smart Grids Research Center (SMGRC) at the University of Kurdistan. Over the years, he has worked as an invited and visiting professor at several universities in Iran, Japan, Australia, France, Germany, and China. He is the author/coauthor of 10 international books, 18 book chapters, and over 500 journal/conference papers.

Prof. Bevrani is a Fellow member of IEEE, the chairman of the Control Chapter of the IEEE Iran Section, and head of the Promotion Committee of the IEEE Iran Section. He was awarded the Allameh Tabatabaei Scientific Medal (National Foundation of Iranian Elites, 2025), an Outstanding Professor (Iran Ministry of Science, Research and Technology, 2022), IEEE Lifetime Research Award (IEEE Iran Section, 2025), and a Distinguished Professor in Electrical Engineering (Iran Academy of Science, 2025). Prof. Bevrani has also been awarded the prestigious Medal for the Promotion of Electrical Engineering Science by the Institute of Electrical Engineers of Japan (IEEJ) in 2026.

His current research interests include microgrid operation and control, power system stability, and Intelligent/robust control applications in the power electric industry.

Keynote Speaker II



Prof. Takao TSUJI

Yokohama National University, Japan



09:40-10:20
August 18, 2026



Room 1202



Speech Title: An Outlook of Supply and Demand Balance in Japan as of 2040

The integration of variable renewable energy sources, such as photovoltaics and wind turbines, is progressing toward carbon neutrality. In Japan, the national government presented an outlook for the supply–demand balance in 2040 in the updated 7th Strategic Energy Plan released in 2025. Accordingly, this keynote speech will discuss recent policy trends and provide an overview of supply–demand balance analyses toward 2040.



Short Biography:

Professor Tsuji is a highly respected expert in power system engineering, and now as a Professor in the Faculty of Engineering. His research focuses on electricity power systems. He is also an expert in the field of electricity markets and serves as an important member for several expert committees under the Japanese government department, the Ministry of Economy, Trade and Industry. He combines deep theoretical insight with practical solutions to overcome the challenges of renewable energy integration and future smart grids in Japanese electricity power system.

Tutorial



August 18, 2026



11:00-12:00
Room 1202

Advanced Dynamic Modelling of Electrical Machines for Nonlinear Control of Variable Speed Drives

The tutorial describes and analyses some advanced dynamic models of electrical machines conceived to be the backbone of high performance nonlinear control techniques. The underlying idea is to have at disposal advanced controllers embedding a better knowledge of the machine behaviour in a wider range of operating conditions, in order to improve the drive dynamic performance in the same operating range. The first part is devoted to the description of classical dynamic models of induction motors (IMs) and Synchronous Motors (SMs), with particular focus on the simplifying assumptions and related choice of the model state variables. The machine operating conditions in which such simplifying model assumptions lead to an inaccurate model result are identified, highlighting the related effects on the control performance. Starting from this analysis, some of the simplifying assumptions are dropped, specific machine effects are properly modelled and the related dynamic models are derived and expressed in space state form. In particular, the following dynamic models are described:

- Dynamic model of the rotating induction motor (RIM) accounting for both magnetic saturation and iron losses;
- Dynamic model of the linear induction motor (LIM) accounting for dynamic end effects;
- Dynamic model of the linear induction motor (LIM) accounting for dynamic end effects and iron losses;
- Dynamic model of the synchronous reluctance motor (SynRM) accounting for magnetic saturation;
- Dynamic model of the synchronous reluctance motor (SynRM) accounting for magnetic saturation and iron losses;

The second part is devoted to the description of advanced nonlinear control techniques exploiting the previously described dynamic models. The input-output feedback linearization control (FLC) has been chosen, since it is inherently a model-based controller, whose dynamic performance is deeply related to the underlying model and related parameter. After a brief description of the FLC approach, the following nonlinear controllers are described and validated by suitable experimental results:

- Feedback Linearizing Control of Induction Motor Considering Magnetic Saturation Effects;
- Input-Output Feedback Linearization Control of Linear Induction Motors Including the dynamic End-Effects;
- Input-Output Feedback Linearization Control of a Linear Induction Motor Taking Into Consideration Its Dynamic End-Effects and Iron Losses;
- Feedback Linearization Based Nonlinear Control of SynRM Drives Accounting for Self- and Cross-Saturation;
- Adaptive Feedback Linearization Control of SynRM Drives With On-Line Inductance Estimation.

Organizers



Prof. Marcello Pucci

Institute of Marine Engineering (INM), National Research Council of Italy (CNR), Palermo, Italy

BIO: Marcello Pucci received the MS degree and the Ph. D. degree in electrical engineering from the University of Palermo (Italy) in 1997 and in 2002, respectively. From 2001 to 2007 he has been a researcher and from 2008 to 2019 he has been a senior researcher at the Section of Palermo of the Institute on Intelligent Systems for the Automation (ISSIA), National Research Council of Italy (CNR) Italy. Since 2020 he has been a Director of Research of the Institute of Marine Engineering (INM), CNR, Italy. He has held several courses at the University of Palermo, Italy, University of Belfort Montbeliard (France), University of South Pacific (Fiji) and University of Rome Tor Vergata (Italy). He has coordinated several scientific projects in the field of electrical engineering. He currently serves as Responsible of Palermo of INM-CNR. His major research interests are electrical machines, control, diagnosis and identification techniques of electrical drives, intelligent control and power converters, wind and photovoltaic generation, micro-grid control and management. He is a senior member of the IEEE. His current google scholar h-index is 42. He is an IEEE Senior Member.



Dr. Antonino Sferlazza

University of Palermo, palermo, Italy

BIO: ANTONINO SFERLAZZA received the master's degree in automation engineering and the Ph.D. degree in mathematics and automation from the University of Palermo, Palermo, Italy, in 2011 and 2015, respectively. In 2013, he was a Visiting Ph.D. Student with the University of California at Santa Barbara, Santa Barbara, CA, USA, in the field of modeling and analysis of stochastic hybrid systems. From 2016 to 2017, he was with the University of Palermo, as a Junior Researcher. From 2017 to 2018, he was a Researcher with LAAS CNRS, Toulouse, France, working in the field of power converter control. He is currently Professor in systems and control engineering with the University of Palermo. Prof. Sferlazza serves as an Associate Editor for the European Journal of Control, and he is a Technology Conferences Editorial Board member of the IEEE Control System Society. His research interests include the development of feedback control algorithms for nonlinear dynamical systems, optimization techniques, estimation of stochastic dynamical systems, and applications of control of electrical drives, power converters, and mechanical systems. He is a senior member of the IEEE. His current google scholar h-index is 26.