

INTERNATIONAL IFAC CONFERENCE

Shiv Nadar University

Noida, Uttar Pradesh

12 March, 2024

8th International IFAC Conference on Advances in Control and Optimization of Dynamical Systems (ACODS 2024)

Firstly, I congratulate Shiv Nadar Institution of Eminence for hosting the Eighth International Conference on Advances in Control and Optimization Of Dynamical Systems (ACODS 2024). It's a privilege to stand before such a distinguished gathering of experts, scholars, and practitioners in the field of control and optimization.

ACODS 2024 serves as a platform to bring together the international community of researchers and practitioners from academia, industry, and research laboratories to disseminate new developments and advances in the control and optimization of dynamical systems.

I am glad to be a part of this conference as the topic of control and optimization of dynamical systems interests me personally. Being an Engineer and alumni of



IISc Bangalore, I find this rare topic very intriguing to me. I have over 35 years of experience in research and development in the area of geotechnical and infrastructure engineering, seismic microzonation and soil dynamics. I feel discussing more about Advances in Control and Optimization Of Dynamical Systems will help me gain more knowledge about this topic.

The 8th International IFAC Conference on Advances in Control and Optimization of Dynamical Systems (ACODS 2024) is a prestigious gathering of scholars, researchers, and practitioners dedicated to pushing the boundaries of control and optimization theory and application. ACODS 2024 serves as a platform for exchanging ideas, sharing insights, and fostering collaboration in this dynamic and rapidly evolving field.

Through this conference, participants will have the opportunity to engage with

cutting-edge research, innovative methodologies, and emerging trends in control and optimization. Through keynote presentations, technical sessions, workshops, and panel discussions, delegates will explore a diverse array of topics spanning theoretical foundations, computational methods, practical applications, and interdisciplinary perspectives.

Such conferences help in addressing key challenges and opportunities in control and optimization across various domains, including robotics, aerospace, automotive systems, process control, manufacturing, energy systems, biomedical engineering, and environmental management. By bringing together experts from academia, industry, and government agencies, ACODS 2024 will catalyze new collaborations, accelerate knowledge dissemination, and inspire transformative advances in the field.



Moreover, ACODS also provides a platform for young researchers and graduate students to showcase their work, interact with seasoned professionals, and gain valuable insights into the latest developments and trends shaping the future of control and optimization. Special sessions and networking events will facilitate mentorship, professional development, and the exchange of best practices among participants at all stages of their careers.

As we navigate the complexities of an increasingly interconnected and technologically driven world, the importance of control and optimization has never been more pronounced. From enhancing the efficiency and reliability of industrial processes to enabling breakthroughs in healthcare, transportation, and sustainability, the impact of control and optimization extends far beyond the confines of academia.

The field of control and optimization plays a pivotal role in addressing complex challenges and advancing technological innovation across diverse domains. By leveraging mathematical principles, computational tools, and engineering expertise, researchers and practitioners in this field strive to optimize the performance, efficiency, and sustainability of dynamic systems, ultimately shaping a more prosperous and resilient future for society.

As we are in Amrit Kaal, it presents us with a unique opportunity to explore the possibilities and opportunities in the field of advances in control and optimization. By embracing interdisciplinary collaboration, leveraging emerging technologies, and fostering a culture of innovation and excellence, we can unlock the full potential of control and optimization techniques to address pressing societal challenges and shape a better future for generations to

come. Our aim should be to develop India in all sectors and domains by 2047.

Amrit Kaal can be termed as the Age of Innovation with unprecedented opportunities to explore and leverage advances in control and optimization. In the realm of engineering, technology, and beyond, these advancements hold the potential to revolutionize systems, processes, and decision-making.

With the rapid advancement of technology, including artificial intelligence, machine learning, big data analytics, and the Internet of Things (IoT), has opened up new frontiers in control and optimization. These technologies offer powerful tools and algorithms for modeling complex systems, analyzing data, and optimizing processes in real-time. Moreover, embracing advances in control and optimization can drive innovation and enhance competitiveness in both academia and industry. By leveraging cutting-edge technologies and methodologies, organizations can develop new products, services, and business models that meet evolving customer needs and market demands.

Our Hon'ble PM clarion call for Viksit Bharat, embodies a vision of progressive and inclusive India where education serves as the cornerstone of development and empowerment for all its citizens. So, let's make this dream a reality by working together by exploring unique and unexplored fields of technology. I would like to highlight that at AICTE approved Institutions, a development dialogue on Amrit Kaal Vimarsh, dedicated to Viksit Bharat is undergoing. In these dialogues, an expert of new technologies delivers his views and opinions to the young minds. I feel such dialogues, expert talk and conferences should be more on 'advance control and optimization', to have a better understanding of the subject.

I invite experts of 'advance control and optimization' sitting here to collaborate with Institutions for an expert talk. Your invaluable views, knowledge, ideas and opinions will surely benefit the younger generation.

I encourage the hosts and participants of ACODS to continue organizing such conferences and embrace the spirit of collaboration, innovation, and excellence that defines our community. I once again congratu-

late the organizers, sponsors, and participants who have made this conference possible. Your dedication and enthusiasm are the driving force behind the collective endeavor. Together, let us embark on a journey of discovery, inspiration, and transformative impact at the 8th International IFAC Conference on Advances in Control and Optimization of Dynamical Systems (ACODS 2024).

Thank you, and may this conference be a resounding success.

