

Prof. Y.A. Liu

**Talk Title: Expanding the Science-Guided Machine Learning Applications for Process Industries: Advances, Education and Workforce Development**



**Bio:**

Y. A. Liu is an Alumni Distinguished Professor at Virginia Tech, where he teaches design courses to graduating seniors and does research and industrial outreach on sustainable engineering, process modeling, big data analytics, and energy and water savings. He is a fellow of the AIChE and AAAS, and has received the ASEE Fred Merryfield Design Award, and the Process Development Research Award, the Professional Achievement Award for Innovations in Green Process Engineering, and the Outstanding Student Chapter Advisor Award and the Warren K. Lewis Award for Chemical Engineering Education from the AIChE, and the Carnegie Foundation U. S. Professors of the Year Award. Two of his textbooks relating to the presentation are: D. R. Baughman, Neural Networks in Bioprocessing and Chemical Engineering, 488 pages, Academic Press, (1995); Y. A. Liu and N. Sharma, Integrated Process Modeling, Advanced Control and Data Analytics for Optimizing Polyolefin Manufacturing, Volumes 1 and 2, 857 pages, Wiley-VCH (2023)

Website: <https://design.che.vt.edu/>