Dr. Mohammad Atif Siddiqui
Head & Associate Professor, Department of Electrical Engineering, Faculty of Engineering, Integral University, Lucknow
Mobile No: (+91)-9044524124, email id: atifsiddiqui@iul.ac.in, atif.nits@gmail.com
Google Scholar Citation, |Orcid Id, Scopus, |Research gate, |linked in

PROFILE

- Highly self-motivated Ph.D. candidate with demonstrated research expertise in process control systems. Strong interpersonal skills
- Experimental techniques: Cascade Control, PID controller design, and Sliding Mode Control, Avionics system.
- Computer skills: LaTeX; PLC Ladder, MATLAB, Windows/Linux.

RESEARCH INTEREST:

- Controller design in improved control structure
- Robustness and performance analysis.
- Advance Control System Engineering.

PROFESSIONAL MEMBERSHIP:

- Member of IEEE

COURSE TAUGHT:

- Advance Control System
- Modern Control System
- Bio Control Systems
- Industrial Automation

ADMINISTRATIVE/DEPARTMENTAL RESPONSIBILTY

- **Chairperson,** MoU Coordination Cell, Integral University, Lucknow**.**
- **Head,** Department of Electrical Engineering Since August 2023.
- **Convenor** of departmental FDP organization committee.
- **Convenor** of departmental Refresher Course organization committee

STUDENTS SUPERVISION

- B. Tech.: 01
- M. Tech.: 03
- PhD. (Supervisor) : 03 (Pursuing)
- PhD. (Co-Supervisor) : 02 (Pursuing)

PUBLISHED/GRANT PATENTS

- OPAM- OPTIMAL PARKING ALLOCATION MODEL. **(Application Number: 202311067294, Published)**
- SPV based salinity measuring instrument for water analysis. **(Application Number: 202411014879, Published)**
- 1-DEGREE OF FREEDOM LABORATORY HELICOPTER FOR CONTROL SYSTEM APPLICATION. **(Application Number: 202411066524, Published)**
- AUTOMATIC DRUG DELIVERY SYSTEM FOR MEAN ARTERIAL BLOOD PRESSURE CONTROL. **(Application Number: 202411022105, Published)**

PUBLISHED/ACCEPTED SCI/SCOPUS RESEARCH PAPERS

- M. A. Siddiqui, Nishat Anwar, M. & Haque Laskar, S. (2023). Sliding mode controller design based on simple closed loop set point experiment for higher order processes with dead time. International Journal of Chemical Reactor Engineering, 21(7), 845-857. https://doi.org/10.1515/ijcre-2022-0134
- M.A. Siddiqui, Anwar, M.N. and, S.H. Laskar , "Cascade controllers design based on model matching in frequency domain for stable and integrating processes with time delay", COMPEL - **The international journal for computation and mathematics in electrical and electronic engineering**, Vol. 41 No. 5, pp. 1345-1375. https://doi.org/10.1108/COMPEL-06-2021-0185
- M. A. Siddiqui, M. N. Anwar, S. H. Laskar, and M. R. Mahboob, “A unified approach to design controller in cascade control structure for unstable, integrating and stable processes,” **ISA Transactions**, pp. 1–16, 2020, doi: 10.1016/j.isatra.2020.12.038. (**SCIE**).
- M. A. Siddiqui, M. N. Anwar, and S. H. Laskar, “Enhanced control of unstable cascade systems using direct synthesis approach,” **Chemical Engineering Sciences**, 232, pp. 116322, 2021, doi: 10.1016/j.ces.2020.116322. (**SCIE**).
- M. A. Siddiqui, M. N. Anwar, and S. H. Laskar, “Sliding mode controller design for second-order unstable processes with dead-time,” **Journal of Electrical Engineering**, 71, no. 4, pp. 237–245, 2020, doi: 10.2478/jee-2020-0032. (**SCIE**).
- M. A. Siddiqui, M. N. Anwar, S. H. Laskar, M. Shamsuzzoha, and M. R. Mahboob, “Closed Loop Tuning of Cascade Controllers Based on Setpoint Experiment,” **Journal of Engineering research**, 8, no. 4, pp. 117–138, 2020, doi: 10.36909/jer.v8i4.8492. (**SCIE**).
- M. A. Siddiqui, M. N. Anwar, and S. H. Laskar, “Tuning of PIDF Controller in Parallel Control Structure for Integrating Process with Time Delay and Inverse Response Characteristic,” **Journal**

of Control, Automation and Electrical Systems, 2008, 2020, doi: 10.1007/s40313-020-00603-x. (**ESCI**).

- M. A. Siddiqui, MN Anwar, SH Laskar "A Model-Free Sliding Mode Controller for Higher-order Unstable and Stable Process.", **International Journal of Chemical Reactor Engineering**, 2022, https://doi.org/10.1515/ijcre-2022-0134. (**SCIE**)**.**
- M. A. Siddiqui, M. N. Anwar, and S. H. Laskar, "Cascade controllers design based on model matching in frequency domain for stable and integrating processes with time delay," **COMPEL - Int. J. Comput. Math. Electr. Electron. Eng.,** vol. ahead-of-p, no. ahead-of-print, 2022, doi: 10.1108/compel-06-2021-0185. **(SCI)**
- M. A. Siddiqui, M. N. Anwar, and S. H. Laskar, "Control of nonlinear jacketed continuous stirred tank reactor using different control structures," **Journal Process Control,** vol. 108, pp. 112–124, 2021, doi: 10.1016/j.jprocont.2021.11.005. **(SCI)**
- Akhlaque Ahmad Khan, Ahmad Faiz Minai and **Mohammad Atif Siddiqui** 2024. Feasibility and Techno-Economic Assessment of 128kWpGrid-Tied Photovoltaic System using HOMER Pro **J. Phys.: Conf. Ser.** 2777 012008. IOP Publishing Ltd. https://doi.org/10.1088/1742-6596/2777/1/012008. **(SCOPUS)**

PAPER PUBLISHED IN INTERNATIONAL CONFERENCES

- (M. A. Siddiqui and S. A. Akhtar, "Control of Hybrid Electric Vehicle Speed by using Model Matching and Pole Placement Technique," **2022 2nd International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET),** Patna, India, 2022, pp. 1-5, doi: 10.1109/ICEFEET51821.2022.9847818.
- M. A. Siddiqui, A. F. Minai, A. A. Khan, F. I. Bakhsh, M. A. Hussain and R. K. Pachauri, "Genetic Algorithm Based SPV System with Cascaded H-Bridge Multilevel Inverter," **2023 International Conference on Power, Instrumentation, Energy and Control (PIECON),** Aligarh, India, 2023, pp. 1-6, doi: 10.1109/PIECON56912.2023.10085864.
- M. A. Siddiqui, M.N. Anwar A.F. Minai, A.A. Khan, M. Naseem and A. Jabbar, "A Direct Synthesis based Sliding Mode Control of a Nonlinear Continuous Stirred Tank Reactor", **2022 IECON 48th Annual Conference of the IEEE Industrial Electronics Society, Brussels, Belgium,** October 17-20, 2022.
- M. A. Siddiqui, S. H. Laskar, M.N. Anwar and M. Naseem, "A Model-Free PI / PID Controller based on Direct Synthesis Approach to achieve Disturbance Rejection", **2019 IECON 45th Annual Conference of the IEEE Industrial Electronics Society, Lisbon, Portugal**, October 13-17, 2019.
- M. A. Siddiqui, M.N. Anwar and S. H. Laskar, "PID Controller Tuning of Cascade Control Systems using Frequency Response Matching and Dominant Pole Placement Method", **2020 IEEE 19th International Power Electronics and Motion Control Conference (PEMC), Gliwice, Poland,** 20th & 24th April 2021. **Accepted and presented.**
- M. A. Siddiqui, M.N. Anwar, S. H. Laskar and A. Yadav, "Cascade Controller Design Based on Pole Placement and Model Matching Technique.", Conference: **International Conference on Emerging Electronics & Automation (E2A) 2021, NIT Silchar, India**, January 06-01, 2022.

- M. A. Siddiqui, S. H. Laskar and M.N. Anwar, "A Simple Tuning Approach for PID Controller based on Direct Synthesis and Root-locus.", **2019 IEEE 3rd International Conference on Computing Methodologies and Communication (ICCMC),** Surya Engineering College (SEC), Erode, India, May 11-13, 2019.
- M. A. Siddiqui, M.N. Anwar, S. H. Laskar and A. Yadav, "PIDA Controller Design for Higher Order Stable Process with Inverse Response Characteristic.", **2018 IEEE 3rd International Conference on Computational and Characterization Techniques in Engineering and Sciences,** CCTES, Integral University, Lucknow, India, September 06-08, 2018.
- Minai, A.F., M. A. Siddiqui, Laskar, S.H., Khan, A.A., Pachauri, R.K. (2024). Performance Evaluation and Assessment of 100 kW Grid-Tied SPV System in Subtropical Climatic Conditions. In: Gabbouj, M., Pandey, S.S., Garg, H.K., Hazra, R. (eds) Emerging Electronics and Automation. **E2A 2022. Lecture Notes in Electrical Engineering,** vol 1088. Springer, Singapore. https://doi.org/10.1007/978-981-99-6855-8_27

PUBLISHED NON-SCI-SCOPUS BUT PEER REVIEWED RESEARCH PAPERS

- M. A. Siddiqui. Design of Parallel Cascade Controller for Nonlinear Continuous Stirred Tank Reactor ,21 May 2024, PREPRINT (Version 1) available at **Research Square** [https://doi.org/10.21203/rs.3.rs-4393821/v1]

_____