

Ali Arshad Uppal, Ph.D., SMIEEE

✉ ali_arshad@comsats.edu.pk

🐦 [@aauppal](https://twitter.com/aauppal)

🌐 [@aauppal](https://www.linkedin.com/in/aauppal)

🌐 [My portfolio](#)



Research Interests

• Nonlinear control • Optimal control • Data driven control • Control of energy conversion systems




Professional Experience

- 2023 – ···· **📖 Tenured Associate Professor**, Department of Electrical & Computer Engineering, COMSATS University Islamabad (CUI), Islamabad, Pakistan
- Teaching at graduate & undergraduate levels
 - Supervision/Co-supervision of MS and Ph.D. theses and undergraduate projects
 - Head of Control and Energy Systems Research group
- 2014 – 2023 **📖 Assistant Professor**, Department of Electrical & Computer Engineering, CUI
- Teaching at graduate & undergraduate levels
 - Supervision/Co-supervision of MS and Ph.D. theses and undergraduate projects
 - Head of Control and Energy Systems Research group
- 2020 – 2021 **📖 Doctoral Researcher**, Department of Electrical & Computer Engineering, University of Porto, Porto, Portugal
Research Project: *FCT UPWIND– A Multi-Kite System to Harvest High Altitude Wind Power*
- Modelling and parametrization of the induction machine (IM)
 - Development of observer based rotor flux-oriented control of the IM
 - Development of a robust cascade control of the ground station module of the airborne wind energy system (AWES) in all operational phases
 - Development of the supervisory controller for the AWES
- 2015 – 2016 **📖 Visiting Scholar**, Department of Electrical & Computer Engineering, The Ohio State University, Columbus, OH, USA
- Development of a simplified time domain model of underground coal gasification (UCG) process
 - Development of the model based control of the UCG process based on Sliding Mode Control theory
 - Implementation of the developed controller on the actual process model
 - The stability of the zero dynamics, which guarantees the overall stability of the closed loop system
- 2012 – 2014 **📖 Professional Researcher**, Control & Signal Processing Research Group, Capital University of Science & technology, Islamabad, Pakistan
Research Project: *ICT R & D Funds– Simulation and Control of the UCG process*
- Development of the one-dimensional packed bed reactor model for Thar gasifier
 - Numerical solution of the developed model
 - Computer simulation of the numerical solution techniques
 - Parameter estimation for the UCG process
 - Model validation with actual field trials
 - Robust control system design for obtaining a desired calorific value of the product gas mixture

Professional Experience (continued)








- 2008 – 2012  **Lecturer**, Department of Electrical & Computer Engineering, CUI
- Teaching at undergraduate level
 - Supervision of undergraduate projects
 - Designed and conducted labs for Electric Machines and Control System
- 2007 – 2008  **Design Engineer**, Public Sector Organization, Islamabad, Pakistan
- Integration and testing of electronic modules

Education










- 2012 – 2016  **Ph.D., Electrical Engineering, COMSATS University Islamabad.**
Thesis title: [Modeling and Control of Underground Coal Gasification.](#)
- 2009 – 2011  **M.Sc., Computer Engineering, University of Engineering & Technology Taxila.**
Thesis title: Dynamic Modeling and Nonlinear Controller Design for UCG.
- 2003 – 2006  **BS., Electrical Engineering, University of Engineering & Technology Taxila.**

Publications






Journal Articles

- 1 A. Ahmed, **A. A. Uppal**, and Q. Ahmed, “Electric vehicle range maximization using mpc based active battery cell balancing (**under review**),” *IEEE Transactions on Control Systems Technology*, Jul. 2024.
- 2 Y. CW., S. Riaz, **A. A. Uppal**, and J. Iqbal, “Fuzzy fault-tolerant controller with guaranteed performance for mimo systems under uncertain initial state,” *International Journal of Control, Automation and Systems*, vol. 22, pp. 2038–2054, Jun. 2024.  DOI: [10.1007/s12555-023-0327-5](https://doi.org/10.1007/s12555-023-0327-5).
- 3 S. B. Javed, **A. A. Uppal**, M. R. Azam, and Q. Ahmed, “Model-based quantitative analysis of power losses aware active cell balancing networks with load (**accepted for publication**),” *IEEE Transactions on Transportation and Electrification*, Aug. 2024.
- 4 S. Ahmad, **A. A. Uppal**, M. R. Azam, and J. Iqbal, “Chattering free sliding mode control and state dependent kalman filter design for underground gasification energy conversion process,” *Electronics*, vol. 12, no. 4, Feb. 2023, ISSN: 2079-9292.  DOI: [10.3390/electronics12040876](https://doi.org/10.3390/electronics12040876).
- 5 A. Ahmed, S. B. Javed, **A. A. Uppal**, and J. Iqbal, “Development of cavlab—a control-oriented matlab based simulator for an underground coal gasification process,” *Mathematics*, vol. 11, no. 11, May 2023, ISSN: 2227-7390.  DOI: [10.3390/math11112493](https://doi.org/10.3390/math11112493).
- 6 A. Ahmed, **A. A. Uppal**, and S. B. Javed, “Nonlinear-control-oriented modeling of the multi-variable underground coal gasification process for ucg project thar: A machine learning perspective,” *Journal of Process Control*, vol. 131, p. 103 090, Nov. 2023, ISSN: 0959-1524.  DOI: [10.1016/j.jprocont.2023.103090](https://doi.org/10.1016/j.jprocont.2023.103090).
- 7 U. Javaid, A. Mehmood, J. Iqbal, and **A. A. Uppal**, “Neural network and ured observer based fast terminal integral sliding mode control for energy efficient polymer electrolyte membrane fuel cell used in vehicular technologies,” *Energy*, vol. 269, p. 126 717, 2023, ISSN: 0360-5442.  DOI: [10.1016/j.energy.2023.126717](https://doi.org/10.1016/j.energy.2023.126717).
- 8 **A. A. Uppal**, M. R. Azam, and J. Iqbal, “Sliding mode control in dynamic systems,” *Electronics*, vol. 12, no. 13, Jul. 2023.  DOI: [10.3390/electronics12132970](https://doi.org/10.3390/electronics12132970).
- 9 **A. A. Uppal**, S. B. Javed, and Q. Ahmed, “Power losses aware nonlinear model predictive control design for active cell balancing,” *IEEE Control Systems Letters*, vol. 7, pp. 3705–3710, Dec. 2023.  DOI: [10.1109/LCSYS.2023.3342550](https://doi.org/10.1109/LCSYS.2023.3342550).

- 10 S. Bano, M. R. Azam, **A. A. Uppal**, S. B. Javed, and A. I. Bhatti, “Robust p53 recovery using chattering free sliding mode control and a gain-scheduled modified utkin observer,” *Journal of Theoretical Biology*, vol. 532, p. 110 914, 2022, ISSN: 0022-5193. [DOI: 10.1016/j.jtbi.2021.110914](https://doi.org/10.1016/j.jtbi.2021.110914).
- 11 U. Javaid, J. Iqbal, A. Mehmood, and **A. A. Uppal**, “Performance improvement in polymer electrolytic membrane fuel cell based on nonlinear control strategies—a comprehensive study,” *PLOS ONE*, vol. 17, no. 2, pp. 1–20, Feb. 2022. [DOI: 10.1371/journal.pone.0264205](https://doi.org/10.1371/journal.pone.0264205).
- 12 S. B. Javed, V. I. Utkin, **A. A. Uppal**, R. Samar, and A. I. Bhatti, “Data-driven modeling and design of multivariable dynamic sliding mode control for the underground coal gasification project thar,” *IEEE Transactions on Control Systems Technology*, vol. 30, no. 1, pp. 153–165, 2022. [DOI: 10.1109/TCST.2021.3057633](https://doi.org/10.1109/TCST.2021.3057633).
- 13 M. Khattak, **A. A. Uppal**, Q. Khan, *et al.*, “Neuro-adaptive sliding mode control for underground coal gasification energy conversion process,” *International Journal of Control*, vol. 95, no. 9, pp. 2337–2348, 2022. [DOI: 10.1080/00207179.2021.1909745](https://doi.org/10.1080/00207179.2021.1909745).
- 14 H. Muazzam, M. K. Ishak, A. Hanif, **A. A. Uppal**, A. Bhatti, and N. A. M. Isa, “Virtual sensor using a super twisting algorithm based uniform robust exact differentiator for electric vehicles,” *Energies*, vol. 15, no. 5, 2022. [DOI: 10.3390/en15051773](https://doi.org/10.3390/en15051773).
- 15 I. U. Rehman, S. B. Javed, A. M. Chaudhry, M. R. Azam, and **A. A. Uppal**, “Model-based dynamic sliding mode control and adaptive kalman filter design for boiler-turbine energy conversion system,” *Journal of Process Control*, vol. 116, pp. 221–233, 2022, ISSN: 0959-1524. [DOI: 10.1016/j.jprocont.2022.06.006](https://doi.org/10.1016/j.jprocont.2022.06.006).
- 16 Y. M. Alsmadi, I. U. Rehman, **A. A. Uppal**, V. Utkin, I. Chairez, and M. Ibbini, “Super-twisting-based sliding mode control of drum boiler energy conversion systems,” *International Journal of Control*, vol. 95, no. 7, pp. 1888–1897, 2021. [DOI: 10.1080/00207179.2021.1884293](https://doi.org/10.1080/00207179.2021.1884293).
- 17 A. M. Chaudhry, **A. A. Uppal**, and S. Bram, “Model predictive control and adaptive kalman filter design for an underground coal gasification process,” *IEEE Access*, vol. 9, pp. 130 737–130 750, 2021. [DOI: 10.1109/ACCESS.2021.3114260](https://doi.org/10.1109/ACCESS.2021.3114260).
- 18 S. B. Javed, **A. A. Uppal**, R. Samar, and A. I. Bhatti, “Design and implementation of multi-variable H_∞ robust control for the underground coal gasification project thar,” *Energy*, vol. 216, p. 119 000, 2021, ISSN: 0360-5442. [DOI: 10.1016/j.energy.2020.119000](https://doi.org/10.1016/j.energy.2020.119000).
- 19 A. Mohsin, Y. Alsmadi, **A. A. Uppal**, and S. M. Gulfam, “A modified simplex based direct search optimization algorithm for adaptive transversal fir filters,” *Science Progress*, vol. 104, no. 2, p. 00 368 504 211 025 409, 2021. [DOI: 10.1177/00368504211025409](https://doi.org/10.1177/00368504211025409).
- 20 M. Riaz, A. R. Yasin, **A. A. Uppal**, and A. Yasin, “A novel dynamic integral sliding mode control for power electronic converters,” *Science Progress*, vol. 104, no. 4, p. 00 368 504 211 044 848, 2021. [DOI: 10.1177/00368504211044848](https://doi.org/10.1177/00368504211044848).
- 21 **A. A. Uppal**, M. C. R. M. Fernandes, S. Vinha, and F. A. C. C. Fontes, “Cascade control of the ground station module of an airborne wind energy system,” *Energies*, vol. 14, no. 24, 2021, ISSN: 1996-1073. [DOI: 10.3390/en14248337](https://doi.org/10.3390/en14248337).
- 22 A. M. Chaudhry, **A. A. Uppal**, Y. M. Alsmadi, A. I. Bhatti, and V. I. Utkin, “Robust multi-objective control design for underground coal gasification energy conversion process,” *International Journal of Control*, vol. 93, no. 2, pp. 328–335, 2020. [DOI: 10.1080/00207179.2018.1516893](https://doi.org/10.1080/00207179.2018.1516893).
- 23 M. Ilyas, J. Iqbal, S. Ahmad, **A. A. Uppal**, W. A. Imtiaz, and R. A. Riaz, “Hypnosis regulation in propofol anaesthesia employing super-twisting sliding mode control to compensate variability dynamics,” *IET Systems Biology*, vol. 14, no. 2, pp. 59–67, 2020. [DOI: 10.1049/iet-syb.2018.5080](https://doi.org/10.1049/iet-syb.2018.5080).
- 24 Q. Irum, S. A. Khan, **A. A. Uppal**, and L. Krivodonova, “Galerkin finite element based modeling of one dimensional packed bed reactor for underground coal gasification (ucg) process,” *IEEE Access*, vol. 8, pp. 223 130–223 139, 2020. [DOI: 10.1109/ACCESS.2020.3044194](https://doi.org/10.1109/ACCESS.2020.3044194).
- 25 U. Javaid, A. Mehmood, A. Arshad, F. Imtiaz, and J. Iqbal, “Operational efficiency improvement of pem fuel cell—a sliding mode based modern control approach,” *IEEE Access*, vol. 8, pp. 95 823–95 831, 2020. [DOI: 10.1109/ACCESS.2020.2995895](https://doi.org/10.1109/ACCESS.2020.2995895).

- 26 Y. M. Alsmadi, A. M. Abdel-hamed, A. E. Ellissy, *et al.*, "Optimal configuration and energy management scheme of an isolated micro-grid using cuckoo search optimization algorithm," *Journal of the Franklin Institute*, vol. 356, no. 8, pp. 4191–4214, 2019, ISSN: 0016-0032.  DOI: [10.1016/j.jfranklin.2018.12.014](https://doi.org/10.1016/j.jfranklin.2018.12.014).
- 27 S. B. Javed, **A. A. Uppal**, A. I. Bhatti, and R. Samar, "Prediction and parametric analysis of cavity growth for the underground coal gasification project thar," *Energy*, vol. 172, pp. 1277–1290, 2019, ISSN: 0360-5442.  DOI: [10.1016/j.energy.2019.02.005](https://doi.org/10.1016/j.energy.2019.02.005).
- 28 M. Rizwan Azam, V. I. Utkin, A. Arshad Uppal, and A. I. Bhatti, "Sliding mode controller–observer pair for p53 pathway," *IET Systems Biology*, vol. 13, no. 4, pp. 204–211, 2019.  DOI: [10.1049/iet-syb.2018.5121](https://doi.org/10.1049/iet-syb.2018.5121).
- 29 **A. A. Uppal**, S. S. Butt, Q. Khan, and H. Aschemann, "Robust tracking of the heating value in an underground coal gasification process using dynamic integral sliding mode control and a gain scheduled modified utkin observer," *Journal of Process Control*, vol. 73, pp. 113–122, 2019, ISSN: 0959-1524.  DOI: [10.1016/j.jprocont.2018.11.005](https://doi.org/10.1016/j.jprocont.2018.11.005).
- 30 A. R. Yasin, M. Ashraf, A. I. Bhatti, and **A. A. Uppal**, "Fixed frequency sliding mode control of renewable energy resources in dc micro grid," *Asian Journal of Control*, vol. 21, no. 4, pp. 2074–2086, 2019.  DOI: [10.1002/asjc.2057](https://doi.org/10.1002/asjc.2057).
- 31 **A. A. Uppal**, Y. M. Alsmadi, V. I. Utkin, A. I. Bhatti, and S. A. Khan, "Sliding mode control of underground coal gasification energy conversion process," *IEEE Transactions on Control Systems Technology*, vol. 26, no. 2, pp. 587–598, 2018.  DOI: [10.1109/TCST.2017.2692718](https://doi.org/10.1109/TCST.2017.2692718).
- 32 I. Khan, A. I. Bhatti, **A. A. Uppal**, and Q. Khan, "Robustness and performance parameterization of smooth second order sliding mode control," *International Journal of Control, Automation and Systems*, vol. 14, no. 3, pp. 681–690, Jun. 2016, ISSN: 2005-4092.  DOI: [10.1007/s12555-014-0181-6](https://doi.org/10.1007/s12555-014-0181-6).
- 33 **A. A. Uppal**, A. I. Bhatti, E. Aamir, R. Samar, and S. A. Khan, "Optimization and control of one dimensional packed bed model of underground coal gasification," *Journal of Process Control*, vol. 35, pp. 11–20, 2015, ISSN: 0959-1524.  DOI: [10.1016/j.jprocont.2015.08.002](https://doi.org/10.1016/j.jprocont.2015.08.002).
- 34 **A. A. Uppal**, A. I. Bhatti, E. Aamir, R. Samar, and S. A. Khan, "Control oriented modeling and optimization of one dimensional packed bed model of underground coal gasification," *Journal of Process Control*, vol. 24, no. 1, pp. 269–277, 2014, ISSN: 0959-1524.  DOI: [10.1016/j.jprocont.2013.12.001](https://doi.org/10.1016/j.jprocont.2013.12.001).

Conference Proceedings

- 1 M. R. Azam, A. Ahmed, **A. A. Uppal**, and Q. Ahmed, "Nonlinear model predictive control design for active cell balancing and thermal management (**accepted for presentation**)," in *2024 IEEE Conference on Control Technology and Applications (CCTA)*.
- 2 **A. A. Uppal**, S. B. Javed, and Q. Ahmed, "Power losses aware nonlinear model predictive control design for active cell balancing (**accepted for presentation**)," in *American Control Conference 2024*.
- 3 S. B. Javed, **A. A. Uppal**, M. R. Azam, K. Shehzad, and Q. Ahmed, "Model-based quantitative analysis of a capacitive cell balancing technique using soc estimator," in *2022 IEEE Conference on Control Technology and Applications (CCTA)*, 2022, pp. 670–675.  DOI: [10.1109/CCTA49430.2022.9966110](https://doi.org/10.1109/CCTA49430.2022.9966110).
- 4 **A. A. Uppal**, S. S. Butt, A. I. Bhatti, and H. Aschemann, "Integral sliding mode control and gain-scheduled modified utkin observer for an underground coal gasification energy conversion process," in *2018 23rd International Conference on Methods and Models in Automation and Robotics (MMAR)*, 2018, pp. 357–362.  DOI: [10.1109/MMAR.2018.8486053](https://doi.org/10.1109/MMAR.2018.8486053).
- 5 G. Murtaza, A. I. Bhatti, Q. Ahmed, and **A. A. Uppal**, "Nonlinear robust control of atkinson cycle engine," in *20th IFAC World Congress*, 2017, pp. 3685–3690.  DOI: [10.1016/j.ifacol.2017.08.562](https://doi.org/10.1016/j.ifacol.2017.08.562).
- 6 M. Azam, A. Bhatti, A. Arshad, and M. Babar, "Sensitivity analysis of wnt signaling pathway," in *Proceedings of 2013 10th International Bhurban Conference on Applied Sciences & Technology (IBCAST)*, 2013, pp. 122–127.  DOI: [10.1109/IBCAST.2013.6512143](https://doi.org/10.1109/IBCAST.2013.6512143).
- 7 A. Arshad, A. I. Bhatti, R. Samar, Q. Ahmed, and E. Aamir, "Model development of ucg and calorific value maintenance via sliding mode control," in *2012 International Conference on Emerging Technologies*, 2012, pp. 1–6.  DOI: [10.1109/ICET.2012.6375477](https://doi.org/10.1109/ICET.2012.6375477).

Funded Projects

- **Optimal Control of Active Cell Balancing Network for Lithium-ion Battery Pack**
Accepted in *NESCOM (RAC), Pakistan, PI: Ali Arshad Uppal*
- **Design and Development of Intelligent Battery Pack for Range Extension of Electric Scooter**
Submitted in *PSF-TUBITAK Competitive Research Grant, PI: Ali Arshad*

Student Supervision

■ MS Students

1. Mr. Imran Ahmed, COMSATS University Islamabad (2021–2023)
Supervisor: Dr. Rizwan Azam, co-supervisor: **Dr. Ali Arshad Uppal**
2. Mr. Afaq Ahmed, COMSATS University Islamabad (2021–2023)
Supervisor: **Dr. Ali Arshad Uppal** co-supervisor: Dr. Syed Bilal Javed
3. Ms. Sara Sarfraz, COMSATS University Islamabad (2019–2021)
Supervisor: **Dr. Ali Arshad Uppal**, co-supervisor: Dr. Quadrat Khan
4. Ms. Shehar Bano, COMSATS University Islamabad (2018–2020)
supervisor: **Dr. Ali Arshad Uppal**, co-supervisor: Dr. Rizwan Azam
5. Ms. Fajar Mukhtar, COMSATS University Islamabad (2018–2020)
supervisor: **Dr. Ali Arshad Uppal**, co-supervisor: Dr. Syed Bilal Javed
6. Mr. Sohail Ahmed, COMSATS University Islamabad (2018–2020)
Supervisor: **Dr. Ali Arshad Uppal**
7. Mr. Bilal Arif, COMSATS University Islamabad (2018–2020)
Supervisor: prof. Shahid A. Khan, co-supervisor: **Dr. Ali Arshad Uppal**
8. Mr. Mutahir, COMSATS University Islamabad (2016–2018)
supervisor: prof. Shahid A. Khan, co-supervisor: **Dr. Ali Arshad Uppal**
9. Mr. Imtiaz Ur Rehman, COMSATS University Islamabad (2016–2018)
Supervisor: prof. Shahid A. Khan, co-supervisor: **Dr. Ali Arshad Uppal**
10. Mr. Fahad Imtiaz, COMSATS University Islamabad (2014–2016)
Supervisor: Dr. Adeel Mehmood, co-supervisor: **Dr. Ali Arshad Uppal**

■ Ph.D. students

1. Mr. Muhammad Shakeel, COMSATS University Islamabad (2019–present)
Supervisor: **Dr. Ali Arshad Uppal**
2. Mr. Azmat Ullah, COMSATS University Islamabad (2019–present)
Supervisor: **Dr. Ali Arshad Uppal**, co-supervisor: Dr. Rizwan Azam
3. Dr. Usman Javed, COMSATS University Islamabad (2016–2023)
Supervisor: **Dr. Ali Arshad**, co-supervisor: Dr. Adeel Mehmood
4. Dr. Qudsiya Irum, COMSATS University Islamabad (2016–2022)
Supervisor: Prof. Shahid A. Khan, co-supervisor: **Dr. Ali Arshad Uppal**
5. Dr. Syed Bilal Javed, Capital University of Science & Technology, Islamabad (2016–2021)
Supervisor: Dr. Raza Samar, co-supervisor: **Dr. Ali Arshad Uppal**

Teaching Experience

▀ Graduate courses at COMSATS University Islamabad

- Intelligent Control Systems (ECI761) in Spring 2022
- Nonlinear Systems and Controls (ECI760) in Fall 2021 and Fall 2022
- Linear Control Systems (ECI660) in Fall 2019
- Linear Systems Theory (ECI665) in Spring (2017, 2018 and 2019) and Fall 2017
- Robust Control Systems (ECI765) in Fall 2018

▀ Undergraduate courses at COMSATS University Islamabad

- Control Systems (EEE325, CPE325) in Fall 2023, Spring 2023, and from 2011–2021
- Electric Machines (EEE371) in Spring 2023, and from 2008–2011
- Electronics-I (EEE231) in Fall 2022

Presentations & Workshops

▀ Presentations

1. **Model Predictive Control Design for Targeted Drug Therapy to Recover p53 in Cancer Treatment**, in *Portuguese Meeting on Optimal Control*, 2021
2. **AI Based Control of Industrial Processes**, in *IEEE 2021 International Conference on Digital Futures and Transformative Technologies*, School of Electrical Engineering and Computer Science (SEECs), National University of Science and Technology (NUST), Islamabad, Pakistan, 2021 (**Guest speaker**)
3. **Sliding mode control of the underground coal gasification energy conversion process**, in *Symposium on Control Systems*, SEECs, NUST 2019 (**Guest speaker**)
4. **Development of a simplified control-oriented model of the underground coal gasification process**, at Department of Electrical & Computer Engineering, The Ohio State University, Columbus, OH, USA, 2015
5. **Development of a one-dimensional packed bed model of the underground coal gasification process for Thar coal gasifier**, at UCG Project Thar, Tharparkar, Pakistan, 2013

▀ Workshops

1. **L^AT_EX–The Way of Scientific Writing**, at the department of Electrical and Computer Engineering, COMSATS University Islamabad on 17 October 2022
2. **Typesetting in L^AT_EX**, at Capital University of Science & Technology, Islamabad on March 13 2018, July 17 2019 and August 5 2021, respectively



Computer Skills

- MATLAB/Simulink
- C++
- Maple
- Mathematica
- L^AT_EX
- MS Office



Awards & Achievements

- 2022 ▀ **Senior Member IEEE**
- 2020–2021 ▀ **Postdoctoral Scholarship** from FEUP, University of Porto, Portugal

Awards & Achievements (continued)

- 2015  **International Research Support Initiative Program Scholarship** from higher education commission, Pakistan
- 2014–2015  **Research Productivity Award** from COMSATS University Islamabad
- 2012–2013  **Ph.D. Scholarship** from UCG project Thar, Pakistan
- 2012–2016  **In-house Ph.D. Scholarship** from COMSATS University Islamabad, Pakistan
- 2010–2011  **MS Scholarship** from UCG project Thar, Pakistan
-  **Merit MS Scholarship** from Center of Advanced Studies in Engineering, University of Engineering & Technology, Taxila, Pakistan

Community Services

- 2022–2023  **Guest Editor** in the special issue *Sliding Model Control in Dynamic Systems*, MDPI Electronics.
- 2016–...  **Academic Reviewer** for the Journal of process control, IEEE Control Systems Letters, IEEE Transactions on (Industrial Informatics, Mechatronics, Transportation & Electrification), International Journal of Hydrogen Energy, Energy Conversion and Management, American Control Conference, IEEE Access, and various journals of MDPI.

References

Name	Dr. Aamer Iqbal Bhatti	Name	Dr. Qadeer Ahmed
Position	Professor	Position	Assistant Professor
Affiliation	University of Engineering and Technology, Lahore, Pakistan	Affiliation	The Ohio State University, Columbus, OH, USA
Email	aib@uet.edu.pk	Email	ahmed.358@osu.edu
Name	Dr. Jamshed Iqbal	Name	Dr. Fernando Fontes
Position	Senior Lecturer	Position	Associate Professor
Affiliation	University of Hull, Hull, UK	Affiliation	University of Porto, Portugal
Email	J.Iqbal@hull.ac.uk	Email	faf@fe.up.pt