

CURRICULUM-VITAE

Siraj Ahmed Khan

Professor

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Area of Interest and Research: *Wind Energy:* Resource Assessment, Flow Modeling, Remote Sensing, Wind Turbine Design and Performance Prediction, Site Selection, Wind-Farm Design and Project Development and Assessment. General Mechanical Engineering Design, Design of Mechanical Equipment and design against Fatigue & Fracture.

Subject Taught: *B.Tech.:* Wind Energy Technology, Design of Machine Elements, Machine Design, CADD, Advanced Machine Design.

M. Tech.: Wind Turbine Design, Design of Mechanical Equipment and Design against Fatigue & Fracture.

Educational Qualifications: Ph.D. (Some Studies on Design and Performance of Horizontal Axis Wind Turbine Generators RGPV 2005) M.Tech. (Design of Mechanical Equipment IIT D 1992) B.E. (MANIT formerly MACT 1987 with Distinction) HSSCE (PLSJ Model Model Gov. School Jabalpur 1982 Merit Scholarship).

Technical Training: (1) *Remote Sensing for Wind Energy* [2013] DTU Wind Energy Danish Technical University, Denmark. (2) *Wind Energy* [1995-96] University of Salford, UK

Supervised Ph. D. Research Work: Scholars Graduated (Ten) and Currently Mentoring (Two) in *Wind Energy*.

Research Publications: Forty-five Scopus research paper with 13 h index with 765 citations.

Books Authored: (1) WIND ENERGY: Theory and Practice Siraj Ahmed, 3/e, 2016, PHI, *Eastern Economy Edition* ISBN978-81-203-5163-9 New Delhi.

(2) MECHANICAL ENGINEERING DESIGN Siraj Ahmed, 2014, PHI, *Eastern Economy Edition* ISBN: 978-81-203-4931-5 New Delhi.

(3) DESIGN AND OPTIMIZATION OF 150 m WIND MONITORING TOWER In Indian Condition. Pramod Sharma, Vilas Warudkar and Siraj Ahmed 2019. Lambert Academic Publishing. ISBN 978-620-0-45608-3.

(4) Experimental Investigations to study the Effect of Coatings to Reduce Hydrogen Embrittlement of High-Strength Steels. Manish Vishwakarma, Amit Khare and Siraj Ahmed 2023, walnutpublication.com ISBN 978-935911476-7.

Patent Granted: (1) *Disc on Disc Type Rolling Wear Testing Machine* (No. 521250, 07.03.2024) and (2) *Dual Wear Tribometer* (No. 422991, 24.02.2023), the Patent Office, GoI.

External Sponsored R & D Projects Completed under BRNS (BARC GoI), MHRD (GoI), DST, MST, GOI, Science and Engineering Research Council Scheme for Young Scientist.

Consultancy Projects: Completed more than 15 Industrial Consultancy Projects, mostly in *wind energy*.

Letter of Appreciation (2014) for “Contribution to MANIT to Aim for Centre of Excellence”

Book Chapters

- (1) *Application of Remote Sensing in Wind Resource Assessment* (2020). ENCYCLOPAEDIA OF RENEWABLE AND SUSTAINABLE MATERIALS, vol.3, pp. 265–276. Oxford: Elsevier.
- (2) *Advancement in remote sensing of wind energy. Advances in Clean Energy Technologies* (2021). Pages 207-233. Academic Press.
- (3) *Tribological Behaviour of Carbide-Free Bainite in High Silicon Steel* (2021). Book: Advanced Materials and manufacturing Processes, 1/e, CRC Press, Paged; 9, eBook ISBN 978003093213.
- (4) *Wind Resource Assessment* (2026), Book: Next-Generation Wind Energy Technology, Advances in Green Technologies for Sustainable Energy Solutions.
- (5) *Wind Data Processing and Analysis* (2026), Book: Next-Generation Wind Energy Technology, Advances in Green Technologies for Sustainable Energy Solutions.
<https://www.appleacademicpress.com/next-generation-wind-energy-technology-advances-challenges-and-applications/1805?utm_source=chatgpt.com>

Articles Published

- Several Articles of National Importance Published on *Wind Energy* in MNRE GOI publication AKSHAY URJA: (1) *Remote Sensing Application in Wind Energy* [2014].
(2) *Re-Powering the Wind Power* [2015].
(3) *Wind!* [2016].
(4) *Vibrant Winds Blowing Across India* [2016].

Administrative Work: *Head of the Department* 2013-2015, during the tenure Programme of B. Tech. in Mechanical Engineering have been granted five-year Accreditation (Grade-A) from National Board of Accreditation (NBA). Extensive experience as *PG Programme Coordinator, Research Committees, Faculty Recruitment Committees, Warden, Chairman Council of Wardens, Joint Controller of Examination* et cetera. Senate Member External Expert NIT Raipur. Advisor UPSC (Subject Expert). Empaneled Subject Expert for Ph. D. Research Examination Anna University, Osmania University et cetera.

Coordinators for five STTPs focused on *Wind Energy Technology* have been conducted in recent past and collaborated with IIT BHU and NIT Allahabad at their place. And organized three **International Conference** organized as **Chairman/Secretary** on **Renewable Energy**.

Invited/Expert/Guest Lectures: Delivered **More than One Hundred** Invited/Expert Lectures various aspects of *Wind Energy Technology* in India (IIT, NIT, IIFM, IE (I), DTU, BHEL etc.) and abroad (University of Jordan [Amman], University of Malaysia [Kuching], IE Sri Lanka [Columbo], et cetera)

Lecture Series: 2017-2023 *Wind Energy Technology*, REM Elective Subject, PGDFM Program, IIFM, Bhopal. 2024 *Wind Energy Technology*, Sustainable Energy Transition, PGDFM Program, IIFM, Bhopal

Lecture Series: 2015-16 Machine Design (Fatigue, Gear and Design of Shaft) for Trainee Engineers at BHEL, Human Resource Development Centre, Bhopal.

Abroad Visited

- Jordan (2013) Keynote Speaker on *Wind Energy* in International Conference on Renewable Energy, GCREEDER 2013. University of Jordan, Amman
- Denmark (2013) Technical Training, *Remote Sensing in Wind Energy*, DTU Wind Energy
- Sri Lanka (2012) Resource Person on Wind Energy: International Conference on Clean and Green Energy
- Malaysia (2011) International Conference on Renewable Energy
- USA (2008 and 2009) Consultancy Project of *Wind Energy* Development
- China (2007) International Conference *Wind Energy*
- UK (1995-96) Technical Training (Six Months) *Wind Energy*

MoU with Industry/Institutes:

- National Institute of Wind Energy (MNRE GoI) Chennai 2003-05, Wind Energy Laboratory Wind Resource Assessment Facility, *Installed Wind Monitoring Stations and Developed Wind Energy Laboratory.*
- Environmental Assessment Division BARC Mumbai 2010-13, Dust Emission Monitoring and its Modelling (*Wind Related Studies*), *Dust Emission Assessment and Modelling* at Jaduguda Uranium Mines, Jharkhand.

