



Dr. KIRAN CHAUDHARI

PhD in Computational Fluid Dynamics from VNIT, Nagpur in 2008.

M.E. in Heat Power from Pune University in 2001

B.E.in Mechanical Engineering from Amravati University in 1998

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Designation: Professor, Mechanical Engineering, Dean Administration, Head, Applied Sciences & Humanities

Experience: Educational 23 Years

Areas of Interest: Thermal Engineering, Heat and Mass Transfer, Refrigeration and Air Conditioning, Numerical Methods in Fluid Flow and Heat Transfer, Computational Fluid Dynamics, Advanced Fluid Mechanics, Design and Performance of Heat Exchanger, Advanced Heat and Mass Transfer.

Publications

Journals:

- **Kiran Chaudhari**, Akshay Deshmukh, Prathamesh Adawade, Sanmeet Bagal, Prathamesh Mane⁵, Raunak Batavia⁶, “Water Purification Using Solar Energy”, International Research Journal of Engineering and Technology (IRJET), Volume: 08 Issue: 06, June 2021. e-ISSN: 2395-0056 and p-ISSN: 2395-0072.
- **Kiran Chaudhari**, Aaqib Momin, Ritu Magare, Omkar More, Aniket Kantale, “Automated Filling Machine”, International Research Journal of Engineering and Technology (IRJET), Volume: 08 Issue: 06, June 2021. e-ISSN: 2395-0056 and p-ISSN: 2395-0072.
- **Kiran Chaudhari**, Sachin Jain, Ashutosh Bhalerao, Vishakha Sable, Shivanand Pillai, “Design and Optimization of Heat Transfer in Double Helical Concentric Coil Heat Exchanger” Blue Eyes Intelligence Engineering and Sciences Publication, Accepted in March 2020.
- **Kiran Chaudhari**, Omkar Kurri, Ninad Mali, Parag Jain, Harshal Kachare, “Increasing the Heat Transfer Rate of AC Condenser by Optimizing Fin Material”, International Journal of Scientific Research and Engineering Development— Volume 3 Issue 2, Mar-Apr 2020.
- **Chaudhari Kiran**, Kapse Neeta, “Review on vibration frequency developed by OM chanting and its positive effects on thyroid”, International Journal of Scientific Engineering and Applied Science (IJSEAS) – Volume-3, Issue - 5, May 2017; ISSN: 2395-347.

- **Chaudhari Kiran**, Lakshmana Kishore.T, G. Ranga Janardhana, “Computational Characterization of Fluid Flow and Heat Transfer in the Pressure Tube of CANDU 6 Nuclear Reactor with Supercritical CO₂”, International Journal of Engineering and Technology (IJET), DOI: 10.21817/IJET/2017/v9i3/ 170903247, Vol 9 No 3 Jun-Jul 2017, ISSN (Online): 0975-4024, pp 2225 – 2235.
- **Chaudhari Kiran**, Lakshmana Kishore.T, G. Ranga Janardhana, “Heat Transfer & Fluid Flow Analysis of Pressure Tube in CANDU 6 Nuclear Reactor using Supercritical water”, SSRG International Journal of Mechanical Engineering (SSRG-IJME) – Special Issue May 2017, pp 153 -158
- **Chaudhari Kiran**, K.V. Srinivasan, Suraj Ghiwe, “Analysis on effect of Temperature on Moisture Separation in air Compressor”, International Journal of Scientific Engineering and Applied Sciences, Volume I, Issue 2, ISSN:2395-3470, June 2015, Pp 297-302.
- **Chaudhari Kiran**, Mishra Roshan, “CFD analysis of Metallic Foam-Filled Triple Tube Concentric Heat Exchanger” International Journal on Recent and Innovation Trends in Computing and Communication, Volume 3; Issue 5, ISSN: 2321-8169, May 2015, Pp 2141-2147.
- **Chaudhari Kiran**, Raut Rajesh, “Thermal Analysis of water pipe subjected to natural convection using computational fluid”, International Journal of Mechanical and Production Engineering Research and Development, ISSN:2246-8001, Volume 4, Issue 2, April 2014, pp 55-62.
- **Chaudhari Kiran**, Deshpande N.V, Sonolikar R.L., Thombare S.B., “CFD modeling of combustion process in tangentially fired boiler for high ash Indian coals”, International Journal of Fuel, Elsevier, Vol. 87 issue 9, September, 2008, pp 1720 – 1731.
- **Chaudhari Kiran**, Deshpande N.V, Sonolikar R.L., Thombare S.B., “Study on the Effect of the Operating Condition on a Pulverized Coal-Fired Furnace Using Computational Fluid Dynamics” Published on line in International Journal of Heat Transfer Engineering, Taylor & Francis Publications, Vol. 52 issue 8, 2012.
- **Chaudhari Kiran**, Bhandari J.V., Mokashi Anand, “Energy conservation in Industrial Boiler”, All India seminar on “Clean Developments Mechanism Benefits for renewable Energy & Energy Conservation Projects” Quarterly magazine of Institute of Engineers, Pune, December 2000, pp 63 – 67.

Conferences:

- Chaudhari Kiran, Hrishikesh Kambli, “Study of Weather Resistant Performance Louvers” at the International Conference on Mechanical, Manufacturing, Industrial and Civil Engineering (ICMMICE) held in Mumbai, India on 12 November, 2021.
- Chaudhari Kiran, G. Ranga Janardhana, Lakshmana Kishore.T,;” Heat transfer and fluid flow analysis of pressure tube in CANDU 6 nuclear reactor using supercritical water”, National conference on recent advances in Mechanical Engineering, Department of Mechanical Engineering, A.U. College of Engineering (A), Andhra University, Visakhapatnam, 10 – 11, March 2017.
- Chaudhari Kiran, Kapse Neeta, Pavani, A., Hebale, A., Poojary, V., Parulekar, S., "Waste Sunflower Oil as an Alternative Fuel for Diesel Engines", International Conference on Nascent Technologies in Engineering, ICNTE-2015, Fr.CRIT, ATEC,Vashi (9th &10th January2015) Published in IEEE, 978-1-4799-7261-6, DOI: 10.1109/ INCTE. 201 .7029919.
- Chaudhari Kiran, Kapse Neeta, Pavani, A., Hebale, A., Poojary, V., Parulekar, S., “Estimation of Performance and Emission Parameters of Waste Transformer Oil and its Blends in a Diesel Engine”, International Conference on Environment & Energy, ICEE-2014, JNTU, Hyderabad 15th - 17th December 2014.
- Lakshmana Kishore.T, Chaudhari Kiran, “Numerical Investigation of The Performance of Metal Foam Filled Triple Pipe Heat Exchanger”, Open Source CFD International Conference 2013.

- Chaudhari Kiran, Deshpande N.V, Thakkar Kartik, “Modeling of combustion process in tangentially fired boiler and its validation for Indian coals by using CFD” proceedings of the ASME 2011 International Mechanical Engineering Congress & Exposition, IMECE2011, November 11-17, 2011, Denver, Colorado, USA.
- Lakshmana Kishore.T, Chaudhari Kiran, “Computational modeling of turbulent flow in supercritical fluids”, International Conference on Thermal Energy and Environment Department of Mechanical Engineering, Kalasalingam University , Srivilliputhur, Tamil Nadu, India, March 24, 2011 - March 26, 2011.
- Chaudhari Kiran, Deshpande N.V, Sonalika R.L., “Numerical investigation of combustion process and reduction of NOx emissions from a tangentially fired under over-fire air operation”, Proceedings of International Conferences on Advances in Mechanical Engineering (ICAME - 2009), Sardar Vallabhabhai National Institute of Technology, Surat, Gujarat, 3 – 5, August, 2009, pp 92 – 97.
- Chaudhari Kiran, Deshpande N.V, Sonalika R.L., Thombare S.B., “Flow analysis of flue gases in tangentially fired boiler for different operating conditions for various percentage of ash content using CFD”, Proceedings of International conference on Emerging research and Advances in Mechanical Engineering ERA – 2009, Velammal Engineering College, Chennai, March 19- 21, 2009, pp 72 – 78.
- Chaudhari Kiran, Deshpande N.V, Sonalika R.L., Thombare S.B., “CFD modeling of combustion process in horizontally fired boiler for different operating conditions for high ash content”, Proceedings of CFD 2008 – Fifth International Conference on Computational Fluid Dynamics, World Academy of Science and Technology, Bangkok, Thailand, December 17 – 19, 2008, pp 172 – 178.
- Chaudhari Kiran, Deshpande N.V, “Computational Fluid Dynamics with Basic Application” Proceedings of the International Conference of Fluid Dynamics, September 28-29,2004, IIT Delhi, pp 21 - 25.
- Verma M.S., Chaudhari Kiran, “Natural convection heat transfer between pairs of differentially heated flat plates” Proceedings of National Workshop on Advanced Computational Applications using ANSYS Fluent, (ACA-2011), 7th January 2011.
- Chaudhari Kiran, Deshpande N.V., “Numerical simulation of 500 MW pulverised coal boiler”, National Conference on Trends in Mechanical Engineering (TIME - 2008), Babasaheb Ambedkar College of Engineering, Aurangabad, 21 – 22 March 2008, pp 120 – 125.
- Chaudhari Kiran, Gupta L.S., “Studies on different methods for fatigue crack growth predictions in 3D crack fronts”, proceedings of 3rd National Conference on Trends in Mechanical Engineering (Time – 2006), Kakatiya Institute of Technology and Science, Warangal, 29 – 30 December, 2006, pp 32 – 35.
- Chaudhari Kiran, Deshpande N.V., “CFD modeling of Secondary Fuel C o-firing with pulverized coal”, Proceedings of 3rd National Conference on Trends in Mechanical Engineering (Time – 2006), Kakatiya Institute of Technology and Sciences, Warangal, 29 – 30 December, 2006, pp 163 – 170.
- Ranjit P.S., Chaudhari Kiran, Murthy S.S.N and Gupta L.S., “Studies on Approaching the six sigma in Design”, All India seminar on “Challenges for Quality and Reliability” (CQR – 2006), NIT – Rourkela, Orissa 4th – 5th November 2006, pp 163 – 170.
- Chaudhari Kiran, Ranjit P.S., Deshpande N.V., “CFD modeling in pulverised Coal Boiler” National Conferences on : Multidimensional concept & Approaches for continual improvements in the e-millennium, 48th National Convection, IIIE Bangalore Chapter Bangalore, 29th – 30th September 2006, pp 63 – 67
- Chaudhari Kiran, Deshpande N.V, Tyagi K.P., “Reburn technology by means of Computational Fluid dynamics and chemical kinetics”, Proceedings of National Conference of Mechanical Engineering, June 29-30,2004, organized by JNTU, Hyderabad, pp 241 – 245.

- Chaudhari Kiran., Bhandari J.V., “How to Drag Velocity in Steam Value”, Proceedings of National seminar on Recent Trends in Industrial Management of Power Plant, College of Engineering, Pune, 12th May 2000, pp 42 – 46.

PhD level Supervisor:

Computational Modeling and Heat Transfer Analysis of Turbulent Flow in Supercritical Fluids.

Reviewer to Journals: International Journal of Production and Mechanical Engineering, MAT Journal

Professional Bodies Association:

- Indian Institution of Industrial Engineering (IIIE) Life Time membership: MIIIE 9627
- Indian Institution of Industrial Engineering (IIIE) Senior Member: SMIIIE9627 (21)
- Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE): 59636
- American Society of Heating, Refrigerating and Air-Conditioning Engineers: ASHRAE – 8450712.
- Indian Society for Technical Education (ISTE) Life Time Membership: 712883
- American Society of Mechanical Engineers (ASME) Professional membership: ASME 100114035

Certified NPTEL Courses:

- NPTEL Certified Course on *Accreditation and Outcome Based Learning* with 82%, Sept. 2021.
- NPTEL Certified Course on *Product Design and Innovation* with 72%, Feb 2020.
- NPTEL Certified Course on *Non-Conventional Energy Sources* with 67%, April 2019.
- NPTEL Certified Course on *Introduction to Research* with 61%, April 2019.
- NPTEL Certified Course on *Effective Engineering Teaching in Practice* with 65%, March 2019.
- NPTEL Certified Course on *Foundation of Computational Fluid Dynamics* with 86%, October 2017.

Awards

- Award of **IIIE Fellowship 2021 – 22** on 16th December 2022 during 64th National Convention of IIIE at Pune.
- **Women Researcher Award** in International Scientist Awards 2019 on Engineering, Science and Medicine by VDGGOOD Technology factory, Vishakhapatnam on 16 & 17th Nov 2019.
- Dr. APJ Abdul Kalam **Life Time Achievement National Award** for remarkable achievements in the field of Teaching, Research & Publications by International Institute for Social & Economic Reforms (R), Bangalore on the eve of Anniversary Celebration on 26th January 2019.
- **University topper** in B.E. (Mechanical Engineering stream) in 1998.
- Award for **First Successful Lady Industrialist** in Maharashtra State in 1999.