Dr. Umang Patdiwala

Ph.D. (Mechanical Engg.; MBA HRM)

Assistant Professor & Head

Mechanical Engineering Department,

Indus Institute of Technology and Engineering

Indus University

Conference Convener: InDACON 2020 - International Conference on "Sustainable Technologies for Desalination & National Water Mission and Annual Congress of InDA, organized at Indus University from 13th to 15th February, 2020.

Research Papers Presented/Published (Total: 30)

International: Conference: 06 - Journals: 14
National: Conference: 04 - Journals: 06

- "Performance Enhancement using Tio2 Nano Particle in Modified Solar Still at Variable Water Depth" paper accepted for publication at International Journal of Ambient Energy, Taylor & Francis
- **2.** Artificial Photosynthesis: Production of H2 and O2 gas by Electrolysis Process, published in Compliance Engineering ISSN No. 8983577, Vol.-11, Issue-5, page. 262-269 and impact factor 2.18, July 2020.
- **3.** A Review on Production of H2 and O2 gas by Electrolysis Process using Artificial Photosynthesis Method, published in JES Journal of Engineering and Science, ISSN No. 3779254, Volume-11, Issue-6, page no. 395-400 June 2020.
- **4.** A Comparative Study of Turbulence Models on Aerodynamics Characteristics of a F-SAE race car paper published in International Journal of Automotive and Mechanical Engineering, ISSN no. 3779254, Volume-11, Issue-6, Page no. 395-400, impact factor 6.54, in July 2020.
- **5.** "Evaluation of Solar Still by Optimizing Condenser" paper published in International Journal of Advance Research, Ideas and Innovation in Technology, Vol. 5, Issue-4, pg. 503-511, July-August 2019.
- **6.** "Developments in Solar still: A Critical Review" paper at conference on International Conference on Recent Advances in Mechanical Infrastructure (ICRAM-2019)on 20-21 April 2019 in collaboration of Springer

- **7.** "Assessment of S.I. Engine Pollution using CNG as an Alternate Fuel" paper presented at International Conference on Renewable Energy and Climate Change attended, IITRAM, Ahmedabad on 1-2 February, 2019.
- **8.** "Solar Distillation System with Nano Particle: A Review" Research Paper published in PDPU Journal of Energy and Management (ISSN 2581-5849) Vol., 3 No.1 Page 29-35, October 2018, indexed in J-GATE, UGC approved- 63922
- 9. "Experimental Investigation of Tip Clearance Loss Mechanism in an Axial Turbine Linear Cascade" is published in a peer reviewed journal titled: "Academic Journal" ISSN No: 1876-6102, Elsevier Energy Procedia, by publisher Elsevier Science, approved by UGC 44475, 51-H Index, Vol.- 1, Issue-1, Page No. 88-93. Impact Factor SNI: 0.799, SCI mago Journal Rank (SJR): 0.495, Abstracting and Indexing in SCOPUS, WoS, Engineering Information Compendex, Current Abstracts (EBSCO), TOC Premier.
- 10. "Computational and Experimental Analysis Study of Aerodynamic Losses of Linear Turbine Cascade using Wind Tunnel" published in journal e-ISSN: 2321-0613, Volume-03. Issue 3, May 2015 with Impact Factor 2.39, in International Journal for Scientific Research & Development
- 11. "Computational Study on Aerodynamic Losses of Linear Turbine Cascade using Wind Tunnel" published in Volume-03, Issue-02, and Page No. 625-630, ISSN 0975-668X/ NOV. 2014 to OCT. 2015, with Impact Factor: GIF: 1.2250- SIF: 3.475 AES Journal of Information, Knowledge and Research in Mechanical Engineering
- **12.** Secondary and Tip clearance flows: study and analysis of their behavior in an axial linear turbine cascade A Review GIT Journal of Engineering and Technology, ISSN -2249-6157, Volume-7, 2014
- 13. "Visualization of Endwall Flow in a Large Deflection Turbine Rotor Cascade: Effect of Streamwise Fences on Secondary Flows and Losses" co-authored Govardhan M. & Gowda B.H.L., at Ninth Asian Congress of Fluid Mechanics (ACFM), Isfahan, Iran, 2002, Conference.
- **14.** Journal of Thermal Science Vol. 15, No.4 pp.296-305 published in the year 2006, titled: "Effect of Streamwise Fences on Secondary Flows and Losses in a Two-dimensional Turbine Rotor Cascade"- by Govardhan M., A Rajender, J. P. Umang

- ISSN No. 1003-2169 e-ISSN 1993-033X approved by UGC 11384, Scopus (Springer) Listed Journal
- **15.** Research Paper entitled: "Heat Exchanger Networking for the Ammonia Plant Using Pinch Technology", presented at 19th National & 8th ISHMT-ASME Heat and Mass Transfer International Conference on 3-5 January, 2008, At JNTU-Hyderabad.
- 16. "Analytic Hierarchy Process (AHP): A Simple and Effective Tool in Vendor Evaluation", by U. J. Patdiwala, S. M. Uniyal, J. M. Mistry, research paper published at International Conference on 'Issues and Challenges in Supply Chain Management (ICSCM)' at Institute of Technology, Banaras Hindu University (BHU), on 28-30 May, 2008.
- **17.** Research paper titled- "Performance Analysis of Four-Stroke Diesel Engine using Jatropa as a Bio-diesel Fuel"- published at a National Conference on Recent Trends in Energy Engineering and Management (NCRTEAM 2007) on 2-3 March 2007.
- **18.** "Energy Audit A Vital Parameter for Energy Management"- by U. J. Patdiwala, S. M. Uniyal, J. M. Mistry published at a National Conference on Recent Trends in Energy Engineering and Management (NCRTEAM 2007) on 2-3 March 2007.
- **19.** ISO/TS 16949 The Harmonized Standard for the Automotive Supply Chain: A literature review at National Level Conference organized by Yeshwantroa Chavan College of Engineering at Nagpur, during 19-20 January, 2008.
- **20.** "Vendor Quality Analysis and Selection Through Analytic Hierarchy Process (AHP) in Multi Criteria Decision Environment, a research paper published in the "Journal of Engineering & Technology Sardar Patel University year 2008.
- **21.** Paper presented at National Conference on Emerging Trends in Mechanical Engineering titled, "Computer Aided Facilities Layout through Constructive and Improvement Heuristics" held on 28-29 March, 2008 at G H Patel College of Engg. & Tech. GHCET, Vallabh Vidyanagar.
- 22. "Experimental investigation on solar air heater with double pass aluminum cans" International Journal of Engineering and Technical Research (IJETR) ISSN: 2321-0869 (Online), 2454-4698 (Print), Volume-2, Issue-6, June 2014, Impact Factor 2.19 (according to Google Index)

- 23. "Experimental investigation of double pass solar air heater with three obstacles on an absorber plate" published in GIT-Journal of Engineering and Technology, Vol.-8 ISSN No. 2249-6157, 2015.
- **24.** "A Review on Tip Clearance Flow and Secondary Flow Losses in Linear Turbine Cascade" Research Paper published in IOSR (International Organization of Scientific Research) Journal of Mechanical and Civil Engineering, Volume 11, Issue 3, May-June 2014. E-ISSN no. 2278-1684 and P-ISSN no. 2320-334X, indexed in Google Scholar and J-GATE.
- 25. "Analysis of I.C. Engine Fins for Effective Cooling Performance", published in "International Journal of Science Technology & Engineering" –Vol. 5, Issue-I, July 2018, ISSN No. (Online) 2349-748X, Impact Factor- 4.753, Pg. 16-21
- **26.** "Design and Fabrication of Low Speed Wind Tunnel for Aerodynamic Model Test" presented at "International Conference on Engineering Technology, Science and Management Innovation (ICETSMI-2018)" and published "Journal of Emerging Technologies and Innovative Research (JETIR)" –Vol. 5, Issue- 7, July 2018, ISSN No.-2349-5162, Impact Factor- 5.87, UGC approved Journal no. 63975.
- **27.** Research Paper titled "Investigation on Hydraulic Door Opening System" published in Journal of Emerging Technologies and Innovative Research November 2018 with Impact factor 5.87, ISSN No. 2349-5162 and UGC approved no. 63975.
- **28.** "Simulation of Aerofoil for Linear Cascade" paper published in Journal of Emerging Technologies and Innovative Research ISSN UGC Approved (Journal No: 63975) & 5.87 Impact Factor, Volume 6 Issue 6, June 2019.
- **29.** "Comparison of Plain Airfoil with Tubercle Airfoil: A Review" paper published in Compliance Engineering Journal, ISSN No: 0898-3577, Volume 11, Issue 6, 2020 Page No: 696 to 700, July 2020.
- **30.** "Analysis of NACA 63-415 Airfoil with Modified NACA 63-415 using CFD Analysis" paper published in JES- Journal of Engineering Science, Vol 11, Issue 6,June/ 2020 ISSN NO: 0377-9254, Page No:730-735, July 2020.