

RÉSUMÉ

ABHISHEK DASORE



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EDUCATION

Course	Institution	Year of Passing	Subjects/Specialization	Percentage/CGPA
Ph.D.	Koneru Lakshmaiah Education Foundation, Guntur	26 th November, 2020	Department: Mechanical Engineering Specialization: Thermal Engineering PhD Title: Drying kinetics of root vegetables using convective tray dryer	NA
M. Tech	JNTUA College of Engineering, Anantapur	November, 2016	Department: Mechanical Engineering Specialization: Heat Power (R & A/C)	79
B. Tech	JNTUA College of Engineering, Anantapur	April, 2012	Mechanical Engineering	73.4
XII (Intermediate)	Sri Chaitanya Junior Kalasala, Anantapur	March, 2008	Mathematics, Physics & Chemistry	94
X (SSC)	L. R. G. High School, Anantapur	March, 2006	Mathematics, General Science & Social Studies	81.8

PROFESSIONAL POSITIONS HELD

Assistant Professor, Department of Mechanical Engineering, RGM College of Engineering and Technology (Autonomous), Nandyal (18-02-2020 to Till Date)

Assistant Professor, Department of Mechanical Engineering, Kuppam Engineering College, Kuppam (08-04-2013 to 17-06-2014)

AutoCAD Faculty at ISCOT Educational and Rural Development Society, Anantapur from 01-05-2012 to 01-04-2013.

COURSES TAUGHT

- Fluid Mechanics and Hydraulic Machines
- Engineering Thermodynamics
- Engineering Drawing
- Refrigeration and Air-conditioning

PROFESSIONAL DUTIES

- Mentored the students continuously.
- Supervised the students in their UG & PG projects.
- Assisted the department and institution in NBA and NAAC accreditation process.
- Conducted research and published papers in academic journals.

PUBLICATIONS

PATENTS

- | | | |
|---|------|---|
| 6 | 2022 | A. U. Patent 2,021,103,321: "Solar Energy Monitoring System by IoT" , March 9, 2022. |
| 5 | 2021 | Indian Design Patent "Automated Ambu Bag Respirator" Accepted. Application No. 339893-001 |
| 4 | 2021 | Indian Design Patent "Infrared Thermometer" Accepted and Published with Journal No. 40/2021 and Journal Date is 01/10/2021 |
| 3 | 2021 | A. U. Patent 2,021,100,783: "A composite nano-coated internal combustion engine cylinder" , April 7, 2021. |
| 2 | 2021 | A. U. Patent 2,021,101,982: "A charger of lithium battery for solar cell" , May 19, 2021. |
| 1 | 2021 | A. U. Patent 2,021,102,000: "A smart device for maintain greenhouse controlling environments parameters." , May 19, 2021. |

CONFERENCES

Citations

- | | | |
|---|------|---|
| 8 | 2022 | Ramakrishna Balijepalli, Upendra Rajak, A Dasore , Anshul Raj, Prem Kumar Chaurasiya. Design and Optimization of NACA 0012, NACA 4412 and NACA 23,012 Aerofoils of Wind Turbine of Solar Updraft Tower Power Plant. In: Chaurasiya, P.K., Singh, A., Verma, T.N., Rajak, U. (eds) Technology Innovation in Mechanical Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-16-7909-4_2 |
| 7 | 2022 | Ramakrishna Balijepalli, A Dasore , Upendra Rajak, Y. Siva Kumar Reddy, Tikendra Nath Varma. Design and Optimisation of Annulus Combustion Chamber of Gas Turbine Engine: An Analytical and Numerical Approach. In: Verma, P., Samuel, O.D., Verma, T.N., Dwivedi, G. (eds) Advancement in Materials, Manufacturing and Energy Engineering, Vol. II. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-16-8341-1_47 |
| 6 | 2022 | MH Krishna, A Dasore , U Rajak, R Konijeti, TN Verma. Thermo-Economic Optimization of Spiral Plate HX by Means of Gradient and Gradient-Free Algorithm. In: Verma, P., Samuel, O.D., Verma, T.N., Dwivedi, G. (eds) Advancement in Materials, Manufacturing and Energy Engineering, Vol. II. |

Lecture Notes in Mechanical Engineering. Springer, Singapore.
https://doi.org/10.1007/978-981-16-8341-1_48

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|---|------|--|---|
| 5 | 2022 | A Dasore , Upendra Rajak, Ramakrishna Konijeti, Ramakrishna Balijepalli, K Prahlada Rao, Charan Kumar Ganteda, Tikendra Nath Verma. Comparative numerical investigation of rectangular and elliptical fins for air cooled IC engines. <i>Materials Today: Proceedings</i> , Vol. 49, Part 2, pp. 481-485. | 3 |
| 4 | 2022 | A Dasore , U Rajak, R Balijepalli, TN Verma, K Ramakrishna. An overview of refinements, processing methods and properties of natural fiber composites. <i>Materials Today: Proceedings</i> , Vol. 49, Part 2, pp. 296-300. | 8 |
| 3 | 2022 | U Rajak, P Nashine, A Dasore , R Balijepalli, PK Chaurasiya, TN Verma. Numerical analysis of performance and emission behaviour of CI engine fueled with microalgae biodiesel blend. <i>Materials Today: Proceedings</i> , Vol. 49, Part 2, pp. 301-306. | 7 |
| 2 | 2021 | SK Mohammad Shareef, M Sai Vikas, ALN Arun Kumar, A Dasore , Sanjay Chhalotre, Upendra Rajak, Triendra Nath Verma. Design and thermal analysis of engine cylinder fin body using various fin profiles, <i>Materials Today: Proceedings</i> , Vol. 47, Part 17, pp. 5776-5780. | 2 |
| 1 | 2021 | A Dasore , R Konijeti, BK Naik, SPR Annam. Performance Evaluation of Adsorption Refrigeration System Using Different Working Pairs. In: Muthukumar P., Sarkar D.K., De D., De C.K. (eds) <i>Innovations in Sustainable Energy and Technology. Advances in Sustainability Science and Technology</i> , 2021. Springer, Singapore.
https://doi.org/10.1007/978-981-16-1119-3_26 | |

JOURNALS

Citations

- | | | | |
|----|------|---|---|
| 22 | 2022 | Mohammed Anees Sheik, MK Aravindan, Erdem Cuce, A Dasore , Upendra Rajak, Saboor Shaik, A Muthu Manokar, Saffa Riffat. A comprehensive review on recent advancements in cooling of solar photovoltaic (PV) systems using phase change materials (PCMs), <i>International Journal of Low-Carbon Technologies</i> , 2022; ctac053, https://doi.org/10.1093/ijlct/ctac053 | |
| 21 | 2022 | Upendra Rajak, Prerana Nashine, Prem Kumar Chaurasiya, Tikendra Nath Verma, A Dasore , Kamal Kishore Pathak, Gauav Dwivedi, Anoop Kumar Shukla, Gaurav Saini. The effects on performance and emission characteristics of DI engine fuelled with CeO ₂ nanoparticles addition in diesel/ tyre pyrolysis oil blends, <i>Environment, Development and Sustainability</i> . https://doi.org/10.1007/s10668-022-02358-8 | |
| 20 | 2022 | A Dasore , U Rajak, M Panchal, VN Reddy, TN Verma, PK Chaurasiya. Prediction of overall characteristics of a dual fuel CI engine working on low-density ethanol and diesel blends at varying compression ratios, <i>Arabian Journal for Science and Engineering</i> . https://doi.org/10.1007/s13369-022-06625-8 | 1 |
| 19 | 2022 | NJ Rathod, MK Chopra, PK Chaurasiya, US Vidhate, A Dasore . Optimization on the Turning Process Parameters of SS 304 Using Taguchi and TOPSIS, <i>Annals of Data Science</i> , https://doi.org/10.1007/s40745-021-00369-2 | |
| 18 | 2022 | SM Karishma, U Rajak, BK Naik, A Dasore , R Konijeti. Performance and emission characteristics assessment of compression ignition engine fuelled with the blends of novel antioxidant catechol-daok biodiesel, <i>Energy</i> , Vol. 245, pp. 123304 | 8 |
| 17 | 2022 | Upendra Rajak, A Dasore , Prem Kumar Chaurasiya, Tikendra Nath Verma, Prerana Nashine, Anil Kumar. Effects of microalgae -ethanol-methanol-diesel | |

blends on the spray characteristics and emissions of a diesel engine, *Environment, Development and Sustainability*, <https://doi.org/10.1007/s10668-021-01998-6>

- 16 2022 U Rajak, P Nashine, **A Dasore**, TN Verma. Utilization of renewable and sustainable microalgae biodiesel for reducing the engine emissions in a diesel engine, *Fuel*, Vol. 311, pp. 122498. 3
- 15 2022 U Rajak, Ü Ağbulut, I Veza, **A Dasore**, S Sarıdemir, TN Verma. Numerical and experimental investigation of a CI engine behaviours supported by zinc oxide nanomaterial along with diesel fuel, *Energy*, Vol. 239, Part E, pp. 122424. 18
- 14 2021 TN Verma, U Rajak, **A Dasore**, A Afzal, AM Manokar, A Aabid, M Baig. Experimental and empirical investigation of a CI engine fuelled with blends of diesel and roselle biodiesel, *Scientific Reports (Nature Portfolio)*, Vol. 11, 18865, pp. 1-23. 5
- 13 2021 TS Singh, U Rajak, **A Dasore**, M Muthukumar, TN Verma. Performance and ecological parameters of a diesel engine fueled with diesel and plastic pyrolyzed oil (PPO) at variable working parameters, *Environmental Technology & Innovation*, Vol. 22, 101491: pp. 1-16. 24
- 12 2020 **A Dasore**, R Konijeti, T Polavarapu, N Puppala. Convective hot air-drying kinetics of red beetroot in thin layers, *Frontiers in Heat and Mass Transfer* Vol. 14, pp. 1-8. 10
- 11 2020 **A Dasore**, K Ramakrishna, BK Naik. Evaluation of heat and mass transfer coefficients at beetroot-air interface during convective drying, *Interfacial Phenomena and Heat Transfer*, Vol. 8, No. 4, pp. 303-319 19
- 10 2020 **A Dasore**, K Ramakrishna, TNV P, P Naveen. A novel empirical model for drying of root vegetables in thin-layers, *International Journal of Scientific and Technology Research*, Vol. 9, No. 1, pp. 2639-2642. 7
- 9 2019 **A Dasore**, R Konijeti, N Puppala. Experimental investigation and mathematical modeling of convective drying kinetics of white radish, *Frontiers in Heat and Mass Transfer* Vol. 13, pp. 1-8. 11
- 8 2019 MC Returi, R Konijeti, **A Dasore**. Heat transfer enhancement using hybrid nanofluids in spiral plate heat exchangers, *Heat Transfer – Asian Research*, Vol. 48, No. 7, pp. 3128-3143. 26
- 7 2019 JR Konda, MR NP, R Konijeti, **A Dasore**. Effect of non-uniform heat source/sink on MHD boundary layer flow and melting heat transfer of Williamson nanofluid in porous medium, *Multidiscipline Modeling in Materials and Structures*, Vol. 15, No. 2, pp. 452-472. 15
- 6 2019 **Dasore A**, K Ramakrishna. Numerical simulation of air temperature and air flow distribution in a cabinet Tray Dryer, *International Journal of Innovative Technology and Exploring Engineering*, Vol. 8, No. 11, pp. 1836-1840.
- 5 2019 **Dasore A**, K Ramakrishna, P Naveen. Method for determining the appropriate thin layer drying model for a feedstock, *International Journal of Recent Technology and Engineering*, Vol. 8, No. 3, pp. 3627-3632. 6
- 4 2018 **Dasore A**, K Ramakrishna, P Naveen. A panorama of ideas in the adoption of an effective and efficient drying technique for an agricultural produce, *International Journal of Mechanical and Production Engineering Research and Development (IJMPERD)*, Vol 8, No. 9, pp. 955-962. 6

3	2018	KJ Reddy, NP Madhusudhana Reddy, RK Konijeti, A Dasore . Numerical Investigation of chemical Reaction and Heat Source on radiating MHD stagnation point flow of Carreau Nanofluid with suction/injection, <i>Defect and Diffusion Forum</i> , Vol 388, pp. 171-189, Trans Tech Publications, Switzerland.	10
2	2018	RM Venkateswara, K Ramakrishna, A Dasore . Thermal design of spiral plate heat exchanger through numerical modelling, <i>Int. J. Mechanical Engineering and Technology</i> , Vol 9, No 7, July 2018, pp 736-745.	24
1	2018	S Gupta, NK Karanam, R Konijeti, A Dasore . Thermodynamic analysis and effects of replacing HFC by fourth generation refrigerants in VCR systems, <i>Int. J. of Air-conditioning and Refrigeration</i> , Vol 26, No 1, 2018, pp 1850013-1 to 1850013-12	26

PROFESSIONAL ACTIVITIES

- ✚ **Organized three-day national level hands-on workshop on Advanced HVAC Energy Simulation using Design Builder**, jointly by ISHRAE BBS Sub chapter and Department of Mechanical Engineering, RGM College of Engineering and Technology, Nandyal, during 20-09-2022 to 22-09-2022.
- ✚ **Organised half-day seminar on Development of Entrepreneurial skills at student level**, jointly by Institute Innovation Council, ISHRAE BBS Subchapter and Department of Mechanical Engineering, Rajeev Gandhi Memorial College of Engineering and Technology, Nandyal, Andhra Pradesh, on 16-09-2022.
- ✚ **Organised half-day seminar on Leadership Redefined – A panel discussion with women entrepreneur**, jointly by Institute Innovation Council, ISHRAE BBS Subchapter and Department of Mechanical Engineering, Rajeev Gandhi Memorial College of Engineering and Technology, Nandyal, Andhra Pradesh, on 17-06-2022.
- ✚ **Organised half-day seminar on How to plan for start-up: Legal & Ethical Steps**, jointly by Institute Innovation Council, ISHRAE BBS Subchapter and Department of Mechanical Engineering, Rajeev Gandhi Memorial College of Engineering and Technology, Nandyal, Andhra Pradesh, on 14-06-2022.
- ✚ **Convener to two-day International Conference** on Contemporary Innovations in Mechanical Engineering (CIME-2022), sponsored and organised by Science City of Andhra Pradesh and Department of Mechanical Engineering, Rajeev Gandhi Memorial College of Engineering and Technology, Nandyal, Andhra Pradesh, during 22-04-2022 and 23-04-2022.
- ✚ **Delivered an expert lecture** in the one-week faculty development programme (FDP) on **Research Essentials** organised by Department of Computer Science and Engineering, held from 31-01-2022 to 05-02-2022 at Chandigarh University, Mohali, Punjab, India.
- ✚ **Delivered a Keynote Address** in the RSRI Conference on Theoretical and Applied Science (RSRI CTAS 2022-Second Edition) on 27th and 28th February 2022 organised by REST Labs & REST Society for Research International, Krishnagiri, India.
- ✚ **Organised two-day workshop on importance of NDT in Quality & Energy Sector**, jointly by VIDAL NDT Hyderabad and Department of Mechanical Engineering, Rajeev Gandhi Memorial College of Engineering and Technology, Nandyal, Kurnool (dt.), Andhra Pradesh, during 01-12-2021 and 02-12-2021.

- ✦ **Organized three-day blended mode (Online/Offline) Hands-on workshop on Energy Modelling and Simulation of HVAC systems (EMSHVAC 2021)**, jointly by Indian Society of Heating, Refrigeration and Air-conditioning Engineers (ISHRAE) Bhubaneswar, Odisha and Department of Mechanical Engineering, Rajeev Gandhi Memorial College of Engineering and Technology, Nandyal, Kurnool (dt.), Andhra Pradesh, during 02-09-2021 and 04-09-2021.
- ✦ **Undergone two-month internship** from 17-05-2019 to 24-07-2019 at Thermal Science Laboratory, Department of Mechanical Engineering, IIT Guwahati.
- ✦ **Undergone one month training on Solidworks design software at Central Institute of Tool Design**, Sub-centre Vijayawada, from 05-06-2013 to 04-07-2013.

MEMBERSHIPS

- ✦ **Member (M - 61602)** in Indian Society of Heating, Refrigerating and Air Conditioning Engineers
- ✦ **Member (M - 1728169)** in Mechanical Engineering Division of The Institution of Engineers (India).
- ✦ **Lifetime Member (LM: AA0220)** in Mechanical Division by REST Society for Research International.

PROFESSIONAL SKILLS

- ✦ Hands-on experience on **Data interpretation using python, Hypothesis testing, ANOVA, ANN techniques, LDA, Tableau, ANSYS workbench, Solidworks, CATIA, Solid Edge**
- ✦ Basic knowledge on **C-programming**
- ✦ Hands-on experience on **Design Builder an advanced energy simulation tool**

PROFESSIONAL HONOURS

- ✦ **Program Chair** for the ISHRAE BBS Subchapter society for the year 2022-2023.
- ✦ **Innovation Ambassador** for the Institute Innovation Council, Rajeev Gandhi Memorial College of Engineering and Technology Nandyal for the year 2021-22.
- ✦ Received **RSRI Young Researcher Award** in the RSRI Conference on Theoretical and Applied Science (RSRI CTAS 2022-Second Edition) on 27th and 28th February 2022 organised by REST Labs & REST Society for Research International, Krishnagiri, India.
- ✦ Received **PG scholarship** through AICTE during 2014-2016.

COMMUNITY SERVICE

- ✦ **Volunteered in National Service Scheme (NSS) for 2 years** during 2010-2012 in JNTUA College of Engineering (Autonomous), Anantapur and attained 240 hours Regular NSS Certificate.

REFERENCES

- 3 **Dr. B. Kiran Naik**
Assistant Professor
Department of Mechanical Engineering
National Institute of Technology Rourkela
Odisha-769008, India
Phone: +91-9435686059
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- 2 **Dr. P. Muthukumar**
Professor & Associate Dean (Industrial Interactions & Special Initiatives)
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- 1 **Dr. Konijeti Rama Krishna**
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DECLARATION

I hereby declare that all the details furnished above are true to the best of my knowledge.

DASORE ABHISHEK