

EXCELLENCE IN EDUCATION; SERVICE TO SOCIETY

(ESTD, UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)

Rajampet, Annamayya District, A.P - 516126, INDIA

### **Faculty Profile**

#### **Basic Information:**

NAME : Dr. D. Krishna Mohan Raju

DESIGNATION : Professor & Dean of Innovation and

Incubation Centre

DEPARTMENT : Mechanical Engineering

DATE OF BIRTH : **05-07-1967** 

DATE OF JOINING : 05-08-2017

EMAIL ID : krishnamohan.inventions@gmail.com

EMPLOYEE ID : AITS031004



#### **Academic Profile:**

| Qualification | Name of the Board/University         | YEAR |
|---------------|--------------------------------------|------|
| Ph.D          | JNTU Hyderabad                       | 2015 |
| M.Tech.       | R.E.C. – CALICUT, CALICUT UNIVERSITY | 1992 |
| B.Tech.       | S.V. University                      | 1990 |

#### **Research Details:**

| 1. Areas of Specialization :           |                        | Automobile Engineering, Energy Conservation,<br>Thermal Power Plant, I.C. Engines, Home<br>appliances |
|--|------------------------|---|
| 2. No. of Publications :               |                        | 10  |
| 3. Awards Received :                   |                        | -   |
| 4. Research Guidance                   |                        |   |
|  | No. of PhD Guided:     |   |
|  | No. of M.Tech. Guided: |   |
|  | No. of B.Tech. Guided: |   |
| 5. Details of Professional Membership: |                        |   |
| 6. Subjects Taught :                   |                        |   |

### • Publication Details:

|    | Title  | Publisher                     | Published<br>Year |
|----|--|-------------------------------|-------------------|
|    |  | International Journal of      |                   |
| 1. | A Conceptual Design of Collapsible Wind Friction | Engineering Research and      |                   |
|    | Reduction Attachments to Truck for Better Fuel   | Technology (IJERT), ISSN      | 2012              |
|    | Economy  | 0974-3154, Vol. 5, No. 3, pp. |                   |
|    |  | 251–259                       |                   |



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| 2. | A Conceptual Design of Collapsible Wind Friction<br>Reduction Attachments to Bus for Better Fuel<br>Economy                          | International Journal of<br>Advanced Mechanical<br>Engineering (IJAME), ISSN<br>2250-3234, Vol. 2, No. 1, pp.<br>25–34  | 2012 |
|----|--|---|------|
| 3. | A Conceptual Design of Wind Friction Reduction<br>Attachments to The Rear Portion of A Car for Better<br>Fuel Economy at High Speeds | International Journal of<br>Engineering Science and<br>Technology (IJEST), ISSN<br>0975-5462, Vol. 4, No. 5, pp.<br>2366–2372   | 2012 |
| 4. | A Conceptual Design Of Collapsible Wind Friction<br>Reduction Attachments To Bike For Better Fuel<br>Economy                         | International Journal of<br>Multidisciplinary Research<br>& Advances in Engineering<br>(IJMRAE), ISSN 0975-7074,<br>Vol. 4, No. III, pp. 239–252                        | 2012 |
| 5. | A New Idea On Rotary Engine  | Recent Advances in Mechanical Power Transmission – 6th National Convention of Mechanical Engineers, Institution of Engineers (India), Karnataka State Centre, Bangalore | 1990 |
| 6. | Theoretical Analysis On Proposed Economical<br>Energy Efficient Solar Cum Thermal Power Plant  | National Seminar on New Energy Technologies and Clean Environment, University College of Engineering, Osmania University, Hyderabad                                     | 1993 |
| 7. | An Absorption Refrigeration System for Big Cold<br>Storage Rooms in Coastal Areas Using Ocean<br>Thermal Energy                      | Proc. IX ISME Conference<br>on Mechanical Engineering,<br>Dept. of Mech. & Industrial,<br>University of Roorkee,<br>Roorkee   | 1994 |
| 8. | Distillation Plant in Combination With Coastal-<br>Based Thermal Power Plant Using Ocean Thermal<br>Energy – An Idea                 | National Symposium on Power Plant Fly Ash Utilization and Waste Heat Recovery Systems, Osmania University, Hyderabad, in association with AICTE – New Delhi             | 1995 |
| 9. | A New Simple Indexing Mechanism – An Idea  | International Conference on Manufacturing Excellence, Organized by Indian Institution of Production Engineers & Institution of Electrical Engineers, U.K., Bangalore    | 1995 |
| 10 | . A Solar Drier in Combination With Heat Pump  | National Symposium on<br>Solar–2000, Pondicherry,<br>Organized by Pondicherry<br>College of Engineering   | 1996 |



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### **Patent Details:**

|    | Title of Patent   | Submitted/Published/Awarded                      |
|----|---|--|
| 1. | "A Rotary Piston Engine" Patent Application<br>No.: D-CHE/0612. (242/MAS/1998), dated on<br>06-02-1998.   | Patent No.:201003,Patent granted on 16-6-2006.   |
| 2. | "A Multi Engine Automobile" Patent application<br>No.: 2849/CHE/2008, Date of Filing: 10-05-<br>2009. Date of Publication: 01/06/2012   | Patent No.: 293971, Date of Grant:07/03/2018     |
| 3. | "A SYSTEM FOR CONTROLLING VALVE OPERATING PERIOD" Patent application No.: 2853/CHE/2008, Date of Filing: 10-05-2009. Date of Publication: 08/06/2012.   | Patent No.:300988 Date of Grant:13/09/2018,      |
| 4. | "A DOUBLE CRANK OPPOSITE CYLINDER<br>ENGINE WITH FLYWHEEL DRIVEN AT HIGH<br>SPEED" Patent application No.:<br>2855/CHE/2008, Date of Filing: 10-05-2009.<br>Date of Publication: 29/06/2012.                                  | Patent No.:300303, Date of Grant: 27/08/2018     |
| 5. | "HIGH TEMPERATURE ISOTHERMAL<br>EXPANSION SYSTEM" Patent application No.:<br>2848/CHE/2008, Date of Filing: 10-05-2009.<br>Date of Publication: 01/06/2012.   | Patent No.:306245, Date of Grant: 24/01/2019     |
| 6. | "AN IMPROVED AIR SUSPENSION SYSTEM"<br>Patent application No.: 2852/CHE/2008, Date<br>of Filing: 10-05-2009. Date of Publication:<br>01/06/2012.  | Patent No.:3330216, Date of Grant: 24/01/2020.   |
| 7. | "An Efficient Counter Flow Heat Exchanger" Patent application No.: 2850/CHE/2008, Date of Filing: 10-05-2009, Date of Publication: 01/06/2012.  | Patent No.:336913, Date of Grant: 15/05/2020.    |
| 8. | "Heat Exchanger to Liberate Coolant Liquid<br>Heat to Atmosphere" Patent application No.:<br>2851/CHE/2008, Date of Filing: 10-05-2009,<br>Date of Publication: 08/06/2012.   | Patent No.:314700, Date of Grant: 25/06/2019.    |
| 9. | "Practical Isothermal Compression and<br>Isothermal Expansion System" Patent<br>application No.: 2854/CHE/2008, Date of Filing:<br>10-05-2009, Date of Publication: 01/06/2012.   | Patent No.:341133, Date of Grant: 10/07/2020.    |
| 10 | "Portable Water Production From Drainage Water Using Reverse Osmosis Technique And Efficient Counter Flow Heat Exchanger" Patent application No.: 1289/CHE/2009, Date of Filing: 03-12-2009, Date of Publication: 11/05/2012. | Patent No.:336801, Date of Grant:<br>13/05/2020. |
| 11 | "An Innovative Wax Lamp" Patent application<br>No.: 1304/CHE/2009, Date of Filing: 03-12-<br>2009.  | Patent No.: 348025, Date of Grant: 28/09/2020.   |
| 12 | "High Heat Transfer Coefficient Counter Flow<br>Heat Exchanger" Patent application No.:<br>1282/CHE/2009. Date of Filing: 03-12-2009.   | Patent No.: 349878, Date of Grant: 22/10/2020.   |



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| 40 William id Front Injuration Creatons In The Forms Of | Detent No. 250557 Detent Orest                 |
|---|--|
| 13. "Liquid Fuel Injection System In The Form Of        | Patent No.: 350557, Date of Grant:             |
| Vapour In The I.C.Engines" Patent application           | 30/10/2020.                                    |
| No.: 1293/CHE/2009. Date of Filing: 03-12-              |  |
| 2009.   | D  |
| 14. "Gasket With Self Sealing Pressure" Inventor:       | Patent No.: 353526, Date of Grant:             |
| D.Krishna Mohan Raju, Patent application No.:           | 11/12/2020.                                    |
| 1306/CHE/2009. Date of Filing: 03-12-2009.              |  |
| 15. "Steering Mechanism To Achieve Perfect              | Patent No.: 353527, Date of Grant:             |
| Steering Using Cams" Patent application No.:            | 11/12/2020.                                    |
| 1288/CHE/2009. Date of Filing: 03-12-2009.              |  |
| 16. "Low Manufacturing Cost Refrigerator" Patent        | Patent No.: 373295, Date of Grant:             |
| application No.: 1283/CHE/2009, Date of Filing:         | 30/07/2021.                                    |
| 03-12-2009.   |  |
| 17. "HIGH HEAT TRANSFER COEFFICIENT STEAM               | Patent No.: 373296, Date of Grant:             |
| BOILER" Patent application No.:                         | 30/07/2021.                                    |
| 1297/CHE/2009, Date of Filing: 03-12-2009.              |  |
| 18. "A HIGH HEAT TRANSFER COEFFICIENT DRY               | Patent No.: 365985, Date of Grant:             |
| STEAM CONDENSER" Patent application No.:                | 03/05/2021.                                    |
| 1300/CHE/2009, Date of Filing: 03-12-2009.              |  |
| 19. "Collapsible Front and Rear Attachments To          | Patent No.: 383525, Date of Grant:             |
| Automobiles For Reducing Wind Friction"                 | 02/12/2021.                                    |
| Patent application No.: 1301/CHE/2009, Date             |  |
| of Filing: 03-12-2009.                                  |  |
| 20. "High Efficient Friction Belt Drive System"         | Patent No.:396005, Date of Grant: 30/04/2022.  |
| Patent application No.: 1311/CHE/2009, Date             |  |
| of Filing: 03-12-2009.                                  |  |
| 21. "Combined Steel Wheel And Tyre Wheel                | Patent No.: 398271, Date of Grant:             |
| System To Travel The Vehicles Both On Rails             | 31/05/2022.                                    |
| And On Road" Patent application No.:                    |  |
| 1299/CHE/2009, Date of Filing: 03-12-2009.              |  |
| 22. "MULTIPLE WORM AND WORM WHEEL                       | Patent No.: 413948, Date of Grant: 08/12/2022. |
| MECHANISM FOR LIFTING HIGH LOADS"                       |  |
| Patent application No.: 1286/CHE/2009, Date             |  |
| of Filing: 03-12-2009.                                  |  |
| 23. "LIFTING MECHANISM USING HYDRAULIC                  | Patent No.: 416474, Date of Grant: 02/01/2023. |
| MOTOR AND MULTIPLE WORMS AND WORM                       |  |
| WHEEL MACHANISM" Patent application No:                 |  |
| 1294/CHE/2009. Date of Filing: 03-12-2009.              |  |
| 24. "DISTILLED WATER PRODUCTION USING                   | Patent No.: 413237, Date of Grant: 30/11/2022. |
| EFFICIENT COUNTER FLOW HEAT                             | ,  |
| EXCHANGER AND COMPRESSOR" Patent                        |  |
| application No.: 1295/CHE/2009. Date of Filing:         |  |
| 03-12-2009.   |  |
| 25. "PRESSURISED WATER TANK" Patent                     | Patent No.: 419599, Date of Grant: 30/01/2023. |
| application No.: 1309/CHE/2009, Date of Filing:         | 2010 01 01 01 01 01 01 01 01 01 01 01 01       |
| 03-12-2009.   |  |
| 26. "AN EFFICIENT CONTINUOUS VARIABLE                   | Patent No.: 416455, Date of Grant: 02/01/2023. |
| TRANSMISSION SYSTEM" Patent application                 | 1 atom 110100, Bato of Orant. 02/01/2020.      |
| No.: 1310/CHE/2009, Date of Filing: 03-12-              |  |
| 2009.   |  |
| 2000.   |  |



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| 27. "PRACTICAL ISOTHERMAL COMPRESSION             | Patent No.: 413897, Date of Grant: 08/12/2022. |
|---|--|
| SYSTEM USING HYDRAULIC PUMP AND                   |  |
| PRACTICAL ISOTHERMAL EXPANSION SYSTEM             |  |
| USING HYDRAULIC TURBINE" Patent                   |  |
| application No.: 1305/CHE/2009, Date of Filing:   |  |
| 03-12-2009,                                       |  |
| 28. "Power Saving Fan" Patent application No.:    | Patent No.: 426316, Date of Grant: 22/03/2023. |
| 1302/CHE/2009 Patent No.: 426316, Date of         |  |
| Filing: 03-12-2009, Date of Grant: 22/03/2023.    |  |
| 29. "Efficient Air Conditioning Using Evaporative | Patent No.:485228, Date of Grant: 19/12/2023.  |
| Cooling Combined With Mixed Type Counter          |  |
| Flow Heat Exchanger" Patent Application No.:      |  |
| 201641044048, Dated: 23-12-2016.                  |  |