

R. KOUSIK KUMAAR., B.E., M.Tech., M.Ae.S.I., (Ph.D.), AMIE.,

Assistant Professor

Department of Aeronautical Engineering,
Nehru Institute of Engineering and Technology,
"Nehru Gardens", Thirumalayampalayam (PO),
Coimbatore- 641 105,
Tamilnadu, India.
Tel. No: +91 422 2622007/08



Email ID: kousikrangaraj@gmail.com

Mobile. No: +91-90033-67525

CAREER OBJECTIVE

To associate with a leading & growing organization and to utilize the skills, I have acquired during my tenure in working, in an effective and resourceful manner so as to achieve more for the development of the organization, myself and the society.

EDUCATION

- ❖ **DOCTORATE OF PHILOSOPHY (Ph.D., - Faculty of Mechanical Engg)** – Pursuing
(Expected to complete by JUNE 2021) - Anna University, Chennai – **7.75 CGPA** (Highly Recommended)
- ❖ **MASTER OF TECHNOLOGY (M.Tech., - Aeronautical Engg)**
Hindustan Institute of Technology & Science, Chennai – 2013 - **7.98 (CGPA)**
- ❖ **BACHELOR OF ENGINEERING (B.E., - Aeronautical Engg)**
Nehru Institute of Engineering & Technology, Anna University of Technology, Coimbatore –
2011 - **8.35 (CGPA)**

ACADEMIC WORK EXPERIENCES

S. No	Name of the College	Designation	Service		Experience		
			From	To	Years	Months	Days
1.	Nehru Institute of Engineering and Technology	Assistant Professor – Aeronautical Engg	03/07/2014	Till Date	6	4	21
Total					6	4	21

AREAS OF RESEARCH INTEREST

- Aircraft Structural Analysis
- Composite Materials and Structures
- Finite Element Analysis
- Materials Characterization
- High Temperature Materials

EDITORIAL DUTIES AND PROFESSIONAL BODIES MEMBERSHIP

1. Editorial Board Member in the Journal ‘**Advances in Aerospace Science and Applications (AASA)**’, Research India Publications, www.ripublication.com/editorial_board_of_aasa.htm. from 2018.
2. Life-Time Member of Aeronautical Society of India (**Ae.S.I**)
3. Life-Time Associate Member of Institution of Engineers India (**IEI**)
4. Life-Time Member of Institute of Research Engineers and Doctors (**IRED**)

PUBLICATIONS

i) Books

1. **Kousik Kumar.R**, ‘**Aircraft Materials and Processes (ISBN.NO: 978-81-936020-1-0)**’ for Anna University R2013 Sixth Semester Aeronautical Engineering.

ii) International/National Journals

1. **Kousik Kumar.R**, ‘**Study of Tribological Behaviour of Aluminium-Cenosphere Composite Materials**’, Nehru International Journal of Engineering and Technology, ISSN: 2348 – 6007, Volume 2 - Issue. 01, January - March 2015, pg.no: 01-07.
2. **Kousik Kumar. R**, Dr. P. Maniiarasan, ‘**Reduction of Skin Friction Drag in Wings by Employing Riblets**’, International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, Volume 4 - Issue. 07, July – 2015, pg.no: 46-51.
3. **Kousik Kumar.R**, Kannan.G, ‘**Optimization of Coefficient Of Friction Value for Aluminium-Cenosphere Composite Material**’, International Journal of Applied Engineering Research (IJAER) (SCOPUS indexed journal and Annexure – II of Anna University, Chennai (2015)), ISSN: 0973-4562, Vol. 10, No. 84 (2015), pg.no: 41-45, © Research India Publications; <http://www.ripublication.com/ijaer.html>.
4. **Kousik Kumar.R**, Kesavan.M, ‘**Design and CFD Analysis of Shock Wave over Supersonic CD Nozzle**’, International Journal of Latest Trends in Engineering and Technology (IJLTET), e-ISSN: 2278-621X, p-ISSN: 2319-3778, Vol. 07 Issue. 01, May 2016, pg.no: 502-510.
5. **Kousik Kumar.R**, Kannan.G and Boopathy.G and Surendar.G, ‘**Fabrication and Computational Analysis of Cenosphere Reinforced Aluminum Metal Matrix Composite Disc Brakes**’, International

Journal of Mechanical Engineering and Technology (IJMET), ISSN Print: 0976-6340 and ISSN Online: 0976-6359 (**SCOPUS indexed journal**), Vol 8, Issue 6, June 2017, pg.no. 553–563, © **IAEME** Publication.

6. Kannan.G and **Kousik Kumar.R**, ‘**Design Fabrication of EDF- Afterburner Test Rig**’, International Journal of Mechanical Engineering and Technology (IJMET), ISSN Print: 0976-6340 and ISSN Online: 0976-6359 (**SCOPUS indexed journal**), Volume 9, Issue 6, June 2018, pp. 178–181, © **IAEME** Publication.

CONFERENCES (National/International)

1. **Kousik Kumar.R**, Saravanan.V, Dr. P.R. Thyla, ‘**Study of Aluminium-Cenosphere Metal Matrix Composite by Stir Casting Route**’ in International Convention on **Innovations in Engineering and Technology for Sustainable Development (IETSD 2012)** held at Bannari Amman Institute of Technology, Sathyamangalam on 03rd – 05th September 2012.
2. **Kousik Kumar.R** ‘**Construction and Analysis of Regression Equation for Tribological Properties of Aluminium-Cenosphere Composites**’ in **International Conference on Contemporary Innovations in the Sphere of Mechanical Engineering and Management (ICCISMEM 2015)** held at Sri Subramanya College of Engineering and Technology, Palani, Tamil Nadu, India on 30th & 31st March 2015.
3. **Kousik Kumar.R**, Kannan.G ‘**Optimization of Coefficient Of Friction Value for Aluminium-Cenosphere Composite Material**’ in **National Conference on Design, Materials & Constructions (NCDMC 2015)** ISBN: 978-93-82570-65-3 held at Vel Tech Dr. RR & Dr. SR Technical University, Chennai on 20th – 22nd August 2015.
4. **Kousik Kumar.R**, Kannan.G and Boopathy.G ‘**Design and Finite Element Analysis of Aluminium Cenosphere Composite Disc Brakes**’ in **National Conference on Design, Materials & Constructions (NCDMC 2017)** held at Vel Tech Dr. RR & Dr. SR Technical University, Chennai on 21st & 22nd April 2017.
5. **Kousik Kumar.R**, S.Karthikeyan, K.Arunjunai Ananth and S.Karthikeyan ‘**Analytical and Experimental Comparative Study of Coaxial Jet**’ in **International conference on Science, Technology, Engineering and Management (ICSTEM’19)** held at KIT-Kalaignarkarananidhi Institute of Technology, Coimbatore on 22nd & 23rd March 2019.

WORKSHOP/SEMINAR/FDPs PARTICIPATED

- Attended One Day Workshop on ‘**GAS TURBINES & SYSTEMS**’ conducted by Gas Turbine Research Establishment (GTRE), DRDO at NIET, Coimbatore on December 2010.

- Attended Brain Storming Session on **‘MULTI CENTRIC GAS TURBINE ENABLING TECHNOLOGY (GATET)’** Initiative by **GTRE, DRDO**, Bangalore at DRDO Centre, Bharathiar University Campus, Coimbatore on 15th April 2015.
- Attended Faculty Development Programme on **‘LEARNING ABILITY AND TEACHING EFFICACY’** at Nehru Institute of Engineering and Technology, Coimbatore on 24th – 26th June 2015.
- Attended Two days workshop on **‘DESIGN, MANUFACTURING, TESTING & CERTIFICATION ASPECTS OF SMALL GAS TURBINE ENGINES’** organized by Multi Centric GAs Turbine Enabling Technology (GATET), Gas Turbine Research Establishment (GTRE), DRDO, Bangalore on 15th & 16th June 2015.
- Attended One-day national level workshop on **‘UNMANNED AERIAL SYSTEMS - RECENT TRENDS AND FUTURE PROSPECTS’** organized by Department of Aerospace Engineering, Karunya University, Coimbatore on 09th October 2015.
- Attended One-day workshop on **‘DESIGN OF EXPERIMENTS & OPTIMIZATION FOR RESEARCHERS (with Hands-on Training)’** organized by Department of Aeronautical Engineering, Karpagam Institute of Technology, Coimbatore on 16th & 17th November 2015.
- Attended an Awareness programme on **‘BASIC FOUNDRY PRACTICES’** organized by MSME – Technology Development Centre, Ministry of Micro, Small & Medium Enterprises, Government of India Organization at IFEX-2016 Expo, Coimbatore on 30th January 2016.
- Attended One-day seminar on **‘MANUFACTURING CHALLENGES IN COMPOSITES’** organized by the Department of Mechanical Engineering, Karunya University, Coimbatore on 28th September 2016.
- Attended One-day Faculty Development Programme on **‘A SNEAK PEEK INTO STUDENT PSYCHOLOGY’** at Nehru Institute of Technology, Coimbatore on 05th November 2016.
- Attended Three Days National Workshop on **‘APPLICATIONS OF CFD-A HANDS-ON APPROACH’** at Bannari Amman Institute of Technology, Sathyamangalam on 10th – 12th August 2017.
- Attended three days International Workshop on **‘ADVANCEMENTS IN COMPOSITE MATERIALS AND ITS APPLICATIONS’** at Kumaraguru College of Technology, Coimbatore on 13th, 14th and 16th October 2017.
- Attended One-day National Workshop on **‘RECENT ADVANCES IN MANUFACTURE OF AEROSPACE AND AUTOMOTIVE COMPONENTS (RAMAAC 2017)’** at PSG College of Technology, Coimbatore on 14th October 2017.
- Attended One-day Hands On-Training Workshop on **‘WRITING AND PUBLISHING RESEARCH PAPER’** at Nehru Institute of Engineering and Technology, Coimbatore on 20th January 2018.
- Attended **‘CONFERENCE ON INDUSTRY – ACADEMIA – R&D ECOSYSTEM’** as a delegate organized by ICRFT, Anna University during 26th – 27th February 2018 at Anna University, Chennai.

- Attended One-day Seminar on **‘RESEARCH METHODOLOGY’** organized by Nehru Institute of Engineering and Technology in association with Centre for Research, Anna University-Chennai on 03rd March 2018.
- Attended Five days Faculty Development Programme on **‘NBA ACCREDITION’** held at Nehru Institute of Engineering and Technology, Coimbatore on 08th – 14th June 2018.
- Attended One-day Faculty Development Program on **‘METHODOLOGIES & PRACTICES FOR PROFITABLE RESEARCH THROUGH PATENTS & IPR’** held at Nehru Institute of Engineering and Technology, Coimbatore on 23rd November 2018.
- Attended One-day Workshop on **‘HANDS ON TRAINING IN WRITING AND PUBLISHING RESEARCH PAPERS IN INTERNATIONAL JOURNALS’** at Nehru Institute of Engineering and Technology, Coimbatore on 22nd December 2018.
- Attended Five days Webinar series on **‘RECENT DEVELOPMENTS IN SURFACE ENGINEERING, ADVANCES IN WELDING TECHNIQUES, LATEST TRENDS IN COMPOSITE MATERIALS, KNOW YOUR INDUSTRY, ART OF WRITING RESEARCH ARTICLES’** organized by Department of Aeronautical Engineering, Excel Engineering College, Komarapalayam from 27th April 2020 to 01st May 2020.
- Attended One-day Webinar on **‘ENHANCING RESEARCH EFFECTIVENESS USING SCOPUS, SCIENCEDIRECT AND MENDELEY’** organized by Faculty Development Centre, Kurukshetra University, Kurukshetra in collaboration with ELSEVIER-India on 01st May 2020.
- Attended One-day Webinar on **‘SECRETS TO GET QUICKLY PUBLISHED AS A SCIENTIFIC AUTHOR & HASTEN YOUR PHD RESEARCH WRITING’** conducted by AristocratResearch.com, a unit of Aristocrat IT Solutions Pvt Ltd., Chennai on 17th May 2020.
- Attended One-day Webinar on **‘GRANT AND RESEARCH PROPOSAL WRITING’** organized by Department of ECE, Kumaraguru College of Technology, Coimbatore in collaboration with IEEE SSIT Madras Section Chapter on 20th May 2020.
- Attended One-day Webinar on **‘APPLICATIONS OF ADVANCED NDT TOOLS’** organized by Department of Aeronautical Engineering, Kumaraguru College of Technology, Coimbatore on 23rd May 2020.
- Attended One-day Webinar on **‘COVID-19 INFODEMIC AND COMMUNIATIN CHALLENGES’** organized by KIT–Centre for Industry Institute Interactions, Kalaignarkarunanidhi Institute of Technology, Coimbatore on 23rd May 2020.
- Attended One-week Faculty Development Program on **‘MANUFACTURING AND ANALYSIS OF ADVANCED MATERIALS AND ENGINEERING STRUCTURES’** organized by

Department of Aeronautical Engineering, MLR Institute of Technology, Hyderabad from 26th to 30th May 2020.

- Attended One-day Webinar on **‘DIMENSIONS OF EMPLOYABILITY SKILLS POST COVID-19’** organized by KIT–Centre for Industry Institute Interactions, Kalaignarkarunanidhi Institute of Technology, Coimbatore on 26th May 2020.
- Attended One-day Webinar on **‘AIRCRAFT MECHANICAL SYSTEM’** organized by Department of Mechanical Engineering, SRM TRP Engineering College, Trichy on 30th May 2020.
- Attended One-day Webinar on **‘VISION ZERO FOR MANUFACTURING INDUSTRIES’** organized by Department of Mechanical Engineering, SRM TRP Engineering College, Trichy on 30th May 2020.
- Attended One-day International Webinar on **‘REVIEW ARTICLE WRITING USING MS-WORD AND PUBLICATION’** organized by International Journal of Microbial Science jointly with Department of Microbiology, Jayawantrao Sawant College of Science and Commerce, Pune on 31st May 2020.
- Attended One-day Webinar on **‘OPTIMIZATION TECHNIQUES’** organized by Department of Aeronautical Engineering, ACS College of Engineering, Bangalore on 04th June 2020.
- Attended One-day Webinar on **‘RECENT RESEARCH IN AERODYNAMICS’** organized by Department of Aeronautical Engineering, Paavai Engineering College, Namakkal on 09th June 2020.
- Attended One-day Webinar on **‘BASIC ASPECTS OF COMPUTATIONAL FLUID DYNAMICS & ITS APPLICATIONS’** organized by Department of Aeronautical Engineering, Paavai Engineering College, Namakkal on 10th June 2020.
- Attended One-day Webinar on **‘ADVANCES IN FLUID MECHANICS’** organized by Department of Aeronautical Engineering, Paavai Engineering College, Namakkal on 11th June 2020.
- Attended One-day Webinar on **‘COMPRESSIBLE FLOWS WITH/WITHOUT SHOCKS’** organized by Department of Aeronautical Engineering, Paavai Engineering College, Namakkal on 12th June 2020.
- Attended five days Online Faculty Development Programme on **‘AN OVERVIEW OF AERONAUTICAL SCIENCES’** organized by Department of Aeronautical Engineering, Paavai Engineering College, Namakkal from 9th June 2020 to 13th June 2020.
- Attended One-day Online Workshop on **‘COMPUTATIONAL MODELLING USING ANSYS FLUENT’** organized by Thermodyn Edutech, Chennai 09th June 2020.

- Attended Five-days Online Faculty Development Training Programme on ‘**MATHEMATICAL MODELLING & ANALYSIS USING MATLAB & SIMULINK**’ conducted by Thermodyn Edutech, Chennai 08th June 2020 to 12th June 2020.
- Attended One-day International Webinar on ‘**BASICS OF SYSTEM ANALYSIS USING MULTIBODY DYNAMICS**’ organized by Department of Mechatronics Engineering, Hindustan College of Engineering and Technology, Coimbatore on 26th June 2020.
- Attended Two-days webinar on ‘**FLUID STRUCTURE INTERACTION (FSI)**’ organized by Kumaraguru Centre for Industrial Research and Innovation (KC.IRI) & Department of Automobile, Mechanical and Aeronautical Engineering, Kumaraguru College of Technology, Coimbatore from 23rd to 24th July 2020.
- Attended One-day Online Faculty Development Programme on ‘**GENDER EQUITY IN CLASSROOM**’ organized by Gender Equity Cell of Nehru Institute of Engineering and Technology, Coimbatore on 28th July, 2020.
- Attended five days Online Faculty Development Programme on ‘**EMERGING RESEARCH AREAS IN AERODYNAMICS**’ organized by Department of Aeronautical Engineering, Bannari Amman Institute of Technology, Sathyamangalam, Tamilnadu from 03rd to 08th August 2020.
- Attended One-day webinar titled ‘**RECENT TRENDS IN AVIATION INDUSTRY**’ organized by Nehru College of Aeronautics and Applied Sciences, Coimbatore on 08th August 2020.
- Attended One-day webinar on ‘**AIRCRAFT SYSTEMS**’ organized by Department of Electrical and Electronics Engineering, PSG College of Technology, Coimbatore on 12th August 2020.
- Attended One-day webinar on ‘**MATLAB & SIMULINK FOR ALL**’ organized by Yemi foundation on 12th August 2020.
- Attended One-day webinar on ‘**TOOLS FOR RESEARCH**’ organized by Department of Mechanical Engineering, Nehru Institute of Engineering and Technology, Coimbatore on 19th August 2020.

TECHNICAL QUALIFICATIONS

Software skills – Certified in **AUTOCAD, SOLIDWORKS, CATIA V5, ANSYS 12.0, GAMBIT & FLUENT, HYPERMESH** and **MSC NASTRAN & PATRAN**.

PROGRAMS ORGANIZED

- Organized two days workshop on **National Robotics Championship 2015** in Association with IIT - Bombay on 30th and 31st January 2015 at NIET.
- Organized one-day seminar on ‘**Effective Writing Project Proposal in Engineering and Management Disciplines**’ on 04th March 2015 at NIET.

- Organized Two-days National Level Symposium ‘**VIHAAN 2K15**’ on 09th and 10th March 2015 at NIET.
- Organized National Level One-day Seminar on ‘**Recent Advancements in Indian Aerospace Technologies**’ on 18th September 2017 at NIET.
- Organized One-day Workshop on ‘**Foundation in Aeronautics**’ on 9th October 2017 at NIET.
- Organized One-day Seminar on ‘**Research Methodology**’ in association with Centre for Research, Anna University-Chennai on 03rd March 2018 at NIET.
- Organized One-day National Level Technical Symposium ‘**VIHAAN 2K18**’ on 24th March 2018 at NIET.
- Organized One-day Seminar on ‘**Unmanned Aerial Vehicles**’ on 12th July 2019 at NIET.
- Organized One-day Seminar on ‘**Composite Material Characterization in Aircraft Industries**’ on 13th February 2020 at NIET.
- Organized ‘**National Level UAV Workshop**’ on 29th February 2020 at NIET.
- Organized Two-days National Level Symposium ‘**VIHAAN 2020**’ on 13th March 2020 at NIET.
- Organized National Level Webinar on ‘**Resilience the Buzz word post COVID-19 World**’ on 28th August 2020 at NIET.
- Organized National Level Webinar on ‘**Smart Materials for Aeronautical/Aerospace Applications**’ on 20th October 2020 at NIET.

INDUSTRIAL VISITS ORAGNIZED

- Organized Industrial Visits to **Satish Dhawan Space Center – SDSC, Sriharikota** and **CSIR – SERC, Tharamani** from 12th September to 14th September 2017 for third year Aeronautical Engineering students, NIET.
- Organized Industrial Visits to **ISRO Propulsion Complex (IPRC), Mahendragiri** and **Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram** from 10th to 12th January 2018 for third year Aeronautical Engineering students, NIET.
- Organized Industrial Visits to **ISRO Satellite Center (ISAC), Bengaluru, CSIR – National Aerospace Laboratories (NAL), Bengaluru** and **HAL Heritage Center, Bengaluru** from 08th to 10th August 2018 for Final year and third year Aeronautical Engineering students, NIET.

ACHIEVEMENTS

1. Resource Person for “**Multidisciplinary Design Optimization for Aircrafts**” in CSIR sponsored Two Days National Level Seminar on ‘**Role of Deep Learning in Multidisciplinary Design Optimization (MDO) And Its Applications & Tools**’ organized by Department of Information Technology & Department of Computer Science and Engineering, Karpagam College of Engineering (Autonomous), Coimbatore, Tamilnadu on 13th December 2019.
2. Resource person for ‘**Trends in Airline Industry**’ organized by Department of Management Studies, Nehru Institute of Technology, Coimbatore on 05th January 2016.

PERSONAL PROFILE

Date of Birth : 2nd January 1990.
Gender : Male.
Languages Known : English, French, Hindi, Tamil, Telugu and Malayalam.
Marital status : Single.
Hobbies : Surfing the Internet, Learning New Technologies.
Residential Address : 79, Arunachalam Road (W), R.S. Puram, Coimbatore – 641002.
Residential Telephone. No : 0422-2478378

Place: Coimbatore



KOUSIK KUMAAR. R