



## AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING

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### DEPARTMENT OF MECHANICAL ENGINEERING

<b>NAME &amp; INITIALS</b>	Dr. JUNAID BASHA A M	
<b>DESIGNATION</b>	PROFESSOR EMERITUS	
<b>EDUCATIONAL QUALIFICATION</b>	B.E., M.S., Ph.D.,	
<b>EXPERIENCE</b>	35 YEARS	
<b>DATE OF JOINING</b>	17-02-2022	
<b>EMAIL ID</b>	junaidbashaam@gmail.com	
<b>AREA OF SPECIALISATION</b>	Research, Design and Development, Quality Assurance & Control, Project Management, HR administration	

### EDUCATIONAL QUALIFICATION

DEGREE	BRANCH / SPECIALIZATION	INSTITUTION	UNIVERSITY	YEAR
Ph.D.	MECHANICAL ENGINEERING	INDIAN INSTITUTE OF TECHNOLOGY, MADRAS	INDIAN INSTITUTE OF TECHNOLOGY, MADRAS	1996
M.S.	MECHANICAL ENGINEERING	INDIAN INSTITUTE OF TECHNOLOGY, MADRAS	INDIAN INSTITUTE OF TECHNOLOGY, MADRAS	1985
B.E.	MECHANICAL ENGINEERING	UNIVERSITY OF MADRAS	UNIVERSITY OF MADRAS	1980

### PUBLICATION DETAILS

S. Nagesh, A. M. Junaid Basha & Thakur Dinesh Singh “Dynamic performance analysis of high speed flexible coupling of gas turbine engine transmission system”, Journal of Mechanical Science and Technology, 29, pages 173–179 (2015)

V. Ramasamy and A.M. Junaid Basha “Effect of Internal Clearance on Buckling of Multistage Hydraulic Cylinder”, Defence Science Journal, Vol. 68, No. 2, March 2018, pp. 167-174

**Toshin Momin, RP Chandrasekar, S Balasubramanian and Dr. AM Junaid Basha, “ Design and Analysis of High Pressure Hydraulic Filter for Marine Application” IOP Conference Series: Materials**

Science and Engineering, Volume 197, Frontiers in Automobile and Mechanical Engineering 7–9 July 2016, Sathyabama University, Chennai, India
G. Srinivasan, M. S. Kumar and A. M. J. Basha, "A conditional-proportional damper schedule for semi-active suspension of ground vehicles," <i>2015 International Conference on Smart Technologies and Management for Computing, Communication, Controls, Energy and Materials (ICSTM)</i> , 2015, pp. 629-636, doi: 10.1109/ICSTM.2015.7225490.
Jothi, BA, & Basha, AMJ. "Development of a Hydraulic Filter for Nozzle Actuation System of a Gas Turbine Engine." <i>Proceedings of the ASME 2012 Gas Turbine India Conference. ASME 2012 Gas Turbine India Conference</i> . Mumbai, Maharashtra, India. December 1, 2012. pp. 717-723.
Arul jothi, B., and AM Junaid Basha. "Multipass Performance of Different Medias in Aircraft Hydraulic Filters." <i>Indian Journal of Science and Technology</i> 7.4 (2014): 447.
Nagesh, S., AM Junaid Basha, and S. Abilash. "Fatigue crack growth arrestor for high speed flexible coupling of fighter aircraft transmission systems." <i>International Journal of Vehicle Structures &amp; Systems</i> 4.1 (2012): 34.
Nagesh, S., A. M. Junaid Basha, and Dineshsingh G. Thakur. "Sensitivity Analysis of Mission Critical Shear Bolts of Combat Aircraft High-Speed Flexible Coupling." <i>Journal of Failure Analysis and Prevention</i> 15.5 (2015): 672-678.
Nagesh, S., A. M. Junaid Basha, and Dineshsingh Thakur. "An Investigation and 3D Crack Propagation Analysis of High Speed Flexible Coupling of Fighter Aircraft." <i>Journal of Failure Analysis and Prevention</i> 15.5 (2015): 662-671.
Srinivasan, G., A. M. Junaid Basha, M. Senthil Kumar, and K. Anbudurai. "Proportional Integral Derivative Control of Hydro-Gas Suspension Unit for Tracked Vehicles." <i>International Journal of Vehicle Structures &amp; Systems (IJVSS)</i> 4, no. 1 (2012).
AM, Junaid Basha. "BUCKLING LOAD ANALYSIS OF A HYDRAULIC CYLINDER." <i>International Journal on Design and Manufacturing Technologies</i> 7, no. 2 (2013).
Basha, AM Junaid, M. Singaperumal, and K. Narayanasamy. <i>Studies on Hydrostatic Steering System of Armoured Fighting Vehicles</i> . No. 933065. SAE Technical Paper, 1993.
Jothi, B. Arul, and AM Junaid Basha. "Design criteria for aircraft hydraulic filter." <i>Frontiers in Automobile and Mechanical Engineering-2010</i> . IEEE, 2010.
Ramasamy, V., and A. M. Basha. "Multistage hydraulic cylinder buckling analysis by classical and numerical methods with different mounting conditions." <i>Fluid Mechanics and Fluid Power—Contemporary Research</i> . Springer, New Delhi, 2017. 901-910.
SRINIVASAN, G., AM JUNAID BASHA, and M. SENTHIL KUMAR. "Design Studies and Mathematical Modeling of Hydro-Pneumatic Suspension for Armoured Fighting Vehicles." <i>The 11th Asian International Conference on Fluid Machinery and The 3rd Fluid Power Technology</i> . 2011.
Nagesh, S., A. M. Basha, and G. Singh. "Influence of applied misalignment on the balanced high speed flexible coupling of fighter aircraft." <i>Applied Mechanics and Materials</i> . Vol. 592. Trans Tech Publications Ltd, 2014.

#### ACHIEVEMENT DETAILS

Design, develop, testing and production of Aircraft Mounted Accessory Gear Box (AMAGB) with

compact high speed gears of AGMA standards transmitting 750 HP with Accessories of Hydraulic pumps, generator and a Jet-Fuel starter
Design, develop, testing and production of High Speed Light Weight Power Take-off Shaft (PTO) transmitting 750HP from Engine to AMAGB
Design, develop, testing and production of MIL-H-185D standards Hydraulic Filters with High Precision Micron ratings
Design, develop, testing and production of Submarine Filters
Design, develop, testing and production of Main Battle Tank (MBT) systems, components, managing with about 300 technical staff and officers
Governance and administration of more than 1500 employees including service officers, technical officers, staffs and contractual employees
Developed an Artificial Kidney for renal failure patients utilizing the filter technology with a comprehensive bio-technique
Technology Group Award 2002 & 2013
Defence Technology Spin-off Award 2014