# FACULTY PROFILE

Name	Dr. Tide P. S.
Designation	Professor in Mechanical Engineering
Official address	Professor in Mechanical Engineering School of Engineering Cochin University of Science & Technology Kochi – 682 022.
Home Address	M-125, Changampuzha Nagar, Kalamassery Cochin – 682 033.
Mobile No. Email id	94973 66401, 79074 37475 tideps@gmail.com, tideps@cusat.ac.in

# **Education qualifications:**

Sl. No.	Degree	University	Specialization	Class
1.	Ph.D	I.I.T Madras	Mechanical Engineering	-
2.	M.Tech	I.I.T Kharagpur	-	-
3.	B.Tech	Government Engineering	-	I Class
	(Mechanical)	College, Trichur, Kerala		(Honours)

Teaching experience	: <b>32</b> Years	
<b>Research Experience</b>	: 18 Years	
Areas of interest	: Compressible Fluid Flows, Computational Fluid Dynamics, Experimental Fluid Dynamics, Supersonic & Under expanded flows	
Subjects handled	: Compressible Fluid Flows, Gas Dynamics, Propulsion Engineering, Mechanics of Machinery, Dynamics of Machinery, Vibration and Noise Control, Thermodynamics and Propulsion, Engineering Mechanics	
Promotions:		
1 <sup>st</sup> promotion (Date & designation): 17/02/1997 (Senior Lecturer) (DTE Order & U.O)		

2 <sup>nd</sup> Promotion (Date & designation): 21/09/2002	(Reader) (U.O)
3 <sup>rd</sup> Promotion (Date & designation): 21/09/2010	(Professor) (U.O)

#### Post Doctoral Fellowship Mentored: 1 (U.O. No. CUSAT/AC(B).B3/2280/2021 dated 08/07/2021)

Sl. No.	Name of student	Project Title	Status
1	Arjun K S	Endwall convective heat transfer for bluff body in nanofluid flow through a channel under magnetic flux at high Reynolds numbers	12-7-2021 to Till date

#### **Ph.D Guided: 7 Completed**

Sl. No.	Name of student	Title of thesis	Status
1	Sandhya M	Investigations on Flow Characteristics of Jets emanating from Round and Rectangular Nozzles with and without Bevel	Completed
2	Mubarak A K	Investigation on Shock Cell Parameters in Jets emanating from Conical, Bell and Double Parabolic Nozzles	Completed
3	Sunil A S	An Investigation on Flow Oscillations due to Shear Layer Instability and Vortex Dynamics	Completed
4	Salaji S	Analysis, Modification, and Evaluation of Chaulmoogra Oil (Hydnocarpus Wightianus) as a Base Oil for Industrial Lubricants	Completed
5	Bindu M D	Experimental and Numerical Investigations on Friction Stir Welding of AA 7068-T6 Aluminium Alloy	Completed
6	Roy V Paul	Experimental and Numerical Investigations on Jet Dynamics of Flow Emanating from Corrugated Lobed Nozzles	Completed
7	Sabu Kurian	Experimental and Numerical Investigations on Heat Transfer Enhancement using Flow Deflectors in a Jet Array Impingement System with Cross-Flow	Completed
8	Rama Chandra Rao Adduru	Experimental Investigations, Modelling and Optimization of Reactive Precipitation for Recovering Ammonium Perchlorate from Reject Brine	Thesis submitted
9.	Arun G Nair	Numerical Investigations on Performance Enhancement of SCRAMJET Combustor using Modified Strut based Flameholder	Pre-synopsis completed

#### **Sponsored Projects**

RUSA 2.0 – Major Projects - Co-Principal Investigator Project Number: T4L Total amount: **76** Lakhs Project Title: *Material Characterisation and Defect Sizing by Tone Burst Eddy Current Thermography* 

# Number of Publications:International Journals: 50International Conferences: 35International Seminar & National Conferences: 08

#### Memberships in Professional bodies: Life Member ISTE LM-14114, ISSE LM-00663, IEI: F-120477-3, ISHMT: 1540

#### **Expert Committee Membership:**

Sl. No.	Name of Committee	Name of Institute	Role of Faculty Member	Duration
1	Board of Studies in Mechanical Engineering & Marine Engineering	CUSAT, Cochin	Chairman	2015-2019
2	Board of Studies in Ship Technology	CUSAT, Cochin	Member	2015-2019
3	Board of Studies in UG Studies	MG University, Kottayam	Member	2015-2017
4	Academic Council	CUSAT, Cochin	Member	2015-2019
5	Board of Studies in Defence Science and Technology	CUSAT, Cochin	Member	2021-Till date
6	Board of Studies in Mechanical & Marine Engineering	CUSAT, Cochin	Member	2023-Till date

#### **Details of Publications:**

#### (i) International Journals

Year	Type of publications	Papers published
2009	International Journal	Tide, P. S., Babu, V., "Improved Noise Predictions from Subsonic
		Jets at Mach 0.75 Using URANS Calculations", Progress in
		Computational Fluid Dynamics, Inderscience, 9(8) (2009) 460-
		474.
2009	International Journal	Tide, P. S., Babu, V., "Numerical Predictions of Noise Due to
		Subsonic Jets from Nozzles with and without Chevrons", Applied
		Acoustics, Elsevier, 70(2) (2009) 321-332.
2009	International Journal	Tide, P. S., Srinivasan, K., "Novel Chevron Concepts for Jet
		Noise Reduction", Proc. I.Mech.E. Part G, Journal of Aerospace
		<i>Engineering</i> , <i>SAGE</i> Publishing, 223(1) (2009) 51-67.
2010	International Journal	Tide, P. S., Babu, V., "Numerical Investigation of the Effect of
		Chevrons in Subsonic Jets using URANS", Progress in
		<i>Computational Fluid Dynamics, Inderscience,</i> <b>10</b> (2) (2010) 65-79.
2010	International Journal	Tide, P. S., Srinivasan, K., "Effect of Chevron Count and
		Penetration on the Acoustic Characteristics of Chevron Nozzles",
		Applied Acoustics, Elsevier, 71(3) (2010) 201-220.
2011	International Journal	Rajendran C., Madhu G., Tide P.S., Kanthavel K., "Aerodynamic
		Performance Analysis of Horizontal Axis Wind Turbine Using
		CFD Technique", European Journal of Scientific Research, 65(1)
		(2011), 28-37.
2012	International Journal	Shajikumar K.R., Tide P.S., "An Investigation on Tube
		Temperature Distribution in a Water Tube Boiler", IOSR Journal
<u> </u>		of Mechanical and Civil Engineering, <b>2(3)</b> (2012), 45-50.
2014	International Journal	Mubarak A.K., Naveen S. Das, Tide P. S., "Assessment of

		Performance of Turbulence Models in the Numerical Simulation
		of Mach 1.4 Free Jet from a Convergent Divergent Nozzle",
		European Journal of Scientific Research, <b>123</b> (3) (2014), 316-328.
2014	International Journal	Bhasi A. B., Bindu M. D., Tide P. S., "Jet Dynamics of Co-axial
		Dual compressible Jets for Different Exit Velocity Ratios",
		International Review of Mechanical Engineering, <b>8(5)</b> (2014) 908-
		915.
2015	International Journal	Vipin R, Sabu Kurian, Tide P S., "Study on pulsed impingement
		cooling", International Journal of Science, Engineering and
		Technology Research, 4(10) (2015) 3635-3639.
2015	International Journal	Tigy V, Sabu Kurian, Tide P S., "Numerical Investigation on Jet
		Impingement Cooling Aided with Synthetic Jet on Target Plate",
		International Journal of Science, Engineering and Technology
		Research, 4(10) (2015) 3629-3634.
2015	International Journal	Mahesh T A., Sabu Kurian, Tide P S., "Numerical Investigation
		on Jet Impingement Cooling Aided with Cross Flow and Ribs on
		Target Plate", International Journal of Science, Engineering and
		Technology Research, 4(10) (2015) 3644-3652.
2017	International Journal	Sandhya M, <b>Tide P. S.</b> , "Computational Analysis of Subsonic Jets
		from Round and Beveled Nozzles", International Journal of
		Energy Technology and Policy, Inderscience, 13(1) (2017) 141-
		157.
2017	International Journal	Sabu Kurian, Gokulnath R, Biju N, Tide P S., "Numerical
2017		Optimization of heat transfer using combined steady and pulsating
		jet array", <i>GRD Journal for Engineering</i> , 6(2) (2017) 91-96.
2017	International Journal	Sabu Kurian, Jassim K, Biju N, <b>Tide P S.</b> , "Numerical
2017		optimisation of heat transfer using pulsating jet array with phase
		shift" <i>GRD Journal for Engineering</i> , 6(2) (2017) 171-176.
2018	International Journal	Sandhya M, <b>Tide P. S.</b> , "Computational Analysis of Subsonic Jets
2010		from Rectangular Nozzles with and without Bevel", <i>Journal of</i>
		Spacecraft and Rockets, (AIAA) 55(3) (2018) 749-763.
2018	International Journal	Mubarak A K., Tide P. S., "Design of a Double Parabolic
2010	International Journal	
		Supersonic Nozzle and Performance Evaluation by Experimental
		and Numerical Methods", Aircraft Engineering and Aerospace
2019	T. 4	Technology, Emerald Insight, 91(1) (2018) 145-156.
2018	International Journal	Mubarak A K., Tide P. S., "Experimental and Computational
		Exploration of Underexpaded Jets from Conical, Bell and Double
		Parabolic Nozzles", International Review of Mechanical
0010	T, , 1 T	Engineering 12(1) (2018) 33-41.
2018	International Journal	Sunil A. S., Tide P. S., "An Investigation on Suppression of
		Vortex Instabilities for a Flow past a Bluff bBody using a Passive
		Device", International Review of Mechanical Engineering, 11(2)
		(2018) 132-137.
2018	International Journal	Don P Jose, Tide P. S., "Numerical analysis of aerodynamic
		characteristics of hang glider", Journal of Applied Engineering
		Research, 13(3) (2018) 93-98.
2018	International Journal	Hredesh T, Tide P. S., "Numerical study on the effect of leading
		edge shapes on the flow characteristics over delta wings", Journal
		of Applied Engineering Research, 13(3) (2018) 51-55.
2018	International Journal	Kriparaj, Roy V Paul, Tide P. S., "Numerical study on the flow
		characteristics of jet emanating from four lobed corrugated nozzles

		with varying lobe lengths", Journal of Applied Engineering
		Research, 13(3) (2018) 36-39.
2018	International Journal	Radhika R, Joshy P J, Tide P. S., "Study of flow developments
		around an airfoil with a range of backward steps", Journal of
		Applied Engineering Research, 13(3) (2018) 99-103.
2019	International Journal	Praphul T, Joshy P J, Tide P. S., "Numerical Analysis of Plume
		Structures of Fluids on a Horizontal Heated Plate", Journal of Heat
2010	International Journal	Transfer ( <i>ASME</i> ), 141(4) (2019) 042502.
2019	International Journal	Sunil A S, <b>Tide P S</b> , "An Investigation on the suppression of vortex induced vibration of a cylinder using compound method
		with oscillating splitter plate", International Journal of Advanced
		Research in Dynamical and Control Systems, 11(7) (2019) 562-
		569.
2019	International Journal	Sunil A S, Tide P S, "Numerical Investigations on suppression of
		Aeolian vibrations on a tall chimney using helical strakes",
		International Journal of Engineering Applications, 7(5) (2019)
		152-159.
2019	International Journal	Sunil A S, Tide P S, "An investigation on reduction of vortex
		induced loads on marine risers", International Journal of Emerging
2020	International Journal	Technologies and Innovative Research, 10(5) (2019) 25-33. Roy V Paul, Kriparaj K G, <b>Tide P S</b> ., "Numerical predictions of
2020	International Journal	the flow characteristics of subsonic jet emanating from corrugated
		lobed nozzle", Aircraft Engineering and Aerospace Technology,
		<i>Emerald Insight</i> , 92(7) (2020) 955-972.
2020	International Journal	Roy V Paul, Kriparaj K. G., Tide P. S. and Biju N. "Design and
		Installation of Supersonic Free Jet Test Facility with Flow
		Visualisation". International Journal on Engineering Applications,
		Vol. 8 (2020) 233-240.
2020	International Journal	Bindu M D, Tide P S, Bhasi A B, "Influence of tool rotational
		speed on microstructure, mechanical properties and corrosion behaviour of friction stir welded AA 7068-T6 Aluminium alloy,
		International Journal of Mechanical and Production Engineering
		Research and Development, ISSN(P):2249-6890; ISSN(E):2249-
		8001 – 2020.
2020	International Journal	Sabu Kurian, Gikku Tom, Tide P S, Biju N, (2020) Experimental
		and Numerical Analysis of Heat Transfer Characteristics of an
		Impinging Round Jet with Vortex Generators, Solid State
2020	T ( ( 1 T 1	Technology, 63(6) 2020.
2020	International Journal	Bindu M. D., <b>Tide P. S.</b> , Bhasi A. B., Abdul Samad P. A. (2020)
		"Numerical and Experimental Studies on Friction Stir Welding of AA 7068-T6 for different welding speeds", International Review
		of Mechanical Engineering, Vol.14, No.10 pp. 615-625.
2021	International Journal	Bindu M. D, <b>Tide P. S</b> , Bhasi A. B, Ramachandran K. K,
		"Modelling and parametric optimization of friction stir welding of
		Aluminium Alloy AA7068-T6 using response surface
		methodology and desirability function analysis" Bulletin of the
		Polish Academy of Sciences: Technical Sciences, 69(4) (2021) 1-
2021	International Lawrent	9. (SCI) Solu Kunian Tida D. S. Diju N. "Experimental and Numerical
2021	International Journal	Sabu Kurian, <b>Tide P. S</b> ., Biju N., "Experimental and Numerical Investigations on Baffle Assisted Jet Array Impingement Cooling
		with Cross-flow", International Journal of Energy Technology and
L		with Cross-flow, international southar of Energy reenhology and

		Policy, <b>Inderscience</b> , 17(4) (2021) 398-420.
2021	International Journal	Sabu Kurian, Tide P. S, Biju N (2021) Effect of Baffle
		Configuration on Heat Transfer and Pressure Drop Characteristics
		of Jet Impingement System with Cross-Flow, Journal of Advanced
		Research in Fluid Mechanics and Thermal Sciences 86(2) 15-27.
2021	International Journal	Sabu Kurian, Abhijith A, Tide P. S, Biju N (2021) Numerical
		optimization of pulse frequency and heat transfer for a subsonic
		impinging jet array. Materials Today. https://doi.org
2021	International Journal	/10.1016/j.matpr.2021.05.250.
2021	International Journal	Bindu M. D., <b>Tide P. S.</b> , Bhasi A. B., "Numerical Studies on Temperature and Material Flow during Friction stir Welding using
		Different Tool Pin Profiles", Journal of Advanced Research in
		Fluid Mechanics and Thermal Sciences, 83 (1), pp. 91-104.
2022	International Journal	Sabu Kurian, Jijo J, <b>Tide P S,</b> Biju N, Artificial Neural Network -
		Genetic Algorithm Based Optimization of Baffle Assisted Jet
		Array Impingement Cooling with Cross-Flow, Journal of Applied
		Fluid Mechanics, Isfahan University of Technology, Vol. 15(2),
		441-451, 2022.
2022	International Journal	Kriparaj K G, Roy V Paul, Tide P S, Biju N, An experimental
		study on shock cell structures of under-expanded jets from
		corrugated lobed nozzles using schlieren imaging technique,
		Journal of Flow Visualization and Image Processing, Begell
2022	International Journal	House, Vol. 29(4), 23-41, 2022. Arun G Nair, <b>Tide P S</b> , Bhasi A B, Numerical Investigation on
2022	International Journal	flow across strut-based flame holder with converging grooves,
		Journal of Flow Visualization and Image Processing, Begell
		House, Vol. 28(3), 97-125, 2022.
2022	International Journal	Arjun, K. S., Rakesh, K., & Tide, P. S (2022). Passive Downward
		Heat Transfer in Reverse Thermosyphon Enabled Bubble Pump
		with Two Working Media for U-Tube Solar Thermal
		Collector. Trends in Sciences, 19(20), <u>DOI:</u>
	T	<u>10.48048/tis.2022.6234</u>
2022	International Journal	Kriparaj, K. G., Roy V Paul, <b>Tide, P. S</b> , Biju N (2022) "Schlieren
		imaging investigation on azimuthally varying shock net from four- lobed corrugated nozzle", Aircraft Engineering and Aerospace
		Technology, 94(7), 1058-1067.
2022	International Journal	Emlin V, Joshy P J, <b>Tide P S</b> , (2022) Numerical Analysis of Pool
		Boiling of Nano Fluids for High Heat Dissipation Applications,
		<b>IEEE</b> Transactions on Components, Packaging and Manufacturing
		Technology, IEEE Xplore Vol. 8(12) 1293-1301.
2022	International Journal	Arjun P, Joshy P J, Tide P S, Numerical Analysis on Air Core
		Vortex Formation in Inclined Cylindrical Tanks, Fluid Dynamics,
		Pleiades Publishing – Springer 2022.
2023	International Journal	Arjun, K. S., Rakesh, K., <b>Tide, P. S.</b> , & Biju N. (2023). Modeling
		of the Thermal Behaviour of Reverse Thermosyphon, utilizing
		Solar Energy and different working fluids. Songklanakarin Journal
2023	International Journal	of Science and Technology, 45(2), 256-263. Arjun, K. S., <b>Tide, P. S</b> ., & Biju N. (2023). Optimum profiles of
2023	miemanonai Journal	endwall contouring for enhanced net heat flux reduction and
		aerodynamic performance. Journal of Harbin Institute of
		Technology (New Series), 2023, 1-13. DOI: 10.11916/j.issn.1005-
L	1	1000-1000 (1000 Series), 2020, 1 10. DOI: 10.11710/J.13911.1000-

		9113.2023037
2023	International Journal	Arjun, K. S., Tide, P. S., Biju N. (2023). "Turbine Passage
		Secondary Flow Dynamics and Endwall Heat Transfer Under
		Different Inflow Turbulence", Journal of Harbin Institute of
		Technology (New Series), Article in Press.
2023	International Journal	Ramachandra Rao A, Tide P S, Benny K. George, Jojo Mathew
		(2023) Quasi-dynamic model for dissolution coupled with reaction
		and precipitation of sodium bicarbonate in fed-batch reactive
		crystallization, Chemical Engineering Journal Advances, Elsevier,
		15 (2023) 100504
2023	International Journal	Ramachandra Rao A, Tide P S, Benny K. George, Ajith Prasad A
		R, Jojo Mathew (2023) Optimisation of reactive precipitation for
		processing reject brine in ammonium perchlorate manufacture,
		International Journal of Industrial and Systems Engineering,
		Inderscience Publishers, (Article in Press)
2023	International Journal	Arun G Nair, Tide P S, Bhasi A B., (2023) Numerical
		investigation of the effect of strut geometries on the flow
		characteristics in a model combustor, Aircraft Engineering and
		Aerospace Technology, DOI 10.1108/AEAT-03-2023-0074.

### (ii) International Conferences

Year	Type of publications	Papers published
2008	International Conference	Tide P.S, Babu V., "A Comparison of Prediction by SST and
		Wilcox K- $\omega$ Models for a Mach 0.9 Jet", 46th AIAA Aerospace
		Sciences Meeting and Exhibit, Reno, Nevada, USA, AIAA-
		2008-0024.
2008	International Conference	Tide, P. S., Srinivasan, K., "Far-field Acoustic Investigation on
		Six Lobed Chevron Nozzles", International Conference on
		Aerospace Science and Technology, Bangalore, INCAST-2008-
		015.
2009	International Conference	Tide P.S, Babu V., "Aerodynamic and Acoustic predictions
		from Chevron nozzles Using URANS Simulation", 47th AIAA
		Aerospace Sciences Meeting, Orlando, Florida, USA, AIAA-
		2009-0014.
2009	International Conference	Tide, P. S., Srinivasan, K., "Experimental Investigation on the
		Effect of Chevron Penetration on 4 Lobed Chevron Nozzles",
		47th AIAA Aerospace Sciences Meeting, Orlando, Florida,
		USA, <i>AIAA-2009-0852</i> .
2009	International Conference	Tide, P. S., Srinivasan, K., "Aeroacoustic studies on beveled
		and Asymmetric-chevron nozzles", 30th AIAA Aeroacoustic
		Conference, Miami, Florida, USA, AIAA-2009-3404.
2011	International Conference	Bindu M.D., Rekha L., Tide P.S., Functionally graded
		materials for thermal barrier coatings – A review (International
		conference on materials for the future, ICMF, 2011.
2011	International Conference	Sandhya M., Mubarak A.K., Tide P.S., Performance of
		refractory metal composite as nozzle throat material and recent
		trends in fabrication, ICMF, 2011.
2011	International Conference	Mubarak A.K., Sandhya M., Tide P.S., Review on the
		application of ablative materials for solid rocket motor nozzle
		and their fabrication, ICMF, Government Engineering College,

		Thrissur, 2011.
2011	International Conference	Rekha L, Bindu M D, Tide P S., Sustainable Constructions,
		Green Buildings, Design and Delivery, ICMF 2011,
		Government Engineering College, Thrissur.
2013	International Conference	Mubarak A.K., Tide P.S., Review on the drag reduction
		technologies in aircraft (Proceedings of the International
		Conference for the Future, ICMF, Government Engineering
		College, Thrissur, 2013.
2014	International Conference	Anand Raj Hariharan, Tide P S, Bhasi A B., "Numerical
		Investigation of Injector Geometries on Jet in Crossflow at High
		Speed", International Conference on Energy, Environment,
		Materials and Safety, ICEEMS' 14 (2014), 409-414.
2014	International Conference	Bindu M. D., Karun V Gopal, Tide P. S., "Prediction of
		Turbulence Characteristics of Coaxial Dual Nozzle Flows",
		International Conference on Energy, Environment, Materials
		and Safety, ICEEMS' 14 (2014), 415-421.
2014	International Conference	Sandhya M, Tide P S, "Numerical Investigation of Flow
		Characteristics of Subsonic Jets from Round & Beveled
		Nozzles", International Conference on Energy, Environment,
		Materials and Safety, ICEEMS' 14 (2014), 423-429.
2014	International Conference	Sunil A. S., <b>Tide P. S.</b> , "An Investigation on Fluid Flow Oscillations
		for Flow Past a Square Cylinder at Various Reynolds Numbers",
		International Conference on Energy, Environment, Materials
2014	Lutana dia sal Canforda a	and Safety, ICEEMS' 14 (2014), 443-450.
2014	International Conference	Aswith R.Shenoy, J. C. Pisharady, Khalid Rashid, <b>Tide P.S.</b> , "Numerical Investigation on the Effect of Secondary Gas Injection in
		Dual Bell Nozzle Flow Transition", International Conference on
		Energy, Environment, Materials and Safety, ICEEMS' 14
		(2014), 459-469.
2014	International Conference	Mubarak A. K, Jaison K. A, Tide P. S., "Estimation of
		Performance of Turbulence Models in Imperfectly Expanded
		Jets from a Convergent Divergent Nozzle", International
		Conference on Energy, Environment, Materials and Safety,
		ICEEMS' 14 (2014), 471-476.
2014	International Conference	A. B. Bhasi, Tide P. S., P. V. Shouri, "Adaptation Measures to
		Environmental Regulatory Compliance tn Small and Medium
		Enterprises - A Study to Combat Operational Issues",
		International Conference on Energy, Environment, Materials
		and Safety, ICEEMS' 14 (2014), 371-378.
2015	International Conference	Aswith R Shenoy, Tide P. S., Numerical analysis of geometric
		effects on alternate wedge strut induced mixing in a Scramjet
		combustor, International Conference on Emerging Trends in
		Mechanical Engineering, (ICETiME), 2015, 53-66.
2015	International Conference	Sabu Kurian, Vipin R, Tide P. S., Biju N, Numerical
		investigation on pulsating jet impingement cooling,
		International Conference on Emerging Trends in Mechanical
L		Engineering, (ICETiME), 2015, 77-86.
2015	International Conference	Amaldev N, Mathew George, Khalid Rashid, J C Pisharady,
		Tide P. S., Numerical study of linear aerospike nozzle and
		experimental validation of spike pressure distribution,
		International Conference on Emerging Trends in Mechanical
1		Engineering, (ICETiME), 2015, 87-100.

2015	International Conference	Roy V Paul, Joseph K J, Tide P S, Biju N, Design and
2013		development of free jet test facility with anechoic chamber for
		subsonic and supersonic flows, International Conference on
		Emerging Trends in Mechanical Engineering, (ICETiME),
2015	International Conference	2015, 181-188. Salaji S, Jayadas N H., <b>Tide P S</b> ., Evaluation of marotty oil as a
2015	International Conference	base stock for industrial lubricants, International Conference on
		Emerging Trends in Mechanical Engineering, (ICETiME),
2016	International Conference	2015, 245-250. Aswith R Shenoy, Abuthahir K A, <b>Tide P S.</b> , LES of alternate
2010		wedge strut induced mixing in a Scramjet combustor, 6 <sup>th</sup>
		International Conference on Fluid Mechanics and Fluid Power,
		Allahabad, 2016.
2019	International Conference	Mechanical Characterization and microstructure studies of
2019		friction stir welded AA 7068-T6 alloy, Bindu, M. D, Tide, P. S,
		Bhasi A B, ICEEMS 2019, CUSAT.
2019	International Conference	Aiswarya Unny, Joshy P J, <b>Tide P S</b> , Aerodynamic analysis of
2017		the wing of unmanned aerial vehicle with and without
		morphing, ICEEMS'19, CUSAT Cochin, April 2019.
2020	International Conference	Nithin Krishnan S, <b>Tide P S</b> , Joshy P J, Supersonic flow past
2020		straight, concave and convex wedge surfaces, International
		Conference STAGE' 20, NSSCE, Palakkad, July 2020.
2021	International Conference	Sabu Kurian, <b>Tide P S</b> , Biju N, Heat Transfer Effect of
		Louvered Baffle in Jet Impingement Heat Transfer with Cross-
		flow, IOP Conf. Series: Materials Science and Engineering,
		ICIMS 2021, Vol. 1132, February 2021.
2021	International Conference	Saurav Sivadas, Joshy P J, Tide P S, A numerical study on the
		effect of Reynolds number on aerodynamics of insect wings,
		International Conference on Aerospace Engineering and
		Mechanical Engineering, ICAME'21, TKM College of
		Engineering, Kollam, December 2021.
2021	International Conference	Neethu Elsa John, Joshy P J, Tide P S, An investigation on
		vortex ring patterns by falling droplets on free surface of a
		liquid, International Conference on Aerospace Engineering and
		Mechanical Engineering, ICAME'21, TKM College of
		Engineering, Kollam, December 2021.
2022	International Conference	Akram P A, Beena Mary John, Teresa Siby Madathil, Shija C,
		Prakasan Abhirami, Mathiazhagan A, Tide P S, Ebenezer D D,
		Numerical Model of a Multi-layer Shock and Vibration Isolator,
		OCEANS 2022, February 2022, Chennai, pp. 1-6.
2022	International Conference	An investigation on air-core vortex formation in hemispherical
		tanks, Heera Susan John, Rohith N R, Joshy P J, Tide P S,
		International Conference on Sustainable Technology and
0000		Innovation for Industry, ICSTII 2022, CUSAT, April 2022.
2022	International Conference	Niju Mohammed, Shebin A, Mohammed Haseeb E, Tide P S,
		Franklin R John, Ranjith S Kumar, Sreejakumari S S, Effect of
		Direct Current Electrowetting-on-Dielectric on Droplet
		Impingement Dynamics, 9 <sup>th</sup> International Conference on Fluid
2022		Mechanics and Fluid Power, Dec. 2022, IIT Roorkee.
2022	International Conference	Niju Mohammed, <b>Tide P S</b> , Franklin R John, Praveen A,
	1	Ranjith S Kumar, Investigation of the Droplet Impingement on

		a Hydrophobic Surface with a Fixed Particle, 9th International
		Conference on Fluid Mechanics and Fluid Power, Dec. 2022,
		IIT Roorkee.
2023	International Conference	Praveen A, Abhinanth J, Gireeshkumaran Thampi B S, Tide
		P.S, Niju Mohammed K and Ranjith S Kumar, Experimental
		Investigation on Self-propulsion of Leidenfrost Droplets on
		Narrow Ratchet Surfaces, 9th Asian Joint Workshop on
		Thermophysics and Fluid Science, Nov. 2022, Utsunomiya,
		Japan.
2023	International Conference	Arun G Nair, Tide P S, Bhasi A B, Numerical investigation of
		flow inside a cavity-based combustor with shock generator,
		International Conference on Science Engineering &
		Technology, ICSET-23, Trivandrum. (Accepted)

# (iii) International Seminars and National Conferences

Year	Type of publications	Papers published
1999	International Seminar	<b>Tide P. S.</b> , and Joshy P. J., An Investigation of Pollution Dispersion from a Stack, International Seminar on Safety and Fire, 1999.
1999	International Seminar	Bhasi A. B., and <b>Tide P. S.</b> , Hazard Identification and Documentation for efficient health and Safety Programmes (International Seminar on Safety and Fire, 1999.
1999	International Seminar	<b>Tide P. S.,</b> and Vinodkumar M. N., An Investigation on Flight Safety, International Seminar on Safety and Fire, 1999.
2004	National Congress	<b>Tide P. S.</b> , Bhasi A. B., Joshy P. J., Increasing the efficiency of coal fired boilers, International Congress on Boiler Engineering and Technology, 2004.
2014	National Conference	Jyothi Sankar P. R., Suresh P. R., <b>Tide P. S.</b> , CFD Studies on the influence of jet geometry at low Reynolds number, National Conference on Latest Trends in Mechanical Engineering, NCLTME-2014.
2015	National Conference	Basil George, Suresh C B., M R R Panicker, <b>Tide P. S.</b> , Experimental analysis of stem blockage effect in a conical type flow meter, National Conference on Advances in Mechanical Engineering, 2015.
2015	National Conference	Vipin Krishna V, Suresh C B., M R R Panicker, <b>Tide P. S.</b> , Experimental analysis of Multiport Averaging Device and Effect of body shape on flow coefficient, National Conference on Advances in Mechanical Engineering, 2015.
2015	National Conference	Mubarak A.K., Naveen M. P., <b>Tide P. S.</b> , Dheeraj R., Performance Analysis of turbulence models of supersonic jets through a convergent divergent nozzle, National Conference on Innovative Engineering, 2015.

Tide P. S.