### **DEPARTMENT OF MECHANICAL ENGINEERING** B.I.T SINDRI, DHANBAD (JHARKHAND): 828 123

### **CURRICULUM – VITIE**

01.	Name (in block letters)	:	RAJEN KUMAR NAYAK	
02.	Father's Name	:	KRISHNA KUMAR NAYAK	Teres
03.	Date of birth	:	01-01-1974	Ő
04.	Sex	:	Male	T T
05.	Mobile No	:	9939709574	1 10 1
06.	E-mail)	:	rajennayak4@gmail.com	
07.	Address for correspondence	:	Department of Mechanical Engine	eering,
	(with Pin code)		B.I.T. Sindri, Sindri, Dhanbad – 8	28123.
08.	Department	:	Mechanical Engineering Departme	ent
09.	Current Designation & Grade Pay	:	Assistant Professor; Grade Pay: 80	000/-
10.	Academic qualifications	:	Ph. D in Mechanical Engineering	from
			I.I.T (ISM), Dhanbad (Jharkhand)	
11.	Life Memberships	:	ISTE & Institution of Engineers	

# 12. Higher Qualifications:

Sl.	Examination	Name of	<b>Board / University</b>	Year of	Div/Class
	Passed	college		passing	Secured
i.	B. Tech (Mechanical)	B.I.T. Sindri, Dhanbad	Vinobabhave Univ. (Hazaribag)	1995	First Class
ii.	M. Tech (Mechanical)	B.I.T. Sindri, Dhanbad	Vinobabhave Univ. (Hazaribag)	2010	First with Distinction
iii.	Ph. D (Mechanical)	I.I.T(ISM), Dhanbad	I.I.T(ISM), Dhanbad	2017	

Sl.	Name of the Course/	Place	Duration	Sponsoring
	Summer School			agency
i.	Digital Transformation in Teaching	I.I.T Delhi	06.04.2020 to	(TEQIP - 3)
	Learning Process	&	22.04.2020	
		I.I.T Mumbai	(02 weeks)	
ii.	Bio Energy: Technology	NIT, Kurukshetra	18.05.2020	(TEQIP - 3)
	& Transitions	&	to	
		Govt. Engg	22.05.2020	
		College Bikaner	(01 week)	
iii.	Green Energy Technology for	NIT, Kurukshetra	11.06.2020	(TEQIP - 3)
	Sustainable Development	&	to 20.06.2020	
		Govt. Engg	(02 week)	
		College Bikaner		
iv.	Recent Advances on Manufacturing	B.I.T	27.11.2019 to	(TEQIP - 3)
	(RAIM - 2018)	Sindri	01.12.2019	
			(1 week)	
v.	Concepts of Thermodynamics	I.I.T	Jul-Oct,	NPTEL
		Kharagpur	2022	Course
			(12 Weeks)	
vi.	Applied Thermodynamics for	I.I.T Guwahati	Jul-Oct,	NPTEL
	Engineers		2022	Course
			(12 Weeks)	
vii.	Quiz on Thermodynamics	MD. S A J	29.05.20	SELF
		College of Engg.	( <b>01 Day</b> )	
		Chennai		

## Academic Staff College Orientation / Refresher Course attended during last 10 years:

## 14. **Publications:**

SI.	Author's name	Title of paper	Name of journal	Year of publication	Vol. No.	Pages
i.	R.K. Nayak, S.N. Singh	Effect of geometrical aspects on the performance of jet plate solar air heater	Solar Energy, SCI	2016	137	434- 440
ii.	R.K. Nayak, S.N. Singh	Experimental Investigation of Flow and Heat Transfer in Cross and Non - Cross Flow Inline Hole Jet Plate Solar Air Heater	IJPRES	2015	2	64 - 72

iii.	R.K.	Analytical Study of Flow	HEFAT, 11 <sup>th</sup>	Held at		
	Nayak,	and Heat Transfer in	International	Orlando.		
	S.N.	Cross and Non-Cross	Conference	Florida		
	Singh	Flow Jet Plate Solar Air		14-26 July		
		Heater		203  July,		
			rozza em e e th	2014		
iv.	R.K.	Performance studies on	ISHMT, 11 <sup>m</sup>	Held at IIT		
	Nayak,	jet plate solar air heater	International	Kharagpur		
	S.N.		Conference	28-31 Dec,		
	Singh			2013		
	D II			2022	10	TOOL
v.	R.K.	Analytical Study of	Frontiers in	2022	19	ISSN:
	Nayak et.	a Let Plate Solar Air	Transfor			2151-
	al	a jet Flate Solar All Heater with The	Transfer			8629
		Longitudinal Fins Under	ESCI / Scopus			
		the Cross Flow and Non-	Indexed			
		Cross Flow Conditions.	Journal)			
vi.	R.K.	Performance Analysis of	Frontiers in	2022	19	ISSN:
	Navak et	Longitudinal Fin Jet Plate	Heat and Mass			2151-
	al	Solar Air Heater under	Transfer			8629
	ai	Cross Flow Condition.	ESCI / Scopus			0027
			Indexed			
			Journal)			
vii.	R.	Combined Natural	Frontiers in	2022	19	ISSN:
	Prasad,	Convection and Surface	Heat and Mass			2151-
	R.K.	Radiation in A Square	Transfer			8629
	Nayak	Cavity with The Inversely	ESCI Scopus			002)
	et.al	Linearly Heated Opposite	Indexed			
	-	Side Walls.	Journal)			
viii	R.	Experimental	A Scopus	2022	14	3511-
	Prasad,	Investigation of the	Indexed			3521
	K.K. Novel	Exchanger with	Journal			
	et al	Triangular Baffles				
ix	Amit	Mathematical approach	A Web of	2023		
1/1.	Gunta	and experimental	Science / ESCI	2025		
	R K	validation on criteria for	/ Scopus			
	Novolz	instability of interface	Indexed			
		hotwoon liquid dramlet	Journal			
	et.al	between inquia aroplet				
		and water.				
		https://doi.org/10.1007/s				
		00033-022-01928-0				

х.	R.K.	Effects of Geometrical	ESCI / Scopus	2023	20	ISSN:
	Nayak et.	and Flow Parameters on	Indexed			2151-
	al	The Performance of	Journal			8629
		Cross Flow Jet Plate				
		Solar Air Heater,				
		Frontiers in Heat and				
		Mass Transfer.				

**PATENT:** Ultrasonic Assisted Portable Equipment for Multi-Layer Anti Reflective Coating on 14.03.2024, Design No - 410573-001 b), The Patent Office Government of India (Intellectual Property)

Signature of the faculty

HOD Department of Mechanical Engg.