# **CURRICULUM VITAE**

**Details** Photo

Name: Dr. Rajat Kumar Pradhan Father: Rajkishore Pradhan Mother: Tulasi Pradhan Date of Birth: 08/01/1973

**Position:** Assistant professor (Stage III)

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Scopus id: 36659773200; Researcher id: AAY-4649-2021

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Google Scholar Link:

https://scholar.google.com/citations?user=cJ4e05%20sAAAA

J&hl=en&user=WI2JOHgAAAAJ



### **Educational Background:**

Sl. No	Degree	University/Institution	University/Institution Discipline	
1	B. Sc.	UTKAL UNIVERSITY, BHUBANESWAR	PHYSICS (HONOURS WITH DISTINCTION)	1992
2	M. Sc.	UTKAL UNIVERSITY, BHUBANESWAR	PHYSICS (SPECIAL PAPER: PLASMA PHYSICS)	1994
3	GATE	IIT, KHARAGPUR	PHYSICS	1995
4	NET (JRF & L)	UGC	PHYSICS	1995(JUNE)
5	NET (JRF & L)	CSIR	PHYSICS	1995(DECEMBER)
6	M.Phil.	UTKAL UNIVERSITY, BHUBANESWAR	PHYSICS	1996
7	OPSC	ODISHA PUBLIC SERVICE COMMISSION	PHYSICS	1999
8	Ph. D.	UTKAL UNIVERSITY, BHUBANESWAR	PHYSICS	2021

Ph.D. thesis title: A Study of The Conscious Observer in Relativity, Quantum Theory and Their

**Unification**;

Ph. D. Research Area: High Energy Physics;

Supervisor: Prof. L. P. Singh

### **Professional Background:**

Sl. No	Position held	Name of the Institute	Joining	held Up to
1	JR. LECTURER IN PHYSICS	VIKRAM DEV COLLEGE, JEYPORE	26/05/1999	25/11/2009
2	ASSISTANT PROFESSOR (STAGE-I)	VIKRAM DEV COLLEGE, JEYPORE	26/11/2009	19/09/2010
3	ASSISTANT PROFESSOR (STAGE-I)	RAJENDRA AUTONOMOUS COLLEGE, BALANGIR	20/09/2010	14/09/2012
4	ASSISTANT PROFESSOR (STAGE-I)	RAJENDRA AUTONOMOUS COLLEGE, BALANGIR	15/09/2012	25/06/2014
5	ASSISTANT PROFESSOR (STAGE-II)	BHADRAK AUTONOMOUS COLLEGE, BHADRAK	26/06/2014	14/09/2015
6	ASSISTANT PROFESSOR (STAGE-II)	BHADRAK AUTONOMOUS COLLEGE, BHADRAK	15/09/2015	14/09/2021
7	ASSISTANT PROFESSOR (STAGE-III)	BHADRAK AUTONOMOUS COLLEGE, BHADRAK	15/09/2021	CURRENT

### **Awards/ Achievements:**

Sl. No	Award/Achievement	Agency	Year
1	STATE MERIT SCHOLARSHIP	GOVERNMENT OF ODISHA	1980
2	STATE MERIT SCHOLARSHIP	GOVERNMENT OF ODISHA	1982
3	NATIONAL RURAL TALENT SEARCH (NRTS) SCHOLARSHIP	GOVERNMENT OF INDIA	1984
4	NATIONAL SCHOLARSHIP	GOVERNMENT OF INDIA	1987
5	NATIONAL SCHOLARSHIP	GOVERNMENT OF INDIA	1989
6	NATIONAL SCHOLARSHIP	GOVERNEMENT OF INDIA	1992
7	DAE RESEARCH FELLOWSHIP	DEPARTMENT OF ATOMIC ENERGY, GOVERNMENT OF INDIA	1995
8	NET (JUNE)	UGC	1995
9	NET (DEC0	CSIR	1995
10	GATE-95	IIT, KHARAGPUR (ALL INDIA RANK-85; SCORE: 95.02 PERCENTILE)	1995
11	DIPLOMA IN ADVANCED PHYSICS	INSTITUTE OF PHYSICS, BHUBANESWAR,	1996
12	OPSC-TOPPER IN PHYSICS	OPSC	1999

### Membership of Professional and Academic Bodies

Sl.	Professional/Academic	Position held	Tenure	Organization level
No.	Body			
1	Odisha Physical Society	Patron Member	2004	STATE
			Onwards	
2	Odisha Vigyan Mandal	Vice-President	2016	STATE
			Onwards	
3	The Divine Life Society	Life Member	2000	INTERNATIONAL
			Onwards	
5	Indian Association of	Life Member	2022	INTERNATIONAL
	Physics Teachers		Onwards	
6	Institute of Philosophy	Editorial Board Member	2023	INTERNATIONAL
	of Nature	for Journal (Towards	Onwards	
		Unification of Sciences)		
7	Information Physics	Member	2025	INTERNATIONAL
	Institute		onwards	
8	IPI Letters	Editorial Board Member	2025	INTERNATIONAL
			onwards	

# **Professional Courses and Trainings:**

Orientation	1) 02-01-2009 to 29-02-2009, UGC-ASC, Sambalpur University, Sambalpur.
Programme	2) 27-01-2004 to 01-02-2004, Orientation Programme conducted by CHSE, Odisha
	at Rajdhani College, Bhubaneswar.
Refresher	1) 07-06-2004 to 19-06-2004: Refresher Course in Physics, Institute of Physics,
courses	Bhubaneswar, Odisha-751005.
	1) 24-01-2011 to 13-02-2011, UGC-ASC, Sambalpur Univ Earth Scinces
	(Multidisciplinary)
	2) 07-01-2015 to 27-01-2015, UGC-ASC, Sambalpur Univ Physics
	3) 24-01-2018 to 13-02-2018, UGC-HRDC, Utkal Univ Research Methodology in
	Applied Science
	4) 16-02-2023 to 01-03-2023, UGC-HRDC, Utkal University, Bhubaneswar,
	Environmental studies and Disaster Management
	5) 30-01-2024 to 12-02-2024, MMTTC, Utkal University, Bhubaneswar, Indigenous
	Knowledge Systems,
Faculty	1) 16-11-2021 to 07-12-2021, UGC-HRDC, RSPL, Rishihood University, Sonepat,
Development	Haryana- Indian Knowledge Systems: Sources, Theories, Concepts and Practices
Programmes	2) 24-04-2024 to 30-04-2024: NEP sensitization programme, MMTTC, Utkal
	University, Bhubaneswar

Other	1) Aug-1995 to Jun-1996: Diploma in Advanced Physics, Institute of Physics,
professional	Bhubaneswar, Odisha-751005. (Pre-Ph. D. Coursework).
Courses/train	2) 04-11-1996 to 30-11-1996: XII SERC (Scientific and Engineering Research
ings/program	Council) PREPARATORY School in Theoretical High Energy Physics: Institute
mes/Schools/	of mathematical Sciences, Madras, India.
camps	3) 17-02-1997 to 08-03-1997: XII SERC (Scientific and Engineering Research
	Council) MAIN School in Theoretical High Energy Physics: Indian Institute of
	Science, Bangalore, India-560012.

- 4) 10-02-1997 to 02-03-1997: XIII SERC (Scientific and Engineering Research Council) MAIN School in Theoretical High Energy Physics: Visva-Bharati, Santiniketan-731235...
- 5) 01-03-2008 to 29-04-2008: Two-month residential Yoga-Vedanta Course: The Yoga-Vedanta Forest Academy, The International Divine Life Society HQRS, Rishikesh, Himalayas, Uttarakhand, India-249192.
- 6) 08-03-2010 to 10-03-2010: Physics Olympiad Exposure Camp-2010 for teachers at Homi Bhabha Centre for Science Education, TIFR, Mumbai-400088.
- 7) 18-10-2011 to 22-10-2011: DST sponsored Inspire Science Camp organized by NIST, Berhampur, Odisha-761008.
- 8) 28-06-2018 to 01-07-2018: Summer School on Space & Time in Science and Spiritual Traditions organized at IIT(BHU), VARANASI, Resource person.
- 9) 20-12-2021 to 22-12-2021: Training Programme on Introduction to Plasma Science & Technology & Nuclear Fusion by IPR, Gandhinagar at KISS, BBSR,

### *i*-Got Karma Yogi Courses

3			al Tusion by IFK, Gan		l
Sl.	Date	Course Name	Institution/Orga-	Certificate	Durat-
No			nisation/Course	Number	ion
			provider		
1	16-01-	Yoga Break at	Morarji Desai	1737034788581	00:27
	2025	Workplace	National Institute of		
		r ····	Yoga (MDNIY)		
2	16-01-	Zero Trust	National E-	1737959619458	00:42
-	2025	Architecture and	Governance Division		
		Strategic	(NEGD) MeitY Govt		
		Cybersecurity	of India		
		Frameworks			
3	16-01-	Common Yoga	Morarji Desai	1737034589319	00:51
	2025	Protocol-Sanskrit	National Institute of		
			Yoga (MDNI)		
4	16-01-	Concepts and	Indira Gandhi	1737959545811	00:55
	2025	Practices of Social	National Forest		
		Entrepreneurship	Academy		
5	23-01-	Developing	Central Reserve	1737630502231	00:39
	2025	Effective Soft	Police Force (CRPF)		
		Skills			
6	23-01-	Integrative	Rashtriya Raksha	1737957525631	00:56
	2025	Wellness	University (RRU)		
7	23-01-	Right to	Department of	1737630627386	02:15
	2025	Information (RTI)	Personnel and		
			Training (DoPT)		
8	23-01-	A simple stretch to	Sashastra Seema Bal	1737630708959	00:21
	2025	stretch your life	(SSB)		
9	23-01-	स्वछता ही सेवा-	Ministry of Housing	1737630295290	00:20
	2025	2024	and Urban Affairs		
			(MoHUA)		
10	03-02-	Moral thinking	IIT, Kanpur	1738574909869	00:58
	2025	for action: An			
		introduction to			
		values and ethics			
11	03-02-	Communication	IIT, Kanpur	1738574858633	01:21
11	2025	Skills	111, 1xanpui	1730377030033	01.21
10	03-02-	+	HT Vannua	1720574011206	01:26
12	2025	Project	IIT, Kanpur	1738574811296	01:20
	2023	Management			

13 03-02- 2025	Wildlife Conservation	IIT, Kanpur	1738574751234	01:10
14 03-02- 2025	Forests and their Management	IIT, Kanpur	1738574681252	01:12

#### **Research Interests:**

- 1) Quantum Field Theory, Pre-Big Bang Cosmology, Unification, Holographic principle, Black holes.
- 2) Theory of probability, Foundations of Physics, Philosophy of Physics, Science Education
- 3) Foundations of Quantum Theory, Interpretation problem and observer effects, Role of conscious Observer in Quantum Theory, Quantum Objectivation, Psychophysical interpretation, Generalizations of relativity
- 4) Consciousness, Free will, Quantum description of states of consciousness, Zeno effect, Anti-Zeno effect and Sleep disorders
- 5) Cognitive Neuroscience, Theory of Subjective time and time reckoning, Psychophysics, Generalized Fechner law, Attention, Qualia, Theory of Perception.
- 6) Notion of Self, Exclusion principle for fermionic matter and for living entities, Physical information and Qualia information, Instincts
- 7) Foundations of Biological evolution, Psychobiology in evolution, Metaevolution, Role of consciousness in evolution, Purposive evolution, Generalization of Prey-predator Relationships, Niche classification and Gause Exclusion, Instinct and epigenetics, endosymbiosis.
- 8) Public Health, cancer, COVID-19. Neuroeconomics, alternative systems and therapies.
- 9) Indian Philosophy, Vaisheshika, Yoga, Vedanta, Vedic cosmology, Indian Psychology, IKS, Epistemology

#### **Research Publications:**

- 1. Biswas AK, Maharana J. and Pradhan RK, The Holography Hypothesis And Pre-Big-Bang Cosmology, (Arxiv/Hep-Th/9811051), Phys. Let. B 1999; 462: 243-248. Print ISSN: 0370-2693, Online-ISSN 1873-2445. <a href="https://doi.org/10.1016/S0370-2693(99)00934-X">https://doi.org/10.1016/S0370-2693(99)00934-X</a>
- 2. Pradhan RK, Joshi SK. Particle on A Polygon: Quantum Mechanics, Orissa Journal of Physics 2004;11:197-204. **ISSN:0974-8202.** https://arxiv.org/abs/quant-ph/0009011
- 3. Pradhan RK. Towards An Understanding of The Observed Spacetime Dimensionality, (Arxiv/Physics/1303.5634), OJP 2005;12:174-179. https://arxiv.org/abs/1303.5634
- 4. Pradhan RK. On The Combination of Inertial Parameters, OJP 2006;13:10-16. ISSN:0974-8202
- Pradhan RK. The Concept of Biophysical Work, Orissa Journal of Physics 2007;14:190-196.
   ISSN:0974-8202
   https://www.researchgate.net/publication/259198433\_THE\_CONCEPT\_OF\_BIOPHYSICAL\_WORK
- 6. Pradhan RK. The Conscious Observer and Relativity, OJP 2008;15:210-216. ISSN:0974-8202
- 7. Pradhan RK, Singh LP. On Reality of Tachyonic De Broglie Waves, Orissa Journal of Physics 2009;16(1):149-164. **ISSN:0974-8202.** <a href="https://doi.org/10.48550/arXiv.0908.1365">https://doi.org/10.48550/arXiv.0908.1365</a>
- 8. Pradhan RK. Subject-Object Duality and The States of Consciousness: A Quantum Approach, (Arxiv/Physics/0907.4971) Neuroquantology 2010;8(3):262-278, ISSN: 1303-5150. <a href="https://doi.org/10.48550/arXiv.0907.4971">https://doi.org/10.48550/arXiv.0907.4971</a> DOI: 10.14704/Nq.2010.8.3.292.
- 9. Pradhan RK. Are Quantum States Subjective? (Arxiv/Quant-Ph/1202.4886), Orissa Journal of Physics 2011; 18(2):158-162. **ISSN:0974-8202.** https://doi.org/10.48550/arXiv.1202.4886
- 10. Pradhan RK. Are All Probabilities Fundamentally Quantum Mechanical? (Arxiv/Quant-Ph/1105.5695), Orissa Journal of Physics 2012;19(2):161-175. **ISSN:0974-8202.** <a href="https://doi.org/10.48550/arXiv.1105.5695">https://doi.org/10.48550/arXiv.1105.5695</a>
- 11. Pradhan RK. Psychophysical Interpretation of Quantum Theory, (Arxiv/Quant-Ph/1206.6095), Neuroquantology 2012; 10(4): 629-645. ISSN: 1303-5150. <a href="https://neuroquantology.com/open-ph/">https://neuroquantology.com/open-ph/</a>

- access/Psychophysical+Interpretation+of+Quantum+Theory\_13905/
- 12. Pradhan RK. The Problem of Conscious Observation in The Relativistic Description, Neuroquantology 2014; 12(4): 417-423. DOI: 10.14704/Nq.2014.12.4.755 <a href="https://www.researchgate.net/publication/271211788\_The\_Problem\_of\_Conscious\_Observation\_in\_Relativistic\_Description">https://www.researchgate.net/publication/271211788\_The\_Problem\_of\_Conscious\_Observation\_in\_Relativistic\_Description</a>
- 13. Pradhan RK. Population Coding of Neural Correlates and The Generalized Fechner Law, OJP, Vol. 21(1), 65-72, 2014. **ISSN:0974-8202.** <a href="https://casa-acharya.com/Orissa%20Journal%20of%20Physics/OJP">https://casa-acharya.com/Orissa%20Journal%20of%20Physics/OJP</a> PDF Files/21 1 4 FP.pdf
- 14. Pradhan RK. Does Rayleigh Scattering Explain the Blueness of Sky? Science Horizon, March 2015, 28-30, Odisha Bigyana Academy, Bhubaneswar, Odisha. (https://www.researchgate.net/publication/279778023\_Does\_Rayleigh\_scattering\_explain\_the\_Bluenessof\_Sky) https://odishabigyanacademy.in/ebook/science-horizon-37/#dearflip-df\_1960/31/
- Pradhan RK. Vaisheshika Darshana and Particle Physics: A Comparative Analysis, DOI: 10.13140/RG.2.2.20387.91682.<a href="https://www.researchgate.net/publication/281863959">https://www.researchgate.net/publication/281863959</a> Particle Physics and the Vaisheshika System A Comparative Analysis
- 16. Pradhan RK. An Explanation of Psychophysical Interactions in The Quantum Double-Slit Experiment, Physics Essays 2015; 28(3): 324-330. **P-ISSN**, 0836-1398, O-ISSN: 2371-2236 https://www.ingentaconnect.com/content/pe/pe/2015/00000028/00000003/art00007#
- 17. Pradhan RK. Quantum Zeno Effect in Sleep Disorders and Treatment by The Anti-Zeno Effect, Neuroquantology 2016; 14(1): 143-148. ISSN: 1303-5150. (DOI:10.14704/Nq.2016.14.1.864). https://arxiv.org/pdf/1111.5227
- 18. Pradhan RK. Minimal Neural Recruitment from Generalized Fechner Law, Neuroquantology 2017;15(1): 1-6. ISSN: 1303-5150. (DOI:10.14704/Nq.2017.15.1.1007). <a href="https://www.researchgate.net/publication/317814688">https://www.researchgate.net/publication/317814688</a> Minimal Neural Recruitment from Stevens Coding and Fechner Decoding in the Brain
- 19. Pradhan R. K. Psychophysical Interpretation and Conscious Observation in Quantum Field Theory, Neuroquantology, September 2018;16(9):34-45. ISSN: 1303-5150. DOI: 10.14704/Nq.2018.16.9.1258. <a href="https://www.researchgate.net/publication/329152112\_Psychophysical\_Interpretation\_and\_Conscious\_Observation">https://www.researchgate.net/publication/329152112\_Psychophysical\_Interpretation\_and\_Conscious\_Observation</a> in Quantum Field Theory
- 20. Tripathy A. Pradhan RK. Neural Recruitment, Information Processing and The Equation for Subjective Time, Neuroquantology 2018;16(10):82-86. ISSN: 1303-5150. <a href="https://www.researchgate.net/publication/328886610">https://www.researchgate.net/publication/328886610</a> Neural recruitment and information processing 1756-4932-1-PB
- 21. Pradhan RK, Tripathy A. Subjective Time in Neuropsychology *vis-a-vis* The Objective Time of Physics.Neuroquantology.2018;16(11):1-11. ISSN: 1303-5150. <a href="https://www.researchgate.net/publication/329307702\_Subjective\_Time\_in\_Neuropsychology\_vis-a-vis\_the\_Objective\_Time\_of\_Physics">https://www.researchgate.net/publication/329307702\_Subjective\_Time\_in\_Neuropsychology\_vis-a-vis\_the\_Objective\_Time\_of\_Physics</a>
- 22. Tripathy A. Pradhan RK. A Prelude to Meta-Evolution, Indian Journal of Science and Technology August 2018;11(31): DOI: 10.17485/Ijst/2018/V11i31/130098. P-ISSN: 0974-6846. O-ISSN: 0974-5645. https://indjst.org/articles/a-prelude-to-meta-evolution
- 23. Tripathy A. Pradhan RK. Methylation-Assisted Epigenetic Evolution and The Psycho-Biology of Human Experiences, Indian Journal of Public Health Research and Development 2018; 10(8):554-558. O-ISSN: 0976-5506, P-ISSN: 0976-0245. <a href="https://www.researchgate.net/publication/336060880\_Methylation-Assisted\_Epigenetic\_Evolution\_and\_the\_Psycho-biology\_of\_Human\_Experiences">https://www.researchgate.net/publication/336060880\_Methylation-Assisted\_Epigenetic\_Evolution\_and\_the\_Psycho-biology\_of\_Human\_Experiences</a>
- 24. Tripathy A. Pradhan RK The Indomitable Force of Instinctive Urge in Competitive Success, Stress Response and Evolution. International Journal of Scientific Research and Reviews 2019; 8(2):2286-2300. ISSN: 2279-0543. http://www.ijsrr.org/down 82598.php
- 25. Tripathy A. Pradhan RK., Role of Evolutionary Urge in Epigenetics And Gene-Culture Coevolution: A Meta-Evolution Perspective, Indian Journal of Science And Technology, August 2018;11(32): DOI: 10.17485/Ijst/2018/V11i32/131051. P-ISSN: 0974-6846. O-ISSN: 0974-5645. https://indjst.org/articles/role-of-evolutionary-urge-in-epigenetics-and-gene-culture-co-evolution-a-meta-

#### evolution-perspective

- 26. Tripathy A. Pradhan RK. The Ubiquitousness of Prey-Predator Relationship (PPR), The Law of Purposive Association and Fundamental Questions in Evolution, Indian Journal of Science and Technology August 2018; 11(32): DOI: 10.17485/Ijst/2018/V11i32/131052. P-ISSN: 0974-6846. O-ISSN: 0974-5645. <a href="https://indjst.org/articles/the-ubiquitousness-of-prey-predator-relationship-ppr-the-law-of-purposive-association-and-fundamental-questions-in-evolution">https://indjst.org/articles/the-ubiquitousness-of-prey-predator-relationship-ppr-the-law-of-purposive-association-and-fundamental-questions-in-evolution</a>
- 27. Tripathy A. Pradhan RK., Symbiotic Interactions, Law of Purposive Association and The +/+ Nature of All Co-evolution, Indian Journal of Science and Technology November 2018;11(43): DOI: 10.17485/Ijst/2018/V11i43/132577. P-ISSN: 0974-6846. O-ISSN: 0974-5645. https://indjst.org/articles/symbiotic-interactions-law-of-purposive-association-and-the-nature-of-all-co-evolution
- 28. Tripathy A. Pradhan RK., A Critical Analysis of Unusual Prey-Predator Relationships with Regard to Their Exclusive Evolutionary Advantages, Indian Journal of Science and Technology October 2018;11(39), DOI: 10.17485/Ijst/2018/V11i39/131270. <a href="https://indjst.org/articles/a-critical-analysis-of-unusual-prey-predator-relationships-with-regard-to-their-exclusive-evolutionary-advantages">https://indjst.org/articles/a-critical-analysis-of-unusual-prey-predator-relationships-with-regard-to-their-exclusive-evolutionary-advantages</a>
- 29. Tripathy A. Pradhan RK. Niche Classification, Niche Processes and Niche Dynamics: Role of Consciousness, International Journal of Scientific Research and Reviews 2019;8(1):1316-1328. ISSN: 2279-0543. https://www.ijsrr.org/down\_2091.php
- 30. Tripathy A. Pradhan RK. Niche, Competition and the Laws of Conscious Individual Dynamics: Similarities with Laws of Classical and Quantum Physics, International Journal of Scientific Research and Reviews 2019; 8(1):1626-1635. ISSN: 2279-0543. https://www.ijsrr.org/down\_2146.php
- 31. Tripathy A. Pradhan RK. The Notion of self and the process of conscious individual evolution, International Journal of Scientific Research and Reviews 2019;8(2):3742-3750. ISSN: 2279-0543. https://www.ijsrr.org/pdf/2592.pdf
- 32. Tripathy A. Pradhan RK, Parasite-Vector-Host Conscious mechanism as Determinant of Parasite Virulence, vector Infectivity and Host Susceptibility: Reproductive Success of malaria Parasites in plasmodia-Mosquito-Human Troika, International Journal of Scientific Research and Reviews 2019;8(1):2079-2086. ISSN: 2279-0543. <a href="https://www.ijsrr.org/down\_2259.php">https://www.ijsrr.org/down\_2259.php</a>
- 33. Pradhan RK, Tripathy A. Neural Recruitment in Subjective Time Perception in a Non-local Model and the Psychological Nature of Attention. Neuroquantology. 2019;17(6):58-64. ISSN: 1303-5150. <a href="https://www.researchgate.net/publication/334272422">https://www.researchgate.net/publication/334272422</a> Neural Recruitment in Subjective Time Perception in a Non-local Model and the Psychological Nature of Attention
- 34. Pradhan RK, Tripathy A. On the Question of Free Will in a Quantum Physics Inspired Model of Consciousness. Neuroquantology. 2019; 17(8):14-18. ISSN: 1303-5150. doi: 10.14704/nq.2019.17.08.2735. <a href="https://www.researchgate.net/publication/336346202">https://www.researchgate.net/publication/336346202</a> On the question of free will in a quantum p <a href="https://www.researchgate.net/publication/336346202">https://www.researchgate.net/publication/336346202</a> On the question of free will in a quantum p
- 35. Tripathy A. Pradhan RK. Oxidative Stress and Role of Glutathione S-Transferase in Brain Health and Ageing, Indian Journal of Public Health Research and Development 2019;10(8):548-553. O-ISSN: 0976-5506, P-ISSN: 0976-0245. http://dx.doi.org/10.5958/0976-5506.2019.01942.9
- 36. Tripathy A. Pradhan RK. Consciousness as the Cosmic Ordering Principle and the Interplay of Order and Disorder in the Physical and Biological Systems, International Journal of Scientific Research and Reviews 2019;8(1):859-873. ISSN: 2279-0543. <a href="https://www.ijsrr.org/down\_2016.php">https://www.ijsrr.org/down\_2016.php</a>
- 37. Tripathy A. Pradhan RK, Information, Perception and Quantum Objectivation: The Potential of Human Consciousness, International Journal of Scientific Research and Reviews 2019; 8(1):599-608. ISSN: 2279-0543. <a href="https://www.ijsrr.org/down\_1963.php">https://www.ijsrr.org/down\_1963.php</a>
- 38. Tripathy A, Pradhan RK. The Cancer Principle-I: Introducing Cancer as a Fundamental Principle of Nature. Indian Journal of Public Health Research and Development 2020;11(6):1-5. O-ISSN: 0976-5506, P-ISSN: 0976-0245. https://medicopublication.com/index.php/ijphrd/issue/view/44
- 39. Tripathy A, Pradhan RK. The Cancer Principle-II: Cancer as the Origin of All Life on Earth. Indian Journal of Public Health Research and Development. 2020;11(6):6-10. O-ISSN: 0976-5506, P-ISSN: 0976-0245. https://medicopublication.com/index.php/ijphrd/issue/view/44

- 40. Tripathy A, Pradhan RK. The Cancer Principle-III: Evolution by Cancer. Indian Journal of Public Health Research and Development. 2020; 11(6):11-16. O-ISSN: 0976-5506, P-ISSN: 0976-0245 https://medicopublication.com/index.php/ijphrd/issue/view/44
- 41. Tripathy A, Pradhan RK. The Cancer Principle-IV: The inevitability and invincibility of Cancer. Indian Journal of Public Health Research and Development. 2020;11(6):17-21. O-ISSN: 0976-5506, P-ISSN: 0976-0245 <a href="https://medicopublication.com/index.php/ijphrd/issue/view/44">https://medicopublication.com/index.php/ijphrd/issue/view/44</a>
- 42. Tripathy A, Pradhan RK. The Cancer Principle-V: Cancer Prevention and Therapeutics. International Journal of Public Health Research and Development. 2020;11(6):30-34. O-ISSN: 0976-5506, P-ISSN: 0976-0245 https://medicopublication.com/index.php/ijphrd/issue/view/44
- 43. Tripathy A, Pradhan RK. COVID-19 as a Conscious Organism: A Novel Understanding of the SARS-CoV-2 as a Natural Evolution of the SARS Virus. Indian Journal of Public Health Research and Development.2020. 11(7): 142-147.. <a href="https://medicopublication.com/index.php/ijphrd/issue/view/45">https://medicopublication.com/index.php/ijphrd/issue/view/45</a>
- 44. Tripathy A, Pradhan RK. Free Radicals and Oxidative Stress: The Role of Mitochondria in Aging and Mortality. Indian Journal of Public Health Research and Development. 2020. 11(8):19-23. <a href="https://medicopublication.com/index.php/ijphrd/issue/view/47">https://medicopublication.com/index.php/ijphrd/issue/view/47</a>
- 45. Tripathy A, Pradhan RK. COVID-19 and Spanish Flu Pandemics: Insights into the Viral Vehicles of Life and the Concept of Dispersed Organisms. Indian Journal of Public Health Research and Development. 2020;11(10):6-9. <a href="https://medicopublication.com/index.php/ijphrd/issue/view/49">https://medicopublication.com/index.php/ijphrd/issue/view/49</a>
- 46. Tripathy A, Pradhan RK. COVID-19 as a Dispersed Organism: Host Manipulation and Psychosocial Impacts. Indian Journal of Public Health Research and Development. 2020;11(10): 88-92. <a href="https://medicopublication.com/index.php/ijphrd/issue/view/49">https://medicopublication.com/index.php/ijphrd/issue/view/49</a>
- 47. Tripathy A, Pradhan RK. Hidden Subjective Aspects in the Law of Diminishing Marginal Utility: The Initial Bump and Limitations of Neuroeconomics. Indian Journal of Public Health Research and Development. 2021;12(1): 33-39. <a href="https://medicopublication.com/index.php/ijphrd/issue/view/66">https://medicopublication.com/index.php/ijphrd/issue/view/66</a>
- 48. Asima Tripathy, R K Pradhan. Cycles in Time and Psyche: Implications for Cyclicity, Fatality and Symptomatics of COVID-like Pandemics. Indian Journal of Public Health Research and Development. 2021;12(2): 53-57. https://medicopublication.com/index.php/ijphrd/issue/view/71
- 49. Asima Tripathy, R K. Pradhan. COVID-19 management, treatment and vaccination strategies as the most efficient host manipulation by SARS-CoV-2: Reappraisal of a serious global public health crisis, Indian Journal of Public Health Research and Development 2022; 13(1):77-82. <a href="https://medicopublication.com/index.php/ijphrd/issue/view/89">https://medicopublication.com/index.php/ijphrd/issue/view/89</a>
- 50. Pradhan RK. On fragility of psychokinetic (PK) effects in classical and quantum systems. Physics Essays 2022;35(1):85-88. P-ISSN, 0836-1398, O-ISSN: 2371-2236. <a href="https://www.ingentaconnect.com/contentone/pe/pe/2022/00000035/00000001/art00014">https://www.ingentaconnect.com/contentone/pe/pe/2022/00000035/00000001/art00014</a> https://doi.org/10.4006/0836-1398-35.1.85
- 51. Pradhan RK. Retrocausal quantum effects from Broken Time-reversal symmetry, Orissa Journal of Physics 2023; 30(1):7-14. **ISSN:0974-8202.** <a href="https://casa-acharya.com/Orissa%20Journal%20of%20Physics/OJP\_PDF\_Files/30\_1\_2\_FP.pdf">https://casa-acharya.com/Orissa%20Journal%20of%20Physics/OJP\_PDF\_Files/30\_1\_2\_FP.pdf</a>
- 52. Pradhan RK. Visual Perception Using Advanced Wave Solutions of Maxwell's Equations, Orissa Journal of Physics Feb 2024;31(1): 93-102. **ISSN:0974-8202.** <a href="https://casa-acharya.com/Orissa%20Journal%20of%20Physics/OJP\_PDF\_Files/31\_1\_10\_FP.pdf">https://casa-acharya.com/Orissa%20Journal%20of%20Physics/OJP\_PDF\_Files/31\_1\_10\_FP.pdf</a>
- 53. Pradhan RK and Tripathy A. Multi-disciplinary and Trans-disciplinary Approach to Attaining Sustainable Development Goal (SDG) and Aspects of Indian Indigenous Knowledge Systems, Ilorin journal of Science 2024; 11(3): 1-6. ISSN: 2408-4816. <a href="https://iljs.org.ng/index.php/iljs/article/view/292/198">https://iljs.org.ng/index.php/iljs/article/view/292/198</a>
- 54. Tripathy A, Pradhan RK. Concept of Reflexivity in Mandukya Upanishad and its Applications in Physics, (To Appear, 2025 ).
- 55. Tripathy A, Pradhan RK. Environment and Development- A Perspective Based on the Gita Philosophy, Towards Unification of Sciences, December 2024; 2(4): 248-259. <a href="https://philosophyofnature.org.in/environment-and-development-a-perspective-based-on-the-gita-philosophy/">https://philosophyofnature.org.in/environment-and-development-a-perspective-based-on-the-gita-philosophy/</a>

### **Published Books/ book chapters:**

SI. No	Titles, Number				
1	Full Paper on "Consciousness and Quantum Fields: Implications of The Psychophysical				
	Interpretation"- At the International Conference On "Quantum Physics and				
	Consciousness" Organised By Bhaktivedanta Institute, Kolkata At B. Institute On 04-				
	05 February, 2017: Proceedings volume ISBN: 81-89635-29-8, pages: 161-170.				
2	A.Tripathy and R. K. Pradhan. Meta-Evolution: A Perspective Beyond Biological Evolution. Mahi Publication, Ahmedabad, India, ISBN: 978-93-95581-14-1, Date of Publication: 01/01/2022.				
	https://www.mahipublication.com/bookdetails/meta-evolution-a-perspective-beyond-biological-evolution/NTU4/				
3	A, Tripathy and R. K. Pradhan. How Consciousness Shapes Biological Evolution: Insights from Physics, Psychology and Philosophy. Mahi Publication, Ahmedabad, India, ISBN: 978-93-6678-539-4, Date of Publication: 31/12/2024				
	https://www.mahipublication.com/bookdetails/how-consciousness-shapes-biological-evolution-insights-from-physics-psychology-philosophy/ODE2/				

### **Published Abstracts Presented in international and national Conference Proceedings**

Sl. No	Authors  R. K. Pradhan	Conference title, Organizing Institutions  24th OPS convention On World Year of Physics Ispat College, Rourkela and OPS	Level, Dates and Venue NATIONAL 10-02-2007 TO 11-02-2007 Rourkela	Abstract title and page numbers  Science and Yoga  Abstract/Souvenir Volume: Pages: 42-49
2	R.K. Pradhan	The 5 <sup>th</sup> Annual Seminar on The Role of Spiritual Wisdom in the Age of Science and Technology ISKCON, Sambalpur and VSSUT, Burla	NATIONAL 10-04-2010 VSSUT, Burla	Is The Earth Conscious? An Interpretation Through the Science of Remote- Sensing And Vedanta Philosophy  Abstract/souvenir: Pages 37-48
3	R.K. Pradhan	UGC sponsored national; seminar on Yoga-Vedanta Rajendra Autonomous College, Bolangir	NATIONAL  18-02-2012 TO 19-02-2012 Bolangir	Presentation: Integration of Modern Science with Yoga- Vedanta for The Highest Attainment  Abstract/Souvenir volume: pages: 85-93

4	R.K. Pradhan	UGC Sponsored National Seminar on Advances in Physics in the Last Half Century and its Applications to Society G.M. University, Sambalpur	NATIONAL 27-02-2016 TO 28-02-2016 Sambalpur	Presentation: Twentieth Century Physics: Overview, Impact and Implications Proceedings: Pages: 53- 58
5	KK Pradnan	The National Level OSI (Optical Society of India) Foundation Seminar Optical Society of India and Bhadrak autonomous College	NATIONAL 21/01/2017 Bhadrak	Presentation: The Incredible Quantum PK Effect in The Double-Slit Experiment Abstract volume: Page: 14
	RK Pradhan	International Conference On Quantum Physics and Consciousness Bhaktivedanta Institute, Kolkata	INTER- NATIONAL 04-02-2017 TO 05-02-2017 Kolkata	Invited Speaker Consciousness and Quantum Fields: Implications of The Psychophysical Interpretation Proceedings volume ISBN: 81-89635-29-8, pages: 161-170
6	R.K. Pradhan	National Level Conference on Perspectives of Yoga Department of Sanskrit Christ College, Cuttack	NATIONAL 26-11-2027 TO 27-11-2017 Cuttack	Presentation: Yoga as a universal science Souvenir/Abstracts: Page 36
7	A. Tripathy R.K.Prtadhan	International Seminar on Emerging trends in Physics and Applications (ISETPA- 2019) Dept of Physics, Parala Maharaja Engineering College, Berhampur and Odisha Physical Society	INTER- NATIONAL 02/02/2019 TO 04/02/2019 PMEC, Berhampur	Presentation: The equation for perceived time duration: Role of Attention and neural information processing Abstract volume pages: 128-129
8	R. K.Pradhan A. Tripathy	International Seminar on Emerging trends in Physics and Applications (ISETPA- 2019) Dept of Physics, Parala Maharaja Engg. College, Berhampur and Odisha Physical Society	INTER- NATIONAL 02/02/2019 TO 04/02/2019 PMEC, Berhampur	Presentation: The many facets of time in Physics Abstract volume page: 130
9	A.Tripathy R.K.Prtadhan	The Science of Consciousness (TSC-2019) conference Interlaken Congress Center, Interlaken, Switzerland and Dayalbagh Educational Institute, Agra, India.	INTER- NATIONAL  25-06-2019 TO 28-06-2019 Interlaken	Consciousness as the Cosmic Ordering Principle and the Interplay of Order and Disorder in the Physical and Biological Systems Abstracts: East-West Forum, Article no-83, Page- 227 https://www.tsc2019- interlaken.ch/app/downloa

10	A.Tripathy R.K.Prtadhan	The Science of Consciousness (TSC-2019)	INTER- NATIONAL	d/7833890754/program_ab stracts_online_corr4.pdf?t= 1562607584 Information, Perception and Quantum
		conference Interlaken Congress Center, Interlaken, Switzerland and East-West Forum, Dayalbagh Educational Institute, Agra, India.	25-06-2019 TO 28-06-2019 Interlaken	Objectivation: The Potential of Human Consciousness  Abstracts: Article No- 109, Page- 235  https://www.tsc2019- interlaken.ch/app/downloa d/7833890754/program ab stracts_online_corr4.pdf?t= 1562607584
11	A.Tripathy R.K.Prtadhan	Recent Trends in Physical Sciences (RTPS-2020) PG Dept. of Physics, Bhadrak Autonomous College, Bhadrak	NATIONAL 11-01-2020 TO 12-01-2020 Bhadrak	Presentation: Nothing in Science Makes Sense Except in the Light of Consciousness Abstracts: section-9: Physics of Consciousness: page:39-42.
12	A.Tripathy R.K.Prtadhan	Recent Trends in Physical Sciences (RTPS-2020) PG Dept. of Physics, Bhadrak Autonomous College, Bhadrak	NATIONAL 11-01-2020 TO 12-01-2020 Bhadrak	Presentation: Is Living Matter Just Another State of Matter? Abstracts: Section-6: Biophysics, page- 32-33
13	R. K. Pradhan A. Tripathy	Recent Trends in Physical Sciences (RTPS-2020) PG Dept. of Physics, Bhadrak Autonomous College, Bhadrak	NATIONAL 11-01-2020 TO 12-01-2020 Bhadrak	Presentation: Simple Linear Physics vis-à-vis the complex Nature of Reality  Abstracts: Section-5: Nonlinear Dynamics, page- 31
14	R. K. Pradhan A. Tripathy	Recent Trends in Physical Sciences (RTPS-2020) PG Dept. of Physics, Bhadrak Autonomous College, Bhadrak	NATIONAL 11-01-2020 TO 12-01-2020 Bhadrak	Presentation: Rethinking Foundations of Physics Post-information revolution  Abstracts: Section-5: Foundations of Physics, page:35-36
15	A. Tripathy R.K. Prradhan	National Conference on Trends and progress of Animal Sciences FM University, Balasore	NATIONAL 06-02-2020 TO 07-02-2020 Balasore	How far and how do genes determine Behavior  Abstracts: page-10.
16	A. Tripathy R.K. Prtadhan	National Conference on Relevance of Vedanta philosophy in the 21st century  PG Dept. of Advaita Vedanta Sri Jagannatha	NATIONAL 12-03-2020 TO 13-03-2020	Presentation: Evolution of Life: Upanishadic Views vis- à-vis Scientific Paradigm

		Sanskrit university, Puri	Puri	Abstracts: Page: 25
17	R. K.Pradhan A. Tripathy	National Conference on Relevance of Vedanta philosophy in the 21st century  PG Dept. of Advaita Vedanta Sri Jagannatha Sanskrit university, Puri	NATIONAL 12-03-2020 TO 13-03-2020 Puri	Presentation: Vedanta and the observer effect in quantum physics Abstracts: Page: 34
18	S. Kar R.K.Pradhan	5th National Seminar on Recent Trends in Physical sciences (RTPS-2023) PG Dept. of Physics, Bhadrak Auto. College, Bhadrak	NATIONAL 24-02-2023 TO 25-02-2023 Bhadrak	Presentation: Revisiting Role of Acceleration in Twin Paradox in A Realistic Model of Space Travel Abstracts: Page-21
19	A.Tripathy R.K.Prtadhan	5th National Seminar on Recent Trends in Physical sciences (RTPS-2023)  PG Dept. of Physics, Bhadrak Auto. College, Bhadrak	NATIONAL  24-02-2023 TO 25-02-2023 Bhadrak	Presentation: Is Biology in Need of Physicists? – A Summary of Seminal Contributions in Biology by Three Great Physicists: Erwin SchrÖdinger, Richard Feynman and Paul Davies Abstracts: page-24-25
20	R.K. Pradhan A. tripathy	International Seminar on Recent Trends in Physical Sciences and Indian Knowledge Systems (RTPS- IKS-2025) PG Department of Physics Bhadrak Auto. College, Bhadrak	INTER- NATIONAL 10-01-2025 TO 12-201-2025 Bhadrak	Presentation Bringing IKS to the forefront of Modern Sciences
21	A. Tripathy R.K. Pradhan	International Seminar on Recent Trends in Physical Sciences and Indian Knowledge Systems (RTPS- IKS-2025) PG Department of Physics Bhadrak Auto. College, Bhadrak	INTER- NATIONAL 10-01-2025 TO 12-201-2025 Bhadrak	Presentation Scientific Paradigm and Teleological Creation
22	R.K. Pradhan A. Tripathy	National Conference on New Horizons of Indian Knowledge Systems PG Department of Sanskrit Fakir Mohan University, Balasore	National 18-02-2025 TO 20-02-2025 Balasore	Presentation Extracting Scientific Content from Scriptures: Contrasting Epistemologies of Modern Science with IKS  Abstract Volume page: 16

# Seminars and Conferences Organized as Organizer/Convener/Organising Committee member:

Sl.	Conference title and	Level, Dates	<b>Invited Speakers and Resource Persons</b>
No	Organising Institution	and Venue	
1	Seminar on Contemporary Trends in Physics (CTP-2013)	STATE 30-03-2013	Prof. Sashi Bhushan Pradhan, Ex-Principal, Vikram Dev Autonomous College, Jeypore Prof. Prasanna Kumar Mishra, G.M.
	Rajendra Autonomous College, Bolangir	TO 31-03-2013 Bolangir	University, Sambalpur Prof. Tushar Ranjan Routray, Sambalpur University, Sambalpur Prof. S. P. Pati, Sambalpur University, Sambalpur
2	Seminar on Recent Trends in Physics	STATE 27-08-2015	Dr. Biswajit Pradhan, IIIT, BBSR; Dr. SS Biswal, Ravenshaw University,
	Department of Physics, Bhadrak Autonomous College, Bhadrak	Bhadrak	Cuttack; Dr. Rajib Biswal, MPC Autonomous College, Baripada; Prof. Suresh C. Nayak, FM Autonomous College, Balasore
3	OSI (Optical Society of India)	NATIONAL	Prof. Kallol Bhattacharya, Calcutta
	foundation National Seminar on "PHOTONICS" in	21-01-2016	University; Dr. Ritwick Das, NISER, BBSR;
	collaboration with OSI, Department of Physics, Bhadrak Autonomous College, Bhadrak	Bhadrak	Dr. Ranjan Jha, IIT, BBSR; Prof. S. I. Hosain, Ravenshaw University, Cuttack
4	Special Seminar on Search for QGP at LHC and RHIC Department of Physics, Bhadrak	NATIONAL 25-01-2017	Dr. Ranjit Nayak, IIT, MUMBAI
	Autonomous College, Bhadrak	Bhadrak	
5	Special Interactive Seminar in Collaboration with Bhadrak	INTER- NATIONAL	Dr N C Das, Army Research Lab., NASA, USA,
	College Alumni Association, Department of Physics, Bhadrak Autonomous College,	29-01-2019	Dr Bigyani Das, Goddard Space Flight Center, NASA, USA
	Bhadrak	Bhadrak	D 0 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
6	One-day Multidisciplinary Seminar	NATIONAL 28-02-2019	Dr. Sushanta Kumar Pal, IIT, Delhi, Dr. Mrs. Asima Tripathy, Zoology,
	Department of Physics, Bhadrak Autonomous College,	Bhadrak	R. K. Pradhan, physics
7	Bhadrak Recent Trends in Physical	NATIONAL	Prof. Rukmani Mohanta, University of
	Science (RTPS-2020) Department of Physics, Bhadrak	11-01-2020	Hyderabad; Prof. Pradeep Kumar Mohanty, IISER
	Autonomous College, Bhadrak	TO 12-01-2020	Kolkata; Prof. Kamala Lochan Panigrahi, IIT
		Bhadrak	Kharagpur; DR. Jajati Keshari Nayak,VECC Kolkata;8Prof, Lambodar Prasad Singh, Utkal Unversity, Bhubaneswar
8	Online Lecture Series on Basics of Quantum mechanics	NATIONAL	Prof. Pradeep Kumar Mohanty, IISER, Kolkata

		00 00 2021	
	Dhodrak Auto Caller DC	08-09-2021	
	Bhadrak Auto. College, PG	TO	
	Department of Physics, FM	30-09-2021	
	University and KIIT	ONLINE	
	International University,BBSR	MODE	
9	Students' Innovation Festival	INTER-	Resource Person
	(SIF)-India International Science	NATIONAL	Member of organizing Committee of
	Festival (IISF)-2022 at MANIT,	21-01-2023	SIF-2022 and Panel judge for
	Bhopal	TO	projects on theme:
		24-01-2023	Developing Sustainable Life based on Five
		Bhopal	Elements of Nature: The Earth (पृथ्वी), The
		Bhopui	water (जल),The fire (तेजस /अग्नि), The air
			(हবা) and The space (आকাহা)
10	Recent Trends in Physical	NATIONAL	Dr. M. Mohapatra, DGM-IMD, GOI-New Delhi
10	_	NATIONAL	Dr. K. K. Nanda, Director, IOP, BBSR
	Science (RTPS-2023)	24-02-2023	Prof. M. Sivakumar, Univ. of Hyderabad Dr. J.K.
	Department of Physics, Bhadrak		Nayak, VECC, Kolkata
	Autonomous College, Bhadrak	TO	Prof. D. Behera, NIT, Rourkela
	DIIAUIAK	25-02-2023	Dr. S. N. Dash, NIT-Rourkela
		D111	Dr. Aruna K. Nayak, IOP, BBSR
		Bhadrak	Dr. Ajaya K. Nayak, NISER, BBSR,
			Prof. D. P. Mohapatra, IOP, BBSR.
11	National Conference on	NATIONAL	Prof. P. K. Mishra, Vice-Chairman,
11		INATIONAL	MSRVP, Ujjain. Chancellor, DRPCA
	Astrology (ASTRO 2024)	04-01-2024	University, Pusa, and Ex-VC, NOU,
	Astrology (ASTRO-2024)	07 01-2024	Baripada
	In Collaboration with Odisha	IGNOU,	Prof. Harekrishna Satapathy,
	Vigyan Mandal (OVM)	Regional	VC, National Sanskrit University Tirupati.
	16) an ivianda (0 v ivi)	Center,	Prof. Jyotish Chandra Mohanty, Retd.
		BBSR	Reader, Ravenshaw University, Cuttack
		אפממ	Prof. L.P. Singh, Utkal University,
			Bhubaneswar
12	One day special seminar on Thin	NATIONAL	Dr. Manas Ranjan Puhan
	film separation Techniques	08-10-2024	Research Scholar, Membrane Science and
	DOD . CT	Bhadrak	Separation Technology Division,
	PG Dept. of Physics,		CSIR-Central Salt & Marine Chemicals
	Bhadrak Auto. College, Bhadrak		Research Institute (CSIR-CSMCRI),
12	International Seminar on Recent	INTED	Bhavnagar, Gujarat, India
13		INTER- NATIONAL	Prof. Subhendra D. Mahanti, Michigan
	Trends in Physical Sciences and Indian Knowledge Systems	INATIONAL	State University, USA Dr. Partha Sarathi Parhi, Ghent University,
	(RTPS-IKS-2025)	10-01-2025	Belgium
	PG Department of Physics	TO	Prof. Sudhakar Panda, Ex-Director, NISER,
	Bhadrak Auto. College, Bhadrak	12-01-2025	BBSR
		Bhadrak	Prof. Prasanta K. Panigrahi, Ex-Director,
	Convener and Session chair		IISER, Kolkata
			Prof. Mrittunjoy Guha Majumdar, Adjunct
			Professor, NIAS, Bengaluru
			Prof. Hari Har Hota, Ex-Vice Chancellor,
			Shree Jagannath Sanskrit University, Puri
			Prof. Prabhat K. Mahapatra, Central
			Sanskrit University, Agartala Campus
			Prof. Jyotis Chandra Mohanty, Ex-
			Principal, Govt, Sc, College, Chatrapur
			Prof. Prahallad Chandra Naik, Ex-Director,
			Pathani Samanta Planetarium, BBSR

			Prof. Basudeba Mishra, Vedic Scholar and
			IKS expert
			Dr. S. Sahoo, NIT, Rourkela
14	One day DAE outreach	NATIONAL	Dr. Jajati Kesari Nayak,
	programme	24-01-2025	Scientific Officer-G, VECC Kolkata
		Bhadrak	·
	VECC Kolkata and Bhadrak (A)		
	College, Bhadrak		
	Organiser		
15	One day international webinar-	INTER-	Peter Warwick Morgan, Yale University,
	cum-seminar on the occasion of	NATIONAL	USA.(ONLINE)
	National Science Day-2025	01-03-2025	Sushanta Kumar Pal, JSPS fellow, Chiba
	celebration in	Bhadrak	University, Japan
	PG Dept of Physics, Bhadrak		Dean R. Radin, Institute of Noetic Sciences,
	Autonomous College, Bhadrak		Canada(ONLINE)
	Convener and session chair		

# Seminars, workshops and Conferences (participation/presentation/Lecture/Talk)

SI. No	Conference Title and Organizers	Level Dates & Venue	Role and Details
1	21st National convention of OPS and National Conference on Physics and Industry Interface Christ College, Cuttack and Odisha Physical Society	NATIONAL 14-02-2004 TO 15-03-2004 Cuttack	Participation
2	Five days' State level workshop on Astronomy and Astrophysics for High School Teachers Odisha Bigyana Academy and Pathani Samanta Planetarium	21-10-2004 TO 26-10-2004 Jeypore	Resource Person Astrophysics in five lectures
3	22 <sup>nd</sup> Annual Convention of OPS and National conference on Einstein and Twentieth Century Physics R. D. women's Autonomous College, BBSR and Odisha Physical Society	NATIONAL 05-02-2005 TO 06-02-2005 BBSR	Presentation Title: Space-time dimensionality from fundamental principles
4	State-Level Science Exhibition Department of Mass Education Odisha Vikram Dev College, Jeypore	STATE 22-02-2005 Jeypore	Chief Speaker Our Understanding of the Universe
5	23 <sup>rd</sup> Annual Convention of OPS and National conference on Astrophysics and Cosmology P. N. College, Khordha and Odisha6Physical Society	NATIONAL 11-02-2006 TO 12-02-2006 Khordha	Presentation Title: Dualities in Twentieth Century Physics
6	24 <sup>th</sup> Annual Convention of OPS and National conference on Physics Education and Research Ispat College, Rourkela and Odisha	NATIONAL 10-02-2007 TO 11-02-2007 Rourkela	Presentation: The Concept of Biophysical Work

	Physical Society		
7	25 <sup>th</sup> Annual convention of OPS and National seminar on Recent Developments & Prospects of Physics Stewart Science College, Cuttack and Odisha Physical Society	NATIONAL 02-02-2008 TO 03-02-2008 Cuttack	Presentation: On The Combination of Inertial Parameters
8	UGC sponsored National Seminar on Promotion of Ethics and Human Values V, Dev College, Jeypore	NATIONAL 27-12-2008 TO 28-12-2008 Jeypore	Presentation: The promotion of Ethical and Human Values: Needs and Modes
9	26 <sup>th</sup> Annual Convention of OPS and National Seminar on Role and relevance of physics in Engineering Education NIST, Berhampur and OPS	NATIONAL 14-02-2009 TO 15-02-2009 Berhampur	Presentation: The Role of Conscious Observer in Relativity
10	27 <sup>th</sup> Annual Convention of OPS and UGC sponsored national Seminar on Global Warming – The challenging days ahead Paradip College, Paradip and OPS	NATIONAL 22-03-2009 TO 23-03-2009 Paradip	Presentation: Global Warming: From Facts and Figures to Causes and Cures
11	27 <sup>th</sup> Annual Convention of OPS and UGC sponsored national Seminar on Global Warming and Clean Energy North Odisha University and OPS	NATIONAL 13-02-2010 TO 14-02-2010 Baripada	Presentation: The States of Consciousness: A Quantum Approach
12	UGC Sponsored National Seminar on Ethics and Values in Contemporary English Literature Vikram Dev College, Jeypore	NATIONAL 27-03-2010 Jeypore	Presentation: Ethics and Values in Contemporary in Life and Literature
13	UGC Seminar on Promotion of Ethics and Human Values Kotpad College, Kotpad	NATIONAL 28-03-2010 Kotpad	Presentation On Promotion of Ethics and Human Values
14	28 <sup>th</sup> OPS Convention and National Seminar on Non-conventional Energy Sambalpur University and Odisha Physical Society	NATIONAL 12-02-2011 TO 13-02-2011 Sambalpur	Presentation: A Comprehensive Interpretation of Quantum Theory
15	29 <sup>th</sup> OPS Convention and National Seminar on Nano Science and Technology U.N. Autonomous College, Adaspur and Odisha Physical Society	NATIONAL 11-02-2012 TO 12—02-2012 Adaspur	Participation
16	30 <sup>th</sup> OPS convention and UGC sponsored National seminar on Recent Trends in LASER and Photonics (RTLP)	NATIONAL 09-02-2013 TO 10-02-2013 Cuttack	Presentation: Psychophysical Interpretation of Quantum Theory: The Only Interpretation by An Indian

	Ravenshaw University and OPS		Scientist
17	UGC Sponsored state level seminar on Contemporary Trends in Physics Rajendra Autonomous College, Bolangir	STATE 30-03-2013 TO 31-03-2013 Bolangir	Presentation:  Vedantic Solutions to fundamental problems of cosmology
18	31st OPS convention and National Seminar on Recent Trends in Condensed Matter Physics(RTCMP) SOA University, ITER, BBSR	NATIONAL 08-02-2014 TO 09-02-2014 SOA, BBSR	Presentation: Non-linear Coding and Decoding in Living Systems
19	32 <sup>nd</sup> OPS Convention and UGC sponsored National Seminar on Ballistics FM University and OPS	NATIONAL 13-02-2015 TO 14-02-2015 Balasore	Presentation: Vaisheshika Philosophy and Modern Particle Physics: An Analysis
20	UGC Sponsored National Seminar on Contemporary Physics FM Autonomous College, Balasore	NATIONAL 28-02-2015 Balasore	Presentation: The Interpretation Problem of Quantum Mechanics
21	One Day Workshop on Choice Based Credit System (CBCS) F. M. Autonomous College, Balasore	UNIVERSITY 30-07-2015 Balasore	Participation
22	Two-Day Skill-Based Workshop on Computational Methods and Applications in Physics Utkal University, Bhubaneswar	STATE 05-11-2015 TO 06-11-2015 BBSR	Participation
23	UGC Sponsored National Seminar on Relevance of Physical Science in Social Science Hindol College, Khajuriakata, Dhenkanal, Odisha	NATIONAL 27-12-2015 TO 28-12-2015 Hindol	Presentation: Physics of Mind-Matter Interactions
24	International Seminar (Vaicharik Kumbha) On Science And Spirituality,  MPCST, SVYASA And Vijnana Bharati	INTER- NATIONAL 12-02-2016 TO 14-02-2016 BHOPAL	Participation
25	UGC Sponsored National Seminar on Space Science and Technologies in the service of mankind Hindol College, Khajuriakata, Dhenkanal, Odisha	NATIONAL 18-12-2016 TO 19-12-2016 Hindol	Presentation: The Science and Philosophy of Space
26	One-Day State-Level Workshop for Physics Teachers Stewart English Medium School, Sukinda	STATE 05/05/2016 Sukinda	Resource Person: Correct Appreciation of Science and Innovative Physics Teaching
27	National Mathematics Day Seminar PG Department of Mathematics,	STATE 22-12-2016	Resource Person: Srinivasa Ramanujan: The

	Ravenshaw University, Cuttack and Odisha Vigyan Mandal	Cuttack	Pride of India [Chief Guest: Prof. Swadhin Patnaik; Guest of Honour: Prof. Purna Chandra Dash]
28	33 <sup>rd</sup> OPS Convention and National Seminar Berhampur University, Bhanja Vihar	NATIONAL 11-02-2017 TO 12-02-2017 Berhampur	Participation
29	The 3 <sup>rd</sup> world congress on Vedic Sciences Tritiyam Viswa-Veda-Vijnan-Sammelanam (VVVS) on Vedic and Modern Sciences: Insights, Interface and Integration Vijnan Bharati and Deccan College, Pune, GOVT of Maharashtra and Govt. of Goa	INTER- NATIONAL  10-01-2018  TO 13-01-2018  PUNE	Presentation: Incorporating Modern Physics in Vedanta- Roadmap for Realization of Swami Vivekananda's Vision
30	Summer School -2018 on Space and Time  Bhaktivedanta Institute, Kolkata and IIT, BHU	NATIONAL  28-06-2018  TO  01-07-2018  IIT, BHU	Resource Person (Two lectures)  The concept of time in Physics
31	One Day NAAC Awareness Workshop F.M University, Balasore	University 16-11-2018 Balasore	Participation
32	Two-day international webinar on Frontiers in cellular and molecular Biology Department of Biochemistry and IQAC of MMK & SDM Mahila Mahavidyalaya	INTER- NATIONAL 21-07-2021 TO 22-07-2021 ONLINE	Participation
33	National Conference on Astrophysics, astronomy and astrology (ASTRO-2024) Odisha Vijnan Mandal IGNOU Regfional Center, BBSR	NATIONAL 22-01-2024 Bhubaneswar	Presentation: Astrology: Removing the Pseudoscience Tag
34	40 <sup>th</sup> annual convention of Orissa Physical Society Recent Advances in Physics and Ballistics (RAPAB - 2024) F.M. University, Balasore and OPS	NATIONAL 10-02-2024 TO 11-02-2024 Balasore	Participation
35	Vision Document: 2026 & 2047  Odisha's Vision 2036 & 2047 for Odisha's future encompassing properity and sustainability	STATE 23-11-2024 ONLINE	Participation Certificate No: 11232024103265
36	Faculty Development Programme on introduction of new Lesson Plan cum Progress Register	College 18-01-2025	Participation

	IQAC, Bhadrak Autonomous College, Bhadrak	Bhadrak	
37	Faculty Development Programme on introduction of Student mentoring	College 07-02-2025	Participation
	IQAC, Bhadrak Autonomous College, Bhadrak	Bhadrak	
38	One day International webinar-cumseminar on the occasion of National Science Day-2025 celebration in PG Dept of Physics, Bhadrak Autonomous College, Bhadrak Convener and session chair	INTER- NATIONAL 01-03-2025 Bhadrak	Presentation Keynote Address: Aspects of Fundamental Research

# $Resource\ Person/Invited\ Speaker/Guest\ of\ Honor/Chief\ Guest/Chief\ Speaker\ in\ General/Multi-disciplinary\ Programs$

Sl.	Seminar Title, Organizers,	Level	Role and Details
No.	<b>Venue and Dates</b>		
1	One-day Special Seminar	STATE	Resource Person:
	Department Of Physics,	11-01-2012	Science: What it is and How to
	Govt. Autonomous College.	Angul	Do It
	Angul		
2	One-day Special Seminar	STATE	Resource Person:
	Patitapabana Mahavidyalaya,	18.01.2012	<b>Spirituality: A Rousing Call to</b>
	Sainkul, Keonjhar,.	Sainkul	The Modern Youth
3	One-day special Seminar	STATE	Resource Person:
	Department of Physics,	21-01-2012	A Proper Attitude to Science in
	Anandpur Autonomous	Anandpur	the Twenty first Century
	College, Anandpur		
4	One-Day Awareness Camp for	STATE	Resource Person
	The Youth	08-09-2014	The Need for True Education
	Sambalpur University	Sambalpur	
	Auditorium		
5	One Day Ethics and Values	STATE	Resource Person
	Camp For School And College Teachers And Students	01-11-2014	Ethics: The Science Of
	The Ethics Club of The	RSP Auditorium,	<b>Goodness And Present Day</b>
	Education Wing Of Rourkela	Rourkela	Challenges
	Steel Plant		
6	District Level Science Exhibition	District	Guest of Honour
	SBD International School,	01-05-2015	The Basics of Science and
	Bhadrak	Bhadrak	Technology
			<i>60</i>
7	One day Special Seminar on the	District	Chief Guest
	Birthday of President APJ Abdul	15-10-2015	Learning from the life and work
	Kalam	Tihidi	of Dr. Kalam
	Tihidi College, Tihidi, Bhadrak	-	
8	One-day Special Seminar	STATE	Resource Person
	PG Department of Physics	22-01-2016	<b>Developing The Right Attitude</b>
	G.M. University, Sambalpur	Sambalpur	to Science

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9	One-day Awareness	STATE	Resource Person:
	Programme on Value	03-04-2016	Need For Value Education
	Education	Rourkela	
	NIT, ROURKELA		
10	One-day special Seminar	STATE	Resource Person:
	A. B. College, Basudevpur	24-10-2016	Scientific Attitude- A Physics
		Basudevpur	Perspective
11	One-day Special Seminar	STATE	Speaker
	Baba Bhairabananda	27-10-2016	On Promotion of Ethical and
	Mahavidyalaya, Chandikhole	Chandikhole	Human Values
12	State level Conference and	STATE	Resource Person
	Youth Camp	12-12-2016	A Set of Four Lectures on "Our
	Sivananda Seva Grama, Gahama,	TO	Eternal Heritage"
	Angul	16-12-2016	
		Gahama	
13	One-day Special Seminar	STATE	Resource Person:
	Sailabala Women's	05-01-2018	Consciousness in Physics
	Autonomous College, Cuttack	Cuttack	
14	National Webinar on National	NATIONAL	Resource Person:
	Youth Day	12-01-2021	The ever-growing relevance of
	YRC, Charampa	ONLINE	Swami Vivekananda
	Mahavidyalaya	01(21)(2	~ // <del>******</del>
15	State level webinar: Gita e-	STATE	Resource person:
10	pathchakra	17-07-2021	Eighth chapter of the Bhagvad
	Swami Vivkananda Loka	ONLINE	Gita
	Samsad, Keonjhar	OTTENTE	Web link:
	Samsad, Reonjiidi		https://youtu.be/MMPU7exzT7A
16	State Level Webinar on	STATE	Resource Person:
10	Swachhta pakhwada	07-09-2021	11000 01100 1 0110011
	NSS wing of G.M. Higher	ONLINE	
	Secondary School, Sambalpur	OT (EII (E	
17	8 <sup>th</sup> SOAWAL lecture series,	STATE	Invited Speaker:
1,	SOA University,	18-09-2021	Does The Conscious Observer
	Bhubaneswar8	ONLINE	Play a Role in physics
18	State level webinar: Srimad	STATE	Resource Person
10	Bhagavat Darshan	10-02-2022	Visualizing the cosmic form of
	Swami Vivkananda Loka	ONLINE	the Lord
	Samsad, Keonjhar	ONLINE	(Srimad Bhagavatam 2-1)
	Samsau, Reonjiiai		(Sililiad Bilagavatalii 2-1)
19	State level webinar:	STATE	Pasourea parson
19	Awakening with the	23-03-2022	Resource person  Synthesis of verses 9 to 28, ch. 8
	_	ONLINE	
	Bhagavadgita Swami Vivkananda Loka	ONLINE	of Srimad Bhagavadgita
20	Samsad, Keonjhar	OT A TE	Chief Speedrer
20	State level webinar: Gita	STATE	Chief Speaker
	Sugita Kartavya	15-04-2022	Sraddhatraya vibhaga Yoga
	Swami Vivkananda Loka	ONLINE	(Gita: Ch. 17)
21	Samsad, Keonjhar	OT A TES	CIL CO I
21	State level webinar: Gita	STATE	Chief Speaker
	Sugita Kartavya	15-06-2022	Arjuna Vishada Yoga (Gita:
	Swami Vivkananda Loka	ONLINE	Ch. 1)
	Samsad, Keonjhar		
22	State level webinar:	STATE	Chief Speaker

	Awakening with the Bhagavadgita Swami Vivkananda Loka Samsad, Keonjhar	17-07-2022 ONLINE	Purushottama Yoga (Gita: Ch. 15:12-20)
23	State level webinar: Gita Sugita Kartavya Swami Vivkananda Loka Samsad, Keonjhar	STATE 15-12-2022 ONLINE	Chief Speaker Sankhya Yoga (Gita: Ch. 2:21- 30)
24	Stduents' Innovation Festival (SIF-2022) of India Internatrional Science Festival IISF-2022 Manit, Bhopal, Madhya Pradesh	INTERNATIONAL 21-01-2023 TO 24001-2023 Bhopal	Resource Person Member, organizing committee and member of Jury for projects
25	Online national webinar: Uttishthata: A Motivational Talk Series Kalahandi University, Bhawanipatana, Kalahandi	NATIONAL 21-04-2023 ONLINE	In vited Speaker  Nitya Jibanare Gita (Gita in Daily Life)  https://www.voutube.com/watch?v=AYrsXdqvblQ
26	State level webinar: Gita Sugita Kartavya Swami Vivkananda Loka Samsad, Keonjhar	STATE 15-05-2023 ONLINE	Chief speaker Karma Yoga (Gita:3:32-43)
27	First Interactive Outreach Programme on Science Education "Scientifically Speaking" Department of Physics Bhadrak A. College, Bhadrak and B. M. Bagurai High School, Bhadrak.	STATE 30-09-2023 BMBHS, Bhadrak	Resource Person What Science Teaches Us and What It Does Not
28	State level webinar: Gita Sugita Kartavya Swami Vivkananda Loka Samsad, Keonjhar	STATE 15-10-2023 ONLINE	Chief speaker Jnana Karma sannyasa Yoga (Gita:4:31-42)
29	Second Interactive Outreach Programme on Science Education "Scientifically Speaking" Department of Physics Bhadrak A. College, Bhadrak and Government High School, Bhadrak.	STATE 11-11-2023 Govt. High School, Bhadrak	Resource Person Scientific Attitude and Scientific Temper
30	Third Interactive Outreach Programme on Science Education "Scientifically Speaking" Department of Physics Bhadrak A. College, Bhadrak and Bhadrak Zilla School, Bhadrak.	STATE 17-11-2023 Bhadrak Zilla School, Bhadrak	Resource Person From Studying Science to Doing Science
31	IYDP (NUA-O) Programme Kushaleswar Anchalika	STATE 24-01-2024	Chief Guest Glory of Sri Jagannath and

	Mahavidyalaya, Kushaleswar, Keonjhar	Kushaleswar	Jagannath Samskriti
32	TOT (Training of Trainers) on LSDG (Localization of Sustainable Development Goal) Theme 8 (Good Governance DPRC (District Panchayat Training Center), Bhadrak	STATE 22-02-2024 DPRC, Bhadrak	Resource Person Good Governance and 5T initiative
33	National Science Day-2024 celebrations Anandapur College. Anandapur	STATE 28-02-2024 Anandapur	Chief guest Inculcating Scientific Temper in the 21st century
34	Annual day of Science Society Atal Behari College, Basudevpur	STATE 23-03-2024 Basudevpur	Chief speaker Science, Religion and Spirituality
35	State level webinar: Gita Sugita Kartavya Swami Vivkananda Loka Samsad, Keonjhar	STATE 15-06-2024 ONLINE	Chief speaker Atma Samyama Yoga (Gita:6:41-47)
36	Pustaka Vimochana Utsava Bigyana Mancha, Anadapur and Anandapur College, Anandapur	STATE 28-07-2024 Anandapur	Invited speaker  Vaigyanika o Vigyana Darshana  By Prof. Jagannatha Saha
37	National Webinar: ONLINE Vijnana Bharati Mandala Vijnana Bharati	NATIONAL 24-08-2024 ONLINE	Keynote speaker  Can a spin ½ mosdel describe  Consciousness
38	State level webinar: Gita Sugita Kartavya SVLS, Keonjhar	STATE 15-09-2024 ONLINE	Chief speaker Jnana Vijnana Yoga (Gita:7:21-30)
39	25 <sup>th</sup> Annual day Rajat Jayanti celebration of Brahmakumaris Rajyoga Meditation Centre, Bhadrak Brahmakumaris centre, Bhadrak	NATIONAL 04-11-2024 Bhadrak	Guest of Honour The goal of life
40	TOT (Training of Trainers) on LSDG (Localization of Sustainable Development Goal) Theme 8 Good Governance at DPRC (District Panchayat Training Center), Bhadrak	STATE 05-11-2024 Bhadrak	Resource Person Good Governance and 5T initiative
41	4 <sup>th</sup> Interactive Outreach Programme on Science Education "Scientifically Speaking" Kendriya Vidyalaya, Bhadrak. Bhadrak Auto. College, Bhadrak	NATIONAL 18-11-2024 Bhadrak	Resource person The Truth about Science
42	District Level Science Mela Nehru Yuva Kendra, Bhadrak	DISTRICT 29-11-2024	Resource Person  Judge for the individual and

	Bhadrak Autonomous College, Bhadrak	Bhadrak	Group projects
43	State level webinar: Gita	STATE	Chief speaker
	Sugita Kartavya	15-01-2025	Rajavidya Rajaguhya Yoga
	SVLS, Keonjhar	ONLINE	(Gita:9:1-10)
44	National conference of New	National	Invited Speaker
	Horizons of Indian	18-02-2025	
	Knowledge Systems	To	Extraction of Scientific contenmt
		20-02-2025	from scriptural texts: Contrasting
	PG Dept of Sanskrit		the epistemologies of Modern
	F.M. University. Balasore		Science and IKS

#### Science Popularization Publications in Odia

- 1. R. K. Pradhan. Sutrakalpara Janmarahasya, Digbalaya, 5, 11-15, 2004, OPS Publication, BBSR.
- 2. R. K. Pradhan. Vijnana, Andhaviswasa O Andha-Aviswasa, Digbalaya, 6, 43-50, 2005, OPS Publication, BBSR.
- 3. R. K. Pradhan. *Vijnana O Andhaviswasa*, *Vijnana Diganta*, 12, 4, 36-37, 2005, Orissa Vijnana Academy, BBSR.
- 4. R. K. Pradhan. Vaijnanika Karana Darshao, Digbalaya, 7, 28-32, 2006, OPS Publication, BBSR.
- 5. R. K. Pradhan. *Andhaviswasara Prakrita Karana O Nirakarana*, *Digbalaya*, 8, 43-46, 2007, OPS Publication, BBSR.
- 6. R. K. Pradhan. Yoga Vijnana, Digbalaya, 9, 49-55, 2008, OPS Publication, BBSR
- 7. R. K. Pradhan. Vijnana O Adhyatma Vidya, Digbalaya, 10, 68-78, 2009, OPS Publication, BBSR.
- 8. R. K. Pradhan. *Manava Jivanare Vijnana O Dharmara Bhumika, Digbalaya*, 11, 69-76, 2010, OPS Publication, BBSR.
- 9. R. K. Pradhan. Jada O Chetanara Vivechana, Digbalaya, 12, 57-61, 2011, OPS Publication, BBSR.
- 10. R. K. Pradhan. *Hawking, Feynman O Einsteinkara Iswara Chintana, Digbalaya*, 13, 42-47, 2012, OPS Publication, BBSR.
- 11. R. K. Pradhan. *Vijnana O Adhyatmikata, Adhyatma Vahini*, (Ed. Cahtanya Das Thakur), Balangir, 2012.
- 12. R. K. Pradhan. *Gaveshana Kshetrare Bharatiya Vaijnanika*, *Digbalaya*, 14, Pp 13-16, 2013, OPS Publication, BBSR.
- 13. R. K. Pradhan. Andhaviswasa, Hetuvada O Dabholkar Hatyakanda, Digbalaya, 15, 20-24, Feb. 2014.
- 14. R. K. Pradhan. Viswasara Vijnana, Digbalaya, 16, Feb. 2015.
- 15. R. K. Pradhan. Sabu Samasyara Vaijnanika Samadhana Sambhava Ki? Digbalaya, 17, Pp 10-13, Feb.2016.
- 16. R. K. Pradhan. Bharatiyanka Vaijnanika Manovritti: Eka Visleshana", Digbalaya, 18, Feb. 2017.
- 17. R. K. Pradhan. *Antarvibhagiya Vijnana*, Pp 56-57, Digbalaya, Feb 2019
- 18. R. K. Pradhan. *Chetanara Vijnana*, Digbalaya, Feb 2020 Pp 46-48
- 19. R. K. Pradhan. Vijnana Mela O Pradarsani Ityadira Prasangikata, Digbalaya, Feb 2024 Pp 45-46
- 20. R. K. Pradhan, Quantum Sahabandhana, Digbalaya, Feb 2025, Pp: 23-24

#### Other literary and Philosophical Publications (English)

- 1. R. K. Pradhan. *The Problem of Evil*, The Divine Life, Pp 17-18, March 2010, The Divine Life Trust Society Publication, Rishikesh, India.
- 2. R. K. Pradhan. *An Analysis of The Universal Prayer*, The Divine Life, Pp 15-16, April 2014, The Divine Life Trust Society Publication, Rishikesh, India.

3. R. K. Pradhan. *Trishul Sadhana of Gurudev*, The Divine Life, Pp 17-19, April, 2015, The Divine Life Trust Society Publication, Rishikesh, Himalayas, India.

### Other literary and Philosophical Publications (Odia)

- 1. R. K. Pradhan. *Hitārtha Sāhitya*(Odia), Abhiyana, Vol. XIV, No. 3, 35-40, 2010, Utkala Pravasi Abhiyana, Kolkata.
- 2. R. K. Pradhan. Buddhi Bāhuda (Odia), Rishi Darshana, (4), 10-16, 2012, Cuttack, India.
- 3. R. K. Pradhan. Subhadra Kie? (Odia), Subhadra Kshetra, (6), 9-10, 2012, Bhawanipatna, India.
- 4. R. K. Pradhan. *Viswaku Bhãratara Avadãna*, (Odia Trans. From Original English Talk By Sw. Chidananda), The Sambada (Odia Daily), Page-6, 24.09.2012.
- 5. R. K. Pradhan. *Vividha Mantrare Nihita Shakti* (Odia Trns. From English Original By Sw. Sivananda), Divya Sandesh (Ed. Prof. Hrudananda Ray), 12-13, Nov. 2012, Cuttack.
- 6. R. K. Pradhan. *Parivesha Pradushana O Bhagavadgitã*, Gitã Manthana, (Ed. Prof. Biswambhara Padhi), 9, 11-12, Dec-2012, Bhawanipatna, India.
- 7. R. K. Pradhan. *Bhaktara Bhagavãn*, (Odia Trans. From English Original By Sw. Krishnananda), Souvenir Released On The Occasion Of 35<sup>th</sup> All-Odisha Divine Life Conference At Bhubaneswar, Jan. 2013.
- 8. R. K. Pradhan. Samānatāra Samasyā O Samādhana, Rishi Darshana, (2), 41-45, 2014, Cuttack, India.
- 9. R. K. Pradhan. Sãhityara Dharma, Rishi Darshana, (6) 1, 14-16, 2016, Cuttack, India.
- 10. R. K. Pradhan. *Adarsa Sahitya*, Rishi Darshana, 6,4, 2016, 25-26.

#### **Administrative and other Experiences**

- 1. YRC Counselor, Vikram Dev Junior College, Jeypore, Odisha
- 2. Head, Dept. of Physics, Vikram Dev Jr. College, Jeypore, Odisha
- 3. Member, Library Committee, Vikram Dev Autonomous College, Jeypore
- 4. Professor in charge, Physics Seminar, Vikram Dev Autonomous College, Jeypore, Odisha
- 5. Observer, CHSE Annual Examinations, Vikram Dev College Nodal Centre, Jeypore, Odisha.
- 6. Professor-in-charge, Yoga, Vikram Dev Jr. College, Jeypore
- 7. Head, Dept. of Physics, Rajendra Jr. College, Balangir, Odisha
- 8. Academic Bursar, Rajendra Jr. College, Balangir, Odisha
- 9. Officer in charge, Examinations, Rajendra Jr. College, Balangir, Odisha
- 10. Deputy Controller of Examinations, Rajendra Autonomous College, Balangir, Odisha
- 11. Officer in charge, College Time table, Rajendra Autonomous College, Balangir, Odisha
- 12. Associate Vice-president, Science Society, Rajendra Autonomous College, Bolangir
- 13. Member, Internal Audit team, Rajendra Autonomous College, Balangir, Odisha
- 14. Professor in charge, Yoga, Rajendra Autonomous College, Balangir, Odisha
- 15. Zone Officer, CHSE Valuation Zone, Rajendra Junior College, Balangir, Odisha
- 16. Coding Officer, CHSE Valuation Zone, Rajendra Junior College, Balangir, Odisha
- 17. Observer, CHSE Annual Examinations, Rajendra Junior College Nodal Centre, Balangir, Odisha.
- 18. Observer, CHSE Annual Examinations, Bhadrak Junior College Nodal Centre, Bhadrak, Odisha.
- 19. Head, Department of Physics, Bhadrak Autonomous College, Bhadrak, Odisha
- 20. Deputy Superintendent of CHS Examinations, Bhadrak Autonomous College, Bhadrak
- 21. Deputy Superintendent of Semester Examinations, Bhadrak Autonomous College, Bhadrak
- 22. Public Information Officer, Bhadrak Autonomous College, Bhadrak, Odisha
- 23. Coordinator, IQAC, Bhadrak Autonomous College, Bhadrak, Odisha
- 24. Coordinator, AISHE, Bhadrak Autonomous College, Bhadrak
- 25. Member, Examination committee, Bhadrak Autonomous College, Bhadrak
- 26. Member, Library Committee, Bhadrak Autonomous College, Bhadrak
- 27. Professor in Charge, College Time table, Bhadrak Autonomous College, Bhadrak, Odisha

- 28. Professor-in-charge, College Website, Bhadrak Autonomous College, Bhadrak
- 29. Head, Postgraduate Department of Physics, Bhadrak Autonomous College, Bhadrak, Odisha
- 30. Associate Vice-President, Science Society, Bhdrak Autonomous College, Bhadrak
- 31. Associate Vice-president, Students' Common Room, Bhadrak Autonomous College, Bhadrak
- 32. Coordinator, M. Sc. Applied Physics (Self Financing), Bhadrak autonomous College, Bhadrak
- 33. Member, Purchase Committee, Bhadrak Autonomous College, Bhadrak, Odisha
- 34. Member, Disciplinary Squad, Bhadrak Autonomous College, Bhadrak, Odisha
- 35. Coding Officer, Semester Examination, Bhadrak Autonomous College, Bhadrak, Odisha
- 36. Head, NAAC subcommittee on Criterion-III, Research, Innovation and Extension, Bhadrak Autonomous College, Bhadrak, Odisha
- 37. Member Financial Aid committee, Bhadrak Autonomous College, Bhadrak
- 38. Member, Library Committee, Bhadrak Autonomous College, Bhadrak

### **Mentoring experiences**

#### Total UG project dissertations supervised up to 2024: 228

#### UG Project dissertations supervised (2018)- 50

S1.	Roll	Name	Project Topic
No	No.		
1	5715	Suryanarayan Panigrahi	A Study of Raman effect and its Applications
	B001		
2	003	Shraddha Suman	A study of Laser and its applications
3	004	Manas Ranjan Puhan	A study of the uses of SEM in determination of surface
			topography and morphology
4	006	Rajesh Kumar Tripathy	A Study of SEM in surface characterization
5	007	Suchismita Nayak	A study of Magnetic Monopoles
6	008	Arpita Das	A study of Entropy and Information
7	009	Biswaranjan Das	Rainbow: A conceptual study of a natural phenomenon
8	010	Sibaranjan Mohapatra	A study of Uses of STM
9	011	Tapas Kumar Das	A study of Neutrino Oscillations
10	012	Sangita Mohanty	A study of Nuclear Reactions
11	013	Kishore Chandra Das	A study of SEM and its Advantages over other devices
12	014	Chinmay Kumar Nayak	A study of SEM and its Applications
13	015	Amiya Ranjan Sahoo	A study of Gibbs paradox and its Resolution
14	016	Kartikeswar Panda	A study of Hall effect
15	017	Subrata Kumar Behera	A study of Modulation and Demodulation based on Phase
16	019	Sujit Kumar Sahoo	A study of Uncertainty Principle and Einstein's Radiation
			Box paradox
17	020	Amiya Ranjan Dhal	A study of LED and its uses
18	021	Rojalin Padhi	A study of Nernst Heat Theorem and third law of
			thermodynamics
19	022	Sangram Senapati	A study of Least time and Least Path
20	023	Radhanath Rout	A study of STM and its applications
21	024	Amarjyoti barik	A study of The Twin Paradox
22	026	Sachin Kumar Sahoo	A study of MRI for diagnostics
23	027	Kalyani Parida	A study of Classification of Elementary Particles
24	028	Mahima P. Sahoo	A study of Raman Effect and Applications in Defense
25	029	Latika Behuria	A study of Application of LASER in LiDAR
26	030	Debasmita Panda	A study of Blackbody Radiation
27	031	Ashish Kumar Mondal	A study of Light wave communication

28	032	Dibya Ranjan Nayak	A study of Dark Matter Classification
			-
29	033	Prasanta Kumar Rout	A study of Magnetic Resonance Imaging
30	034	Monalisha Das	A study of Tokamak Reactor and Fusion power
31	035	Shuvra Shovini Padhi	A study of Evolution of Quantum Mechanics
32	036	Ashis Kumar Mohapatra	A study of Superconductivity and Josephson Effect
33	037	Suraj Kumar Das	A study of Scanning Tunnelling Microscope
34	038	Alok Kumar Jena	A study of Expansion of the Universe
35	039	Susmita Mallick	A study of Stellar Evolution
36	040	Somyaranjan Samal	A study of Mass Spectrometry
37	041	Pravat Kumar Biswal	A study of Atomic Force Microscopy
38	042	Chandan Kumar Swain	A study of nuclear weapons
39	043	Bijay Ho	A study of Fabrication of ICs and MOSFET
40	044	Manasi Prusty	A study of Entropy and Second Law
41	045	Kirti Chandra Panda	A study of Nanotechnology in Medicine and
			Communication
42	046	Pravat Kumar Duari	A study of Standard Model of Elementary Particles
43	047	Subham Kumar Nayak	A study of Boolean Algebra, Logic Gates and Applications
44	048	Suryakanta Parida	A study of Photon Polarizations
45	049	Swadesh Tripathy	A study of Redundancy of Second Postulate of Relativity
46	050	Monalisa Panda	A study of Black holes
47	051	Biswabandita Sahoo	A study of Radioactive Decay of Unstable Nuclei
48	052	Swetalina Sahoo	A study of Electron microscope
49	053	Biranchi Narayan Nayak	A comparative study of STM and AFM
50	054	Subhadarshini Das	A study of Dark Matter

# **UG Project dissertations supervised (2019)-44**

<b>S</b> 1.	Roll	Name	Project Topic
No	No.		
1	5716	Jagannath Panda	A study of Existence of Dark Matter in the Universe
	B001		
2	003	Soumyaranjan Sahoo	A study of Black hole formation (PMRF-1)
3	005	Jagannath Prusty	A study of Stirling's approximation and statistical
			problems
4	006	Rojalin Mohapatra	A study of Extremum Principles
5	007	Kamlesh Prusty	A study of Black hole properties
6	008	Mohammed Firoz	A study of Stellar Evolution
7	009	Lipsa Rani Biswal	A study of Smart Materials and Meta materials
8	010	Satabdi Das	A study of Natural Optical Effects in earth's Atmosphere
9	011	Shubhra Jyoti Mohapatra	A study of Future of Smart Materials
10	012	Diptimayee Sahoo	A study of Optical Effects in earth's Atmosphere
11	013	Aditya Narayan Mishra	A study of Optoelectronic Devices
12	014	Ananta Narayan Peda	A study of Existence of dark Matter in the Universe
13	015	Saisangeet Rout	A study of Maxwell's Demon- historical perspective
14	016	Biswamohan Nayak	A study of Stellar Evolution
15	017	Abinash Nayak	A study of Existence of dark Matter in the Universe
16	018	Partha Sarathi Panigrahi	A study of Maxwell's Demon and its applications
17	019	Dhiren Panda	A study of Existence of dark Matter in the Universe
			(PMRF-2)
18	020	Asutosh Dwibedi	A study of Boltzmann's argument of Equilibrium
19	021	Swagat Priyadarshan	A study of Liouville's Theorem

20         022         Bikram Keshari Behera         A study of Superconductivity (PMRF-3)           21         023         Bijay Kumar Sahoo         A study of Maxwell's Demon (PMRF-4)           22         024         Tapan Kumar Das         A study of Stellar Evolution           23         027         Jyoti Ranjan Mishra         A study of Birth and Death of a star           24         028         Ratnakar Nath         A study of Stellar Evolution           25         030         Prangya Paramita Pagal         A study of Exploration of Smart Materials and metamaterials           26         031         Prajna Dipasikha Thatei         A study of Extremum Principles in Physics           27         033         Ashish Kumar Jena         A study of Optoelectronic Devices           28         034         Sunakar Sahoo         A study of Maxwell's Demon with focus on recent researches           29         035         Sapan Kumar Dash         A study of Optoelectronic Devices- applications           30         036         Abhilipsa Nayak         A study of Superconductivity- foundations           31         037         Patita Kalyan Sahoo         A study of Superconductivity- types           33         039         Satyajit Puhan         A study of Superconductivity- properties           34         040			T = === .	T
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<ul> <li>41 049 Subhasmita Grahacharya A study of some interesting Optical Effects in earth's Atmosphere</li> <li>42 051 Dibyajit Nayak A study of Twin Paradox: Detailed calculations and example</li> <li>43 052 Subham Nayak A study of Optoelectronic Devices- methods of fabrication</li> <li>44 5715 Jyotsna Rani Rout A Study of Raman Spectroscopy and its Applications</li> </ul>	40	048	Swapna Sarita Rout	A study of Optical Effects in earth's Atmosphere
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		B005		

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S1	Roll	Name	Project Title
No	No		
1	5717	Subhakanta Sahoo	A study of Quantum Computers
	B001		-
2	002	Aditya Narayan Panda	A study of Maxwell's Demon- Different Variants
3	003	Sourav Nayak	A study of Grand Father paradox
4	004	Santanu Kumar	A study of Quantum Zeno Effect
		Mohapatra	
5	005	Satyajit Rout	A study of Dark Energy and dark Matter- Different
			candidates
6	006	Somya Ranjan Parida	A study of Dark Matter and Dark Energy- comparison
			and significance in cosmology
7	007	Suvendu Siddheswar	A study of Olber's paradox and Modern Cosmology
		Lenka	
8	800	Subhasmita Panigrahi	A Study of Raman Effect and its Applications

9	009	Ritesh Kumar Pradhan	A Study of Radiation from Moving Charge: Larmor Formula
10	010	Pradeep Mahajan Dass	A Study of Grand Father Paradox
11	011	Alisha Upadhyaya	A Study of Bohmian Mechanics
12	012	Prasanna Kumar Sethy	A Study of Josephson Effect in Superconductors
13	013	Subhalaxmi Barik	A Study of Cerenkov Radiation
14	014	Chandan Malik	A Study of Dark Energy and Dark Matter-History
15	015	Sibanee Rout	A Study of Nucleosynthesis
16	017	Rakesh Kumar Mandal	A Study of Dark Energy and Dark Matter-Necessity
17	020	Kanhu Charan Hembram(B)	A Study of Dark Energy and Dark Matter-Modern experimental evidence
18	021	Balaram Baskey	A Study of The Simple and the Double Pendulum
19	022	Fagun Hembram	A Study of Dark Energy and Dark Matter
20	024	Chinmay Prasad Jena	A Study of Superconductor at High Temperature
21	025	Elina Rout	A Study of Simple, Compound and Double Pendulum
22	026	Pravat Kumar Behera	A Study of Maxwell's Demon-Theoretical formulations
23	027	Subrajit Puhan	A Study of Big Bang Cosmology
24	028	Biswajit Patra	A Study of Neutron stars, Quasars and Pulsars
25	030	Kanhu Charan Mallik	A Study of Strange Stars
26	031	Debasish Panda (Back)	A Study of Maxwell's Demon-Proposal & History
27	032	Rudra Narayan Nanda (Back)	A Study of Maxwell's Demon- Experimental issues
28	033	Debasish Hait	A Study of Schrodinger cat and EPR Paradox
29	034	Monalisa Jena	A Study of Entropy and Information-similarities
30	036	Sarat Chandra Panda	A Study of Optoelectronics Devices- future applications
31	037	Debi Prasad Jena	A Study of Black holes: Types, Metrics and Properties
32	038	Jagdish Chandra Dutta	A Study of Spacetime Curvature and Gauss Law in Newtonian Gravitation
33	039	Pabitra Kumar Sethy	A Study of
34	040	Bhakta Majhi	A Study of Types and Lives of Stars
35	041	Anjan Kumar Majhi	A Study of Olber's Paradox and Cosmology
36	043	Goutam Sahoo	A Study of Types and Lives of Stars
37	044	Puspanjali Sahoo	A Study of Entropy and Information

### UG Project dissertations supervised (2021)-44

Sl.	Roll	Name	Project Title
No	No		
1	5718	Pabitra Bal	A Study of Relationship Between Entropy and
	B001		Information
2	002	Swapna Manjari Parhi	A Study of Dark Matter and Dark Energy- Theoretical and
			Experimental findings
3	003	Satyabrata Nayak	A Study of Quantum Biology
4	004	Bhadratanu Sha	A Study of Quantum Zeno Effect
5	005	Biswajit Puhan	A Study of Different Types of Sensors in Modern World
6	006	Saisangita Mishra	A Study of Quark Gluon Plasma
7	007	Diptipragyan Sahoo	A Study of Liquid Crystals and Their Applications
8	800	Manas Ranjan Gahan	A Study of Nuclear Fusion
9	009	Sarojini Prusty	A Study of Entropy and Information

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37 038 Debidarshan Puhan A Study of Liquid Crystals and Applications	37	038	Debidarshan Puhan	A Study of Liquid Crystals and Applications
38 039 Jeeban Pradeep Sahoo A Study of Neutron Stars, Pulsars and Quasars	38	039	Jeeban Pradeep Sahoo	A Study of Neutron Stars, Pulsars and Quasars
39 040 Gouri Sankar Debata A Study of Black hole Thermodynamics	39	040	Gouri Sankar Debata	A Study of Black hole Thermodynamics
40 041 Chinmayee Behera A Study of Entropy and Information- applications	40	041	Chinmayee Behera	
41 042 Manoj Kumar Panda A Study of Black hole Thermodynamics	41	042	Manoj Kumar Panda	
42 043 Priyaranjan Behera A Study of Aerodynamics of Cricket Ball	42	043		
43 044 Ranjan Kumar Jena A Study of The Quantum Computer	43	044		
44 045 Ganesha Prasad Barik A Study of Dark Matter and Dark Energy	44	045		, ,

# UG Project dissertations supervised (2022)-18

Sl.	Roll	Name	Project Title
No	No		
1	5719	Soundariyabala Sahoo	A study of the evolutionary physics of lighting systems
	B002		

2	003	Ipsita Panda	A study of the concept and applications of Quantum
			entanglement
3	800	Rashmirekha Nayak	A study of the physics of human sensory perception
4	009	Pritisna Rout	A study of the origin and properties of Cosmic Microwave
			Background Radiation
5	010	Sritam Behera	A study of the physics of Large Hadron Collider (LHC)
6	012	Pradeep Kumar Sahoo	A study of geothermal phenomena and their implications
7	014	Malaya Ranjan	A study of the formation, properties and evolution of neutron
		Mohanty	stars
8	020	Baburam Tudu	A study of Hubble's law and its implications and applications in
			cosmology
9	022	Shankar Soy	A study of the landscape of post-relativistic cosmological
			models
10	025	Deepak Kumar Nayak	A study of the possible next generation of supernovae in Milky
			Way
11	029	Rutuparnna Jena	A study of inertial mass, gravitational mass and the
			equivalence principle
12	032	Ashutos Sahoo	A study of the evolution of the concept of entropy
13	033	Ajit Sukla	An exploration of theoretical and experimental progress in
			astrobiology
14	038	Anirudha Sutar	A study of the role of dark matter and dark energy in
			expanding universe scenario
15	040	Pullak Panda	A study of the causes and consequences of baryon asymmetry
			in the universe
16	041	Priyanka Jena	A study of the planetary properties in solar system with regard
			to Titius-Bode law
17	042	Sushree Sangita Nayak	A study of the proposal and falsification of Maxwell's demon
18	043	Swastilata Panigrahi	A study of entropy in relation to information and irreversibility

# **UG Project dissertations supervised (2023)-22**

Sl	Roll	Name	Project Title
No	No		,
1	5720	Buddhadev Jena	A study of household power supply network and modern household
	B004		wiring
2	005	Omm Pratik Dash	A study of the thermodynamics of the 4-stroke automobile engine
3	006	Jeeban Jyoti Sahoo	A study for verification of Kepler laws with latest planetary data
4	009	Rishikesh Biswal	A re-look at "The failed ether hypothesis"
5	010	Manoj Kumar Sethy	A study of the phenomenon of Ball lightning and its proposed explanations.
6	014	Ranjit Soy	A study of the developments in hundred years of wave particle duality and the progress of our understanding of nature
7	018	Suvam Adhikari	A study of the physically significant complex quantities in physics
8	019	Bhawani Sankar Rout	A study of the scientific history of understanding light: From Plato's emission theory to Feynman-Wheeler absorber theory.
9	025	B. Sai Suvam	An analysis of the possibility of heat death of the universe
10	026	Nabasarathi Sethi	A study of the theories and experiments on determination of velocity of sound
11	027	Shubhra Shubhankar Sahoo	A study of fractal dimensions in different systems
12	029	Satyanarayan Mohapatra	A study of the factors affecting variation of energy consumption in different blocks of Bhadrak Autonomous College.
13	032	Chandra Sekhar Pradhan	A systematic study of measurements and theories of velocity of light

14	033	Abinasha Nayak	A study of the evolution of the concept of atom from ancient Indian knowledge systems to the present-day physics era		
15	035	Kshyanaprava Sahoo	A study of Mach-Zender interferometer and its applications.		
16	037	Partha Sarathi Behera	A Study of Foucalt pendulum and its application		
17	038	Himanshu Sekhar Singh	An analysis of multipole expansion of potential and its uses in Physics up to the Octupole moment.		
18	041	Subhekshana Tripathy	A study of the methods of astronomical measurements		
19	042	Sarmistha Rout	A study of quantum mechanical spin and Bloch sphere representation		
20	043	Sushree Sangita Sethi	A study of variation of power consumption during last five years in Chudamani village of Bhadrak district		
21	044	Omkar Mishra	A study of the inflationary phase of Big-bang Cosmology		
22	047	Suraj Murmu	A comparative analysis of assembly, performance, advantages and disadvantages of analog and digital circuits in specific applications		

### **UG Project dissertations supervised (2024)-13**

Sl	Roll	Name	Project Title	
No	No			
1	5721 B002	Shruti Chetana	A study of the challenges faced by UG students in grasping Quantum mechanical Concepts	
2	003	Pradyumn a Ranjan Lenka	A study of the types of Vimanas described in Vaimanika sastra and their feasibility as per modern aviation technology	
3	004	Ananya Abhipsa Mallick	A study of the signatures of Inflationary phase in modern cosmology and the graceful exit problem	
4	005	Soumya Ranjan Behera	A study of the methods of calculation of temperatures of different astronomical objects	
5	006	A.S.K. Snehashish Behera	A Study of the Physics of Indian Musical Instruments (Non-stringed) as discussed by Sir C V Raman	
6	008	Tukuna Malik	A Study of Canonical Transformations and their applications	
7	011	Udeepta Narayan Sahoo	A Study of the agreements and departures of the geocentric astronomy of Siddhanta Darpana and Modern Astronomy	
8	015	Sanjukta Upadhyaya	A study of Gamma Ray Bursts (GRB): Classification of Sources and their Uses as Cosmological indicators	
9	029	Gyana Ranjan Jena	A Study of the Physics of Indian Musical Instruments (Stringed) as discussed by Sir C V Raman	
10	034	Priyabrata Jena	A study of Newtonian cosmology as a background for Modern Cosmology	
11	039	Dibyajyoti Jena	A study of factors determining galactic shapes, distribution and their dynamics	
12	040	Saipras anna Chaini	A comparative study of all the proposed cosmological models in 20 <sup>th</sup> century	
13	042	Ankita Panda	A Study of different types of Red shifts with their theoretical bases and Cosmological Applications	

### PG Project dissertations supervised up to 2024: 108

### **PG Dissertations supervised (2020)-31**

Sl.	Roll No	Name	Project Title
No			
1	10218B	Sushree Subhadarshini	A Study of Cellular Automata and game of Life
	001	Biswal	

2	002	Sibani Dash	A Study of Fullerenes
3	003	Lopamudra Giri	A Study of Dark Matter and Dark Energy
4	004	Subhashree Pothal	A Study of Black holes
5	005	Ansuman Sha	A Study of The Cosmological Constant
6	006	Adarsha Chandra	A Study of Density Functional Theory
		Puhan	
7	007	Mahima Priyadarshini	A Study of Superfluidity
		Sahoo	
8	008	Srutilisa Mohanty	A Study of Exotic Materials
9	009	Utkalika Choudhury	A Study of Neutron Stars, Pulsars and Quasars
10	010	Sipra Jyoti Parida	A Study of Neutron Stars, Pulsars and Quasars
11	011	Sangita Mohanty	A Study of Planck Scales
12	012	Sumitra Mohapatra	A Study of Maxwell's Demon
13	013	Debabrata Sahoo	A Study of Coherent States in Quantum Mechanics
14	014	Shraddha Suman	A Study of Schrodinger's cat
15	015	Laxmipriya Roul	A Study of Graphene
16	016	Kirti Chandra Panda	A Study of Planck Scales
17	019	Jitendranath Giri	A Study of Cosmic Microwave Background Radiation
18	020	Subhasmita Padhi	A Study of Coherent states and applications
19	021	Laxmipriya Nayak	A Study of Quantum Information and Computing
20	10318	Satyasarthak Senapati	A Study of Quaternions
	B001		
21	002	Swetalina Sahoo	A Study of Gravitational Waves & Introduction to Ligo
22	003	Madhusmita Khatua	A Study of CMBR: Cosmic Microwave Background
			Radiation
23	004	Pragnya Parimita	A Study of Fullerenes
		Mallick	
24	005	Jyotismat Raul	A Study of Cosmic Microwave Background Radiation
25	800	Debasis Patri	A Study of Quantum Random Walk
26	009	Subhadra Rout	A Study of Quantum Information and Computing
27	010	Bikash Kumar Nayak	A Study of Density Functional Theory
28	011	Sahin Parwin	A study of EPR Paradox & Quantum Entanglement
29	012	Pravat Kumar Das	A Study of Graphene and its Applications
30	013	Jyotshnarani Mohanty	A study of EPR Paradox & Quantum Entanglement
31	014	Subhrasmita Satapathy	A Study of Superfluidity

# **PG Dissertations Supervised (2021)-36**

Sl.	Roll No	Name	Project Title
No.			
1	10219B	Bandita Rout	A Study of Nuclear Fusion: Recent advances in
	001		India
2	002	Sunayak Jena	A Study of Higgs Boson
3	003	Sayan Itishree Panda	A Study of Nuclear Fusion for future energy
4	004	Bijay Laxmi Nayak	A Study of The Hubble Law
5	005	Dayanidhi Sankhua	A Study of Liquid Crystals and Applications
6	006	Manisa Barik	A Study of Liquid Crystals and Applications
7	007	Prangya Paramita Pagal	A Study of Quark Confinement and Assymptotic
			Freedom
8	800	Rajalaxmi Das	A Study of Stellar Evolution
9	009	Sonali Patra	A Study of Nuclear Fusion- Aspects of Tokamak and
			Plasma-aided fusion in Laboratory

011	Himanshu Tripathy	A Study of Entropy and Information- cosmological
013	Haranriya Parichha	perspectives A Study of Black hole Thermodynamics
		A Study of Nuclear Fusion research in India
014		A Study of Nuclear Lusion research in mala
015		A Study of BEC- New State of Matter
016	Sibashankar Mandal	A Study of Different Types of Sensors
017	Abhilash Jena	A Study of Dark Matter and Dark Energy- Recent
		advances
018		A Study of the Relation Between Time and Entropy
019	Nirlipta Mishra	A Study of Quantum Biology
020	Mitali Dutta	A Study of Dark Matter, Dark Energy and its Future
021	Reeturani Palai	A Study of Ghost Imaging Technique
022	Ankita Patri	A Study of Gravitational Waves and Their Detection
023	Sindhuja Priyadarsani	A Study of Different Types of Sensors and Their
	Biswal	Applications
024	Sangeeta Priyadarsani Sendha	A Study of Quantum Tunnelling
40319B	Pradeepti Dhal	A Study of Supersymmetric Quantum Mechanics
001		
002	Saumyashree Panda	A Study of Nuclear fusion in Stellar Interiors
003	Madhusmita Panigrahi	A Study of Gravitational waves: Detection and Significance
004	Hiramani Patra	A Study of Black hole Thermodynamics
006	Sushree Sangita Biswal	A Study of Higgs Boson and its Detection
007		A Study of Liquid Crystals and Their Applications
009	Gobinda Chandra Das	A Study of Higgs Boson: Detection and Significance
010	Debasish Pani	A Study of Stellar Evolution
011	Chinmaya Kumar Sahoo	A Study of Giant Magnetoresistance
012	Pravat Kumar Duari	A Study of Tachyons and Their Role in String Theory
014	Jayasmita Panda	A Study of Nuclear Fusion in Sun and its implications
015	Ananta Narayan Peda	A Study of Study of Growth of Epitaxial Thin Films
016	Subhashree Sahoo	A Study of Liquid Crystal and Its Applications
017	Pracheeprava Nayak	A Study of Different types of Sensors and Their Applications
	013 014 015 016 017 018 019 020 021 022 023 024 40319B 001 002 003 004 006 007 009 010 011 012 014 015 016	013 Harapriya Parichha 014 Prajnaparamita Priyadarsani Sahoo 015 Sagarika Sahoo 016 Sibashankar Mandal 017 Abhilash Jena  018 Shashikanta Kar 019 Nirlipta Mishra 020 Mitali Dutta 021 Reeturani Palai 022 Ankita Patri  023 Sindhuja Priyadarsani Biswal 024 Sangeeta Priyadarsani Sendha 40319B Pradeepti Dhal 001 002 Saumyashree Panda 003 Madhusmita Panigrahi  004 Hiramani Patra 006 Sushree Sangita Biswal 007 Rajanandini Behera 009 Gobinda Chandra Das 010 Debasish Pani 011 Chinmaya Kumar Sahoo 012 Pravat Kumar Duari 014 Jayasmita Panda 015 Ananta Narayan Peda 016 Subhashree Sahoo

# PG Dissertations supervised (2022)-15

Sl	Roll No	Name of the Student	Project title-Supervisor
No			
1	10320B001	Prakash Kumar Sethi	A study of Characteristics, Properties and Applications
			of Graphene
2	10320B002	Jagdish Chandra Dutta	A study of nucleosynthesis in Big bang cosmology
3	10320B005	Subhashree	A study of quark confinement and asymptotic freedom
		Subhasmita	in the standard model
4	10320B008	Sashikanta Das	A study of gravitational collapse and its consequences
5	10320B009	Elorarani Mohapatra	A study of the role of the Higgs boson in standard model
6	10320B010	Anupriya Mohanty	A study of cosmology in Indian Knowledge Systems

7	10320B013	Surya Narayan Pati	A study of experimental evidences of Big bang
			cosmology
8	10320B016	Debasish Hait	A study of the signatures and significance of QGP
9	10220B003	Santanu Kumar Behera	A study of quark properties and their experimental
			verification
10	10220B008	Jyotirmayee Mohanta	A study of the problems of Secondary school students in
			grasping physics concepts
11	10220B009	Debidatta Mahapatra	A study of Hadron production in heavy ion collisions
12	10220B014	Debiprasad Jena	A study of the classification of galaxies and black holes
13	10220B015	Satyabrata Jena	A study of stellar interiors
14	10220B017	Santanu Kumar	A study of neutrino oscillations
		Mohapatra	
15	10220B019	Swosti Swarupa Nayak	A study of Stellar evolution

# **PG Dissertations Supervised (2023)-16**

CI	E D - 11	N C (1	Title of the market
Sl.	Exam. Roll	Name of the	Title of the project
No.	No.	student	
1	10221B001	Debashrita Sethi	A Study of Aspects of Density Functional Theory
2	10221B002	Monalisa Prusty	The Jean's Instability and Resolution of Jeans Swindle In A
			Gravitating Gaseous Ball
3	10221B003	Tungabidya Behera	A Study of Fractal Structures In Nature And Their
			Dimensionality.
4	10221B005	Pabitra Bal	A Study of Einstein's Equivalence Principle And Its
-			Experimental Verification
5	10221B007	Lopita Rani Pati	A Comprehensive Study of Micro& Macroscopic Divisions of
		•	Spatio-Temporal Extents in Indian Knowledge Systems and
			Comparison with Modern Physics
6	10221B010	Nitismita Khandual	A Study of the Phenomenon of Schumann Resonance in Earth-
			Ionosphere System
7	10221B011	Rojalin Padhi	A Study of Misconception Related to Centrifugal and
			Centripetal Force In Ug Students.
8	10221B012	Subhashree	A Study of The Atmosphere as A Dynamic Physical System
		Priyadarsani	
9	10221B014	Ashutos Panda	A Study of the Origins Of 21 Cm Hydrogen Line and The
			Astronomical Value of The GMRT Project
10	10321B001	Jyotsnarani Malik	A study of the Legendre transformation of functions and
			their applications in physics
11	10321B002	Rashmita Jena	A study of the algebra and applications of tensors in
			physics
12	10321B004	Elina Rout	A Study of a Century of Neutrino Physics: From Pauli's
			Neutrino Hypothesis to The Indian Neutrino Observatory
13	10321B009	Laxmipriya	An analysis of the development of the concept of tensor
		Maharana	quantities and their properties
14	10321B010	Budheswar Kisku	A study of collective excitations in finite nuclei in Thomas
			Fermi model
15	10321B014	Tanmaya Behera	Role of relativistic mean field formalism in the study of
			finite and infinite nuclear matter.
16	10321B015	Jyoti Ranjan Sendh	A study of Cyclic cosmology in Indian knowledge
10	103210013	Jyou Kanjan Schull	systems.
			systems.

#### PG Dissertations Supervised (2024)-10

Sl.	Exam. Roll	Name of the	Title of the project
No.	No.	student	
1	10222B002	Sushree Prajna Elina	An investigation of the rediscovery of Vaimanika sastra and
		Priyadarsini	its criticism by the Scientific Community
2	10222B006	Srikant Pradhan	A study of the efficiency, longevity and cost- effectiveness
			of some popular electrical/electronic devices by different
			manufacturers
3	10222B009	Naziya Kadree	A study of the landscape of different Interpretations of
			Quantum Theory and their 4distinguishingCharacteristics
4	10222B010	Baisakhi Sahani	An investigation of the discovery of electricity described in
			ancient Indian Texts: The works of Dr. V.R. Kokatnur
5	10322B001	Priyadarshani Dhal	A Study of the Neutrino as a Majorana Fermion and its
			possible applications
6	10322B006	Bandana Guru	A study of the different theorems and conjectures
			concerning Black holes
7	10322B009	Sushanta Kumar	A Study of complete Tunnelling of acoustic phonons between
		Nayak	two piezoelectric crystals
8	10322B014	Tapaswini Padhy	A Study of the formation of event horizon and accretion
			disks in different types of black holes
9	10322B015	Salmarani Swain	A Study of the emerging technology of 3D printing
10	10322B016	Nirupama Pati	A Study of Chandrasekhar limit for White dwarfs and its
			extensions to neutron stars and quark stars

#### **Top TEN Career Highlights in different capacities**

- 1. Record number of Blood donations, Extension activities, Teak Plantations YRC Counsellor and engaging regular Yoga theory and Practical classes for all streams as OIC, YOGA (2004-10) Vikram Dev Junior College, Jeypore
- 2. Stream-lining of time table as OIC, Time table and all-round improvement of academic environment as Academic Bursar of Rajendra Junior College, Bolangir (2012-14)
- 3. Formulation of a comprehensive set of Hard Case Rules (HCR) for examinees as Deputy Controller of examinations, Rajendra Autonomous College, Bolangir (2013-14) and Setting up of a YOGA Hall for regular YOGA classes as OIC, YOGA
- 4. Member of the Internal Audit team (Financial, Administrative and Academic) of Rajendra Autonomous College, Bolangir for better performance of the College in the NAAC Accreditation
- 5. Setting up, for the first time, IQAC of Bhadrak Autonomous College, spearheading and contributing immensely to the College getting NAAC A+ grade in the second cycle (NAAC peer

- team visit from 06-02-2017 to 08-02-2017) as **IQAC Coordinator**. Also worked as **Coordinator AISHE** for Bhadrak Autonomous College, Bhadrak from 2018 to 2021.
- 6. Setting up, for the first time and running, a fully functional College website as OIC, College Website from 2015-2022 provided and maintained free by NIC
- 7. Instrumental and Pivotal Role in Opening of Postgraduate programs in Physics and Applied Physics (Self-financing) in 2018 in Bhadrak Autonomous College as Head, Department of Physics
- 8. More than 50 research publications and more than 100 presentations in seminars and conferences with *h*-index 9 and *i*10 index 8 are testimony to my research credentials. Getting profusely cited in the book "Quantum Mind and Social Science: Unifying Physical and Social Ontology" published by the Prestigious Cambridge University Press for my independent and original work on the interpretation of Quantum theory https://assets.cambridge.org/97811070/82540/index/9781107082540 index.pdf.
- 9. Four of my UG final year (2019) project students, currently pursuing Ph. D. degrees: (1) Soumyaranjan Sahoo-5716B 003, (2) Dhiren Panda-5716B019 (3) Bikram Kesari Behera-5716B022 and (4) Bijay Kumar Sahoo-5716B023 were awarded the prestigious Prime Minister's Research Fellowship (PMRF) in 2023-24 with their dissertations as supporting qualifying documents
- 10. Many students from Department of Physics, Bhadrak Autonomous College, Bhadrak have successfully cleared National level examinations like NET, GATE. JAM, JEST, CUET and CLAT and gone for higher studies since my assuming charge of HOD, Physics in 2014.

