


Title	Smt	First Name	K	Last Name	Madhuri	Photograph
Designation	Junior Lecturer					
Department	Physics					
Address	Govt. Women's College, Sambalpur					
Mobile	9439534582					
Email	kmadhuriphy@gmail.com					
Education	MSc, MPhil, NET					
Subject	Institution			Details		
M.Sc.	School of Physics, Sambalpur University			Specialization in Nuclear Physics		
M.Phil	School of Physics, Sambalpur University			A prelude to study the finite nucleus using finite range yukawa interaction		
Career Profile						
Organization/ Institution		Designation		Duration	Role	
V.S.S.U.T., Burla		Lecturer		2years	Teaching	
Govt. Women's College, Sambalpur		Junior Lecturer		8 years	Teaching	
Research/ Interests/ Specialization						
Nuclear Physics						
Teaching Experience (Subjects/ Courses Taught)						
10 years						
Publications: Articles / Book Chapter						
Sl. No.	Title	Authors		Name of Journal (Year of Publication) volume of journal : issue number (DOI)		
1.	Crustal moment of inertia of glitching pulsars with the KDE0v1 Skyrme interaction	K. Madhuri, D.N. Basu, T.R. Routray, and S.P. Pattnaik		Eur. Phys. J. A (2017) 53 : 151 (DOI 10.1140/epja/i2017-12338-x)		
2.	Influence of the nuclear matter equation of state on the r-mode instability using the finite-range simple effective interaction	S P Pattnaik, T R Routray, X Viñas, D N Basu, M Centelles, K Madhuri and B Behera		J. Phys. G: Nucl. Part. Phys. (2018) 45 : 119401 (https://doi.org/10.1088/1361-6471/aae142)		

3.	Addendum: Influence of the nuclear matter equation of state on the r-mode instability using the finite-range simple effective Interaction (2018 J. Phys. G: Nucl. Part. Phys. 45 055202)	S P Pattnaik, T R Routray , X Viñas, D N Basu, M Centelles, K Madhuri and B Behera	J. Phys. G: Nucl. Part. Phys. 4 https://doi.org/10.1088/1361-6471/aae1425 (2018) 119401 (6pp)
4.	Half-lives of proton emitters studied with the KDE0v1 Skyrme interaction	K Madhuri , D N Basu, T R Routray and S P Pattnaik	Indian J Phys(2020) https://doi.org/10.1007/s12648-020-01801-8 https://doi.org/10.1007/s12648-020-01801-8

Conference/ Presentations

Sl. No.	Title	Authors	Conference/Seminar
1.	Spin Polarized Nuclear Matter and Finite Nuclei with Simple Finite Range Effective Interaction	T. R. Routray, S. P. Pattnaik, K. Madhuri, T.M. Sahu and B. Behera	Proceedings of the DAE Symp. on Nucl. Phys. 59 (2014)
2.	Influence of nuclear matter fourth-order symmetry energy on neutron star crust-core phase transition	T. R. Routray, S. P. Pattnaik, X. Viñas, M. Centelles, K. Madhuri, B. Behera	Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 60 (2015)
3.	Importance of the fourth-order terms of energy in the Taylor series expansion on neutron star crust-core phase transition	S. P. Pattnaik, K. Madhuri	Souvenir and Proceedings of UGC sponsored national seminar on “Advances in physics During the Last Half century and its applications to society”, 96, (2016)
4.	Taylor expansion in the study of neutron star crust-core transition density	T. R. Routray, X. Viñas, D.N. Basu, S.P. Pattnaik, M. Centelles, L.M. Robledo K. Madhuri, B. Behera	Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 61 (2016)
5.	Validity of parabolic approximation in the study of crust-core transition density using skyrme interaction.	K. Madhuri, S.P. Pattnaik, T.R. Routray, D.N. Basu, and B Behera	Proceedings of the DAE-BRNS Symp. on Nucl. Phys. 61 (2016)
6.	Inner crust of neutron stars with mass-fitted Skyrme interaction	K. Madhuri, D. N. Basu, T. R. Routray, and S. P. Pattnaik	Proceedings of the DAE Symp. on Nucl. Phys. 62 (2017)
7.	Study of the effect of the slope parameter on the r-mode instability using Simple Effective Interaction	S. P. Pattnaik , T. R. Routray, X. Vinas, D. N. Basu, K. Madhuri and B. Behera	Proceedings of the DAE Symp. on Nucl. Phys. 62 (2017)

8.	Intensity of gravitational waves emitted by pulsar neutron stars due to r-mode oscillation	T. R. Routray, S. P. Pattnaik, X. Viñas, D. N. Basu, M. Centelles, K. Madhuri and B. Behera	Proceedings of the DAE international Symp. On Nucl. Phys. 63 (2018)
9.	Influence of transition density calculated by thermodynamical method and dynamical method on crustal fraction of moment of inertia of neutron star using $R\sigma$ and $G\sigma$ Skyrme interaction	K. Madhuri, T.R. Routray, D.N. Basu, and S.P. Pattnaik	Proceedings of the DAE international Symp. On Nucl. Phys. 63 (2018)
10.	Bulk viscosity of the neutron star matter under the influence of Direct URCA reactions	S. P. Pattnaik, X. Vinnas, D. N. Basu, M. Centelles, K. Madhuri, D. Behera, S. Pasayat, P. Bano and T. R. Routray	Proceedings of the DAE international Symp. On Nucl. Phys. 63 (2018)
11.	A review of populist schemes in India in 2015	K. Madhuri	Proceedings of National Seminar on “Rise of Populism in Contemporary India” (2019)
12.	The r-mode instability of the neutron star matter under the influence of URCA reactions	Routray T R, Pattnaik S P, Viñas X, Basu D N, Centelles M and K Madhuri	Proceedings of the DAE Symp. On Nucl. Phys. 64 576. (2019)
13.	Study of finite nuclei and spindown properties of newborn neutron stars using Finite range Simple effective interaction	P. Bano, S. P. Pattnaik, S. K. Tripathy, K. Madhuri, S. K. Padihari, and Z. Naik	Proceedings of the DAE Symp. On Nucl. Phys. 65 (2021)

Public Service/ University Service/ Consulting Activity/ College Committee members

1. NSS Programme officer
2. Associate OIC, Examination Section
3. Advisor, College Cultural association
4. Member Science Society
5. Member of Day Scholar Association

Professional Societies Memberships

1. Life member of Red Cross Society.
2. Life Member of Odisha Physical Society.

Other Details			
<i>Seminars, Conferences, Symposia Workshops, FDP etc., attended</i>			
Sl No.	Seminar/ Conference/ Workshop etc.	Name of the Sponsoring Agency	Place and Date
1.	59 nd DAE DAE-BRNS Symposium on Nuclear Physics	DAE	11-15 December 2007. School of Physics, Sambalpur University, Sambalpur, Odisha, India
2.	National Seminar On “Physics and Technology of Novel Materials”	School of Physics, Sambalpur University, Sambalpur, Odisha, India	25-27 February 2010 School of Physics, Sambalpur University, Sambalpur, Odisha, India
3.	Workshop on “Awareness Programme: Medical & Society Application Of Nuclear Physics”	School of Physics, Sambalpur University, Sambalpur, Odisha, India	26 March 2011 School of Physics, Sambalpur University, Sambalpur, Odisha, India
4.	Training Programme in Senior level on First Aid	Indian Red cross Society Odisha branch	18-20 September 2014 Rotary club, Sambalpur
5.	59 th DAE DAE-BRNS Symposium on Nuclear Physics	DAE	8-12 December 2014. Varanasi, India • BHU
6.	32 nd Annual Convention of Orissa Physical Society and National Seminar on Ballistics- A Multidisciplinary Physical Science	OPS	14-15 February 2015 Post Graduate Department of Applied Physics and Ballistics Fakir Mohan University, Vyasa Vihar, Balasore-756019, ODISHA (India)
7.	Workshop on “Teaching of Science”	Silicon, Sambalpur in collaboration with BPUT	07-08 May 2015 Silicon Institute of Technology, Sambalpur
8.	National level Workshop on “Inclusive Pedagogy for quality teaching in higher education	NAAC	08-09 August 2015 Govt. Women’s College, Sambalpur, Odisha, India

9.	National Seminar on “Gender Disparity & Development in India”	UGC	11-12 September 2015 Department of Geography, Home Sc. & Economics Govt. Women’s College, Sambalpur
10.	60 th DAE DAE-BRNS Symposium on Nuclear Physics(2015)	DAE	8-11 December 2015. SSSIHL, Prasanthi Nilayam-515134, AP, India.
11.	33rd convention of the Orissa Physical Society (OPS) along with a national seminar on "Recent Trends in Physics"	OPS	13-14 February 2016 Physics Department, Maharishi College of Natural Law, Saheed Nagar, Bhubaneswar-751007
12.	National Seminar on “Advances in the last half Century and its applications to society”	UGC	27-28 February 2016 G.M. (Auto) College, Sambalpur
13.	61 st DAE DAE-BRNS Symposium on Nuclear Physics(2015)	DAE	05-09 December 2016. SINP, Kolkata, India
14.	CNT Lectures on Special Topics in Nuclear Physics	Variable energy cyclotron Centre. Kolkata	01-11 March 2017 Variable energy cyclotron Centre. Kolkata
15.	62 nd DAE DAE-BRNS Symposium on Nuclear Physics	DAE	20-24 December 2017 Thapar Institute of Engineering and Technology (Deemed University), Patiala.India
16.	National Seminar on “Application of Nano and smart Materials”	School of Physics, Sambalpur University, Sambalpur, Odisha, India	23-24 February 2018 School of Physics, Sambalpur University, Sambalpur, Odisha, India
17.	63 rd DAE DAE-BRNS Symposium on Nuclear Physics (International)	DAE	09-14 December,2018 BARC, Mumbai, Maharashtra, India

18.	National Seminar on “Relevance of Gandhi in the Contemporary World”	Govt. Women’s College, Sambalpur, Odisha, India	11 January 2019 Govt. Women’s College, Sambalpur, Odisha, India
19.	National Seminar on “Influence of Mahatma Gandhi On Indian Literature”	Govt. Women’s College, Sambalpur, Odisha, India	10 November 2019 Govt. Women’s College, Sambalpur, Odisha, India
20.	National Seminar on “ The Srimad bhagvad gita in 21 st century”	Govt. Women’s College, Sambalpur, Odisha, India	20 February 2020 Govt. Women’s College, Sambalpur, Odisha, India
21.	National Seminar on “ Rise of Populism in Contemporary India”	Govt. Women’s College, Sambalpur, Odisha, India	7 December 2019 Govt. Women’s College, Sambalpur, Odisha, India
22.	Higher Secondary School Teachers Training Programme (Physics)	Higher Secondary education, Odisha	19-29 November 2021 Indian Institute of Science, Challakere Campus at Khudapura.
23.	65 th DAE -BRNS Symposium on Nuclear Physics	DAE	01-05 December 2021 BARC, Mumbai, Maharashtra, India