CURRICULAM VITAE

Name : **Dr. Swami Nandan**

PERSONAL PROFILE

1.**Date of Birth** : **18-09-1978**

2.Marital Status : **Married**

3.Address for Correspondence : **C-502, Anand Enclave Apartments, Kalibari Road Katihar, Bihar; 854105, India**

4.Permanent Address : **C/O Smt. Sandhya Rani Das, Tilkamanjhi, Bhagalpur, Bihar; 812001, India**

5.Nationality : **Indian**

6. E-mail : **swaminandan18@gmail.com**

7. Mobile Number : **9868626599, 8076496285**

Present Employment: Assistant Professor(Permanent; scale 11), Department of Physics, D. S. College, Katihar (A constituent college of Purnea University, Purnia).

TEACHING EXPERIENCE

1. I worked as a Lecturer at SGTB Khalsa College, University of Delhi; on Ad-hoc basis; Period :08-01-2005 to 07-04-2005; 18-10-2004 to 23-12-2004 ; 30-07-2004 to 30-09-2004;
2. Worked as Assistant Professor at Kirori Mal College, University of Delhi; on Ad-hoc basis; Period from 02-09-2009 to 30-04-2010;

3. Worked as Assistant Professor at Daulatram College, University of Delhi; on Ad-hoc basis ; Period from 03-11-2008 to 02-03-2009; and 05-03-2009 to 04-04-2009

4. Worked as a Assistant Professor in Maharaja Agrasen College, University of Delhi,from October 2010 to March 2018 with intermittent breaks.

ACADEMIC PROFILE:

S.N	Degree	University	Division	Year of Award
1.	**Ph.D** (Theoretical Physics) **Topic** : "Study of Pseudosymmetres and Generation of First Integrals in Analytical Mechanics"	Department of Physics and Astrophysics, University of Delhi	NA	2013
2.	**M.Sc** (Physics)	Department of Physics and Astrophysics, University of Delhi	IInd Div. (56.1%)	2002
3.	**B.Sc** (Honours) in Physics	Tilkamanjhi Bhagalpur University, Bhagalpur	1st Div. (74.88%)	1999

Ph.D (Physics) from **Department of Physics and Astrophysics, University of Delhi**

Title: Study of Pseudosymmetries and Generation of First Integrals in Analytical Mechanics;

Salient features of Ph.D. research work :

The study focussed on Nambu mechanics, a new approach to classical dynamics based on an N-dimensional Nambu-Poisson structure replacing the primitive even-dimensional Poisson one and on N-1 Hamiltonians in place of a single Hamiltonian. While Nambu originally considered N=3, we have been successful in elaborating the idea for higher N values. We have shown that classical description of systems having dynamical symmetries is described elegantly by Nambu's formulation of mechanics. By making a judicious choice for the extra constants of motion, the dynamical system can be cast in beautiful canonical form as originally conjectured by Nambu .

ACADEMIC EXCELLENCE

Qualified UGC-CSIR NET : NET with JRF in Physical Sciences; Certificate No : F.No: 2-48/2001/(II) EU.II

RESEARCH PUBLICATIONS:

1. Canonical form of Nambu- Poisson bracket: A pedestrian approach; **Pramana-Journal of Physics**; Year :2011; Volume : 77; Page : 1105-1117; **ISSN: 0304-4289**; First and Principal/Corresponding author;

2. Nambu Mechanics, Integrating factor and Multi Hamiltonian Systems; **Vidyawarta**; Year: 2022; Volume: 08; Page :58-61; **ISSN : 2319-9318**; Single Author

3. A Short Review On Solar and Jovian Radio Emission; International Journal of Engineering Research and Applications; Year :2023; Volume 13;Page 129-135; **ISSN :2248-9622**; Joint Author

OTHER PUBLICATIONS:

1. Authored a book on **'Some Aspects of Nambu Mechanics'** ; Vaishnavi Publication, Delhi, India; ISBN: 8193072480

2. Co-Editor of book 'Academic **and Activist Perspectives on Biodiversity and Climate Change, Vol.1**' 2017; Book Age Publications, New Delhi; ISBN : 978-93-83281-43-5

3. Co-Authored article " Clean Development Mechanism (CDM) : A Sustainable Solution" in the book '**Academic and Activist Perspectives on Biodiversity and Climate Change, Vol.1**' 2017; Book Age Publications, New Delhi; ISBN : 978-93-83281-43-5.

CONFERENCES :

1. Presented Research paper at National Conference on Inspired Learning at Maharaja Agrasen College, University of Delhi, Delhi in October,2015; Research Paper Titled 'Shift from Fossil Fuel to Renewable Sources of Energy for Sustainable Development: The Smart Ways' Published in International Journal for Scientific Research and Development;

2. Presented Research paper at National Conference on Recent Trends in Physics held at Purnea University, Purnia in December, 2022; Titled "Nambu Mechanics :A New Mechanics"

COURSES ATTENDED:

1. I have attended Orientation Course (129^{th}) at UGC- HRDC, Pondicherry University, Pondicherry held from 25^{th} July to 14^{th} August, 2019 (Grade :A).

2. Attended Refresher Course in Physics at UGC-HRDC, Gujarat University, Ahmedabad o 04^{th} July, 2022 held from 21^{st} June ; (Grade :A).

3. Attended Faculty Develoment Programme (FDP) on **'Research Methodology'** organized by

Teaching Learning Centre, Ramanujan College, University of Delhi from 1st October to 15th October, 2020 (Grade :A)..

4. Attended National One Week Faculty Training Programme (FTP) on **'Pedagogical Training for Effective Online Teaching and Learning'** organized by Deen Dayal Upadhaya College, University of Delhi in association with K.T.H.M. College, Nashik from 3rd to 10th August, 2020.

OTHER RESONSIBILITIES (academic/administrative) :

I was a Member of Organizing Committee that successfully organized National Conference on Biodiversity & Climate Change (Ist,2nd,3rd,4th,5th) for five consecutive years at Maharaja Agrasen College, University of Delhi. I was Member, Organizing Committee for National Youth Parliament held at Maharaja Agrasen College which bagged fifth rank throughout the country and was awarded for the same. I was Programme Officer of **N.S.S** at my present organisation and also the Sports in-Charge. I am also the convener of the 'Environment Commmittee' I have contributed my mite in giving a fillip to the overall sports culture in my present organization. As a member of college' NAAC team I helped prepare "Self Study Report" (SSR) of my present college.

VISION STATEMENT :

I believe in close teacher student interaction, where learning is a two way process. It involves engaging with them in the charged atmosphere of classroom and outside of it. While lucid presentation of the topic is a sine-qua-non for eliciting interest in the subject, involving them through various activities and making them think deeply and applying the learnt material into logical use is how I plan to create an innovative learning environment. I have experimented with an idea called " The wall of physics " in my present department wherein student writes the keyword after learning a concept thoroughly.

DECLARATION :

I hereby declare that all the above mentioned information is true to the best of my knowledge.

(Dr Swami Nandan)