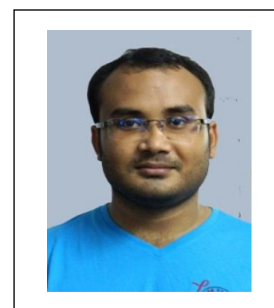


CURRICULUM-VITAE

Sujay Kumar Nayek
 E-mail: sujay_nayek@yahoo.com
 Mob: +91-7679302564

**Personal details:**

Name : DR. SUJAY KUMAR NAYEK
Father's Name : Swapan Nayek
Mother's Name : Arunamayee Nayek
Sex : Male
Date of Birth : 11th January, 1986
Nationality : Indian
Language Proficiency: Bengali, English & Hindi (Read, Speak, and Write)
 Hindi (Read and Speak)

Present Status:

- At present I am working as an Assistant Professor at the Department of Mathematics, Netaji Nagar Day College, Netaji Nagar, Kolkata 700092, West Bengal. Joining Date- 21st March, 2017.

Educational Qualifications:

Degree	Year	Board / University	Subjects Taken
Post Doctoral Experiences (NBHM)	From 1 st Dec,2014 to 20 th March,2017	The University of Burdwan	Quantum Mechanics
Ph.D. Degree	22 nd January, 2015	The University of Burdwan	Mathematics
Ph. D. Course work Examination	2011	The University of Burdwan	Mathematics
NET (JRF)	Dec, 2009	C.S.I.R.	Mathematical Sciences
M.Sc.	2008	The University Of Burdwan	Mathematics Sp. Paper: Quantum Mechanics
B.Sc. Hons.	2006	Katwa College, Katwa The University Of Burdwan	Mathematics (Hons.) Pass: Ben,Eng,Phys., Chem.,Env. Sc.
Higher Secondary (Class 12th)	2003	W. B. C. H. S. E.	Ben, Eng,Math,Phys,Bios,Chem

Madhyamik Pariksha (Class 10 th)	2001	W. B. B. S. E.	Ben,Eng,Math,Phys. Sc.,Life Sc,Geo,Hist
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Computer Skills:

- Expertise in **LaTeX** typing and also in **Bangla word, Avro.**
- Competent in **FORTRAN 77, Origin, Wolfram Mathematica, Microsoft Word, Excel, Power Point.**
- Familiar with **DOS, Windows, Linux** Operating systems.

Achievements:

- **GATE** qualified in the year 2010, All India Rank 209.
- **NET** qualified in the year 2009.

Teaching Experience:

- I served Katwa College (under The University of Burdwan) as a **Part-time Lecturer** in Mathematics from **10.01.2009** to **30.9.2010**, total 1year 8 months and 20 days.

Research Experience:

Ph.D. & Post Doctoral Supervisor: Prof. Arijit Ghoshal

Department of Mathematics,
The University of Burdwan
Burdwan, West Bengal, India
E-mail: arijit98@yahoo.com

- From 8th October, 2010 to 7th October, 2012 as **Junior Research Fellow (UGC).**
- From 8th October, 2012 to 7th April, 2014 as **Senior Research Fellow (UGC).**
- From 1st December, 2014 to 20th March,2017, as **Post Doctoral Fellow** (under **National Board for Higher Mathematics** Post Doctoral Fellowship)

Area & Topic of Research:

- In the area of **Atomic and Molecular Physics.**
- Interested in **Bound State Problems, Multi-Electron Systems, Atomic Collisions.**
- Title of My Ph.D. Thesis: **Dynamics of positron scattering from hydrogen atom with screened Coulomb interactions.**
- Area of post doctoral research work: **Atomic collision phenomena under plasma environment.**
- New Project: **Studies on the positron-alkali atoms collision process in Debye plasma environments**

Publications:

Papers Published in International Journals: 8

1. $ns \rightarrow n's$ transition of hydrogen atom by positron impact with screened Coulomb interactions :
Sujay Nayek and Arijit Ghoshal (2011), *Euro. Phys. J. D* **64**, 257–268
(Publisher: Springer, 2011 Impact Factor: 1.476)

2. **Dynamics of $e^+ + H(ns) \rightarrow e^+ + H(n's)$ with exponential cosine-screened Coulomb potentials :**
Sujay Nayek and Arijit Ghoshal (2012) , *Physica Scripta* **85**, 035301
(Publisher: Institute of Physics Publishing Ltd., U.K., 2011 Impact Factor: 1.204)
3. **Dynamics of positronium formation in positron-hydrogen collisions embedded in weakly coupled plasmas :**
Sujay Nayek and Arijit Ghoshal (2012) , *Physics of Plasmas* **19**, 113501
(Publisher: American Institute of Physics, 2012 Impact Factor: 2.376)
4. **Dynamics of $e^+ + H(ns) \rightarrow Ps(n's) + p$ in dense quantum plasma:**
Sujay Nayek and Arijit Ghoshal (2013) , *Physica Scripta* **88**, 045301
(Publisher: Institute of Physics Publishing Ltd., U.K., 2011 Impact Factor: 1.204)
5. **Positron scattering from hydrogen atom with screened Coulomb potentials**
Arijit Ghoshal, **Sujay Nayek**, M. Z. M. Kamali and K. Ratnavelu(2014)
AIP Conf. Proc. **1588**, 94
(Publisher: AIP Publishing)
6. **Formation of \bar{H} in $\bar{p} - Ps$ collisions embedded in plasmas**
K. Ratnavelu, A. Ghoshal, **Sujay Nayek** , A. Bhattacharya, M. Z. M. Kamali (2016)
Euro. Phys. J. D, 70: 80, DOI: 10.1140/epjd/e2016-60730-8, ((Publisher: Springer,
Impact Factor: 1.208)
7. **Scaling law for asymptotic cross section: Electron-hydrogen collisions**
Sujay Nayek and Arijit Ghoshal (2016) *Chinese Journal of Physics* **54**, 659 (Publisher:
Elsevier, Impact Factor: 0.464)
8. **Electron transfer in proton-hydrogen collisions under dense quantum plasma**
Sujay Nayek, Arka Bhattacharyya, M. Z. M. Kamali, Arijit Ghoshal and K. Ratnavelu
EPJ D 71:234 (2017) (DOI: 10.1140/epjd/c2017-80022-1) (Publisher: Springer, Impact
Factor:1.208)

Conferences / Seminars Attended / Participated:

	International (Number)	National (Number)	State/University (Number)
Paper Presented	4	4	0
Participated	1	2	1

Paper Presented:

1. **National Seminar On Mathematics & Applications (NSMA-2011)**
Organized by Department Of Mathematics, The University Of Burdwan
Title of the paper: Effects of screening on the differential cross section for
 $e^+ + H(ns) \rightarrow e^+ + H(n's)$ with screened Coulomb potentials
Sujay Nayek & Arijit Ghoshal
2. **National Seminar On Analysis Of Nonlinear Systems (ANS-2011)**

- Organized by Department Of Mathematics, Siksha Bhavana, Visva-Bharati,
Santiniketan
Title of the paper: $e^+ + H(ns) \rightarrow e^+ + H(n's)$ embedded in weakly coupled plasmas.
Sujay Nayek & Arijit Ghoshal
3. **National Seminar On Advances in Mathematics & Applications (AMA-2013)**
Organized by Department Of Mathematics, The University Of Burdwan
Title of the paper: Positronium formation in positron-hydrogen collisions embedded in dense quantum plasma
Sujay Nayek & Arijit Ghoshal
 4. **3rd International Conference On Frontiers Of Mathematics and Applications-2014 (ICFMA-2014)**
Organized by Department Of Mathematics, The University Of Burdwan
Title of the paper: Effects of screening of dense quantum plasmas on positronium formation in positron-hydrogen collisions
Sujay Nayek & Arijit Ghoshal
 5. **International Conference On Emerging Trends in Applied Mathematics-2014**
Organized by Department Of Applied Mathematics, University Of Calcutta
Title of the paper: Elastic $e^+ \rightarrow H$ collisions with screened Coulomb potentials
Sujay Nayek & Arijit Ghoshal
 6. **International Conference on Applications of Mathematics in Topological Dynamics, Physical, Biological and Chemical Systems (ICAMTPBCS-2016)**
Organized by Calcutta Mathematical Society, Kolkata, December 09-11, 2016
Title of the paper: Scattering of electron from hydrogen atom: asymptotic cross section and scaling law.
Sujay Kr. Nayek & Arijit Ghoshal
 7. **National Seminar On Recent Advances in Computational Mathematics (RACM-2016)**
Organized by Department Of Applied Mathematics, University Of Calcutta, December 27-29, 2016
Title of the paper: Charge transfer in proton-hydrogen collisions under dense quantum plasma.
Sujay Kr. Nayek & Arijit Ghoshal
 8. **International Conference On Mathematics and its Applications**
Organized by Department Of Mathematics, The University Of Burdwan, February 15-17, 2018
Title of the paper: Dynamics of with exponential cosine screened Coulomb potential
Sujay Kr. Nayek

Participated:

- Participated in the **National Seminar on Mathematics & Applications (NSMA-2012)** organized by the Department of Mathematics, The University Of Burdwan during March 28-29, 2012.
- Participated in the **10th Micro Seminar on Nonlinear Phenomena** organized by the Department of Mathematics, The University Of Burdwan on July 27, 2012.
- Participated in the one day seminar **Colloquium on the lives and works of Sir Asutosh Mookerjee and Acharya Brajendra Nath Seal: A Retrospective Endeavour** organized by the Department of Mathematics, The University Of Burdwan on 26th March, 2014.
- Participated in the **International Conference on Recent Trends in Mathematical Sciences and Applications (ICRTMSA-2016)** organized by the Department of Mathematics, The University Of Burdwan on 9th February, 2016.

Workshops:

- Teachers' Enrichment Workshop in Mathematics for College and University Teachers during June 15-29, 2017 at Asutosh Bhavan, CMS Building, AE374, Salt Lake (Sector-I), Kolkata64 in collaboration with the (India) Mathematics Consortium (TMC), Pune and Department of Mathematics, Raigang University,W.B, Organized by Calcutta Mathematical Society.

Research Websites:

- **Google Scholar:** <https://scholar.google.co.in/citations?user=N8KsD5wAAAAJ&hl=en>

Citation indices	All	Since 2013
Citations	88	84
h-index	5	5
i 10-index	4	4

- **Research Gate:**
https://www.researchgate.net/profile/Sujay_Nayek

Membership:

- I have life membership in **Calcutta Mathematical Society** (wef. 27/5/2014).
- Life membership at Calcutta Institute of Theoretical Physics (Membership Number 125, wef March, 2017)

Declaration & Signature:

I hereby declare that the information provided in this document is genuine and trustworthy to the best of my knowledge.



Date: 21/07/2018

Place: Kolkata

(Dr. Sujay Kumar Nayek)

Assistant Professor
Department of Mathematics
Netaji Nagar Day College
Netaji Nagar, Kol 92