

FACULTY MEMBERS' ACADEMIC PROFILE

1. **Name of the Faculty member:** BISHWAJIT PAUL
2. **Designation:** Assistant Professor in Physics (W.B.E.S.)
3. **Qualification:** Ph.D. (Burdwan University)
4. **Specialization:** Radio Physics and Electronics
5. **E-mail address:** bishwajitkgc@gmail.com
6. **Date of Joining in W.B.E.S.:** 08.06.2009
7. **Date of Joining in this College:** 08.06.2009
8. **Total Teaching experience in College level:** 15+ years
9. **Research interests:** Nonlinear dynamics and Chaos
10. **Title of thesis (Ph.D.) with year:** “Studies on the dynamical behavior of isolated and spatially extended digital phase-locked loops and related problems”, 2019.
11. **Research guidance:** Nil
12. **Research Projects (Completed and ongoing):** Nil
13. **List of publications:**

**A) Published papers in Journals:**

1. “Bifurcation, Chaos and their Control in a time-delay digital Tanlock Loop”, T. Banerjee, **B. Paul** and B. C. Sarkar, *International Journal of Bifurcation and Chaos*, **2013**, 23 (8), 1330029 (19pages) [ISSN 0218-1274; **IF: 2.836**].
2. “Spatiotemporal dynamics of a digital phase-locked loop based coupled map lattice system”, T. Banerjee, **B. Paul** and B. C. Sarkar, *Chaos*, **2014**, 24, 013116 [ISSN 1054-1500; **IF: 3.642**].
3. “Spatiotemporal Dynamics of a Network of Coupled Time-Delay Digital Tanlock Loops”, **B. Paul**, T. Banerjee and B. C. Sarkar, *International Journal of Bifurcation and Chaos*, May, **2016**, Vol. 26, No. 5, 1650076 (17 pages) [ISSN 0218-1274; **IF: 2.836**].
4. “Chimera in digital phase-locked loops”, **B. Paul**, and T. Banerjee, *Chaos, Jan*, **2019**, 29, 013102; American Institute of Physics. [ISSN 1054-1500; **IF: 3.642**].
5. “Nonlocal time-delayed feedback control of spatiotemporal patterns: Controlling a network of digital phase-locked loops”, **B. Paul** and T. Banerjee, *Nonlinear Dynamics*, Feb, **2019**, Vol. 96; no. 2, pp 811–823 [ISSN 0924-090X; **IF: 5.022**].
6. “Networks of coupled time-delay digital tanlock loops: chimera and other emergent spatiotemporal dynamics”, **B Paul**, and T Banerjee, *Nonlinear Dynamics*, Sept, **2020**, Vol 101; pp 2343–2356, [ISSN 0924-090X; **IF: 5.022**].
7. “Time-delayed feedback control of spatiotemporal dynamics in a network of digital phase-locked loops”, **B Paul**, *Science and Culture*, Vol. 89, No. 11-12 Page 406-410, Nov-Dec 2023 [ISSN:0036-8156].

B) Conference Proceedings:

1. “Chaos and Bifurcation in a Time Delay Tanlock Loop”, T. Banerjee, **B. Paul** and B. C. Sarkar, *Proceedings of the International Conference on Laser, Material Science & Communication (ICLMSC-2011)*, Department of Physics, The University of Burdwan, 7-9th December, **2011**, 305-308 [ISBN 978-93-80813-14-1].
2. “Range Extension of a Time Delay digital Tanlock Loop by Time-Delayed Feedback Control Method”, T. Banerjee, **B. Paul** and B. C. Sarkar, *Proceedings of the National Conference on Material Device and Circuit in Communication Technology (MDCCT-2012)*, Department of Physics, The University of Burdwan, 6-7th February, **2012**, 97-100 [ISBN 978-93-80663-36-4].

14. Membership of Learned Societies/ Editorial Boards, etc.: Nil

15. Patents: Nil

16. Awards: Nil

17. Other notable activities: Nil

18. A) Participation in Seminars/Symposia/Conferences/Workshops:

1. **Presented a paper** entitled “*Chaos and Bifurcation in a Time Delay Tanlock Loop*” in the **International Conference** on ‘*Laser, Material Science and Communication (ICLMSC-2011)*’, organised by Department of Physics, University of Burdwan on **7th -9th December, 2011**.
2. **Presented a paper** entitled “*Range Extension of a Time Delay Digital Tanlock Loop by Time-Delayed Feedback Control Method*” in the **National Conference** on ‘*Materials, Devices and Circuits in Communication Technology*’, organised by Department of Physics, University of Burdwan on **6th -7th February, 2012**.
3. **Presented a Poster** entitled “*Digital Phase-locked Loop Based Coupled Map Lattice System*” in the **4th International Conference** on ‘*Complex Dynamical Systems and Applications (CDSA-2016)*’, organised by Department of Mathematics, National Institute of Technology, Durgapur, on **15th -17th February, 2016**.
4. **Presented a Paper** entitled “Modeling of Complex Network of Digital Phase-locked Loops and the Emergent Spatiotemporal Patterns” in the interdisciplinary **international web seminar** on “Modern trends in Humanities, Science & Technology and Social Sciences for Sustainable Development”, organised by A. P. C. Roy Govt. College, Himachal Vihar, Matigara, Siliguri-734010, WB, on **23rd -24th September 2021**.
5. **Presented a Paper** entitled “Spatiotemporal patterns in a network of digital phase-locked loops and their control by nonlocal time-delayed feedback technique” in the **National Conference** on “Material Science, Nanomaterials and its applications in Biological Sciences (MSNBS-2023)”, organised by the Department of Physics, Durgapur Government College, Durgapur-713214, on **1st, March 2023**.
6. **Presented a Paper** entitled “Diverse chimera patterns in the networks of digital on phase-locked loops” in an **International Conference** on “Nonlinear Dynamics and its Applications in Physical and Biological Sciences (NDAPBS-23)”, organised by the “Department of Physics and the Department of Mathematics”, Durgapur Government College, 713214, on **16th -18th, March 2023**.
7. **Presented a Paper** entitled “Complex networks modeling with time-delayed digital tanlock loops and the emergent chimera patterns” in the **National Conference** on “Recent Trends in Sciences” organised by “Fakir Chand College”, Diamond Harbour-743331 on **28th April 2023**.

B) Participation in OP/RC:

1. Participated in the UGC sponsored **Orientation Programme** (91st OP), organised by Academic Staff College, University of Burdwan from **04th to 31st July, 2013**.
2. Participated in the UGC sponsored 6th **Refresher Course** on '*ICT*', organised by Academic Staff College, University of Burdwan from **26th November to 16th December, 2014**.
3. Participated in the UGC sponsored **Refresher Course** on 'Environment and Sustainability', organised by UGC-Human Resource Development Centre, the University of Burdwan from **3rd to 16th January, 2020**.
4. Participated in the UGC sponsored **Refresher Course** on 'Nano-science, Nano-technology and Applications', organised by UGC-Human Resource Development Centre, the University of Burdwan from **1st to 14th December, 2022**.