

BIO-DATA



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| NAME | SAUMEN CHAKRABORTY |
| FATHER NAME | SANTIMOY CHAKRABORTY |
| ADDRESS with CONTACT | “ANANDA NIKETAN”, KACHUBAGAN, PALPARA, 1NO. MOHISHILA COLONY, ASANSOL- 713303. Email- saumenbcc@gmail.com |
| ACADEMICS | M.Sc, Ph.D |
| TEACHING EXPERIENCE | 11 Years and above (i) 2004 to 2007 in PG Dept. of B.B.College, Asansol as Guest Lecturer. (ii) 2008 to till date in UG at B.C.College, Asansol, as Permanent Faculty. (iii) September, 2015 to January, 2016 in PG Dept. of KNU, Asansol as Guest Faculty. |
| TEACHING ACTIVITIES | UG: GPM, Electrodynamics, Electronics, Quantum Physics, Nuclear Physics etc. PG: Nuclear Physics, Mathematical Methods, Experiment related theory, Computer programming and numerical analysis etc. |
| RESEARCH EXPERIENCE | 06 yrs and above |
| RESEARCH AREA | Circuits & Systems, Nonlinear dynamics & Chaos in Electronic circuits, PLL etc. |
| Scholarship | Scholarship (in M. Sc.) |
| Membership | Life member of IETE |
| Other activity | Reviewer of 1. International Journal of Electronics (Taylor & Francis) 2. International Journal of Circuit Theory and Applications (Wiley) 3. International Journal of Dynamics and Control (Springer) |
| List of Publications | Please see annexure - I (Book Chapter-1, Journal - 09, Conference -11) |

Annexure – I List of Publications

Book Chapter:

B. C. Sarkar, S. Sarkar, **S. Chakraborty** "*Unstable PLL-Controller as FM Modulator and Detection of Modulating Self-Oscillations*", Springer Book edited by Dr. Sundarapandian Vaidyanathan and Dr. Christos Volos Manuscript ID: 2015-B1-SCI-Control-C17

Series: Studies in Computational Intelligence (SCI)

Book Title: Advances and Applications in Nonlinear Control Systems

Journal Publications:

1. **S. Chakraborty** "*Creation of Oscillation Death from Amplitude Death in Non-Identical Dual Channel Coupled Chua Circuit*" Volume 4 - Issue 1(No-1) (85 - 91) - January - February 2018, International Journal of Engineering and Techniques (IJET) , ISSN: 2395 - 1303. DOI 10.29126/23951303/IJET-V4I1P13 [**IF-0.797(GIF)**]
2. S S De Sarkar, **S Chakraborty**, "*Nonlinear dynamics of a class of derivative controlled Chua's circuit*", International Journal of Dynamics and Control (Springer), Volume **26**, Issue **11**, **June** 2017, Pages 129-140. DOI 10.1007/s40435-017-0346-2[**UGC approved, SNIP-0.957**]
3. **S Chakraborty** , M Dandapathak, B C Sarkar, "*Oscillation quenching in third order phase locked loop coupled by mean field diffusive coupling*", Chaos (AIP), Volume **26**, Issue **11**, **Nov** 2016, First Page 113106. [**UGC approved, IF-2.415**]
4. **S Chakraborty** , B C Sarkar, "*Enhanced Dynamical Response of Derivative Controlled Third Order Phase Locked Loops*", Communication in Nonlinear Science and Numerical Simulation (CNSNS) (Elsevier) Volume **36**, Issue **C**, **Nov** 2016, Pages 129-140. [**UGC approved, IF-3.181**]
5. B. C. Sarkar, **S. Chakraborty** "*Chaotic Oscillations in a Third Order PLL in the Face of Two Co-Channel Signals and Its Control*", Journal of Engineering Science and Technology Review 8 (2) (2015) 68 – 73 , Special Issue on Synchronization and Control of Chaos: Theory, Methods and Applications. ISSN: 1791-2377. [**UGC approved**]
6. **S Chakraborty** , B C Sarkar, "*Synchronization Response of an Indirectly Coupled Nonlinear Digital Resonator -A Simulation Study*", American International Journal of Research in Science, Technology, Engineering & Mathematics (AIJRSTEM), Issue 6, Volume 1, pp. 83-91, March-May, 2014
7. B C Sarkar, **S Chakraborty**, "*Self-oscillations of a third order PLL in periodic and chaotic mode and its tracking in a slave PLL*", Communication in Nonlinear Science and Numerical Simulation (CNSNS) (Elsevier) , Volume 19, Issue 3, March 2014, Pages 738–749 <http://dx.doi.org/10.1016/j.cnsns.2013.07.003>[**UGC approved, IF-3.181**]

8. **Saumen Chakraborty** and Bishnu Charan Sarkar, “*Dynamics of a nonlinear digital resonator in free running and injection synchronized mode: A simulation study*”, International Journal of Engineering and Advanced Technology (IJEAT), ISSN: 2249 – 8958, Volume-1, Issue-6, pages 94- 98, August 2012. [**UGC approved, IF-5.85**]
9. Bishnu Charan Sarkar, **Saumen Chakraborty**, “*Chaotic Dynamics of a Third Order PLL with Resonant Low Pass Filter in Face of CW and FM Input Signals*”, ACEEE Int. J. on Communications, ISSN 2158-7558, Vol. 03, No. 01, pages 62- 66, DOI: 01.IJCOM.3.1.6, March 2012.

Conference Publications:

1. **S. Chakraborty**, “*Effect of additional direct coupling on the hysteresis loop of mean field diffusively coupled oscillators*”, National Seminar On Recent Trends in Physics (NSRTP-2019), Department of Physics, Bidhan Chandra College, Asansol, 713304, India, January 19, 2019 (**Abstract Only**).
2. Manaj Dandapathak and **S. Chakraborty**, “*Studies on Nonlinear Dynamics of optical Costas Loop Having High Frequency Gain*”, National Conference On Nonlinear Dynamics and its applications (CNDA-16), Department of Physics, Durgapur Govt. College and Michael Madhusudan Memorial College, Durgapur, 713214, India, February 07-09, 2017 (**Abstract Only**).
3. **S. Chakraborty** and S. S. De Sarkar, “*Regeneration of Oscillation in Chua Circuit under mean field diffusive coupling using derivative control*”, National Conference On Nonlinear Dynamics and its applications (CNDA-16), Department of Physics, Durgapur Govt. College and Michael Madhusudan Memorial College, Durgapur, 713214, India, February 07-09, 2017 (**Abstract Only**)
4. **S.Chakraborty** , B.C.Sarkar, “*Effect of additional time delay on the dynamics of a class of third order Phase Locked Loop* ”, National Conference on Materials, Devices and Circuits in Communication Technology 2016(MDCCT 2016), IETE Burdwan Sub Centre and Department of Physics, The University of Burdwan, Burdwan, West Bengal, February 19 - 20, 2016. **ISBN 978-93-80663-20-3**
5. **S.Chakraborty** , B.C.Sarkar, “*Indirect Synchronization Response of a Nonlinear Digital Resonator -A Simulation Study*”, National Conference on Materials, Devices and Circuits in Communication Technology 2014(MDCCT 2014), IETE Burdwan Sub Centre and Department of Physics, The University of Burdwan, Burdwan, West Bengal, February 7 - 8, 2014. **ISBN 978-93-80663-20-3**
6. **Saumen Chakraborty** , Bishnu Charan Sarkar, “*Generalized Synchronization of chaos in third order PLL*”, National Conference on Materials, Devices and Circuits in Communication Technology 2012(MDCCT 2012), IETE Burdwan Sub Centre and

Department of Physics, The University of Burdwan, Burdwan, West Bengal, February 6 - 7, 2012. ISBN 978-93-80663-36-4

7. Bishnu Charan Sarkar, **Saumen Chakraborty**, “*Nonlinear Dynamics of a Class of Third Order PLLs with CW and FM Input Signals*”, International Conference on Engineering Education in the New Century (E2NC-2012), February 03 -04, 2012. ISBN 978-93-80663-35-7
8. B. C. Sarkar, D. Sarkar, **S. Chakraborty**, P. Sarkar and J. Mondal, “*Study on Chaos-Synchronization in a PLL System*”, National Conference on Information, Communication and Intelligent Systems (IETE), Cochin, Kerala, India, 2011.
9. **Saumen Chakraborty** , Bishnu Charan Sarkar , “*Dynamics of a new class of nonlinear digital resonators: A simulation study*”, National Conference on Materials, Devices and Circuits in Communication Technology (MDCCT 2010), IETE Burdwan Sub-Center and Dept of Physics, The University of Burdwan, March 27-28, 2010.
10. **Saumen Chakraborty**, Bishnu Charan Sarkar, “*Dynamics of a nonlinear digital resonator in free running and injection synchronized mode: A simulation study*”, INTERNATIONAL CONFERENCE ON RADIATION PHYSICS AND ITS APPLICATIONS (ICRPA 2010), DEPARTMENT OF PHYSICS, THE UNIVERSITY OF BURDWAN , JANUARY 16-17, 2010. (**Abstract Only**)
11. **Saumen Chakraborty**, Bishnu Charan Sarkar, “*A Novel Nonlinear Digital Resonator*”, 16th West Bengal State Science and Technology Congress, West Bengal State Science and Technology Council and The University of Burdwan, February 28 – March 1, 2009. (**Abstract Only**)
12. R.Banerjee, **S.Chakraborty**, A.K.Mukherjee, “*Elt. Studies of Thermoluminescence of “Earth Soil” Collected from Coal Mines of Different Depths Surrounding Asansol-Raniganj Industrial Belt*”, National Seminar on Environmental Management (NASSEM-2007), Asansol Engineering College, July 26th – 28th , 2007. (**Abstract Only**)