


## Curriculum Vitae

<b>Full Name</b>	Don Biswas		
<b>Designation</b>	Assistant Professor		
<b>Department</b>	University Science Instrumentation Centre		
<b>Campus</b>	Srinagar, HNB Garhwal University		
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<b>Education Qualification</b>	B. Tech. (2008), Kalyani University (Electronics & Instrumentation Engg.) M.Tech.(2010), Calcutta University (Instrumentation & Control Engg.) Ph. D. pursuing from Jadavpur University		
<b>Teaching Experience</b>	10 Years	<b>Research Experience</b>	3 Years
<b>Areas of Interest/ Specialization</b>			
<ol style="list-style-type: none"> <li>1. Perovskite type crystals.</li> <li>2. BCZT and NKN ceramics.</li> <li>3. Characterization of materials.</li> </ol>			
<b>Subject Knowledge</b>			
<ol style="list-style-type: none"> <li>1. Electrical Measurements and Instruments.</li> <li>2. Power Electronics.</li> <li>3. Signals and Systems.</li> <li>4. Industrial Drives.</li> <li>5. Basic Electrical Engineering</li> </ol>			
<b>Instrument knowledge</b>			
<ol style="list-style-type: none"> <li>1. DC sputtering system, RF sputtering system.</li> <li>2. SEM (Scanning Electron Microscopy).</li> <li>3. ICPMS.</li> <li>4. LCR Meter.</li> <li>5. XRD (X-ray diffraction).</li> <li>6. P- E loop tracer.</li> </ol>			
<b>Award/Honours</b>			
<ol style="list-style-type: none"> <li>1. Gate Scholarship (2008-2010).</li> <li>2. Young scientist award (2021) from VDGGOOD society.</li> </ol>			
<b>Administrative Experience</b>			
<ol style="list-style-type: none"> <li>1. Member of Departmental Purchase Committee.</li> <li>2. Member of the B. Tech. Admission Committee, H.N.B. Garhwal University, Srinagar (Garhwal).</li> <li>3. Member of the B. Tech. JOSSA Admission Committee, H.N.B. Garhwal University, Srinagar (Garhwal).</li> <li>4. Member of the B. Ed. Admission Committee, H.N.B. Garhwal University, Srinagar (Garhwal), from jan 2018- july 2018.</li> <li>5. Member of the P.G. Admission Committee, H.N.B. Garhwal University, Srinagar (Garhwal), from jan 2019- july 2020.</li> <li>6. Member of the Ph. D. Admission Committee, H.N.B. Garhwal University, Srinagar (Garhwal), from july 2019- july 2020.</li> <li>7. Member of the board of studies (BoS) (meeting held on 26-02-2019), Instrumentation Engg. – USIC, H.N.B. Garhwal University, Srinagar (Garhwal).</li> <li>8. Member of the B. Tech. examination Committee, H.N.B. Garhwal University, Srinagar</li> </ol>			

(Garhwal).

**Conference/Symposium/Workshop/Invited lecture Attended/Delivered during last eight years (2012-2020)**

1. Attended short term course on “PCB Layout, Fabrication and Testing” from 14-01-2013 to 18-01-2013, organized by NITTTTR Chandigarh, India.
2. Attended Conference on “Recent Advances in Material Science (NCRAMS-13)”, organized by Dept. of Physics, H.N.B. Garhwal University, Srinagar (Garhwal), 26-27 October, 2013.
3. Attended Orientation Course organized by Academic Staff College, Jadavpur University, Kolkata, 04 Aug. - 01 Sept., 2014.
4. Attended a Workshop on NMEICT Awareness “Recent Trends in Education System”, organized by National Institute of Technology, Uttarakhand, on 29-30 November, 2014.
5. Attended Refresher Course on “Disaster Management” organized by UGC-HRDC, Kamaun University, Nainital (Uttarakhand) from 02 – 23 Dec, 2016.
6. Attended two day training program on “Ethics & Values in Public Governance”, organized by Academic Activity Centre, HNBSGU, Uttarakhand, 28-29 May, 2017.
7. Attended one month Induction training Program organized by FDC, HNBSGU, Uttarakhand, 01-30 June, 2018.
8. Presented a Invited talk on the topic ferroelectrics in “International Conference on Aerosol, Air Quality and Climate Change”, organized by Dept. of Physics, H.N.B. Garhwal University, Srinagar (Garhwal), 21-23 October, 2018.
9. Attended a Short term training Program on Data Analysis Awareness “Computational Techniques in Research Methodology for Science and Social Sciences”, organized by FDC, HNBSGU, Uttarakhand, 25-31 July, 2019.
10. Attended a short term training program on “Dimensions of Qualitative Research”, organized by FDC, HNBSGU, Uttarakhand, 21-27 Aug., 2019.
11. Attended a short term training program on “Nanotechnology for electronic and photonic devices (Nanodev 2020)” organized by Punjab Engg. College, Chandigarh, during 15<sup>th</sup> june, 2020- 19<sup>th</sup> june, 2020.
12. Attended online lecture series on “Academic Leadership in Higher education during and after Covid- 19 pandemic” organized by HNB Garhwal university, Srinagar Garhwal, during 22<sup>th</sup> june, 2020- 26<sup>th</sup> june, 2020.
13. Attended a short term training program on “Pedagogical Training for Teachers on Tools for Online Teaching Learning and Evaluation” organized by Swami Ramanand Teerth Marathwada University, Nanded, during 1<sup>st</sup> july 2020- 6<sup>th</sup> july, 2020.
14. Attended a short term course on “Sub-micrometer Semiconductor Device to Circuit Co-Design and Modeling Techniques” organized by NIT Jhalandar, Punjab, during 20<sup>th</sup> Aug., 2020- 24<sup>th</sup> Aug., 2020.

**In the Proceedings of Conferences/ Seminars**

1. K. Kumar, A. Bahuguna, **D. Biswas**, Four band slotted microstrip antenna, State level conference on Imagineering, Tula’s Institute, Dehradun, Uttarakhand, 25<sup>th</sup> October, 2018.
2. **D. Biswas**, P. Sharma, N. S. Panwar, Piezoelectric properties of lead free  $Ba_{1-x}Ca_xZr_{0.1}Ti_{0.9}O_3$  ( $x = 0.150$ ) ceramics with different sintering temperature, International conference on Material Science and Applications (ICMSAA-2019), Physics Department, H. N. B. Garhwal University, Uttarakhand, 25-27 Nov, 2019.
3. V. Rohilla, **D. Biswas**, P. Thapliyal, G. S. Kathait, Recent Trends in Solar Energy Conversion Techniques, National Conference on “Recent Advancements in Natural Products Chemistry and Nanotechnology”(RANPCN-2019), Department of chemistry, H. N. B. Garhwal University, 9-10, September 2019.
4. V. Rohilla, **D. Biswas**, P. Thapliyal, G. S. Kathait, S. Singh, Estimation of some essential, non essential toxic and toxic elements in some Indian Black Tea sold in market by ICP-MS and their risk assessment, International Conference on Material Science and Applications (ICMSAA-19), Department of Physics, H. N. B. Garhwal University, 25-27, November, 2019.
5. **D. Biswas**, P. Sharma, N. S. Panwar, Electrical and optical properties of lead free  $Ba_{1-x}Ca_xZr_{0.1}Ti_{0.9}O_3$  ( $x = 0.150$ ) ceramics, international-conference-on-innovative-research-in-applied-science-engineering, RIT, Roorkee, 20-21, Feb., 2021.

### Conference/Symposium/Workshop Organized during last eight years (2012-2020)

1. Organized the 'World IPR day', jointly with UCOST, Dehradun at USIC Department, HNB Garhwal University, Srinagar (Garhwal), April 26, 2014.

### Peer reviewed Publications

1. **D. Biswas**, G. S. Kathait, P. Thapliyal, V. Rohilla & S. Singh "Temperature dependence of dielectric properties of sodium potassium niobate ceramics for different values of  $x$  ( $\text{Na}_{1-x}\text{K}_x\text{NbO}_3$ )", *Ferroelectrics*, Vol. **526**, pp. 168–175, 2018. (IF- 0.699) (SCI Indexed)
2. T. Singh, B. Gangil, A. Patnaik, **D. Biswas**, G. Fekete "Agriculture waste reinforced corn starch based biocomposites: Effect of rice husk/walnut shell on physicochemical, biodegradable and thermal properties", *Materials Research Express*, Vol. **06** (04), pp. 1-23, 2019. (IF- 1.92) (SCI Indexed)
3. **D. Biswas**, G. S. Kathait, P. Thapliyal, V. Rohilla, S. Singh & J. Negi "Converse piezoelectric properties of K and Na-modified ( $\text{Na}_{1-x}\text{K}_x$ )  $\text{NbO}_3$  lead free ceramics for  $x=0.08$  and  $0.17$ ", *Ferroelectrics*, Vol. **550**, pp. 228–232, 2019. (IF- 0.699) (SCI Indexed)
4. **D. Biswas et al.** "Microcontroller based data acquisition system using error reduction technique", *International Journal of Engineering, Science and Technology*, Vol. **11**, No. 3, pp. 40-48, 2019. (IF- 0.50) (SCI Indexed)
5. G. S. Kathait, **D. Biswas**, P. Thapliyal, V. Rohilla & S. Singh "Influence of Escaping of Na & K on physical properties in Lead-Free  $\text{Na}_{0.92}\text{K}_{0.08}\text{NbO}_3$  Ceramic", *Ferroelectrics*, Vol. **551**, pp. 40–46, 2019. (IF- 0.699) (SCI Indexed)
6. T. Singh, B. Gangil, B. Singh, S. K. Verma, **D. Biswas**, G. Fekete "Natural-synthetic fiber reinforced homogeneous and functionally graded vinylester composites: Effect of bagasse-Kevlar hybridization on wear behavior", *J. Mater Res Technology*, Vol. **8**, No. 6, pp. 5961- 5971, 2019. (IF- 5.32) (SCI Indexed)
7. G. S. Kathait, N. S. Panwar, **D. Biswas**, P. Thapliyal, V. Rohilla & S. Singh "Sintering Effect on Electrical Properties and Morphology of Lead-Free  $\text{Na}_{0.92}\text{K}_{0.08}\text{NbO}_3$  Ceramics", *Science of Sintering*, Vol. **51**, 2019. (IF- 1.42) (SCI Indexed)
8. V. Rohilla, G. S. Kathait, **D. Biswas**, P. Thapliyal, & B. Rohilla "Estimation of Heavy Metals in some Indian Black Tea Leaves by Inductively Coupled Plasma Mass Spectrometer (ICPMS) and associated Health Risks", *Indian Journal of Agricultural Research*, Vol. **A-5429**, pp. 1-6, 2020. (IF- 0.35) (SCI Indexed)
9. **D. Biswas**, N. S. Panwar, P. Sharma "Converse piezoelectric properties of lead free  $\text{Ba}_{1-x}\text{Ca}_x\text{Zr}_{0.1}\text{Ti}_{0.9}\text{O}_3$  ( $x = 0.055$ ) ceramics using double sintered method", *Ferroelectrics*, Vol. **568:1**, pp. 95–103, 2020. (IF- 0.699) (SCI Indexed)
10. V. Rohilla, **D. Biswas**, P. Thapliyal, G. S. Kathait, S. Singh "Estimation of some essential, non-essential toxic and toxic elements in some Indian black tea sold in market by 'ICP-MS' and their risk assessment", *Applied Innovative Research CSIR-NISCAIR*, Vol. **2**, pp. 226-230, 2020. (UGC Listed)
11. D. Das, **D. Biswas**, A. K. Hazarika, S. Sabhapondit, R. B. Roy, B. Tudu, R. Bandyopadhyay "CuO Nanoparticles Decorated MIP-based Electrode for Sensitive Determination of Gallic Acid in Green Tea", *IEEE Sensors Journal*, Vol. **21**, No. 5, pp. 5687– 5694, 2021. (IF- 4.32) (SCI Indexed)
12. A. K. Gautam, R. S. Negi, S. Kumar, **D. Biswas** and S. Rawat "The Seasonal and Morphological Analysis of Airborne  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$  in Srinagar Garhwal (Himalaya Region)", *IJEP*, vol. **40 (11)**: 1154-1163 (2020). (UGC Listed)
13. **D. Biswas**, P. Sharma, N. S. Panwar "Dielectric properties of  $\text{Na}_{1-x}\text{K}_x\text{NbO}_3$  (NKN) ( $0.160 \leq x \leq 0.200$ ) ceramics synthesized by double sintered method", *Ferroelectrics*, Vol. **571**, pp. 214–229, 2021. (IF- 0.699) (SCI Indexed)
14. **D. Biswas**, P. Sharma, N. S. Panwar "Structural and electrical properties of lead free  $\text{Na}_{1-x}\text{K}_x\text{NbO}_3$  ( $0.160 \leq x \leq 0.200$ ) ceramics", *Ceramics International*, Vol. **47**, pp. 13814–13819, 2021. (IF- 5.532) (SCI Indexed)
15. **D. Biswas**, P. Sharma, N. S. Panwar "Composition dependent electrical properties of ( $\text{Ba}_{1-x}\text{Ca}_x\text{Zr}_{0.1}\text{Ti}_{0.9}$ ) $\text{O}_3$  ceramics, near morphotropic phase boundary ( $0.140 \leq x \leq 0.160$ )", *ECS Journal of Solid State Science and Technology*, Vol. **10**, pp. 033002, 2021. (IF- 2.070) (SCI Indexed)
16. J. Negi, **D. Biswas**, N. S. Panwar "Piezoelectric Properties of Ta ( $\leq 5$  (mole)%) Doped in  $\text{Na}_{0.685}\text{K}_{0.315}\text{NbO}_3$ ", *IJPAP*, Vol. **59**, pp. 740–743, 2021. (IF- 0.923) (SCI Indexed)
17. **D. Biswas et al.** "Investigation on dielectric and optical properties of  $\text{Ba}_{1-x}\text{Ca}_x\text{Zr}_{0.1}\text{Ti}_{0.9}\text{O}_3$  ( $x = 0.150$ ) ferroelectric ceramics", *J. Mountain Res.*, Vol. **16 (02)**, pp. 279-286, 2021.

(UGC Listed)

18. K. Kumar, A. S. Bahuguna, Y. P. Pundir, **D. Biswas** “Design of U-Shaped Slot Quad Band Patch Antenna”, *J. Mountain Res.*, **Vol. 16 (03)**, pp. 437-445, 2021. (UGC Listed)
19. **D. Biswas**, P. Sharma, N. S. Panwar “Structural and piezoelectric properties of  $(\text{Ba}_{1-x}\text{Ca}_x\text{Zr}_{0.1}\text{Ti}_{0.9})\text{O}_3$  ceramics, near morphotropic phase boundary ( $0.140 \leq x \leq 0.160$ )”, *IJPAP*, **Vol. 60**, pp. 111–116, 2022. (IF- 0.923) (SCI Indexed)
20. **D. Biswas**, P. Sharma, N. S. Panwar “Temperature dependent dielectric and structural properties of  $(\text{Ba}_{1-x}\text{Ca}_x)(\text{Zr}_{0.1}\text{Ti}_{0.9})\text{O}_3$ , ( $0.140 \leq x \leq 0.160$ ) ceramics ”, *ECS Journal of Solid State Science and Technology*, **Vol. 11**, pp. 043007, 2022. (IF- 2.070) (SCI Indexed)
21. **D. Biswas**, P. Sharma, N. S. Panwar “Effect of sintering on the piezoelectric properties and microstructure of lead free  $(\text{Ba}_{1-x}\text{Ca}_x\text{Zr}_{0.1}\text{Ti}_{0.9}\text{O}_3)$  ( $x = 0.065$ ) ceramics”, *Science of Sintering*, **Vol. 52, issue 2**, pp. 1-8, 2022. (IF- 1.42) (SCI Indexed)

#### **Book Chapter**

1. S. kumar, **D. Biswas**, B. Gangil “Asbestos free braking pads by using organic fiber based reinforced composites for automotive industries”, *Automotive Tribology*, Springer Nature Singapore Pte Ltd., Oct. 2019.
2. V. Rohilla, R. C. Rohilla, P. Thapliyal, **D. Biswas**, G. S. Kathait, “Photovoltaic Power System with Battery Backup and Grid-Connection to Reduce Grid Dependency During Peak Demand Hours and Power Cuts” *Techno-Societal*, Jun. 2021.