


Curriculum Vitae

Full Name	Gambheer Singh Kathait			
Designation	Assistant Professor			
Department	Department of Instrumentation Engineering (USIC)			
Campus	Chauras Campus, H. N. B. Garhwal University			
Telephone	-			
Mobile	9897108774 8433105800			
Email	gambhir11186@gmail.com			
Education Qualification	<ol style="list-style-type: none"> 1. B. Tech. (Applied Electronics & Instrumentation Engg.) (2007), DIT Dehradun, UP Technial University, Lucknow. 2. M. Tech. (Gas Engineering) (2009), UPES, Rajahmundry Andhra Pradesh. 3. Ph. D. (Material Science, Dept. of EIE), SLIET, Longowal, Punjab (Pursuing). 			
Teaching Experience	14 Years	Research Experience	06 Years	
<ol style="list-style-type: none"> 1. Worked as a guest faculty in year 2009 to 2011 in the Department of Instrumentation Engineering (USIC), HNBSGU. 2. Working as an Assistant Professor in the Department of Instrumentation Engineering (USIC), HNBSGU since March 2012. 				
Areas of Interest/ Specialization:				
<ol style="list-style-type: none"> 1. Sensor and Transducer, Control Systems, Renewable Energy, Biomedical Instrumentation, Digital Electronics. 2. Synthesize Advanced materials for energy storage applications and renewable energy engineering. 3. Proficiency in operating the analytical Instruments such as XRD, SEM, EDAX and Piezo Loop Tracer, LCR- meter, UV- Spectrophotometer. 4. Characterization of materials (Ferroelectric and Piezoelectric Materials). 5. Vacuum Instrumentation and Thin Film Deposition Techniques. 				
Administrative Experience:				
<ol style="list-style-type: none"> 1. Member of Discipline committee, Proctor Board, HNBSGU in 2012-14. 2. Member of Proctor Board, HNBSGU in 2017-18. 3. Working as an Assistant Exam Controller, HNBSGU since May 2018 till date. 4. Working as an Assistant coordinator, Entrance Exam Cell, HNBSGU, since 2021. 5. Working as as Assistant nodal officer of CUET, HNBSGU since 2022. 6. Working as a member of admission committee 2023-24 in SOET, HNBSGU. 				
List of Published Papers: Published or accepted more than 10 papers in SCI journals.				
<ol style="list-style-type: none"> 1. Gambheer Singh Kathait (ORCID-0000-0002-2400-3391) , Prashant Thapliyal, Don Biswas, Vishal Rohilla & Surendra Singh. "Influence of Escaping of Na & K on 				

- physical properties in Lead-Free Na_{0.92}K_{0.08}NbO₃ Ceramic”. *Ferroelectrics*, 551 (2020), ID: 1658026 DOI:10.1080/00150193.2019.1658026.(In press)
2. **Gambheer Singh Kathait** (ORCID-0000-0002-2400-3391) , N. S. Panwar. “Two-step sintering affecting the Escaping of Na and K and its impact on Dielectric Properties and Morphology of Lead-Free Na_{0.92}K_{0.08}NbO₃ Ceramics”. *Ferroelectrics*, 554 (2020), ID: 1684760 DOI:10.1080/00150193.2019.1684760.(In press)
 3. **Gambheer Singh Kathait** (ORCID-0000-0002-2400-3391) , M.K. Panda, N. S. Panwar. “Preparation of Potassium Tantalum Niobate - Barium Titanate (KTN-BT) Solid Solution System Ceramics and Their Piezoelectric Properties”. *Ferroelectrics*, 555 (2020), DOI:10.1080/00150193.2019.1691388. (In press)
 4. Don Biswas, **Gambheer Singh Kathait**, Prashant Thapliyal, Vishal Rohilla and Surendra Singh. “Temperature dependence of dielectric properties of sodium potassium niobate ceramics for different values of x (Na_{1-x}K_xNbO₃)” *Ferroelectrics*. 526 (2018) 168-175, doi.org/10.1080/00150193.2018.1456307.
 5. Don Biswas, **Gambheer Singh Kathait**, Prashant Thapliyal, Vishal Rohilla, Surendra Singh and Jyotsana Negi “Converse piezoelectric properties of K and Na modified (Na_{1-x}K_x) NbO₃ lead free ceramics for x = 0.08 and 0.17” *Ferroelectrics*. 550 (2019) 228–232, doi.org/10.1080/00150193.2019.1652511.
 6. **Gambheer Singh Kathait**, N. S. Panwar, D. Biswas, P. Thapliyal, V. Rohilla & S. Singh “ Sintering Effect on Electrical Properties and Morphology of Lead-Free Na_{0.92}K_{0.08}NbO₃ Ceramics” *Science of Sintering*, 51, 2019, Published by International Institute for the Science of Sintering.
 7. **Gambheer Singh Kathait**, M. K. Panda and N. S. Panwar, “Effect of Modified Two - step Sintering Approaches on Potassium Tantalum Niobate – Barium Titanate (KTN - BT) Ceramics and Their Dielectric and Piezoelectric Properties” , *Science of Sintering*, 52, 2020, Published by International Institute for the Science of Sintering.
 8. S. Kashyap, S.C. Bhatt, M. Uniyal and **Gambheer Singh Kathait**, “Structural and dielectric properties of Lead Magnesium Niobate and Ti-doped Lead Magnesium Niobate at room temperature” *Materials today: proceedings*, Vol. 51(Issue 4), 2019, published by Elsevier.
 9. Sidharth Kashyap, S.C. Bhatt, Manish Uniyal and **Gambheer Singh Kathait**, “Investigation of the Perovskite Phase, Morphology and Dielectric Properties of Lead Magnesium Niobate” *AIP Conference Proceedings*, 2220, 040039 (2020).
 10. Rohilla, V., **Kathait, G.S.**, Biswas, D.,Thapliyal, P., Ruhela, B., Estimation of Heavy Metals in Some Indian Black Tea Leaves by Inductively Coupled Plasma Mass Spectrometer (ICP-MS) and Associated Health Risks. *Indian Journal of Agricultural Research*. 2020, DOI: 10.18805/IJARE.A-5429.
 11. Rohilla, V., Rohilla, R.C., Thapliyal, P., Biswas, D., **Kathait, G.S.** (2021). Photovoltaic Power System with Battery Backup and Grid-Connection to Reduce Grid Dependency During Peak Demand Hours and Power Cuts. (eds) *Techno-Societal 2020*. Springer, Cham. https://doi.org/10.1007/978-3-030-69925-3_39.
 12. Don Biswas, Surendra Singh, Prashant Thapliyal, Vishal Rohilla, **G S Kathait**, N S Panwar, Prolay Sharma, Investigation on Dielectric and Optical Properties of Ba_{1-x}CaxZr_{0.1}Ti_{0.9}O₃ (x = 0.150) Ferroelectric Ceramics, *J. Mountain Res.*,16(2), 2021, DOI: <https://doi.org/10.51220/jmr.v16i2.34>.
 13. S. Singh, D. Biswas, A. S. Bahuguna, P. Thapliyal, V. Rohilla, **Gambheer Singh Kathait**, N. S. Panwar, P. Sharma, Composition-dependent dielectric and piezoelectric properties of Na_{1-z}K_zNbO₃ ceramics, *IJPAP*, 61 (2023) 335-342, <https://10.56042/ijpap.v61i5.70679>.
 14. D. Biswas, S. Singh, P. Thapliyal, V. Rohilla, **Gambheer Singh Kathait**, A. S. Bahuguna, P. Sharma, N. S. Panwar, Impedance spectroscopy and AC conductivity analysis of (Ba_{1-k}Cak)(Zr_{0.1}Ti_{0.9})O₃, (0.140 ≤ k ≤ 0.160), ceramics, *ECS advances*, 2

(2023) 042001, <https://10.1149/2754-2734/ad02aa>.

15. **Gambheer Singh Kathait**, N.S. Panwar, Surita Maini, Dielectric, piezoelectric and energy storage properties of large grain $Ba_{1-x}Sr_xTiO_3$ (BST) ceramic system for $0.17 \leq x \leq 0.26$, *Materials Science and Engineering B* 297 (2023) 116786, DOI: <https://doi.org/10.1016/j.mseb.2023.116786>
16. Surendra Singh, Don Biswas, Prashant Thapliyal, Vishal Rohilla, **G.S. Kathait**, N.S. Panwar, Dielectric and structural properties of double-sintered $(Na_{1-x}K_x)NbO_3$, ($0.460 \leq x \leq 0.485$) ceramics, *Ceramics International*, 50 (2024), 7930-7935, <https://doi.org/10.1016/j.ceramint.2023.12.121>
17. **Gambheer Singh Kathait**, N.S. Panwar, Surita Maini, Dielectric, piezoelectric and energy storage properties of Ca, Zr and Sn doped $(Ba_{1-x}Ca_x)(Ti_{0.85+x}Zr_{0.02}Sn_{0.13-x})O_3$ lead-free ceramics at MPB for $0.05 \leq x \leq 0.09$, *Materials Science and Engineering B* 301 (2023) 117139, <https://doi.org/10.1016/j.mseb.2023.117139>
18. Pradeep Mangain, Arun Shekhar Bahuguna, **Gambheer Singh Kathait**, E-Waste Management in the Mountainous Himalayan Region: A Case Study, *J. Mountain Res.*, 18(2), (2023), 207-216, <https://doi.org/10.51220/jmr.v18i2.22>

Conference /FDP/ Seminar Attended.

1. Attended a Refresher Course on “Multidisciplinary Approaches to Address Environmental Issues: Emerging Trends in Physical, Biological and Social Sciences”, organized by Faculty Development Centre, H.N.B. Garhwal University, Srinagar Garhwal, Uttarakhand, from 12th September to 25th September, 2019.
2. Attended AICTE Training and Learning (ATAL) Academy Online FDP on “Artificial Intelligence” organized by MNIT, Bhopal, M.P., May 11-15, 2020.
3. Attended FDP on Modern IOT Technology Tools & Design for Real Time Applications organized by Sai Ram Institute of Technology, Chennai, June 3-9, 2020.
4. Attended FDP on “Managing Virtual Classroom and Open Education Resources” organized by Centre for Academic Leadership and Education Management(CALEM), Punjab University, Chandigarh under the aegis of PMMMNMTT, MHRD, Govt. of India, during June 24-29, 2020.
5. Attended online FDP on “Recent Research Trends in Electronics and Communication Engineering” organized by Department of Electronics and Communication Engineering, GB Pant Institute and Technology, Pauri Garhwal, from 18-08-2020 to 28-08-2020.
6. Successfully completed the FDP on Nature and Properties of Materials through NPTEL online certification from August, 2018 to September 2018.
7. Successfully completed the FDP on Control Engineering through NPTEL online certification from Jan 28, 2019 to April 19, 2019.
8. Successfully completed the FDP on Non Conventional Energy Resources through NPTEL online certification from Jan 28, 2019 to April 19, 2019.
9. Successfully completed the FDP on Automatic Control through NPTEL online certification from Jan 28, 2019 to March 22, 2019.

10. Presented a research article presentation on “Dielectric and Piezoelectric Properties of Sn Doped Ba(Ti_{1-x}Sn_x)O₃ (BT-xBS) Electroceramics for $0.07 \leq x \leq 0.11$ ” in the Fifth International Conference on Recent Advances in Materials and Manufacturing (ICRAMM 2023) organized by Velalar College of Engineering and Technology, Erode I Tamil Nadu I India, held during 29-30, December 2023.

Invited Talks:

1. Presented a Invited talk on the topic ferroelectrics in “International Conference on Material Science and Applications (ICMSAA-19)”, Department of Physics, H. N. B. Garhwal University, 25-27, November, 2019 (Invited Speaker).
2. Invited as a speaker for “Live interaction: Online Examination and Preparation Process” on 29-5-2020 by Online Teaching, Learning & Facilitation Committee, HNBSGU, Srinagar Garhwal.