

Curriculum Vitae

Dr. Alok Singh Kandari

Email – kandarialok@gmail.com

Contact No. --+918791577642



| | | |
|-------------------|---|-------------------------------------------------------------------------------------------|
| Name | - | Dr. Alok Singh Kandari |
| Father's Name | - | Dr. Trilok Singh Kandari |
| Mother's Name | - | Smt. Shanti Kandari |
| Date of birth | - | 22 July, 1984 |
| Gender | - | Male |
| Category | - | General |
| Permanent Address | - | Kandari Bhawan, New Madhi (Chauras) P.O. – Kilkileshwar, Tehri (Garhwal), Uttarakhand. |

Academic Details

2013: Ph.D degree in Science (Physics),
Awarded (as per UGC Regulation 2009)

2011: Completed Pre-PhD. course work in Physics (Secured **70 %**, **(Grade: A+.)**) and registered in Ph.D (Physics) in Department of Physic, HN BG University Srinagar Garhwal, Uttarakhand.

2005: Master of Science in Physics (Electronic and Communication) from HNB Garhwal University, Srinagar, Uttarakhand.
Secured **68.62 %**, **IST Div.**

2003: Bachelor of Science with Physics, Mathematics and Chemistry as major subject from Govt. (PG) College, Gopeshwar, Uttarakhand.
Secured **69.38 %**, **IST Div.**

2000: Intermediate (10+2) with Physics, Mathematics, Chemistry and English as major subject from UP Board, GIC Gopeshwar, Uttarakhand.
Secured **77.8 %**, **IST Div.**

1998: Secondary School Certificate (SSC) from UP Board, GIC Gopeshwar, Uttarakhand
Secured **71.8 %**, **IST Div.**

Title of D. Phil Thesis:

“Electrical and Optical properties of mixed Sodium-Potassium Niobate thin films”.

Research Experience: -- 6-year research experience in various Research Project

02 June 2007 to 31 March 2010 – Working as a “**Project Fellow**” in UGC funded research project entitled “*Electrical properties of mixed sodium-potassium niobate thin films*”.

01 December 2010 to 31 March 2011– Working as a “**Project Assistant Level-II**” in DST funded research project entitled “*Deposition of Ta₂O₅-TiO₂ thin films of uniform thick ness for microelectronics applications*”.

Award

CSIR Fellowship
(01 April 2011 – 31 March 2014) – Completed a research project entitled as a Senior Research Fellow (SRF) of Council of Scientific & Industrial Research (Human Resource Development Group) New Delhi

Teaching Experience: -- 10 year (Academic session) teaching experiences

| | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 2008-2014 | Working (Teaching) as a faculty) in the School of Engineering and Technology, H.N.B.G. University Srinagar (Garhwal), Uttarakhand. |
| 2014-2015 | Working (Teaching) as a faculty in the Department of Physics, Govt. P.G. College, New Tehri (Garhwal), Uttarakhand. |
| 2015- 2017 | Working (Teaching) as a faculty in the Department of Physics, Govt. P.G. College, Uttarkashi (Garhwal), Uttarakhand. |
| 2017-2020 | Working (Teaching) as a faculty in the Department of Physics, Govt. P.G. College, New Tehri (Garhwal), Uttarakhand. |
| 2020-till date | Working (Teaching) as a faculty in the Department of Physics, P.N.G. Govt. P.G. College, Ramnagar, Nainital - Uttarakhand. |

Work Experience and skill:

1. Working and handling experience of following “**Analytical Instruments**” –

1. X-RAY DIFFRACTOMETER

(Make - PANalytical)

2. SCANNING ELECTRON MICROSCOPE (SEM)

(Make- M/S Carl Zeiss NTS Ltd., United Kingdom)

3. INCA ENERGY 250 MICROANALYSIS SYSTEM (EDS)

(Make - M/S Oxford Instruments Nanoanalysis, United Kingdom)

4. INDUCTIVE COUPLE MASS SPECTROSCOP WITH LASER ABLATION SYSTEM (ICP-MS)

(Make – M/S Perkin Elmer Singapore Lte. Ltd., Singapore-139959)

5. ELLIPSOMETER

(Make- M/s SENTECH Instruments GmbH, Germany)

6. PE LOOP TRACER WITH PEZOELECTRIC MEASUREMENTS

(Make- M/s AixACCT system GmbH, Germany)

7. LIQUID NITROGEN PLANT

(Make – M/S Stirling Cryogenics & Refrigeration BV, The Netherlands)

2. Working and handling experience of following “**Measurement Instruments**” –

1. **LCR METER** (for C-V measurement of bulk and thin film sample with various temperature)
2. **SOURCE METER** (for I-V measurement of bulk and thin film sample)
3. **SPECTROMETER** (for T% and R% measurement from UV and Visible rang)

3. Working and handling experience of following “**Sample preparation systems** in material science

1. **DC SUPPLY VACUUM SYSTEM** (Preparation of thin film from conducting target with DC power supply)
2. **RF SUPPLY VACUUM SYSTEM** (Preparation of thin film from non-conducting target with RF power supply)
3. **PROGRAMMABLE (PID) MUFFLE FURNACES**
4. **PRESSING MACHINE UP TO 200 TON**

Computer Skill:

Certificate in Computing (IGNOU)

Membership:

Life time member of “Indian Vacuum Society” (Membership No. LM-844)

Research Publication

1. **Alok Singh Kandari**, Aradhana Bhandari, A.A. Bourai, and N.S. Panwar, “Electrical Properties of $\text{Na}_{1-x}\text{K}_x\text{NbO}_3$ ($0.28 \leq x \leq 0.40$)”, *Ferroelectrics*, 386:139–151, 2009.
2. **Alok Singh Kandari**, Karuna Kandari, Vijendra Lingwal, A.A. Bourai, and N.S. Panwar, “Composition Dependent Dielectric Anomaly in $\text{Na}_{1-x}\text{K}_x\text{NbO}_3$, at $x = 0.475$ ”, *Ferroelectrics*, 393:1–9, 2009.
3. **Alok Singh Kandari**, Vijendra Lingwal and N.S. Panwar, “Morphotropic phase boundary in $\text{Na}_{1-x}\text{K}_x\text{NbO}_3$, near $x = 0.32$ ”, *Solid State Communications*, 150: 74-77, 2010.
4. **Alok Singh Kandari**, Vijendra Lingwal and N.S. Panwar, “Morphotropic Region in $\text{Na}_{1-x}\text{K}_x\text{NbO}_3$, between $x = 0.17$ and 0.18 ”, *Ferroelectrics*, 393:18–26, 2010.
5. Aradhana Bhandari, **Alok S. Kandari**, M. K. Agarwal, Vijendra Lingwal and N. S. Panwar, Sintering process dependent dielectric properties of $[\text{Ta}_2\text{O}_5]_{1-x} - [\text{TiO}_2]_x$, for the compositions near $x = 0.08$, *Ferroelectric letters*, : 37, 1-12, 2010.
6. Aradhana Bhandari, M. K. Agarwal, **Alok S. Kandari**, Vijendra Lingwal and N. S. Panwar, “Dielectric Properties of H- Phase $[\text{Ta}_2\text{O}_5]_{1-x} - [\text{TiO}_2]_x$, ($0.078 \leq x \leq 0.085$)”, *IJIRST*, : Vol – 1, Issue – 10, 102-108, 2015
7. Saklani Sarla, Chandra Subhash and **Kandari Singh Alok**, “Berberis aslatica future based excellent fruit in nutritional profile, antimicrobial and antioxidant ingredients”, *Internation Research Journal of Pharmacy (IRJP)*, 2 (12), 213-216, 2011.

8. Saklani Sarla, Chandra Subhash and **Kandari Singh Alok**, Nutritional evaluation, antimicrobial activity and phytochemical screening of wild edible fruit (carissa opaca)", *International Research Journal of Pharmacy (IRJP)*, 2(12), 217-221, 2011.
9. V. Lingwal, **A. S. Kandari** and N. S. Panwar, Optical properties of sodium niobate thin films, *NANOSYSTEMS: PHYSICS, CHEMISTRY, MATHEMATICS*, 2016, 7 (4), P. 583–591
10. V. Lingwal, **A. S. Kandari** and N. S. Panwar, "Temperature Dependence of Dielectric Properties in Doped Proskites", *International Journal of Management Technology and Engineering*, 8(IX), 797-804, 2018.
11. V. Lingwal, **A. S. Kandari** and N. S. Panwar, Theoretical Investigation of Dielectric Properties of Potassium Mixed Sodium Niobate Crystals, *International Journal of Management Technology and Engineering*, Vol – 8, Issue – IX, 1793-1793, 2018.

Research paper/Abstract in Conferences/ Seminar:

1. N.S.Panwar, A. Kumar, **Alok Kandari**, B.S Rawat et.al., "Spectrally selective properties of scanning magnetron sputtered TiN-Ag stack(s)", *Proceeding of Nation Seminar on RREST*, 78, March 2008, Department of Physics, HN BG University Srinagar (Garhwal), Uttarakhand.
2. **Alok Singh Kandari**, Vijendra Lingwal and N. S. Panwar, "Sintering process Dependence of Dielectric Properties of Lead-Free Ferroelectric $\text{Na}_{1-x}\text{K}_x\text{NbO}_3$, ($x = 0.08$) Ceramics", *National Seminar on Recent Trends in Micro and Macro Physics (NSRTMMO-2011)*, 12-13 October, 2011, Department of Physics, Govt. P. G. College, Gopeshwar, Uttarakhand.
3. Vijendra Lingwal, **Alok Singh Kandari**, B.P. Bahuguna, Ashish Sharma & Kiran Sharma, "Energy Conservation in Home Appliance and Electricity Safety", (Abstract Volume) *National Conference on Resource Management & Its Sustainable Use*. 22-23 March, 2013, pp.46, Pt. LMS Govt. P.G. College, Rishikesh, Uttarakhand.
4. Aradhana Bhandari, **Alok S. Kandari** and N. S. Panwar, "Temperature dependence of dielectric properties of H- phase $[\text{Ta}_2\text{O}_5]_{1-x} - [\text{TiO}_2]_x$, ($0.078 \leq x \leq 0.085$)", *National Conference on Recent Advances in Material Science (NCRAMS- 13)*, 26 – 27 October, 2013, Department of Physics, HN BG University Srinagar (Garhwal), Uttarakhand.
5. Aradhana Bhandari, **Alok S Kandari**, M K Agrawal, Vijendra Lingwal and N S Panwar, "Dielectric Properties of L- Phase $[\text{Ta}_2\text{O}_5]_{1-x}\text{-TiO}_2]_x$, ($x \leq 0.1$)" Elsevier Conference.
6. Vijendra Lingwal, **Alok Singh Kandari** and N. S. Panwar," Optical properties of Sodium Niobate Thin Films", *National Seminar on New Horizons in Theoretical and Experimental Physics (NHTEP-2015)*, 19-20 February, 2015, Department of Physics, Govt. P. G. College, Gopeshwar, Uttarakhand.
7. Vijendra Lingwal, **Alok Singh Kandari** and N. S. Panwar," Theoretical Investigation of Dielectric Properties of Potassium Mixed Sodium Niobate Crystals", 2nd International

Conference on Emerging Trends in Science, Engineering & Technology (ICETSET-2018), 29-30th September, 2018, Maharashtra Chamber of Commerce, Industries and Agriculture, Tilak Road, Pune (India).

8. Prashant Thapliyal, **Alok S. Kandari**, Vijendra Lingwal N. S. Panwar, G. Mohan Rao' "Annealing temperature dependent optical properties of $(\text{Ta}_2\text{O}_5)_{0.965} - (\text{TiO}_2)_{0.035}$ thin films", 1st International Conference on Integrated Intelligence Enable Networks & Computing, 05-07 September 2020, Institute of Technology Gopeshwar, Uttarakhand

Conferences/ Seminar/workshop:

1. National Seminar on Recent Trends In Renewable Energy Sources & Technologies (RREST) & Workshop On Solar Photovoltaic Systems (26-28 March, 2008), held at Department of Physics, HNBG University Srinagar (Garhwal), Uttarakhand.
2. Third International Geo-Hazards Research Symposium (IGRS-2012) (10-14 June, 2012) held at Department of Physics, Badshahithaul Campus, HNBG University Srinagar (Garhwal), Uttarakhand.
3. National Training Programme on RET Screen Software for Evolution of Renewable Energy Project held (22 September, 2012) held at Department of Physics, HNBG DAV (PG) College, Dehradun, Uttarakhand.
4. National Conference on Resource Management & its Sustainable Use (22-23 March, 2013) Held at Pt. LMS Govt. P.G. College, Rishikesh, Uttarakhand.
5. National Symposium on Mind, Matter and Mathematics: A Dialogue, (12-14 March 2014), Department of Physics and Mathematics, Badshahithaul Campus, HNBG University & P.G. College New Tehri.
6. First International Conference on Radiation Awareness and Detection in Natural environment (RADNET-I), (15-17 June, 2015), held at Department of Physics, Badshahithaul Campus, HNBG University Srinagar (Garhwal), Uttarakhand.

Curriculum Activity :

1. NCC 'A', 'B' and 'C' certificate
2. Participate in Cricket team at college level and winner of Badminton (Single) tournament at college level.
3. Co-ordinate the World Worth Day-2015 programmer at New Tehri Garhwal.

Career Objective:

Sincerity, honesty towards the duties and responsibilities

I hereby declare that all the information furnished above are true and correct to the best of my knowledge and belief.

(Alok Singh Kandari)