

CURRICULUM – VITAE

1. **Name:** *Dr. H. S. Tewari*
2. **Present Position:** *Associate Professor in Physics*
3. **Father's Name :** *Shri R. J. Tewari*
4. **Date of Birth:** June 01, 1963
5. **Permanent Address :** Dr. H.S. Tewari, A-10, Ganesh Enclave, Near Petrol Pump, Chhoti Koni, Bilaspur – 495009 (C.G.), India

6. Address for communication: Dr. H. S. Tewari, Physics Department of Pure & Applied Physics
Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur –495009, INDIA

E-mail : tewarihs@vahoo.com; tewari.hs@gmail.com

Mobile : 094241 40587

7. **Area of Research :** **Materials Science**, Electronic Ceramics, Multiferroics.

8. **Academic Qualifications** :

- (i) **Ph. D.** (Materials Engg. – Metal. Engineering) in 1994 from Indian Institute of Technology – Banaras Formerly known as Institute of Technology Hindu University, India from Centre of Advance Study in Metallurgy, Department of Metallurgy, Varanasi
- (ii) **M. Tech.** (Materials Technology) in 1987 from Indian Institute of Technology - Banaras Hindu University, School of Materials Science and Technology. Varanasi
- (iii) **M. Sc. (Physics)** 1984 from D. D. U. Gorakhpur University, Gorakhpur, India

8. Publications:

- Total 17 papers published in international and national journals.
- Approximately 35 conferences/seminars attended to present research work.
- One book jointly edited (2006)

9. Experience (Teaching and Research):

At present, working as Associate Professor in Physics, Guru Ghasidas University since September 2005-till date. From Sept. 1996 to Aug. 2005 worked as a lecturer and senior lecturer respectively. Before this I have research and teaching experience while working as a research associate from March 1994 to September 1996 in Barkatullah University and Guru Ghasidas University, Bilaspur

10. Other Activities/Achievements:

1. Warden: Boy's Hostel (session 2003 – 2004)
2. Program Officer: National Service Scheme (1999 – 2002)
3. **Associate Editor: Chhattisgarh Journal of Science and Technology**(upto 2006)

11. Membership of Professional Societies/ Organizations:

1. Life Member : Materials Research Society of India

a. **Post Doctoral Work:**

- 1) Research experience in the field of dielectrics and high temperature superconductivity from March 1994 to April 1996 in the Department of Physics, Barkatullah University, Bhopal.
- 2) Research experience in the field of preparation and characterization of electronics ceramics for sensor and other application as a Research Associate of C.S.I.R. at the School of Pure and Applied Physics, GuruGhasidas University, Bilaspur from May 01, 1996 to September 20, 1996. **First C. S. I. R. direct Research Associate in GuruGhasidas University.**
- 3) Visited as a expatriate faculty from Oct. 23, 2006 to July 31, 2008 to Department of Physics, Addis Ababa University, Addis Ababa, Ethiopia, N E Africa for teaching UG and PG students.

Research Experience:

During Ph.D. (1987 – 1993): Total Seven Years Experience on preparation and characterization of Electronics Ceramics in the department of Metallurgical Engineering, B. H.U., Varanasi.

Post Doctoral Work:

Research experience in the field of dielectrics and high temperature superconductivity from March 1994 to April 1996 in the Department of Physics, Barkatullah University, Bhopal.

Research experience in the field of preparation and characterization of electronics ceramics for sensor and other application as a Research Associate of C.S.I.R. at the School of Pure and Applied Physics, GuruGhasidas University, Bilaspur from May 01, 1996 to September 20, 1996. **First C. S. I. R. direct Research Associate in Guru Ghasidas University.**

Visited as a expatriate faculty from Oct. 23, 2006 to July 31, 2008 to Department of Physics, Addis Ababa University, Addis Ababa, Ethiopia, N E Africa for teaching UG and PG students.

After Ph.D. (1994 - onwards): Total two years' experience on preparation and Characterization of Dielectric and super conducting materials while working as a research associate of U.G.C. project in department of Physics, Barkatullah University from March 1994 to April 1996.

Total five months experience on synthesis and characterization of Oxide ceramic materials while working as a Research Associate of C.S.I.R. from May 1, 1996 to September 20, 1996 at department of physics, Guru Ghasidas University, Bilaspur.

Total approximately seventeen years' experience in the fields of Materials Science while working as a lecturer, Reader and Associate Professor of Physics, Guru Ghasidas University, Bilaspur.

1. Attended a **refresher course** in Physics organized by Department of Physics, University of Jammu and Academic Staff College, University of Kashmir, Srinagar from March 08 -28, 1999.
2. Attended an **orientation course** organized by Academic Staff College, Banaras Hindu University, Varanasi from Nov. 30 to Dec 27, 1999.
3. Participated in QIP short-term course on “**Modern Magnetic Materials**” organized by Advanced Centre for Research in Electronics, Indian Institute of Technology, Powai, and Mumbai during May 15 – 26, 2000.
4. Participated in the **Regional Training course on Fiber Optics** University/College Teachers of South East Asia Sponsored by **UNESCO** and organized by Department of Physics, Indian Institute of Technology, Kharagpur during Feb. 12-24, 2001.
5. **First C. S. I. R. direct Research Associate in Guru Ghasidas University.**

6. Worked as Program Officer of **National Service Scheme** for University Teaching Department Guru Ghasidas University, Bilaspur (C.G.) from 1998 to 2002.
7. Attended ten days Training and orientation programme organized by Training and Orientation Center, NSS, Vikram University, Ujjain (M.P.) during Oct. 8-17, 1999.
8. Participated in the Regional Training Course in University Science Teaching sponsored by **UNESCO** an organized by Indira Gandhi National Open University, New Delhi for teachers of South East Asia from November 15-26, 1999.
9. Working as a Warden, Boys Hostel, Guru Ghasidas University, Bilaspur.
10. Associate Editor, **Chhattisgarh Journal of Science & Technology**; A joint publication of G.G. University and Chhattisgarh Council of Science and Technology, Raipur till 2006.

LIST OF PUBLICATIONS:

<input type="checkbox"/>	Structural and dielectric properties of $Ba_4R_2Ti_4Nb_6O_{30}$ (R= Y, Sm and Dy) ferroelectric ceramics R Palai, RNP Choudhary, HS Tewari Journal of Physics and Chemistry of Solids 62 (4), 695-700	34	2001
<input type="checkbox"/>	Dielectric relaxator behaviour of $Sr_{0.8}La_{0.2}Ti_{0.8}Co_{0.2}O_3$ O Parkash, L Pandey, HS Tewari, VB Tare, D Kimar Ferroelectrics 102 (1), 203-211	8	1990
<input type="checkbox"/>	Antiferroelectric phase transition in $Pb(Mg_{1/2}X_{1/2})O_3$ (X= Mo and W) R Palai, R N P Choudhary, H S Tewari Materials chemistry and physics 73 (1), 86-92	4	2002
<input type="checkbox"/>	Study of Electrical Conduction Behavior of the System $La_{1-x}Na_xCo_{1-x}Nb_xO_3$ ($x \leq 0.50$) O Parkash, H S Tewari, V B Tare, D Kumar, L Pandey Journal of the American Ceramic Society 75 (11), 3141-3144	4	1992
<input type="checkbox"/>	Effect of Hg addition on synthesis of Bi-based superconductors V Shelke, H S Tewari, N K Gaur, R K Singh Physica C: Superconductivity 300 (3), 217-224	3	1998
<input type="checkbox"/>	Study of the electrical conduction behaviour of the $Ba_{1-x}La_xTi_{1-x}Ni_xO_3$ ($x \leq 0.10$) system O Parkash, H S Tewari, V B Tare, D Kumar Journal of alloys and compounds 190 (2), 243-247	3	1993
<input type="checkbox"/>	Electrical conduction in calcium yttrium titanium cobalt oxide $Ca_{1-x}Y_xTi_{1-x}Co_xO_3$ ($x \leq 0.15$) O Parkash, HS Tewari, VB Tare, D Kumar Journal of Physics D: Applied Physics 26 (4), 676	2	1999
<input type="checkbox"/>	Dielectric properties of the system $Ca_{1-x}Y_xTi_{1-x}Co_xO_3$ ($x \leq 0.15$) H S Tewari, O Parkash, V B Tare, D Kumar Journal of Materials Science 25 (4), 2181-2184	1	1990
<input type="checkbox"/>	Preparation and structure of the system $Ca_{1-x}Y_xTi_{1-x}Co_xO_3$ ($x \leq 0.15$) HS Tewari, O Parkash, VB Tare, D Kumar Journal of materials science letters 7 (10), 1088-1089	1	1988
<input type="checkbox"/>	Dielectric Studies on B-site Double Mixed Barium Titanate System H S Tewari, S Chakraborty Journal of Pure Applied and Industrial Physics Vol 2 (3), 142-285		2012

- [Synthesis and electrical characterisation of the system \$Sr_{1-x}Gd_xTi_{1-x}Co_xO_3\$ using impedance spectroscopy](#) 1997
H S Tewari, R K Singh
ASIAN JOURNAL OF PHYSICS 6, 142-146
-
- [Electrical conduction in the system \$Sr_{0.90}La_{0.10}Ti_{0.90}M'_{0.10}O_3\$ \(\$M' = Co, Ni\$ or \$Cr\$ \)](#) 1996
HS Tewari, RK Singh
Bulletin of Materials Science 19 (6), 1067-1071
-
- [Synthesis and Electrical Characterisation of the System \$Sr_{1-x}Y_xTi_{1-x}Co_xO_3\$](#) 1996
H S Tewari, V K Shelke, N K Gaur, R K Singh
Materials Science Forum 223, 257-260
-
- [The Electrical Conduction Behavior of the \$Ba_{1-x}La_xTi_{1-x}Ni_xO_3\$ \(\$x < 0.10\$ \) System](#) 1993
O PARKASH, HS TEWARI, VB TARE, D KUMAR
ChemInform 24 (13), no-no
-
- [Study of electrical conduction behavior of the system \$La_{1-x}Na_xCo_{1-x}Nb_xO_3\$ \(\$x \leq 0.50\$ \)](#) 1992
O Parkash, HS Tewari, VB Tare, D Kumar, L Pandey
Journal of the American Ceramic Society;(United States) 75 (11) , 3141-4
-
- Model Investigation of radiative lifetime and internal quantum efficiency of small scale silicon nanostructures,
S K Ghoshal, H S Tewari and Sioma Debala,
ISST J. of Applied Physics, 2(1), (2011), 1-5
-
- [DIELECTRIC RELAXATOR BEHAVIOUR OF \$Sr_{0.8}La_{0.2}Ti_{0.8}Co_{0.2}O_3\$](#) 1990
H S TEWARI, V B TARE, D KUMAR, OM PARKASH
Proceedings of Indo-United States Workshop on Electronic Ceramics and ...
-
- [Dielectric properties of the system \$Ca_{1-x}Y_xTi_{1-x}Co_xO_3\$ \(\$x \leq 0.15\$ \)](#)
HS Tewari, O Parkash, VB Tare
Journal of Materials Science 25 (4), 2181-4
- Dielectric characterization of the system $Sr_{1-x}Gd_xTi_{1-x}Co_xO_3$ ($x = 0.10$) using impedance spectroscopy
H.S. Tewari¹ and P.K. Sakharkar²
Volume 7 No. 2 Page No. 499-504 Dec 2010
- Syntheses and Thermal Characterisation of Mixed (Sm-Y) Oxalates Prepared by Coprecipitation Method 1990
Presentit Pauri, S.K. Ghoshal and H.S. Tewari, Material Science Research India , Volume 8 No. 1
Page No. 113-117 Jun 2011
- Photonic applications of Silicon nanostructures
S.K. Ghoshal and H.S. Tewari, Publication date 2010/12 Material Science Research India, Volume 7,
Issue 2, Pages 381-388, Publisher Oriental Science Publishing Company, Bhopal, India

Deposition and Characterization of SiO₂ Films Using PECVD System
R.K. PANDEY, H.S. TEWARI, A. M. MAHAJAN, D.K. GAUTAM,
Proceedings of International conference on nanoscience, engineering & advanced computing (icneac-2011)
Volume-03, ISBN No. 978-81-8465-683-1 , Page 295 – 298

Model investigation of Temperature and concentration dependent luminescence of erbium doped tellurite glasses,
S K Ghoshal, S R Sahar, H S Tewari and M S Rohani, AIP conference proceeding on “ XVI National Seminar on Ferroelectrics and Dielectrics (NSFD- XV), 1372, (2011), 449 – 462

Nanophotonics for 21 Century and Beyond 21st Century, Ghoshal S. K., Tewari H S, Pandey R. K., Sahar M. R. and Rohani M. S., Published in Proceeding of National Seminar on “ Current Trends on Nanoscience and Nanotechnology - 2011” held on June 25th-26th, 2011 Organized by Rungta College of Engineering and Technology, Bhilai, page 6-10

Conference/Seminar Presentations

Dielectric Relaxor Behaviour of Sr_{0.80}La_{0.20}Ti_{0.80}Co_{0.20}O₃
Om Prakash , H. S. Tewari , V. B. Tare and Devendra Kumar
Presented in INDO – US Workshop held at National Chemical Laboratory, Pune during Jan. 8-9, 1989
Studies on Electric Behaviour of the System, Ca_{1-x}Y_{1-x}Ti_{1-x}Co_xO₃ (X<0.15) using Complex Plane Impedance Analysis
Om Parkash , H.S. Tewari , V.B. Tare and Devendra Kumar
Presented in 1st Annual General Body Meeting of Materials Research Society of India held in Pune , Feb. 9-10, 1990
Barrier Layer Formation in Sr_{0.70}Nd_{0.30} Ti_{0.70} Co_{0.30} O₃
Om Prakash and H.S. Tewari
Presented in 2nd Annual Meeting of Materials Research Society of India held in National Physical Laboratory New Delhi , Feb. 9-10 , 1991.
Electron Microscopic Investigation during the Study of Kinetics of Heterogeneous Reactions
V.B. Tare , J. S. Kachhawaha , Vikram Singh , B.D. Tripathi, U.S. Yadava, H.S.Tewari. Om Parkash and D.Kumar
Presented at the Workshop cum Seminar on Scanning Electron Microscopy held in Department of Metallurgy, Banaras Hindu University , Varanasi during Feb. 25-26 1991
Effect of Cooling Rates on Dielectric Properties of the System Sr_{0.70}Nd_{0.30}Ti_{0.70}Co_{0.30}O₃
Om Parkash ,H.S.Tewari and V.B. Tare
Presented in 56th Annual Meeting of Indian Ceramic Society held in Bhilai (M.P.)
Studies on Electrical Conduction Behaviour of the System Ba_{1-x}La_xTi_{1-x}Ni_xO₃
Om Parkash , H. S. Tewari , V. B. Tare and D. Kumar
Presented in 3rd Annual Meeting of Materials Research Society of India held in Indian Institute of Sciences , Bangalore , Feb . 9-10, 1992.
Effect of Ionic Radii on Properties of the System Sr_{0.90}La_{0.1}Ti_{0.90} M_{0.1}O₃(M = Cr , Ni & Co)
H. S. Tewari
Presented as a Technical Paper during 57th Annual Session of the Indian Ceramic Society held in New Delhi Dec. 2-4, 1993
Studies on Dielectric Properties of Ceramics using Complex Plane Impedance Analysis
L. Pandey . Om Parkash , H. S. Tewari , O. P. Thakur and D. Kumar
Presented in 4th Annual Meeting of the Materials Research Society of India held at Regional Research Laboratory , Trivendrum Feb. 9-10, 1993
Dielectric Properties of the System Ba_{1-x}La_xSn_{1-x}Co_xO₃
H. S. Tewari , Om Parkash and V. B. Tare
Invited Presentation in National Seminar on “Materials for Marine Applications “ organized by Naval Chemical and Metallurgical Laboratory , Defence Research and Development Organization (DRDO) , Naval Dockyard , Bombay, March 3-4, 1994

Dielectric and Electrical Properties of Some Valence Compensate Perovskite Oxide

H. S. Tewari

Thesis presentation in Department of Atomic Energy Sponsored Solid State Physics Symposium – 94 held in University of Rajasthan, Jaipur during Dec. 27-31, 1994

Synthesis and Electrical Characterization of the System $Ba_{1-x}La_xSn_{1-x}Co_xO_3$

H.S.Tewari , V.B. Tare and Om Parkash

Presented in 6th Annual Meeting of Materials Research Society of India held in Indian Institute of Technology ,Kharagpur, Feb. 7-10, 1995

Studies on Synthesis and Dielectric Characterizations of Valence Compensated System $Sr_{1-x}Gd_xTi_{1-x}Co_xO_3$

H. S. Tewari

Presented in 59th Annual Meeting On Indian Ceramic Society organized by Anna University , Madras during Jan. 10-11, 1996

Electrical Properties of the System $Sr_{1-x}Y_xTi_xCo_xO_3$

H. S. Tewari , Vilas Shelke , N.K. Gaur and R.K. Singh

Presented in an International Seminar on Disordered Materials organized by Kurukshetra University , Kurukshetra Studies on Effect of Processing Parameters on Superconducting Behaviour of Hg doped Bi-2212 Ceramic

H. S. Tewari , Vilas Shelke and R.K. Singh

Presented in 15th National Symposium on Cryogenics (FNCS –96) organised by National Physical Laboratory , New Delhi and Indian Cryogenic Council during September 12-14, 1996

Dielectric Behaviour of the System $La_{1-x}Na_xCo_{1-x}Nb_xO_3$

H. S. Tewari and R.K. Singh

Presented in National Symposium of Ferroelectrics and Dielectrics (NSFD – IX) held at National Physical Laboratory , New Delhi on Oct. 8-11, 1996

Synthesis and Electric Characterization of the System $Sr_{1-x}Gd_xTi_{1-x}Co_xO_3$ using Impedance and Modulus spectroscopy.

H. S. Tewari and R. K. Singh

Presented in DAE – BRANS Symposium on Electroceramics , organised by Saurashtra University, Rajkot, March 13-15, 1996.

Structural and Dielectric Characterisation of rare earth substituted perovskite oxide,

$Sr_{0.9}Ln_{0.1}Ti_{0.9}Co_{0.1}O_3$ (Ln = La , Nd and Gd)

H.S. Tewari ,AnshumanVyas and R. K. Singh

Presented in Xth National Seminar on Ferroelectrics and Dielectrics, Organised by Indian Institute of Technology , Madras, 1998.

Effect of dopant concentration on the dielectric behaviour of alanine doped TGS crystals

P.K. Bajpai, N. K. Chandan , H. S. Tewari , T. Kundu and D. Chakravorthy

Presented in DAE sponsored Solid State Physics symposium organized by Indira Gandhi Atomic Research Centre, Kalpakkam during Dec. 27-31, 1999

Effect of rare earth substitution on Dielectric properties of the system $Sr_{0.9}Ln_{0.1}Ti_{0.9}Co_{0.1}O_3$

H. S. Tewari ,G.D.Verma , P.K. Bajpai and R.K. Singh

Presented in the “ National Seminar On Recent Trends in Materials Science “ held in

ShriVenkateswaraUniversity,Tirupati during Nov. 25-27, 1999

Studies on dielectric properties of barium stannate based ceramics using impedance analysis

H.S. Tewari

Presented in XI National Seminar on Ferroelectrics and Dielectrics organized by Jammu University, Nov.1-3, 2000

Transport Properties of lanthanum cobaltate substituted barium stannate

H.S.Tewari

Presented in 64th annual Session of the Indian Ceramic Society held at Hyderabad during Jan. 28-31, 2001

Synthesis, Structure and Dielectric Characterization of lanthanum cobaltate substituted

Barium stannate.

H. S. Tewari

Presented in Vth conference of the International Academy of Physical Sciences held in Jhansi and organized by Bundelkhand University during April 7-9, 2002.

High Pressure studies of Titanium Carbide.

AnuragSrivastava, P. Shiva Kumar, H. S. Tewari, and R. K. Singh

Presented in 45th DAE sponsored Solid State Physics symposium organized by Panjab University, Chandigarh (vol. 45, page 53) during Dec. 27-31, 2002

Effect of rare earth ions substitution on dielectric properties in strontium titanate based system.

H. S. Tewari

Presented in National conference on current trends in Condensed Matter Research organized by Kakatiya University, Warangal during September 20 - 22, 2004.

Studies on dielectric properties of perovskite based $\text{Sr}_{1-x}\text{Gd}_x\text{Ti}_{1-x}\text{Co}_x\text{O}_3$ System.

Tewari H.S., Thirteenth National Seminar on Ferroelectrics and Dielectrics(NSFD-XIII), Nov 23-25, 2004, Delhi.

Synthesis, Structure and Electrical Behavior of Yttrium and Cobalt Doped Calcium Titanate.

H. S. Tewari and Amit Godbole,

International Conference on Emerging Frontiers in Physical Science, Dec 21-23, 2004, Allahabad.

Synthesis and Electrical Studies on Yttrium Cobaltite Substituted Strontium Titanate.

Tewari H.S., Godbole Amit, Parkash O. and Kumar D.,

Thirteenth National Seminar on Ferro-electrics and Dielectrics (NSFD-XIII), Organised by Univ. of Del during Nov 23-25, 2004, Delhi.

Studies on dielectric properties of perovskite oxide based $\text{Sr}_{1-x}\text{Gd}_x\text{Ti}_{1-x}\text{Co}_x\text{O}_3$ ($x < 0.50$) system

Tewari H. S.,

Thirteenth National Seminar on Ferro-electrics and Dielectrics (NSFD-XIII), Organised by Univ. of Delhi during Nov 23-25, 2004, Delhi.

Preparation and composition dependent dielectric properties of valence compensated solid solution, $\text{Sr}_{1-x}\text{Y}_x\text{Ti}_{1-x}\text{Co}_x\text{O}_3$.

Tewari H. S. and Godbole Amit,

Presented at National Seminar Organized by Manipur Central University during Feb. 17-18, 2005.

Synthesis and dielectric studies on sodium niobate substituted lanthanum cobaltate $\text{La}_{1-x}\text{Na}_x\text{Co}_{1-x}\text{Nb}_x\text{O}_3$.

H. S. Tewari and Amit Godbole

Presented in National Seminar on Advanced Materials Science held in D D University, Gorakhpur during March 17-19, 2005.

Optimization of efficiency of Polymer light emitting diodes

Devnath Dirhe, S. Tiwari and H S Tewari

Presented in National conference on Advances in Electronic materials and Devices Organised by Department of Pure & Applied Physics, Guru Ghasidas University, Bilaspur during March 5-6, 2006.

High Pressure elastic properties of $\text{TiC}_{1-x}\text{N}_x$.

A Srivastava, K G Roy, H S Tewari, R K Singh and B D Diwan

Presented in National conference on Advances in Electronic materials and Devices Organised by Department of Pure & Applied Physics, Guru Ghasidas University, Bilaspur during March 5-6, 2006.

Effect of Pressure on elastic constants of GaP

Anurag Srivastava, Alka Singh, Ishwar, H S Tewari and R K Singh

Presented in National conference on Advances in Electronic materials and Devices, Organized by Department of Pure & Applied Physics, Guru Ghasidas University, Bilaspur during March 5-6, 2006.

The Optical Band Gap of Silicon Quantum Dots: The Influence of Surface Passivation

S. K. Ghoshal, H. S. Tewari, G. A. Desalegn & E. A. Abebe

Presented in International conference organised by International Academy of Physical Sciences (CONIAPS-X) at Guru Ghasidas University, Bilaspur during Dec. 17-19, 2007

Microstructural studies on $(\text{Ba},\text{La})(\text{Sn},\text{Co})\text{O}_3$ ceramics using complex plane impedance spectroscopy

H S Tewari

Presented in International Conference on multifunctional oxide materials organized Department of Physics, Shimla University, Shimla during April 16-18, 2009

Dielectric studies of double mixed perovskite oxide $\text{Ba}_{0.90}\text{La}_{0.10}\text{Ti}_{0.90}\text{Me}_{0.10}\text{O}_3$ T(Me=Co, Ni and Cr)

Tewari H S and Alok Shukla

Presented in an International conference (CONIAPS – XI) of International Academy of Physical Sciences held in Allahabad at University of Allahabad during Feb. 19-21, 2010