



ISSN:2319-6602
*International
Journal of
Chemical and
Physical Sciences*



**National Conference on
Research Trends in Smart Material
NCRTSM - 2014**

*ISSUE Volume 3, Special Issue
April 2014*



www.ijcps.org

PVK Graphics

**An Open Access Online Bimonthly Journal
dedicated to Chemical and Physical Sciences**

Editorial Board of IJCPS

Editor-in-Chief:

Dr. M. E. Shelke

Associate Professor of Chemistry, HVPM College of Engg. & Tech. Amravati, India

Executive Editor:

Er. P. V. Khandve

Assistant Professor in Civil Engineering, Prof Ram Meghe College of Engineering and Management, Badnera.

Special Issue Editor:

Dr. Pushpinder Gupta Bhatia

Associate Professor in Physics, GN College of Arts, Science and Commerce, G.T.B Nagar, Mumbai.

email: pushpindergnc@gmail.com

Editorial Board:

Dr. B. N. Berad

Professor of Chemistry, RTM Nagpur University, Nagpur, India

Dr. D. T. Tayade

Associate Professor of Chemistry, GVIH & S Amravati, India

Dr. R. E. Shelke

Principal, Govt. ITI Daryapur, Amravati, India

Dr. R. R. Deshmukh

Associate Professor of Physics, Institute of Chemical Technology, Mumbai, India

Dr. Dhiman Bhattacharyya

Postdoctoral Associate, Department of Chemical Engineering, Massachusetts Institute of Technology, Cambridge, USA

Dr. Roman Dabrowaski

Head of Organic Chair and Liquid Crystal Laboratory, Military University of Technology, Warsaw, Poland

Bensafi Abd-El-Hamid

Associate Professor of Chemistry and Physics, Abou Bekr Belkaid University of TlemcenTlemcen, Algeria

Advisory Board:

Dr. A. S. Aswar

Prof. & Head Department of Chemistry, SGB Amravati University, Amravati, India

Dr. H. M. Meshram

Sr. Principal Scientist, IICT, Hyderabad, India

Dr. P. B. Raghuwanshi

Professor of Chemistry, Brijlal Biyani Science College, Amravati, India

Dr. K. L. Wasewar

Associate Professor, Department of Chemical Engineering, VNIT, Nagpur, India



Guest Editors:

Dr. Vijay Dabholkar

Guru Nanak college of Arts, Science and Commerce, Mumbai, India

Prof. Nathani Basavaiah

Professor, Indian Institute of Geomagnetism, Navi Mumbai, India

Dr. S. V. Salvi

Material Science Laboratory, Dept of Physics, Birla College, Maharashtra, India

Dr. Rajendra Deshmukh

Institute of Chemical Technology, Mumbai, India

Dr. Jolly Jacob

Dept of applied science and Mathematics, College of Arts and Science, Abu Dhabi University, UAE

TABLE OF CONTENT

Paper No.	Title of Paper	Page No.
1]	Role of Divalent Substitution in Dielectric Behavior and Pressure Sensitivity of MgTi ₂ O ₅ Author: A. H. Karande, S. Y. Shingare, S.S. Gurav, S.V. Salvi	1-9
2]	Influence of Pentavalent Substitution on Dielectric Behaviour of Karrooite Author: A. H. Karande, S. Y. Shingare, S.S. Gurav, S.V. Salvi	10-16
3]	Influence of Anatase And Rutile Phases on Physical Properties of New Nanosize MgTi ₂ O ₅ Author: A.H.Karande, S.Y.Shingare, S.S.Gurav , S.V. Salvi	17-20
4]	Oil-Palm Fiber Reinforced Binary Composites: Evaluation of Effective Thermal Conductivity Author: Richa Agrawal	21-26
5]	Cation Distribution Of Cu ²⁺ Substituted Nizn Ferrite. Author: Shinde N.S., Khot S.S., More R.M., Kale B.B., Basavaiah N., Watawe S.C., Vaidya M.M.	27-36
6]	Modified Route of Combustion Synthesis and Photoluminescence of (Y,Gd)Al ₃ (Bo ₃) ₄ :Eu ³⁺ Phosphors For Pdps Applications. Author: J. T. Ingle, R.P.Sonekar, S.K.Omanwar, Yuhua Wang	37-42
7]	Efficient Ultrasound Synthesis of 1-(2- Hydroxyphenyl)-3-P-Tolylpropane-1,3-Dione And Its Transition Metal Complexes Author: D.D. Suryawanshia, A.D. Suryawanshib A.S.Rajbhoja, S.T. Gaikwada	43-48
8]	Effect of Phases of Tio ₂ And Li as Substituents on Bafe ₁₂ o ₁₉ – A Comparative Study Author: Joshi V. H.	49-55
9]	Synthesis and Characterization of Ni Nanoparticles Author: Geeta Nair, Smita Survase	56-60
10]	Synthesis and Characterization of Conducting Polypyrrole By Γ – Radiation Author: Chitte Hemant K., Shinde Ganesh N., Bhat Narendra V.	61-67
11]	Differential Susceptibility of Gram Positive and Gram Negative Bacteria Towards Zno Nanoparticles Author: Kakuli A. Maiti, Abhijit Maiti, Rajlakshmi Neogi, D.C.Kothari.	68-77
12]	Electro-Optical Studies on Nanopowder Doped Liquid Crystal Author: Rita A. Gharde, Madhavi S. Pradhan, Santosh A. Mani, Jyoti R. Amare.	78-82

Paper No.	Title Of Paper	Page No.
13]	Magnetic And Dielectric Measurements of Mn Substituted LaFeO ₃ Compounds Author: Sandeep Vansutre ¹ , Prashant Das, H. Muthurajan, S Radha, N. Basaviah	83-90
14]	Eu ³⁺ Emission In Aluminum Borate Based Phosphor, CaAl ₂ B ₂ O ₇ Author: Palaspagar R.S., Gawande A.B., Sonekar R.P., Omanwar S.K.	91-95
15]	Mechanical, Electrical And Etching Study of Potassium Iodide Doped L-Threonine Single Crystal Author: Wankhade Pratik, M, Pahurkar Vikas G., Muley Gajanan G.	96-102
16]	Electrical Properties of Doped Polyblends Author: Saxena Meeta, Sangawar V.S	103-106
17]	Microstructure And Infrared Absorption Spectroscopic Study of Zn Substituted Li-Cu Ferrites. Author: Khot Sujata.S, Shinde.N.S, Kale.B.B, Basavaiah. N, Watawe S.C., Vaidya. M. M.	107-116
18]	Systematic Study of Structural, Transport and Dielectric Properties Of Ba(1-X)Sr _x TiO ₃ synthesized by Chemical Method Author: N. P. Tendolkar, M.R. Kale And S. T. Sankpal	117-126
19]	Study of Water And Nutrient Stresses in Plants by Laser Induced Fluorescence Spectra Author: A.D.Suryawanshi, A.S.Padampalle, V.B.Sanap D. D. Suryawanshi, D.S.Birajdar, B.H.Pawar	127-131
20]	Structural and Electric Properties of Titanium Substituted Ni-Cu-Zn Ferrite Author: Rathi Rajendra, Bhatia Pushpinder, Neogi Rajlakshmi	132-138
21]	Indium Sulfide Thin Films: A Substitute Buffer Layer for Solar Cells Author: V. B. Sanap, A.D. Suryawanshi, S.S. Kosalge, B.H. Pawar	139-143
22]	Magnetic Properties of Sr _{0.2} Ca _{0.8} MnO ₃ Ceramics Author: R. P. Pawar And Vijaya Puri	144-149
23]	Effect of Size And Shape on Young's Modulus of Nanostructured Ag by Lindemann's Criterion Author: S.D. Patil, P.B. Shinde, M.V. Takale	150-154
24]	Study of Attenuation Coefficient of Cow Milk Using Gamma Ray Energy Author: Chaudhari L. M. And Girase S. B.	155-160



Paper No.	Title Of Paper	Page No.
25]	Structural and Optical Properties Studies of Mn ⁺ Ion Implanted Gas Author: Sharad Tripathi, S. K. Dubey, V. S. Upadhyay	161-167
26]	Impedance Analysis of Food Preservative Using Time Domain Reflectometry Author: Badhe S. G And Helambe S. N.	168-173
27]	Photoluminescence Properties of Nanocrystalline Ybo ₃ : Eu ³⁺ Phosphor Author: V. R. Raikwar, V. B. Bhatkar, S. K. Omanwar,	174-178
28]	Superconducting State Parameters for Alkaline Earth Metals Using First Principle Pseudopotentials Author: Vansola Vibha, Patel Hiral N. K. Bhatt , P. R. Vyas, V. B. Gohel	179-185