

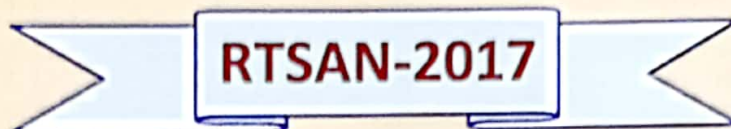


Rayat Shishan Sansthas

Dada Patil Mahavidyalaya, Karjat

Dist- Ahmednagar. (M.S.)

NAAC Reaccredited with **A Grade**



National Level Seminar

On

RECENT TRENDS IN SYNTHESIS AND APPLICATIONS OF NANOMATERIALS



Sponsored by

Planning and Development Board, Savitribai Phule Pune University, Pune

Organized by

DEPARTMENT OF PHYSICS

ISBN978-93-8299552-4

8th - 9th December 2017

INDEX

Sr. No.	Title of Paper	Page No.
1	Environment And Nanotechnology: A Review Mohamed Rizwan Khan	1-4
2	Graphene : A 2-Dimensional Wonder Material with Dimensionless Opportunities, Akash Deep Mishra	5-13
3	Growth and Characterizations of Pure and L-Alanine Doped Zinc Tris-Thiourea Sulphate Single Crystals M.A.Patil, G.R.Achalkar, P.S. Kadam, M.R. Raut	14-21
4	Nanotechnology: A Review on Silver Nanoparticles Khodade H. H.*, Nalwade A. R. **, Bolbhat S. N. ***	22-31
5	Characterization of Spin Coated (Co, Cu, Ni, Zn) Ferrite Thin Films Pardeshi A.R., Raut A.D., Vidhate K.R.	32-35
6	ICT: An innovative Teaching and Learning Process S.G.Thube, V.M.Nikale, Y.A.Pathak, M.A.Patil	36-39
7	Growth And Characterization Of Pure and $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ DOPED Tartaric Acid Single Crystals Y.A.Pathak, R.S. Kharade, M.B. Kurumkar, S.S.Kale,	40-46
8	Investigation of Substrate Temperature of Spray Deposited CdTe Thin Films. V.M.Nikale, S.G.Thube, Y.A.Pathak, S. S. Mhaske	47-54
9	Metal and Metal Oxide Nanoparticles and Immobilization of Cells and Enzymes for Life Sciences Applications Patil I M, Patil.M.A*,Shinde.R.J, Shaikh.S.A, Jamdade.G.Z	55-58

Investigation of Substrate Temperature of Spray Deposited CdTe Thin Films.

V.M.Nikale, S.G.Thube, Y.A.Pathak, S. S. Mhaske
(Department of Physics)

Dada Patil Mahavidyalaya Karjat, Dist-Ahmednagar.(MS)

Abstract:

Semiconducting CdTe thin films have been deposited on amorphous glass substrate using a spray pyrolysis technique. The preparative parameters have been optimized to obtain good quality and stoichiometric thin films. Binary chalcogenides with appropriate bandgap energy have been attracting a great deal of attention because of their potential applications in photovoltaics. CdTe in the form of thin films is prepared at different substrate temperatures by a simple and economical spray pyrolysis technique. The photoelectrochemical characterization shows that both short-circuit current (I_{sc}) and open-circuit voltage (V_{oc}) are at their optimum values at the optimized substrate temperature of 250°C . The XRD pattern shows that the films are pyrocrystalline.

Key words- Spray pyrolysis, Cd chalcogenides thin films, PEC Cell, XRD.

*Corresponding author

Telephone No- +919423184334

E-mail address : vmnikale@rediffmail.com