

SNJB's KKHA Arts, SMGL Comm. & SPHJ Science College, Chandwad

DEPARTMENT OF ELECTRONIC SCIENCE

REPORT ON- a Two Days State Level Workshop on 'Fabrication of Dye-Sensitized Solar Cells' conducted on 26th and 27th February, 2016

Board of College and University Development (BCUD), S. P. Pune University, Pune sanctioned Rs. 1,00,000/- to Electronic Science department, SNJB's KKHA Arts, SMGL Comm. & SPHJ Science College, Chandwad to conduct the two days' workshop on 'Fabrication of Dye-Sensitized Solar Cells'. We conducted the workshop on 26th and 27th February, 2016.

The workshop was arranged at conference hall-2 in Polytechnic building. Registration to the workshop was started around 8:30 AM on ground floor followed by breakfast. Dr V. B. Gaikwad, Director BCUD, S. P. Pune University Pune inaugurated the function as a chief guest. In his inaugural speech Dr V. B. Gaikwad remarked the motive of BCUD behind funding such events notably to promote science in rural areas like Chandwad. Prof. P. K. Khanna, Dean DIAT discussed the challenges in research techniques to keep the environment clean for which he explained the importance of green chemistry as an alternative for safety of the environment. Presidential address was delivered by Shri. Mahavirji Parakh, Co-ordinator, LMC of our college.

To discuss the three generations of photovoltaics and recent trends in Dye Sensitized Solar Cells (DSSCs) was the first objective to conduct this workshop where Prof. S. R. Jadkar not only covered the three generations but also touched the thermal solar importance. Dr Adinath Funde discussed various methods utilized for synthesis of DSSCs and amorphous Si solar cells followed by different dyes to sensitize DSSCs. Prof. R. S. Mane detailed various materials used for synthesis of DSSCs including materials required for photoanodes and electrolytes. Vote of thanks to speakers was expressed by Dr Deepak Patil.

Valedictory function was anchored by Prof. Miss. Safoora Ansari. and Prof. Onkar Pardeshi expressed vote of thanks. Dr Tushar Salve worked as Coordinator for this workshop. Prof. Chaitanya Kumbharde, Dr Ganesh Patil, Prof. Bapu Pagar, Prof. Anil Gite, Dr Sarika Shinde helped contributed for success of the workshop. The non-teaching staff supported all the background activities. Principal Dr G. H. Jain Sir put his valuable suggestions before coordinator to conduct the workshop smoothly.

The workshop was useful for the faculties who are engaged in Dye-Sensitized Solar Cells research. Almost 15 faculty members attended the workshop. Post graduate students coming from nearby colleges also get benefited where 30 students participated in this workshop. The accommodation was provided to the participants in RMD hostel in our campus.



Dr P. K. Khanna worshipping the photo of Poojya Kakaji and goddess Saraswati



Coordinator of the workshop Dr Tushar Salve presenting foreword of the Workshop



Invited speaker Dr Adinath Funde felicitation by Dr Arvind Patil



Fabrication of DSSC and Solar Chimney, a talk delivered by Prof. Sandesh Jadkar



Felicitations of invited speaker Prof. Rajaram Mane by Principal Dr G. H. Jain



Preparation and characterization of DSSC and preparation and characterization of Dyes, a talk delivered by Prof. Rajaram Mane

Program Schedule

26th February 2016

09.00 am to 10.00 am	Registration
10.00 am to 11.00 am	Inaugural function
11.00 am to 11.15 am	Tea Break
11.15 am to 12.30 pm	Session I
12.30 pm to 01.45 pm	Session II
01.45 pm to 02.30 pm	Lunch Break
02.30 pm to 03.45 pm	Session II
03.45 pm to 05.00 pm	Session IV

27th February 2016

10.00 am to 11.15 am	Session I
11.15 am to 11.30 am	Tea Break
11.30 am to 12.45 pm	Session II (Lab Work)
12.45 pm to 01.30 pm	Lunch Break
01.30 pm to 03.30 pm	Session II (Lab Work)
03.30 pm to 04.00 pm	Valedictory Function

Who can register and How to Apply !

Faculties/Research Scholars/PG/UG students

Registration Fees : Rs. 500/- (for Staff)
Rs. 300/- (for Research Students)
Rs. 200/- (for PG/UG Students)

Registration fee can accepted at the time of the seminar or can be sent through D. D. in favor of :

Principal, K.K.H. Abad Arts, S.M.G. Lodha Commerce & S. P. H. J. Science College, Chandwad (Nashik)

• TA / DA will be borne by the participant
• The registration form is available on the college website : www.acschandwadcollege.com

Contact Details

Dr. Tushar S. Salve (Co-ordinator)
Ph. No. (02556) 252126, Mob. 7798970554 (tssalve@gmail.com)
Dr. Deepak R. Patil (Co-ordinator) Mob. 9421522007
Prof. Onkar M. Pardeshi (Co-ordinator) Mob. 7350555581
Prof. B. R. Pagar Mob. 9922889520



Chief Patrons

Hon'ble Santokchandji Surana
(President, SNJB Trust, Chandwad)
Hon'ble Bebilalji Sancheti
(Chairman, Prabandh Samiti, SNJB, Chandwad)
Hon'ble Aitiji Surana
(Vice-Chairman, Prabandh Samiti, SNJB, Chandwad)
Hon'ble Jawaharlalji Abad
(Secretary, Prabandh Samiti, SNJB, Chandwad)
Hon'ble Kantilalji Bafana
(Trustee & Co-ordinator, College LMC, Chandwad)
Hon'ble Mahaveerji Parakh
(Co-ordinator, College LMC, Chandwad)

Chief Guest

Hon'ble Dr. V. B. Gaikwad
Director, BCUD, S. P. Pune University, Pune
Hon'ble Dr. S. S. Jadhav
Dean, Faculty of Science, S. P. Pune University, Pune
Hon'ble Dr. P. K. Khanna
Dean, DIAT, Pune
Hon'ble Dr. C. D. Upasani
Dean, Faculty of Pharmacy, S. P. Pune University, Pune

Chairman

Dr. G. H. Jain (Principal)

Organizing Committee

Prof. D. N. Shimpi (Vice Principal)
Prof. S. P. Khairnar (Vice Principal)
Dr. D. R. Patil (Co-ordinator)
Prof. B. R. Pagar (Treasurer)
Prof. C. B. Kumbharde
Dr. G. E. Patil
Prof. A. B. Gite
Dr. S. S. Patil (Vice Principal)
Dr. T. S. Salve (Co-ordinator)
Prof. O. M. Pardeshi (Co-ordinator)
Dr. Smt. S. D. Shinde (Treasurer)
Dr. M. T. Patil
Dr. A. M. Patil

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Shri Neminath
Jain Bramhacharyashram
(Jain Gurukul's)



**Karmavir K.H. Abad Arts,
Shriman M.G. Lodha Commerce
& Shriman P.H. Jain Science College**

Neminagar, Chandwad, Dist. Nashik (M.S.)-423 101
RE-ACCREDITED by NAAC AT 'B' Grade

Organizes

**Two Days State Level Workshop on
"Fabrication of Dye-Sensitized
Solar Cells"**

26th & 27th February - 2016

Sponsored by

BCUD, Savitribai Phule Pune University, Pune
Under Quality Improvement Program



Organized By

Department of Electronic Science

Venue

S.N.J.B's K.K.H. Abad Arts, S.M.G. Lodha
Commerce & S.P.H. Jain Science College
Neminagar, Chandwad, Dist. Nashik (M.S.)-423 101
Ph. No. (02556) 252126, 252125 Fax No. (02556) 252125
website :- <http://www.acschandwadcollege.com>

About the Institute :

Shri Neminath Jain Bramhacharyashram was established by Karmavir Keshavlalji Harakchandji Abad alias Pujya Kakaji in 1928 to impart education that would build the individual, morally and spiritually. The institute made a small beginning with three students. The thrust of the institute is upon all round development of the individual. It has been working with the mission "Samyak Dnyan, Samyak Darshan and Samyak Charitra". In the last two decades, with the dedication, selfless service and encouragement of the Managing Body and the Prabandh Smiti, the institute has made a mark in the educational sector. At present it facilitates education in Arts, Commerce, Science, Engineering, Polytechnic, Medical (Homeopathy) and Pharmacy to about 11200 students. Institute has one girls hostel (Capacity 750) & 3 boys hostel with all facilities.

About the College :

K. K. H. Abad Arts, S. M. G. Lodha Commerce & S. P. H. Jain Science College was established in 1970 to cater Educational and socio-economic needs of economically backward and drought-prone area of Chandwad. Community College Scheme was sanctioned to the college by UGC in XII plan. The College signed collaboration with Nigeria University, Nigeria for research in the field of Nanotechnology in April 2014. The College hosted Zonal Level AVISHKAR Research Competition consecutively for last three years & even "Yuva Mahotsav" (Indradhanushya) in Sept. 2015. Under the Community college, DMLT course is introduced from last year. The College offers PG course in Mathematics and Organic Chemistry, and from next academic year, new PG courses in Physics, Analytical, Chemistry and Botany are proposed along with B.Sc. in Computer Science.

About the Department :

The department of Electronic is one of the premier department right from the inception of the Science College. It has been offering the subjects at under graduate level in B.Sc. There are four faculty members at the department out of which two are doctorate. The UG program is supported by highly experienced and enthusiastic faculty and state-of-the-art infrastructure, including its own Laboratories. UGC & BCUD sanctioned one Minor Research Project each costing 4.9 lakh. The department has introduced Remedial coaching for undergraduate students.

Note :

"State Level Conference on 'New Research Trends in Chemistry and its Applications in Environmental Science' (Department of Chemistry) and State Level Workshop on 'Modern Techniques in Life Science through practical Approach' (Department of Botany) will be conducted on the same Days.

Dear Sir/Madam,

It gives us an immense Pleasure to inform you that Department of Electronic of our college is organizing Two Days State Level Workshop on "Fabrication of Dye-Sensitized Solar Cells" on 26th & 27th February 2016.

About the Workshop on Fabrication of DSSCs :

The major scope of the workshop will be to discuss the advancement in DSSCs during the first day of the workshop. It shall also cover the synthesis of DSSCs by various methods. DSSCs show the most promising future due to their independence, environmentally friendly, low maintenance and low cost. The participant discussing theory on first day are expected to give details of various photoanodes, various sensitizers, redox electrolyte etc. which are the key components of DSSCs.

On the second day of workshop the Dye-Sensitizer Solar Cell will be fabricated under the guidance of invited experts and as a measure, of fabricated DSSCs, efficiency will be checked using the Solar Simulator.

Objectives of the Workshop :

- ▶ The review of Photovoltaics discussing the three generation of Solar Cells and emergence of recent trends in DSSCs
- ▶ To discuss the working principle of DSSCs
- ▶ Various methods utilized for synthesis of DSSC materials
- ▶ An overview of Dyes used as a Sensitizing material for DSSCs
- ▶ Different materials for Photoanodes and Electrolyte
- ▶ To fabricate the Dye-Sensitized Solar Cell
- ▶ To measure the efficiency of the synthesized DSSC using Solar Simulator.

About Chandwad & Places to Visit :

Chandwad : is located on Mumbai Agra Highway (NH-3). Distance from major cities is Mumbai-230 Km., Pune-270 Km. & Nasik-65 Km. Nearest Railway Junction is Manmad-24 Km.

Places to Visit :-

Shirdi- 84 Km., Trimbakeshwar- 90 Km., Saputara-100 Km. Saptshrungi Gadh-60 Km., Nandur Madhyameshwar-50 Km.

Local Places :-

Rangmahal, Ichhapurti Ganesh Temple, Chandreshwar Temple & Renuka Devi Temple, Prachin Shani Mandir Vardadi

STATE LEVEL WORKSHOP

on
**"Fabrication of Dye-Sensitized
Solar Cells"**

at
**S. N. J. B's, Karmavir K. H. Abad Arts,
Shriman M. G. Lodha Commerce and
Shriman P. H. Jain Science College
Neminagar, Chandwad, Dist. Nashik**

Sponsored by

BCUD, Savitribai Phule Pune University, Pune
Under Quality Improvement Program

on
26th & 27th February - 2016

REGISTRATION FORM

- Name :
- Designation :
- Status (Student/Staff) :
- Department :
- Name of the college :
- Tel. number with STD code :
- Phone :
- Mobile :
- E-mail :
- Registration Fee details :

- Rs. 500/- (for Staff)
 Rs. 300/- (for Research Students)
 Rs. 200/- (for PG/UG Students)

Registration fees can be accepted by D. D. in favour of the Principal, K. K. H. Abad Arts, S. M. G. Lodha Commerce & S. P. H. J. Science College, payable at Chandwad.

D.D. No. Date..... Branch.....

- Photocopies of this form can be used
- Spot registration is also available

Date : / /2016

Signature