Shri Doodhsakhar Shikshan Prasarak Mandal's

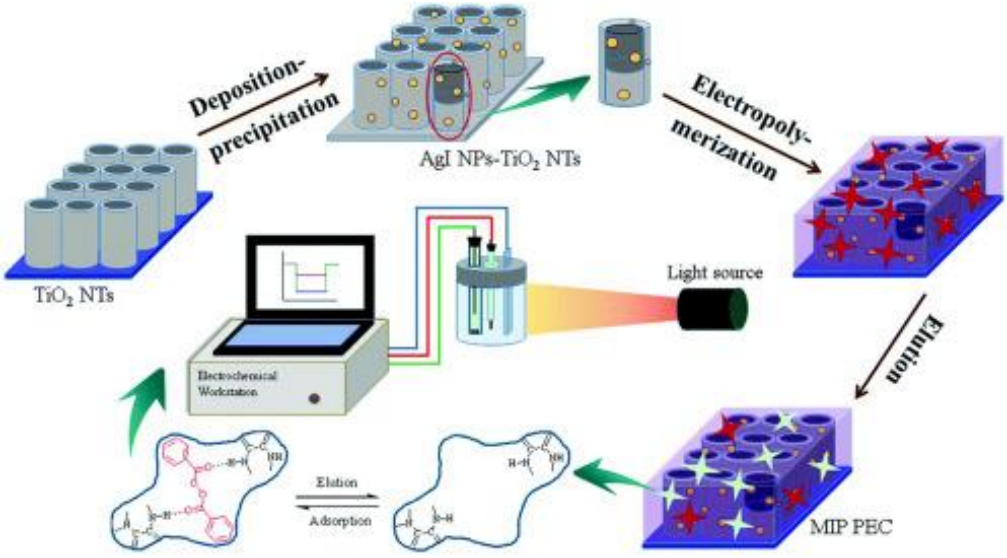
Doodhsakhar Mahavidyalaya, Bidri

Proceeding One Day National Conference

ON

"Advances In Functional Materials"

16 February 2024



Proceeding of the

One Day National Conference

ON

"Advances In Functional Materials"

Organized By

Shri Doodhsakhar Shikshan Prasarak Mandal's

Doodhsakhar Mahavidyalaya, Bidri

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ii) Mr V A Kamble
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iv) Mr. Sagar B Patil

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iii) Mr. S M Ghodake

Principals address

Principal Prof Sanjay Patil
M.A., B.Ed., Ph.D.
Department of Marathi

Doodhsakhar Mahavidyalaya was established in the year 1990 on a non-grant basis by Shri Doodhsakhar Shikshan Prasarak Mandal Bidri to cater to the needs of students from rural backgrounds. 85 students were admitted in the first year. Today about 800 students are learning in this college. In the year 1997 our college received 100% grants from the Government of Maharashtra. In the year 2004, our college was assessed and accredited by NAAC Bangalore with C+ grade. In the third cycle of assessment and accreditation, we have got a B grade with a 2.19 CGPA. At the beginning, most of the faculty members were postgraduates. No one had research experience or a research degree. Our faculty members during their service period registered for Ph.D. and achieved research qualification. Today out of 30 permanent staff members 22 members are Ph.D. holders and 10 members are Professors. In the year 2006, we have got UGC recognition. AS 2f and 12 B condition was fulfilled by our college, we could get a lot of grants in the 11^{th} and 12^{th} plan. About 10 faculty members availed the facility of teacher fellowship of UGC and obtained the Ph.D. degree. After getting Ph.D. degree many of the faculty members continued their research interest in their respective fields. 6 minor projects have been completed by our faculty members. Some of our faculty members got the recognition of research guide of the Shivaji University, Kolhapur. Under their guidance, about 15 students have registered for Ph.D. degrees. Every year our faculty members publish their research in National and foreign journals. All these efforts have inculcated a research atmosphere in the college. In the coming days, we aim to establish a research laboratory and recognition as a research college. This National conference has been organised by inviting as resource persons to our college students who are now working in India or abroad. We all are proud of their achievements and their presence here and address to the gathering will help to strengthen the research profile of my college. I hope that a student getting a research degree from our college will have great success in their career. With these few words, I express the great success of this National conference and welcome you all for your pleasant stay here.

Thank you.

Prof. Dr. Sanjay Patil
Principal
Doodhsakhar Mahavidyalaya, Bidri

Miss. Teja M. Patil
Resource Person

1. Bachelor of Science (B.Sc.) in Physics from Doodhsakhar Mahavidyalaya, Bidri (2017).

2. Master of Science (M.Sc.) in Physics from Shivaji University, Kolhapur (2019).

3. Successfully qualified for the State Eligibility Test (SET) in 2019.

4. Served as a temporary Assistant Professor of Physics at Doodhsakhar Mahavidyalaya, Bidri from 2019 to 2021.

5. Commenced Ph.D. studies at Shivaji University in 2020.

6. Recipient of the CSMNRF SARATHI Fellowship.

7. Currently engaged as a Research Scholar at Incheon National University, South Korea.

8. Authored over six research papers published in internationally and nationally renowned journals, and presented more than three abstracts at national and international conferences.

9. Ph.D. Thesis Title: "Studies on the Chemical Route Synthesis of Copper Cobalt Oxide/Conducting Polymer Composite for Supercapacitor Applications."

10. Specializes in wet chemical synthesis techniques, material science, material engineering and supercapacitor analysis.

11. Proficient in a variety of scientific software including Origin, Vesta, FullProf, ImageJ, ChemDraw, X'Pert HighScore, and Zotero.

12. Teja's current research objective is to develop a cost-effective energy storage device (Supercapacitor) with stable, high-efficiency electrodes. She is committed to applying her knowledge, analytical skills, and experience to conduct multidisciplinary research that contributes to the creation of innovative materials and the advancement of technology.

Enhancing Supercapacitor Performance with Redox-Additive Electrolytes in Metal Oxide Electrodes

Teja M. Patil*

Department of Physics, Bhogawati Mahavidyalaya Kurukali, Shivaji University, Kolhapur, 416004 Kolhapur, Maharashtra, India

Department of Electronic Engineering, Incheon National University, Incheon 406-772, Republic of Korea

Email: tejapatil7912@gmail.com

Abstract

In this work, $CuCo_2O_4$ nanowire arrays were grown on matrix of nickel foam through simple and eco-friendly hydrothermal method and improved its electrochemical performance by introducing redox active substance such as potassium ferricyanide ($K_3Fe(CN)_6$) at different concentrations (0.025, 0.050, and 0.075 M) to aqueous 2M KOH electrolyte. The crucial role of hexacyanoferrate ions in electron shuttling during charging and discharging has been discussed in detail. In pristine 2 M KOH electrolyte $CuCo_2O_4$ nanowire arrays exhibit specific capacity of 295 C g^{-1} (656 Fg^{-1}) and energy density of 18 Wh kg^{-1} at 7.5 mA cm^{-2} current density. These electrochemical measurements are further enhanced up to 2224 C g^{-1} (4942 F g^{-1}) and 139 Wh kg^{-1} in optimized 2 M KOH + 0.050 M $K_3Fe(CN)_6$ electrolyte. Furthermore, $CuCo_2O_4$ exhibits good cyclic stability with 90% capacitance retention up to 5000 CV cycles at a high scan rate of 100 mV s^{-1}. Such impressive performance of $CuCo_2O_4$ nanowire arrays in potassium ferricyanide redox additive electrolyte due to additional redox reactions at the electrode/electrolyte interface, suggest this is a feasible strategy for development of metal oxide-based supercapacitor with redox additive electrolytes.

Keywords: $CuCo_2O_4$, redox additive electrolyte, Potassium ferricyanide, high energy density, Supercapacitor

Acknowledgements:

Teja M. Patil acknowledge Chhatrapati Shahu Maharaj Research Training and Human Development Institute (SARTHI), Pune for providing funding through CSMNRF.

Vinay G.Parale

Resource Person

Name	**Dr. Vinayak G. Parale**	**Country**	**South Korea**
Affiliation	**Yonsei University, South Korea**	**Position**	**Research Professor**
Telephone	**+821048596399**	**Fax**	**-**
E-mail	**vinayakparale3@gmail.com**		
Biography	Dr. Vinayak G. Parale is currently working as a Research Professor in Department of Materials Science and Engineering, Yonsei University, South Korea. He received the B.Sc. degree (Physics) from Shivaji University, Kolhapur, India in 2008, the M.Sc. degree (Solid State Physics) from Shivaji University, Kolhapur, India in 2010, and Ph.D. degree (Physics) from Shivaji University, Kolhapur, India in 2013. He worked as a Lecturer in Sanjay Ghodawat Polytechnic, Kolhapur (June 2013-Feb 2015) and as an Assistant Professor in Engineering Physics at Rajarambapu Institute of Technology, Islampur (March 2015-May 2016). In June 2016, he joined Department of Materials Science and Engineering, Yonsei University, South Korea. He served as BK 21 Postdoctoral Fellow (2016-2018) and BK 21 Research Professor (2018-2019). At present, he is working as a Research Professor at the same department in the Aerogel Materials Research Centre, Yonsei University, South Korea. His current research interests include porous materials, aerogels, functional materials, energy storage and conversion, photocatalysis. Till now, he has published 2 international books, 83 international papers, and actively participated in more than 30 national/international conferences and symposiums. He received various awards and prizes. Additionally, he gave invited talks in various conferences and colleges. He has been served as a guest editor in MDPI polymers journal (I.F.-5.0), and presently serving as a recognized reviewer in more than 40 International peer reviewed journals. In 2022, he started to serve as an Academic Editor in International Journal of Energy Research published by Wiley & Hindwi (I.F.- 4.6)		
Lecture Title	**Aerogel: Lightest solid in the world**		
Photo			

Dr. Santosh Shamarao Patil,M.Sc. Ph. D.
Resource Person

Official address:
Research Scientist
Center for Materials for Electronics Technology,Panchvati off Pashan road,
Govt. of India, Pune Pune 411008
E-mail:santoshkumar.patil.19@gmail.com
Mob: +91-9657489523

Permanent address:
A/P Koor, Tal- Bhudargad, Dist-KolhapurMaharashtra 416209

Educational qualifications:

M.Sc.:InorganicChemistry**(**70.91 %**)**,Shivaji University, Kolhapur (2009-2011)
Ph.D.:Chemistry, C-MET, Pune, registered withShivaji University, Kolhapur,India (2012-2016)Ph.D. supervisors: Prof.S.S.KolekarandDr.B.B.Kale

Thesis Title:
Fabrication ofHierarchical NanostructuredCompositeMaterialsandTheir PhotocatalyticApplications.

Research experience:>**6** years (after Ph.D. degree)

Publications:

Research articles: **35+,** Book chapters: **3**, Review articles:**2**, citations: **>1600**, h-index: **21Post-Doc:**

Sept.2022─April 2023 FEMTO-ST Institute Science and Technology, CNRS FranceSept.2021─ August 2022 Department of Chemistry, INHA University, South Korea
July 2020 ─ Feb. 2021 Department of Chemical Engg. Kyungpook National University, South KoreaOct. 2018 ─ Feb. 2020 Department of Chemistry, POSTECH, South Korea
Sept.2016─ Aug. 2018 Department ofPhysics,ChonnamNationalUniversity,Gwangju,South Korea

Awards/Fellowships

1. Research Fellowship award for International Researchers sponsored by TÜBİTAK-2216, BilkentUniversity, Ankara, TURKEY (Jun 2018).
2. BK 21- Korean Government Postdoctoral Fellowship
3. Best Paper AwardNCMECS-2016, Pune University
4. Elected as 'Young Associate' Maharashtra Academy of Sciences (MASC) 2023

Research interests

1. Research experience in synthesis, assembly and applications of nanoparticles, semiconductor nanostructures, and graphene nanohybrids using chemical, physical and electrochemical process.
2. Artificial photosynthesis/photoelectrocatalysis for future energy carrier's production (H_2generation)
3. Semiconductor photocatalysis for environmental pollution abatement, water treatment etc.
4. Electrocatalysis, energy conversion and storage devices, electrochemical explosive detection (detection of2,4,6 trinitrotoluene)

Visits Abroad/Oral/Invited talks

1. Invited talk, Recent Trends in Chemical Science for Engineering and Technology, Government College ofEngineering, Karad, India
2. Invited talk, (IC-NEEA-2023), Lal Bahadur Shastri College of Arts, Science and Commerce Satara, Maharashtra, India
3. Invited talk, (ICAMA-2023), M. H. Shinde Mahavidyalaya, Tisangi, Gaganbavada, Kolhapur.
4. Oral presentation, NC3- 2015, DIAT Pune, India.
5. Oral presentation, KECS-2021, Bexo, Busan (Korea)
6. Several invited talks in Indian colleges

Short summary and research contribution:

Dr. Santosh Patil received his Ph.D. in Chemistry from Shivaji University, Kolhapur (India), in 2016. After that, he conducted his postdoctoral studies at Chonnam National University, POSTECH, and Kyungpook NationalUniversity (S. Korea). His research interests are focused on synthesis for nanostructured materials, thin films, photocatalysts, structure−composition−property control, and investigating the fundamental process of charge-carrier dynamics at the interface of these materials to increase the overall efficiency of operations particularly forcatalysis, energy conversion (hydrogen generation), and storage, wastewater treatment, and various other applications.During his latest research at FEMTO-ST Institute CNRS France, his research was focused on assessment of deformable electrodes for electrocatalytic hydrogen generation. **Major publications:ACS Chemical Review (I.F. 72.08),ACS Applied Materials Interfaces (I.F. 10.38), Applied Catalysis B: Environmental(I.F. 24.31), Chemical Engineering Journal (16.74), JMCA (I.F. 14.51), ChemSuSChem (I.F. 9.14), Nanoscale (I.F. 8.30)**

Synthesis of Hybrid Nanoscale Materials: Strategies andApplications

Santosh S. Patil

Centre for Materials For Electronics Technology (C-MET), Pune 411008, India.

Corresponding author email: *santoshkumar.patil.19@gmail.com*

Abstract-

Owing to their size-, shape- and composition-modulated exotic physicochemical properties at the nanoscale regime, caused by confinement effects significantly different from bulk-scale materials, nanoscale-materials (NMs) became enticing building-blocks to rationally design a range of functional materials and devices with enhanced performances towards solar-energy harvesting, batteries, supercapacitors, optoelectronic devices, catalysis, and environmental remediation. However, elaborate design and fabrication of such NMs for these and extensive applications is still remained a synthetic bottleneck due to lack of convenient, low cost and scalable methods that are versatile to allow numerous integration of material entities, yet preserving surface features of crystallite size, shape and uniformity. The chemical composition intricacy is another difficult subject left in the current NMs synthesis. Besides, some materials are not satisfactorily reactive at temperatures compatible by solution-phase reactions. In such circumstances, transformations during solid-state-reactions (SSRs) can offer an avenues to create unprecedented NMs with unique compositions and morphologies of intricate hetero- and nano-structures that are otherwise inaccessible. In this context, this work will encompasses a series of examples to overview solution- processed and SSRs for broad scientific significance in order to rationally design functional NMs anticipating structure property relationship in practical applications.

Multifunctional aerogels: traditional to modern synthesis strategies

Vinayak G. Parale

Aerogel Materials Research Centre, Department of Materials Science and Engineering, Yonsei University, South Korea, 03727

Abstract

Aerogels are considered as promising nanomaterials due to their excellent properties such as high specific surface area, low thermal conductivity, low density, and high porosity, known as eminent candidate for future material technology. Aerogels have a structure containing nano-sized pores and their pore size, pore distribution (regular/irregular, open/close), and pore shape, which can be controlled during sol-gel procedure. The outstanding mutifunctionality of aerogels open the way for some potential applications, such as, thermal insulation systems, aeronautical domains, environmental clean-up and protection, heat storage devices, transparent windows, insulating paints and so on. Among these applications, thermal insulating materials can play a vital role in living systems and for saving energy in various domestic and industrial processes. But inorganic aerogels such as silica are brittle in nature, which constrains their large scale-application. To overcome this limitation, this presentation also focuses on the enhancement of mechanical characteristics of inorganic aerogels using hybridization with other materials. This presentation introduces a preparation of aerogel materials, their multifunctionality to use in diverse applications.

Acknowledgments: This work was supported by the National Research Foundation of Korea(NRF) grant funded by the Korea government(MSIT) (No. 2020R1A5A1019131).

Dr. Patil Rajendra. S.

Resource Person

Scientist F Jt Director ACEM DRDO

Experience:

- M/s Sudarshan Chemicals Roha
- Dept of Chemistry Shivaji University Kolhapur
- DRDO joined as Scientist B in 2002
- Present position jt director at ACEM Nashik

Qualified SET in 2002

Publication

- More than 15 research papers in international journals, 2 patents
- Attended numbers of national and international conferences
- Visited Russia three times on govt deputation

Awards:

- Lab scientist of the year
- Technology group award
- Special award for Strategic Contribution two times

Thrust Area:

- Synthesis and characterization of High Energy Materials
- Processing of Composite Solid Propellant for various missiles

Synthesis of Cobalt Ferrite by Sol Gel Method for Structural and Morphological Studies.

P. D. Patil, S. N. Kulkarni[b*]
Amdar Shashikant Shinde Mahavidyalay, Medha, MS 415012, India
Doodhsakhar Mahavidyalay Bidri, MS 416208, India
Dr. Kulkarni S.N.
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Abstract: Cobalt ferrite nanoparticles were synthesized via the sol-gel method and characterized for their morphological properties. The sol-gel technique offers precise control over particle size and uniformity, crucial for optimizing material properties. A study of structural properties of the synthesized material was conducted. Structural characterization of sintered materials was performed using X-ray diffraction (XRD). These studies confirmed the formation of the cubic unit cells. The crystallite size of the samples evaluated from XRD data for Co ferrite was found to be 6.13 nm and the strongest reflection of the plane (311) remains constant for Co ferrite. The lattice constant was a= 8.3600 Å for Co ferrite. The developed nanoparticles' form, size, and distribution were analysed using scanning electron microscopy (SEM). The morphological characterization revealed well-defined aggregated nanoplates with a narrow size distribution.

Key words: Co ferrite, sol-gel technique, XRD, SEM.

Structural and morphological properties of Ce-Co ferrites synthesized by chemical co-precipitation method

Rohit R.Powar[1*], Shashikant K. Sawant[1],
[1]Department of Chemistry, Doodhsakhar Mahavidyalaya, Bidri-416208, Maharashtra, India

Corresponding Author:
Dr. Rohit R. Powar
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Abstract:

Cerium doped cobalt ferrite nanoparticles with the general formula $Ce_yCoFe_{2-y}O_4$ (y = 0, 0.025, 0.05, 0.075 and 0.1) (CeCF) was synthesized by a chemical co-precipitation method, using surfactant to control the particle size. Thermo-gravimetric analysis (TG-DTA) was studied for stability and transformation stages of precursors into final product. Phase identification and structural parameters were analyzed by X-ray powder diffraction (XRD). Ce^{3+}-doping concentration into $CoFe_2O_4$ (CF) noticeably affected the crystallite size, which was in the range of 13 to 27 nm and all samples show a spinel structure without any secondary phase. The lattice parameter, X-ray density, skeletal density, porosity is increases with increase in Ce-doping concentration while a decreasing trend was observed in case of particle size. On the other hand, the surface morphology and stoichiometric composition was confirmed by field emission scanning electron microscopy (FE-SEM), and Energy dispersive X-ray spectroscopy (EDS) respectively.

Keywords– Ce-Co ferrites, Spinel ferrites, Chemical co-precipitation, Thermal stability, Nanoparticles.

Improving biodegrability of biorecalcitrant effluent using advanced oxidation processes

Prof. A. V. Patil[1*], Dr. S V Anekar[2], Prof. P. P. Patil[3]

[1,2] Department of Chemical Engineering, Tatyasaheb Kore Institute of Engineering & Technology, Warananagar, 416113, India.

[3] Department of Chemical Engineering,Department of Technology,ShivajiUniversity,Kolhapur.
*Correspondance: E-mail: arvindpatil2899@gmail.com Mobile: (+91)9637303999;

ABSTRACT

The effective management of hazardous pollutants, in wastewater streams is crucial to ensure compliance with environmental regulations. Conventional treatment methods often fall short in terms of both applicability and efficiency. This necessitates exploring alternative technologies to tackle the challenge. Hydrodynamic cavitation (HC) has emerged as a promising advanced oxidation process (AOP) for wastewater treatment. Its suitability and efficiency are evident, offering several advantages such as low operation costs and straightforward equipment requirements. Through the AOP treatment, HC facilitates the formation and subsequent collapse of vapour filled cavities due to rapid pressure changes induced by high- speed flow. This cavitation induced micro explosion leading to the degradation and conversion of organic and inorganic compounds into less toxic intermediates and, ultimately, their complete mineralization. This work focuses on the degradation of pollutants using HC and its combination with ozonation. Recent studies have developed into optimizing the operating parameters, including inlet pressure, solution concentration, temperature, and pH, to maximize the benefits of HC in the treatment process. Additionally, the study highlights the remarkable synergism achieved through AOPs compared to individual treatment approaches. Overall, high energy efficient wastewater treatment can be achieved using a combine treatment approach based on hydrodynamic cavitation under optimized conditions.

Keywords: Wastewater; advanced oxidation process; hydrodynamic cavitation; synergism

BIOGENIC SYNTHESIS OF COPPER (II) OXIDE AND Ag NANOPARTICLES BY USING BOS TAURUS URINE AND STUDY THEIR BIOMEDICAL APPLICATION.

Sampada Warake[1] , Avinash Ramteke[*]
dravinash03@gamil.com

In recent years increasing importance in greener route of synthesis of nanoparticles. Researchers are widely using biological route of synthesis because this method is biocompatible, Eco-friendly and simple. Our research group synthesized copper(II) oxide and Ag nanoparticles by using Indian cow urine also prepared 20% composites of CuO : Ag by grinding with mortar pestle for three hours. The synthesized nanoparticles were characterized by various spectroscopic techniques like XRD, Zeta Potential, FT-IR, SEM, UV etc. We analyzed antimicrobial activity against microorganisms. Also study other biological activities like antioxidant and antibacterial.

Keywords: Cow Urine, Biomedical, Biogenic.

Eco- Friendly Source @ Soya-Rice Husk Based Activated Carbon For Waste Water And Dye Degradation Treatments.

Swarup S. Pati, Sameer M. Pote, Prasad G. Mahajan*
Department of Chemistry, Dr. Ghali College, Gadhinglaj - 416502,
Dist- Kolhapur, Maharashtra, India.
*Corresponding author email: *mahajanprasad2188@gmail.com*

Abstract:
Powdered activated carbon was prepared from husk of soya and rice. Carbonization was done at 300 °C, 350 °C, 400 °C, 450 °C and 500 °C for an hour and allowed to cool at room temperature. Chemical activation was achieved by impregnating the prepared charcoal with activating reagent with 0.5 N sulfuric acid and heated to 350 °C temperature for an hour. The prepared activated carbon was characterized by using analytical methods such as IR, Scanning Electron Microscopy (SEM) and X-ray diffraction studies (XRD). The physical properties of the activated carbon were determined using available literature standard methods for determination of pH, conductance, ash content, moisture, dye adsorption value, and iodine value. The final carbon content was also satisfactory. Thus, outcome of present research work signifies the purification of contaminated water by removal of dye content or any hazardous metal ions using prepared activated carbon.

References:

1. H. Zhonghuo, M.P. Sriniwasan, N. Yaming, Carbon 39 (2001) 877-886.
2. A.C. Lua, J. Guo, Lagmuir 17 (2001) 7112-7117.
3. D. Shivakumar, J. Nouri, Pollution Res. 1(4) (2015) 297-304.
4. D. Shivakumar, N. Murugan, R. Rajeshwaran, T. Shobana, C. Soundarya, et al, Inter. J. Chem. Tech. Res. 6 (2014) 4373-4378.
5. D. Shankar, D. Shivakumar, M. Thiruvengadam, M. Manojkumar, Pollution Res. 33 (2014) 490-503.

PTERIDOPHYTIC DIVERSITY OF KAGAL TAHSIL IN KOLHAPUR DISTRICT, MAHARASHTRA (M.S.)

***Satish Patil**
Department of Botany, Doodhsakhar Mahavidyalaya, Bidri
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ABSTRACT
Kagal tahsil is situated in the central-eastern part of Kolhapur District. The habitats of the concerning area and the pteridophytic species have been listed. The study area has been botanically explored in different seasons. The paper deals with taxonomic enumeration of the pteridophytic flora. In all 25 species belonging to 26 genera have been enumerated from the study area. The most important localities included in the survey of pteridophytic flora are the vicinity of Bidri, Jaysingrao Lake Kagal, the vicinity of Sake, Benikre villages.

Diversity of Avifauna in Doodhsakhar College Campus,

Bidri Kolhapur District

V.A. Kamble and R.S. Patil
Assistant Professor, Department of Zoology
Doodhsakhar Mahavidyalaya, Bidri
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Abstract

Birds are most prominent species of the Earth's biodiversity and being sensitive to environmental changes. They act as a key indicator for assessing the status of ecosystem health. They are integral part of food chain and food web. Birds play a vital role in keeping balance of nature. The present study was taken Avian diversity carried out in the selected area of Nearby Doodhsakhar college campus are, Bidri Kolhapur district. During survey 26 bird species belonging 17 families are observed. The common bird species were Jungle babbler, common myna, spotted dove, blue rock pigeon, house crow, etc.. This study aims to investigate the bird diversity in the Doodhsakhar college campus, bidri. as no work on bird diversity was carried out. The proposal will be helpful in preparing a baseline data on bird diversity.

Keywords; Avifauna , Diveristy,, Common myna, Spotted dove.

Eco-friendly source @Soya-Rice Husk based Activated Carbon

for Waste water and Dye Degradation treatments

Swarup S. Pati, Sameer M. Pote, Prasad G. Mahajan*
Department of Chemistry, Dr. Ghali College, Gadhinglaj - 416502,
Dist- Kolhapur, Maharashtra, India.
*Corresponding author email: *mahajanprasad2188@gmail.com*

Abstract:

Powdered activated carbon was prepared from husk of soya and rice. Carbonization was done at 300 °C, 350 °C, 400 °C, 450 °C and 500 °C for an hour and allowed to cool at room temperature. Chemical activation was achieved by impregnating the prepared charcoal with activating reagent with 0.5 N sulfuric acid and heated to 350 °C temperature for an hour. The prepared activated carbon was characterized by using analytical methods such as IR, Scanning Electron Microscopy (SEM) and X-ray diffraction studies (XRD). The physical properties of the activated carbon were determined using available literature standard methods for determination of pH, conductance, ash content, moisture, dye adsorption value, and iodine value. The final carbon content was also satisfactory. Thus, outcome of present research work signifies the purification of contaminated water by removal of dye content or any hazardous metal ions using prepared activated carbon.

References:

6. H. Zhonghuo, M.P. Sriniwasan, N. Yaming, Carbon 39 (2001) 877-886.
7. A.C. Lua, J. Guo, Lagmuir 17 (2001) 7112-7117.
8. D. Shivakumar, J. Nouri, Pollution Res. 1(4) (2015) 297-304.
9. D. Shivakumar, N. Murugan, R. Rajeshwaran, T. Shobana, C. Soundarya, et al, Inter. J. Chem. Tech. Res. 6 (2014) 4373-4378.
10. D. Shankar, D. Shivakumar, M. Thiruvengadam, M. Manojkumar, Pollution Res. 33 (2014) 490-503.

An Ultrasound-Promoted Green, Efficient, One-Pot Multicomponent Synthesis Of 5 - Aminopyrazole -4 –Carbonitrile Using Water Extract Of Pomegranate Ash(WEPA) As Catalyst

Kiran N. Patil[a*] , Vivek S. Ingale[a**] , Umesh U. Shinde[a] , Prathamesh D. Ghodake[a]
[a]**Department of Chemistry, Dr. Ghali College, Gadhinglaj, Maharashtra 416502, India**
Author E-mail: kiranpatil277@gmail.com
vivekingale2797@gmail.com

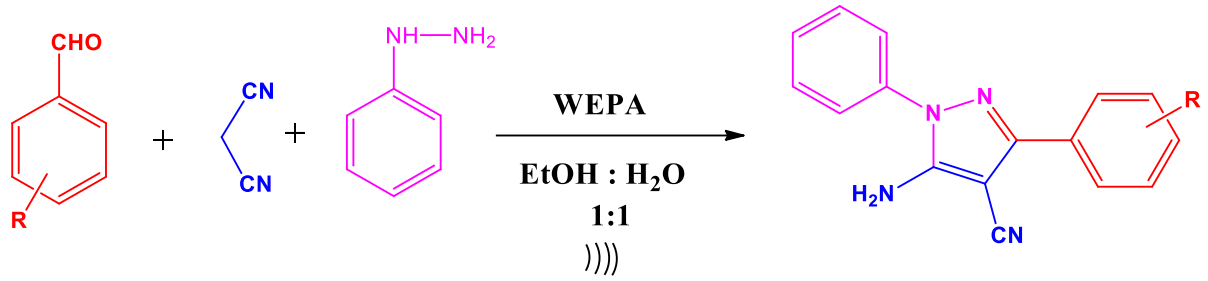
ABSTRACT:

In this work, we described one pot multicomponent synthetic approach for 5-aminopyrazole - 4- carbonitrile synthesis by using WEPA (Water Extract of Pomegranate Ash) as an organo catalyst. A series of substituted derivatives of product were synthesized placing this easy and efficient catalyst as green organic solvent. The reaction involves condensation of malononitrile, aromatic aldehydes and phenylhydrazine generating one- pot pyrazole product. Reaction time has been reduced significantly using ultrasonic waves as a source of energy. The synthetic route of this work involving green solvent and less hazardous reactions. The advantages for this protocol are minimum reaction period, high percentage of yield, less hazardous and operational simplicity.

KEYWORDS:

Ultrasonic Irradiation, Pyrazole, WEPA, Green Organic Solvent, Knoevenagel Condensation, Green Chemistry etc.

GRAPHICAL ABSTRACT:



Preliminary study of Land-snail Diversity in Koyna Wildlife Sanctuary (WLS), Satara, Maharashtra, India

Omkar V. Yadav[1] and A. R. Bhosale[2]

[1]Department of Zoology, Amdar Shashikant Shinde Mahavidyalay, Medha

[2] Department of Zoology, Sadguru Gadge Maharaj College, Karad, 415124

sarpaveda@gmail.com

Abstract

The present study was undertaken to the survey of land snails in the some selected spots of Koyna Wildlife Sanctuary (WLS), Satara district, Maharashtra during June 2021 to December 2022. For this survey we made field observations opportunistically. During survey, we reported 18 species of land snails which represents about 6.4% of all known land snail species from India. All reported species belong to 8 genera. The present study indicates that species count at Koyna Wildlife Sanctuary is likely to increase with additional surveys and systematic work.

Keywords: Diversity, Mollusca, Koyna WLS.

Sidharth Pardesi

Abstract:

The Fe_3O_4 nanoparticles have been prepared by hydrothermal method with varying temperature such as 120, 140, 160 and 180 °C. The structural, morphological characterization of the obtained Fe_3O_4 nanoparticles carried out through XRD, FT-IR and SEM. XRD of the Fe_3O_4 nanoparticles exhibited sharp and strong diffraction peaks, confirming the highly crystalline structure of the Fe_3O_4 particles. The functional groups of the Fe_3O_4 nanoparticles are detected through FT-IR. The obtained nanoparticles exhibited a high level of crystallinity with uniform morphology at each temperature, as can be observed through SEM.

"Synthesis and Characterization of Hydrothermally Prepared Mn_3O_4 for Catalytic Application"

Tushar T. Bhosale[a], Nishigandha B. Chougale[a], Umesh V. Shembade[a], Mayuri G. Magdum[a], Annasaheb V. Moholkar[a*]

[a]*Thin film nanomaterials laboratory, department of Physics, Shivaji University, Kolhapur -416004, India*

***Corresponding author:** Dr. A. V. Moholkar

Email address: avmphy@unishivaji.ac.in, avmoholkar@gmail.com

Abstract:

The current work describes a straightforward hydrothermal method for the preparation of simple manganese oxide microflowers (Mn_3O_4 MFs) for water-splitting activity. The primary aim of this study is to develop Mn_3O_4 MFs as a viable and environmentally acceptable electrode material for the oxygen evolution reaction (OER) mechanism. The structural, morphological, and

electrocatalytic activities of the Mn_3O_4 MFs electrodes are investigated using various physicochemical characterization techniques. From the structural study, the tetragonal crystal structure of the Mn_3O_4 MFs has been confirmed and the non-uniformly distributed microflowers-like structures are evidenced from the scanning electron microscope (SEM) analysis. Additionally, the electrocatalytic activity (OER mechanism) of the prepared Mn_3O_4 electrode has been assessed using cyclic voltammetry (CV) test, electrochemical impedance spectroscopy (EIS) measurements, and linear sweep voltammetry (LSV) techniques respectively. However, for the OER mechanism, the Mn_3O_4 MFs electrode demonstrated good catalytic activities with better electrochemical stability respectively. The resultant electrode material reports superior properties in terms of the overpotential (236 mV), Tafel slope (162 mV/dec), and electrochemical active surface area (ESCA) (8.51 cm^2) with promising stability over the 5 hours of continuous treatment in the aqueous 1M KOH electrolyte at a current density of 10 mA/cm^2 respectively. Therefore, the above findings demonstrate that Mn_3O_4 MFs are a potential candidate for OER catalytic activity.

Keywords: *Mn_3O_4 Catalyst, Hydrothermal method, Microflowers, Water splitting activities.*

Graphene based carboneous electrode nanomaterials having improved energy storage capacity.

Tanaji. S. Patil[a*], R. B. Patil[b], M. V. Takale[c], S. A. Gangawane[d].

[a]Department of Physics, Bhogawati Mahavidyalaya, Kurukali, Tal- Karveer, Dist- Kolhapur - 416001, Maharashtra, India.

[b]Department of Physics, Shri. Yashwantaro Patil Science College, Solankur, Tal- Radhanagari, Dist- Kolhapur -416212, Maharashtra, India.

[c]Department of Physics, Shivaji University, Kolhapur - 416004, Maharashtra, India.

[d]Department of Physics, Doodhsakhar Mahavidyalaya Bidri, Tal- Kagal, Dist- Kolhapur - 416208, Maharashtra, India.

Email – satish.gangawane98@gmail.com

Abstract: Supercapacitors devices are extensively used for power applications. The formation double layer by accumulation of charges and pseudocapacitance by rapid reversible redox reactions are the mechanisms through which energy storage occurs in the supercapacitors. Its main demerit is lower energy density. Carbon based nanomaterials were employed as electrode materials in electrochemical double layer capacitors (EDLCs), due to their high surface area and porosity. Higher surface area of carboneous nanomaterials and use of solid electrolyte may boost the energy storage capability and reliability of EDLCs. Doping and nanocomposites synthesis are the main strategies to prepare carboneous nanomaterials which show the improved electrochemical performance. Graphene is the important carbon nanomaterial having many advantages such as micropores, higher electric conductivity and porosity that boosts the supercapacitive performance

of EDLCs. Here we have discussed many strategies which were employed to improve the storage capability of graphene-based carbon nanomaterials used in supercapacitor devices.

Keywords: Supercapacitor; Graphene; Carbon based nanomaterials.

Effect of NaCl salinity on an antioxidative enzyme activity in the leaves of the *Trianthema portulacastrum* L.

J. M. Patil, S.S. Patil and S. M. Ghodake

Department of Botany, Doodhsakhar Mahavidyalaya, Bidri.

Abstract

The effect of NaCl salinity (100, 200 and 300 mM NaCl added to soil in pot culture) on an antioxidative enzymes such as catalase (CAT), ascorbate peroxidase (APX) and superoxide dismutase (SOD) in the leaves of *Trianthema portulacastrum* L. has been investigated. It was observed that activity of catalase and peroxidase enzyme increased at low concentration of NaCl salinity, but later on at higher concentration (300 mM) activity of both enzymes decreased. On the other hand activity of superoxide dismutase increased with increasing NaCl concentration. The increased activity of the superoxide dismutase enzyme along with increasing NaCl concentration, develop protective mechanism against oxidative damage by salt stress.

Keywords : Salinity, APX, Superoxide dismutase (SOD)

Department of Physics

Prof. H D Dhaygude
Head
Department of Physics
Doodhsakhar Mahavidyalaya, Bidri

Department of Physics was established in the year 1993. Department has produced some prominent students.

1. Dr Dilip Shivgan
2. Dr Vinayak Parale
3. Dr Arvind Patil
4. Dr Avadhut Sutar
5. Dr. Sachin Pawale
6. Dr. Umaji Kumbhar
7. Dr. Girish Yadav
8. Mrs. Teja Patil
9. Dr Yogesh Dabhole
10. Dr. Sandeep Rane
11. Dr Satyajeet Patil
12. Miss Namrata Khot

We all the faculty members achieved Ph. D. degree during the service period. Four minor projects funded by University grants commission has been completed by the faculty members. Prof S N Kulkarni and Dr S A Gangavane are recognized research guide of Shivaji University, Kolhapur. Today seven research students are working for the Ph. D. degree. Their names are as follows

1. Mr. Dheeraj Bhosale
2. Mrs. Jyoti Nagral
3. Mr. Pandu Patil
4. Mrs.Swapnali Patil
5. Ms. Shraddha Phatak
6. Ms. Megha Shinde
7. Mr Tanaji Patil

Main areas of our research are

1, Nanoferrite
2. Sensors
3. Photocatalytic materials
4. Holography
5. Supercapacitor

s n kulkarni

FOLLOWING

Associate Professor, Doodhsakhar Mahavidyalaya, Bidri, Maharashtra India
Verified email at dmbidri.edu.in

ferrite ceramic oxides

TITLE	CITED BY	YEAR
Susceptibility and magnetization studies of Gd^{3+} substituted Mg-Cd ferrites JL Bhosale, SN Kulkarni, RB Sasmile, BK Chougule Bulletin of Materials Science 19, 767-774	20	1996
Effect of Gd3+ substitution on initial permeability of Mg-Cd mixed ferrites JL Bhosale, SN Kulkarni, RB Sasmile, BK Chougule Indian journal of pure & applied physics 33 (7), 412-414	20	1995
Compositional, temperature and frequency dependence of initial permeability in Zr^{4+} substituted Mg-Zn ferrites RB Pujar, SN Kulkarni, CB Bellad, BK Chougule Journal of materials science letters 16, 1668-1669	19	1997
Electrical properties of Zr^{4+}-substituted Mg-Zn ferrites RB Pujar, SN Kulkarni, BK Chougule Journal of materials science letters 15, 1605-1607	13	1996
Grain boundary segregation and carbide precipitation in heat treated niobium superconducting radio frequency cavities A Dangwal Pandey, TF Keller, M Wenskat, A Jeromin, S Kulkarni, H Noei, ... Applied Physics Letters 119 (19)	7	2021

Cited by VIEW ALL

	All	Since 2019
Citations	92	23
h-index	6	4
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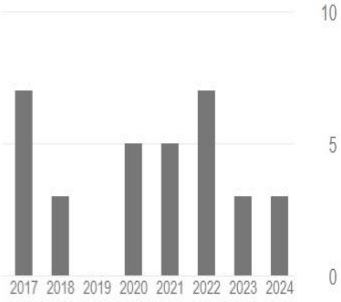

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Materials Science and holo...

TITLE	CITED BY	YEAR
Measurement of properties of copper telluride thin films using holography VJ Fulari, MV Prakash, SA Gandawane Progress In Electromagnetics Research C 12, 53-64	21	2010
Characterization of cadmium selenide thin films by electodeposition and its holographic study SA Gangawane, SD Kamat, VP Malekar, VJ Fulari, SD Patil, MB Dongare Journal of Optics 39, 167-174	9	2010
Surface deformation of cadmium telluride thin films by DEHI SA Gangawane, HD Dhaygude, SD Patil, VJ Fulari Archives of Applied Science Research 3 (1), 186-191	6	2011
A Review on Mn3O4 and Its Composite Nanomaterials of Diverse Morphologies as an Electrode Material in Supercapacitors TS Patil, SA Gangawane, MV Takale Int. J. Sci. Res. Sci. Technol 8, 520-526	5	2021
Surface deformation of cadmium selenide thin films by DEHI technique SA Gangawane, VP Malekar, VJ Fulari	4	2020

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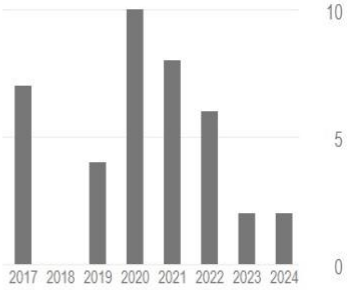


Co-authors EDIT

No co-authors

RESEARCH PROFILE OF DEPARTMENT OF BOTANY

Research degree of individual faculty:

Dr. S.S. Patil – M.Sc. M.Phil. Ph. D. F.I.F.S.

Title of Ph.D. degree – Study of Floristic Diversity of Pteridophytes of Western Ghats in Kolhapur District.

Title of M. Phil. Degree – Studies in Pathophysiological Aspects of Sugarcane.'

Research guide – Approved as research guide by Shivaji University, Kolhapur.

No students working with me for any research degree.

Research Project:.- Study of floristic diversity of Pteridophytes of Western Ghats in Kolhapur district**.** Completed approved by UGC.

The Indian Fern Society, awarded **Fellow of The Indian Fern Society (FIFS)** during the year 2021 for outstanding contributions in Pteridology**. A**t XVI conference of The Indian Fern Society & International Symposium on 'Research in Pteridology: Priorities and Challenges'.**- March 17-19, 2022.**

Research Publications:

1. **Patil S. S.** and Patil. T.M. **(1992)** A non-maceration technique for chlorophyll extraction from plant tissue and its comparison with Arnon's acetone extraction. **Geobios. 19(2):99-103**. (ISSN 0251-1223)

2. **Patil S. S.** and Patil. T.M. **(1994)** Biochemical changes induced by biotic stress in Sugarcane var. Co. 7527. ***Advances in Plant Sciences* 7 (2): 266-272.** (ISSN 0970-3586)

3. **Satish Patil** and Meena Dongare **(2011)** Pteridophytes of Chandgad forest of Kolhapur District (Maharashtra). ***Indian Stream Research Journal* 1(5)**(ISSN**:** 2230-7850)(I.F.5.1651)

4. **Satish Patil** and Meena Dongare **(2011)** Pteridophytic diversity of Tillari Ghat section, Kolhapur. ***Journal of Ecobiology*. 29 (1),23-26**. (ISSN 0970-9037)

5. Patil S., **Patil S.** and Dongare M**. (2013)** The genus Adiantum from Maharashtra: A note on the addition of two species for Maharashtra, India. ***Fern Gazette.*19 (5). (**ISSN 0308- 0838)

6. **Satish Patil (2016)** Effects of long chain fatty alcohol on sugarcane var. Co.740 and Co. 8014. ***Cibtech Journal of Bio-Protocols Vol. 5(1),1-3.*** (ISSN: 2319–3840) (ICV- 77.00)

7. Satish Patil (2017) Study of photosynthetic pigments in Pteridophytes of Kolhapur district. *Indian Stream Research Journal* 7(4), 87-90. (ISSN No. 2230-7850) (I.F.- 5.1651)(May17)

8. Satish Patil (2018) Red rot infection affects Sugarcane var. Co86032 and Co 265. Journal of Current Science and Humanities. (ISSN 2347-7784)(I.F. 2.05) July18

9. Satish Patil (2020) Pteridophytic diversity of Western Ghats in Kolhapur District,Maharashtra (M.S.) *Indian Journal of Plant Science Vol. 9(1), 15-18*. (ISSN: 2319– 3824) {Index Copernicus Value (ICV) = 72.97} (Jan-March-20)

10. Sachin Patil, Manohar Patil and Satish Patil (2020) Diversity and Ethnomedicinal

Pteridophytes of Kolhapur District, Maharashtra. *The Indian Fern Journal* (37): 224 - 236. {NAAS Score of 3.72} (Dec. 20) (Impact factor- 6.416)

11. J. M. Patil and S. S. Patil (2021) Effect of NaCl salinity on the physiological attributes in the leaves of *Trianthema portulacastrum* L. *Bioinfolet* Vol. 18(1B): 179-181 (Jan- Mar.21)(ISSN- p—973-1431 e-0976-4755) (impacy factor- 2.221)

12. Sachin M. Patil, **Satish S. Patil**, Suresh K. Patel & Kishore S. Rajput (2021) Rediscovery, resurrection and lectotypification of endemic *Isoetes sampathkumarnii* L. N. Rao from India**,** ***Plant Science Today*** Vol. 8(4): 900–904 (ISSN 2348-1900) (online) (Sept. 21)

Department Profile

Department of Zoology

1. **Dr. Rajaram S. Patil**

Title of Ph.D thesis : Studies on Biocontamination Of some selected water bodies in Radhanagari and Ganganbawada Tahsil, Dist. Kolhapur Maharastra,India.

No of Paper Published : 03

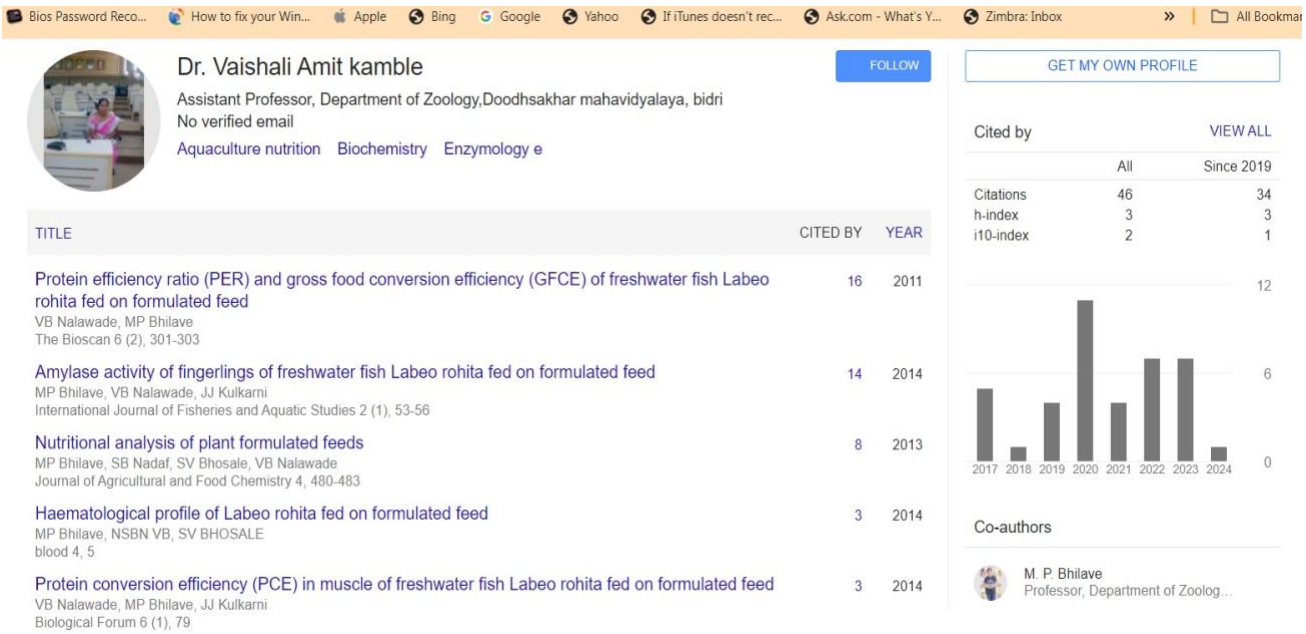
2. Dr. Vaishali Amt kamble

Title of thesis: Effect of formulated feed on growth of freshwater fish "*Labeo rohita*"

No of Paper Published: 13

Citation: 46

H- Index: 03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Assistant Professor, Department of Zoology,Doodhsakhar mahavidyalaya, bidri
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TITLE
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YEAR
Protein efficiency ratio (PER) and gross food conversion efficiency (GFCE) of freshwater fish Labeo rohita fed on formulated feed
16
2011
VB Nalawade, MP Bhilave
The Bioscan 6 (2), 301-303
Amylase activity of fingerlings of freshwater fish Labeo rohita fed on formulated feed
14
2014
MP Bhilave, VB Nalawade, JJ Kulkarni
International Journal of Fisheries and Aquatic Studies 2 (1), 53-56
Nutritional analysis of plant formulated feeds
8
2013
MP Bhilave, SB Nadaf, SV Bhosale, VB Nalawade
Journal of Agricultural and Food Chemistry 4, 480-483
Haematological profile of Labeo rohita fed on formulated feed
3
2014
MP Bhilave, NSBN VB, SV BHOSALE
blood 4, 5
Protein conversion efficiency (PCE) in muscle of freshwater fish Labeo rohita fed on formulated feed
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2014
VB Nalawade, MP Bhilave, JJ Kulkarni
Biological Forum 6 (1), 79
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Profile of Chemistry Department

Sr. No.	Name of Teacher	Qualification	Specialization	Number Of Publications in National and International journals	No. Students Working For Ph.D
1	Prof. Dr. S. N. Zende	M.Sc. Ph D	Physical Chemistry	Publications = 16	02
2	Prof. R.B.Chopade	M.Sc.	Inorganic Chemistry	Publications = 05	
3	Dr. S.K. Sawant	M.Sc. Ph. D.	Organic Chemistry	Publications = 06	
4	Dr. S.G. Khanapure	M.Sc. Ph. D.	Inorganic Chemistry	Publications = 16	
5	Prof .Dr. K.R. Sanadi	M.Sc. Ph. D. SET	Organic Chemistry	Publications= 21 index=09 Total citation =323	01
6	Dr. R.R. Powar	M.Sc. Ph. D.	Industrial Chemistry	Publication =12, Total citation =118 Hindex =6 I10index = 4	
7	Smt. S.B. Warake	M.Sc. SET	Physical Chemistry	Publications =01	

Prof.Dr. K. R. Sanadi

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TITLE	CITED BY	YEAR
Synthesis and characterization of nickel substituted cobalt ferrite nanoparticles by sol–gel auto-combustion method PP Hankare, KR Sanadi, KM Garadkar, DR Patil, IS Mulla Journal of Alloys and Compounds 553, 383-388	119	2013
Structural, electrical and magnetic properties of cadmium substituted copper ferrite by sol–gel method PP Hankare, KR Sanadi, RS Pandav, NM Patil, KM Garadkar, IS Mulla Journal of Alloys and Compounds 540, 290-296	54	2012
Effect of zinc substitution on magnesium ferrite nanoparticles: Structural, electrical, magnetic, and gas-sensing properties RR Powar, VD Phadtare, VG Parale, S Pathak, KR Sanadi, HH Park, ... Materials Science and Engineering: B 262, 114776	30	2020
Synthesis and characterization of Cd0. 7Pb0. 3Se thin films for photoelectrochemical solar cell SD Delekar, MK Patil, BV Jadhav, KR Sanadi, PP Hankare Solar energy 84 (3), 394-400	18	2010
Design and optimization of sensitive analytical spectrophotometric method for micro determination of copper (II) from e-waste by using of novel chromogenic extractant	12	2022

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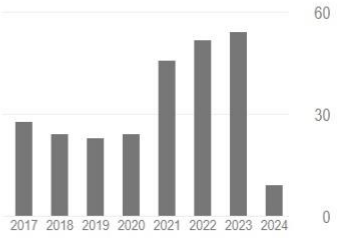

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Prof. Dr. Sharanbasappa Ganpati Khanapure

Doodhsakhar Mahavidyalaya, Bidri

(A). List of research papers published

1. Facile access to 3-cyano-4-azaindoles via a modified Madelung indolesynthesis **(2013)**
2. Cp_2ZrCl_2-catalyzed synthesis of 2-substituted quinozolin-4(3H)-ones. **(2013)**
3. Synergistic catalysis by an aerogel supported ionic liquid phase (ASILP) inthe Synthesis of 1,5-benzodiazepines**. (2013)**
4. Remarkable anti-breast cancer activity of ferrocene tagged multi-functionalized1,4-dihydropyrimidines. **(2013)**
5. Crystal structure of N-[(2-hydroxynaphthalen-1-yl)(4-methylphenyl)- Methyl] acetamide. **(2015)**
6. Sustainable synthesis of sulfonamides using supported ionic liquid phasecatalyst Containing Keggin-type anion. **(2015)**
7. Zirconocene dichloride catalyzed multi-component synthesis of 1-amidoalkyl-2-Naphtha's at ambient temperature**. (2016)**
8. Selective oxidation of alcohols using ferrocene-labeled Merrifield resin-supported Ionic liquid phase catalysts. **(2016)**
9. Intermolecular C–O Coupling Using Hemicucurbituril Supported Ionic LiquidPhase Catalyst. **(2016)**
10. An expedient synthesis of oxazolones using a cellulose supported ionic liquid phase Catalyst. **(2016)**
11. Potentially antibreast cancer enamidines via azide–alkyne–amine couplingand their Molecular docking studies. **(2016)**
12. Anticancer activity of ruthenocenyl chalcones and their molecular dockingstudies**. (2018)**

Dr. Subhash Hariba Patil
Department Of Statistics

Subhash Hariba Patil

FOLLOW

Department of Statistics, Doodhsakhar Mahavidyalaya, Bidri
No verified email
Statistical Quality Control Industrial Statistics and Opt…

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TITLE	CITED BY	YEAR
Economic design of a nonparametric EWMA control chart for location PS Hariba, SD Tukaram Production 26, 698-706	8	2016
Economic design of moving average control chart for non-normal data using variable sampling intervals SH Patil, DT Shirke Journal of Industrial and Production Engineering 32 (2), 133-147	8	2015
Economic design of moving average control chart for continued and ceased production process SH Patil, RN Rattihalli Walter de Gruyter GmbH & Co. KG 24 (1), 129-142	8	2009
Economic design of non parametric sign control chart SH Patil, DT Shirke Communications in Statistics-Theory and Methods 46 (18), 8987-8998	7	2017
Economic design of variable sampling interval sign control chart SH Patil, DT Shirke Journal of Industrial and Production Engineering 34 (4), 253-260	5	2017

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Citations	39	23
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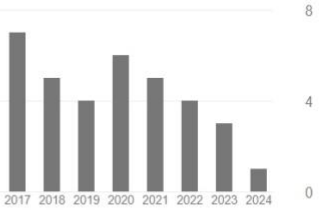

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NAAC Reaccredited 'B' - 2.19 CGPA
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Chief Patrons

1) Hon. Shri.K.P. Patil Ex.MLA.
Chairman, Shree Doodhsakhar Shikshan Prasarak Mandal, Bidri

2) Hon. Shri.Ganpatrao Farakate
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2) Prof. R.B. Chopade (Co-ordinator IQAC)
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4) Prof.Dr.S.N. Zende (Co-Convenor)
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Scientist, Yonsai University, Korea.
3) Dr.Santosh Patil
Research Scientist, CMET, Pune.
4) Miss.Teja Patil
Researcher, Inchon University, Korea.

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Vice-Chancellor, Shivaji University. Kolhapur
2) Prof.Dr. P.S. Patil
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Principal, Yashwantrao Patil Science College, Solankur.
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Principal, Bhogawati College, Kurukali.
17) Dr. Dinesh Amalnerkar
Former Director CMET.

College Committee

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4) Prof.Dr. S.N. Kulkarni
5) Prof.Y.S. Patil
6) Dr. S.K. Sawant
7) Prof.Dr.K.R. Sanadi
8) Dr.S.A. Gangawane
9) Dr.S.G. Khanapure
10) Dr.S.A. Salokhe
11) Dr. S.H. Patil
12) Dr.R.S. Patil
13) Dr. Smt J.M. Patil
14) Dr.Rohit Powar
15) Smt.S.B. Warake
16) Dr.Smt.V.A. Kamble
17) Mr.S.M. Ghodake
18) Mr.S.S. Mithari
19) Mr.Sachin Patil
20) Mr.Amit Patil
21) Mr.S.K. Patil
22) Mr.Sagar Patil
23) Mr.R.R. Alavekar

Principal, Dr Sanjay Patil
Doodhsakhar Mahavidyalaya, Bidri

INVITATION:

Dear Sir/Madam

We are pleased to invite you to participate in one day national conference on "Advances in Functional Materials" set for 16th February 2024 at Doodhsakhar Mahavidyalaya, Bidri. Tal- Kagal, Dist- Kolhapur by Internal Quality Assurance Cell and Science stream

ABOUT COLLEGE:

Doodhsakhar Mahavidyalaya, Bidri, Maharashtra was established by the Shri. Doodhsakhar Shikshan Prasarak Mandal under the initiative of Hon. Shri.Dinkarrao Jadhav in 1990, with the aim of imparting higher education, particularly science education to children of the sugarcane farmers in the vicinity of Bidri. The mission of the institution is to provide a broad spectrum in higher education for rural youth, to make them aware of the importance of education in the development of other sectors like agriculture and to equip the rural youth with skills for their future. The college started with 96 students and 14 teachers in the existing Junior college wing in 1990. Now college has about 850 students pursuing higher education with 30 permanent teachers in different disciplines. For the last four years our college has been felicitated by Shivaji University, Kolhapur for securing first rank for Merit Scholarship Scheme in the Faculty of Science and Technology under Rural Category. About twenty students are doing research under the guidance of recognized guides of our college. One of our faculty members has been awarded as a Fellow of 'Indian Fern Society'. Ten faculty members are professors. The college campus is spread over about 11 acres of land in a rural area with a total built up area of 1909 sq.m. Hon. Shri. Krishnrao P. Patil Ex MLA is the Chairman and Hon. Shri. Ganpatrao Farakate is the Vice-Chairman of our managing committee. Doodhsakhar Mahavidyalaya, affiliated to Shivaji University, is a grant-in-aid college with support from the Maharashtra State Government. The college received permanent affiliation and included in the list of 2(f) & 12(b) under UGC on 23rd March, 2006.

The college is situated in the hilly, rural and remote area of Kolhapur district. This place comes at the centre of four tehsils namely Kagal, Bhudargad, Radhanagari and Karveer. All of our students come from families having agricultural background. Our main aim is to provide them quality education to our maximum strength. Hence we voluntarily participated in the process of accreditation and succeeded in getting C++ grade in the first cycle, B grade with 2.64 CGPA in the second cycle and B grade with 2.19 CGPA in the third cycle. We are proud to be a member of NAAC accredited institutions of India.

OBJECTIVES:

The aim of the conference is to highlight the advancement in the field of materials and to impart and share knowledge of research and development between academicians, research scholars & students, scientist and industrial personnel in various areas of materials, synthesis & Thermal science.

THRUST AREAS:

1] Aerogel 2] Supercapacitor 3] Defence equipment materials 4] Sensors 5] Nano ferrites 6] Photocatalytic Materials 7] Crystal Growth 8] metallocene's 9] Ferroelectrics 10] Composite Materials 11] Biomaterials 12] Energy Storage Materials 13] Materials for sustainable Technology

CALL FOR ABSTRACT:

Brief abstract, based on original research in about 250 words and full paper for poster presentation are invited for the national conference on Advances in Functional Material (NCAFM-2024) to be organised in Doodhsakhar Mahavidyalaya, Bidri on 16th Febeuary 2024.

The abstract will include the title of paper (Times New Roman, Bold 14 pt), Authors name with affiliation, email, contact number and key words (Times New Roman 12 pt).

The abstract will reach on or before 13th February 2024 on **ncafm2024@gmail.com**. The participants are requested to display full paper on the poster on the mentioned themes of the size 1 X 1 meter.

CALL FOR REGISTRATION :

By using following link participant may register by filling registration form,

Registration Link :
https://forms.gle/9xbkp6JtcNYBJJHb6

REGISTRATION FEES :

Participants	Fees
Faculty	Rs.300/-
Industrial Personnel	Rs.350/-
Research Student	Rs.150/-
Student (UG/PG)	Rs.100/-

MODE OF PAYMENT :

Bank : - Bank of Maharashtra, Bidri
Account Name : Principal, Doodhsakhar Mahavidyalaya, Bidri
Account Number : **20224429708**
IFSC : MAHB0000504

IMPORTANT DATES :

Last date for abstract submission- 13th Feb. 2024
Last date for registration - 14th Feb. 2024

For more details contact :

1) Dr.S.S. Patil – 9527240380
2) Dr.S.N. Zende – 7798943175
3) Dr.S.N Kulkarni - 9422628048


Doodhsakhar Mahavidyalaya, Bidri
National Conference On
"Advances in Functional Materials"
16th February, 2024
Resource Persons
Dr. Rajendra Patil
Dr. Vinayak Parale
Dr. Santosh Patil
Ms. Teja Patil
Chief Guests


Doodhsakhar Mahavidyalaya, Bidri
National Conference On
"Advances in Functional Materials"
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Dr. Santosh Patil
Ms. Teja Patil
Chief Guests
Hon. K. P. Patil
Hon. Panditrao Kene
Hon. Sunilraj Suryavanshi
श्री. दूधसाखर शिक्षण प्रसारक मंडळाचे,
दूधसाखर महाविद्यालय, बिद्री.
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!! Vidya Param Bhushanam !!
Doodhsakhar Mahavidyalaya, Bidri
National Conference On
"Advances in Functional Materials"
16th February, 2024
Resource Persons
Dr. Rajendra Patil
Scientist F, Joint Director, ACEM, DRDO, Nashik
Dr. Vinayak Parale
Scientist, Yonsai University, Korea
Dr. Santosh Patil
Research Scientist, CMET, Pune
Ms. Teja Patil
Researcher, Inchon University, Korea
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Prof.Dr.Sanjay Patil
Hon. & Organizing Chairman


!! Vidya Param Bhushanam !!
Doodhsakhar Mahavidyalaya, Bidri
National Conference On
16th February, 2024


!! Vidya Param Bhushanam !!
Doodhsakhar Mahavidyalaya, Bidri
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Prof. Dr.S.N.Kulkarni
Prof. Dr.S.N.Zende
Dr.S.S.Patil
Prof.R.B.Chopade
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Doodhsakhar Mahavidyalaya, Bidri


Bidri
National Conference On
"Advances in Functional Materials"
16th February, 2024
Resource Persons
Dr. Rajendra Patil
Dr. Vinayak Parale
Scientist, Yonsai University, Korea
Chief Guest

तरुण भारत गुरुवार १५ फेब्रुवारी २०२४

बिद्री महाविद्यालयात उद्या राष्ट्रीय चर्चासत्राचे आयोजन

सरवडे : बिद्री ता. कागल येथील दूधसाखर महाविद्यालयात शुक्रवार १६ फेब्रुवारी राष्ट्रीय चर्चासत्राचे आयोजन केले आहे .अँडव्हान्सेस इन फंक्शनल मटेरियलस यावर सदरचे चर्चासत्र होणार आहे.डीआरडीओचे संशोधक डॉ. राजेंद्र पाटील, योनशाई विद्यापीठ, कोरियाचे डॉ. विनायक पारळे, सी एम. ए. टी पुणे येथील डॉ. संतोष पाटील व इनशॉन विद्यापीठ, कोरियातील प्रा. तेजा पाटील मार्गदर्शन करणार आहेत. कार्यशाळेचे उद्घाटन दूधसाखर शिक्षण प्रसारक मंडळाचे अध्यक्ष के. पी .पाटील यांच्या हस्ते आणि उपाध्यक्ष गणपतराव फराकटे, महाविद्यालय विकास समितीचे सदस्य पंडितराव केणे, सुनीलराज सूर्यवंशी,सचिव एस.जी.किल्लेदार यांच्या प्रमुख उपस्थित सकाळी १०.३० वाजता होणार आहे.

दक्षिण महाराष्ट्र केसरी /१६ फेब्रुवारी २०२४/

दूधसाखर महाविद्यालयात आज राष्ट्रीय चर्चासत्र

केसरी वृत्तसेवा

बिद्री : येथील दूधसाखर महाविद्यालयात आज, दि. १६ फेब्रुवारी रोजी एक दिवशीय राष्ट्रीय चर्चासत्राचे आयोजन केले आहे. अँडव्हान्सेस इन फंक्शनल मटेरियलस या विषयावर हे चर्चासत्र होणार आहे.

चर्चासत्रासाठी येथील दूधसाखर महाविद्यालयाचे माजी विद्यार्थी आणि नाशिक येथील डीआरडीओचे संशोधक डॉ. राजेंद्र पाटील, योनशाई विद्यापीठ, कोरियाचे डॉ. विनायक पारळे, सी. एम. ए. टी. पुणे येथील डॉ. संतोष पाटील व इनशॉन विद्यापीठ, कोरियातील प्रा. तेजा पाटील मार्गदर्शन करणार आहेत.

कार्यशाळेचे उद्घाटन दूधसाखर शिक्षण प्रसारक मंडळाचे अध्यक्ष के. पी. पाटील यांच्या हस्ते आणि उपाध्यक्ष गणपतराव फराकटे, महाविद्यालय विकास समितीचे सदस्य पंडितराव केणे, सुनीलराज सूर्यवंशी, सचिव एस. जी. किल्लेदार यांच्या प्रमुख उपस्थित सकाळी १०.३० वाजता होणार आहे. देशभारातील महाविद्यालयाचे प्राध्यापक व संशोधक विद्यार्थी या चर्चासत्रासाठी उपस्थित राहणार आहेत. सर्वांनी उपस्थित रहावे, असे अवाहन प्राचार्य डॉ. संजय पाटील, निमंत्रक डॉ.एस. एस. पाटील, सहनिमंत्रक डॉ. एस. एन. झेंडे, नॅक समन्वयक प्रा. आर. बी. चोपडे, डॉ. एस. एन. कुलकर्णी यांनी केले आहे.

सकाळ कोल्हापूर, बुधवार, २१ फेब्रुवारी, २०२४

बिद्री : येथील दूधसाखर महाविद्यालयामधील राष्ट्रीय चर्चासत्राचे रोपास पाणी घालून उद्घाटन करताना पंडितराव केणे. सोबत प्राचार्य डॉ. संजय पाटील, डॉ. राजेंद्र पाटील, डॉ. विनायक पारळे, डॉ. एस. एस. पाटील आदी.

एअरोजेलवर संशोधनाच्या भरपूर संधी

डॉ. पारळे : दूधसाखर महाविद्यालयात राष्ट्रीय चर्चासत्र

बिद्री, ता. २० : 'भारतात एअरोजेलवर संशोधन खूप कमी ठिकाणी होते. मात्र, त्याचे उपयोग भरपूर आहेत, त्यामुळे त्यात संशोधनाच्या खूप संधी आहेत,' असे प्रतिपादन योनसाई विद्यापीठातील (दक्षिण कोरिया) शास्त्रज्ञ डॉ. विनायक पारळे यांनी केले. दूधसाखर महाविद्यालयात झालेल्या राष्ट्रीय चर्चासत्रात प्रमुख मार्गदर्शक म्हणून ते बोलत होते.

चर्चासत्रात सादर केलेल्या शोधनिबंधाचे परीक्षण डॉ. राजेंद्र पाटील, डॉ. विनायक पारळे यांनी केले. सादर केलेल्या शोधनिबंधांमधून वारणा अभियांत्रिकी महाविद्यालयाच्या समीक्षा पाटील व श्रुतिका पाटील यांनी प्रथम, तर डॉ. घाळी महाविद्यालयाच्या (गडहिंग्लज) किरण पाटील यांनी द्वितीय क्रमांक पटकावला. त्यांना रोख पारितोषिके व प्रमाणपत्र देऊन सन्मानित करण्यात आले.

प्रा. डॉ. एस. एन. कुलकर्णी यांनी स्वागत केले. डॉ. एस. ए. साळोखे यांनी प्रास्ताविक केले. चर्चासत्राचे समन्वयक डॉ. एस. एस. पाटील यांनी आभार मानले. प्रा. समीर घोडके यांनी सूत्रसंचालन केले. चर्चासत्रास संस्थाध्यक्ष के. पी. पाटील, उपाध्यक्ष गणपतराव फराकटे, सचिव सर्जेराव किल्लेदार व सर्व संचालक मंडळाचे सहकार्य लाभले. यावेळी संपूर्ण भारतातून संशोधक प्राध्यापक विद्यार्थी उपस्थित होते.

तरुण भारत गुरूवार २२ फेब्रुवारी २०२४

बिद्री महाविद्यालयात एरोजेलवर राष्ट्रीय चर्चासत्र

सरवडे : एरोजेलवर संशोधन भारतात खूप कमी ठिकाणी होत आहे. मात्र त्याचे उपयोग भरपूर आहेत त्यामुळे त्यात संशोधनाच्या खूप संधी आहेत . असे प्रतिपादन योनसाई विद्यापीठ, दक्षिण कोरिया येथील शास्त्रज्ञ डॉ. विनायक पारळे यांनी केले.

बिद्री ता. कागल येथील दूधसाखर महाविद्यालयात राष्ट्रीय चर्चासत्रात प्रमुख ते मार्गदर्शक म्हणून बोलत होते. अध्यक्षस्थानी प्राचार्य डॉ संजय पाटील होते.चर्चासत्राचे उद्घाटन दूधसाखर शिक्षण संस्थेचे सदस्य पंडितराव केणे यांनी केले.

दुसऱ्या सत्रात संरक्षण, संशोधन व विकास संस्थेचे शास्त्रज्ञ डॉ. राजेंद्र पाटील यांचे , तिसऱ्या सत्रात सिमेट पुणे, येथील शास्त्रज्ञ डॉ.संतोष पाटील इनचॉन विद्यापीठ, कोरिया येथे संशोधक म्हणून कार्यरत असणाऱ्या प्रा .तेजा पाटील यांचे व्याख्यान झाले. शोधनिबंधामधून प्रथम क्रमांक वारणा अभियांत्रिकी महाविद्यालयाच्या प्रतीक्षा पाटील व श्रुतिका पाटील यांनी तर द्वितीय क्रमांक डॉ.घाळी महाविद्यालय, गडहिंग्लजच्या किरण पाटील यांनी पटकाविला.

स्वागत प्रा. डॉ.एस .एन कुलकर्णी तर प्रास्ताविक डॉ.एस. ए.साळोखे यांनी केले .चर्चासत्राचे समन्वयक डॉ. एस. एस. पाटील यांनी आभार मानले. सूत्रसंचालन प्रा.समीर घोडके यांनी केले. यावेळी संपूर्ण भारतातून संशोधक प्राध्यापक विद्यार्थी उपस्थित होते.

बिद्री :राष्ट्रीय चर्चासत्राचे उद्घाटन करताना पंडितराव केणे,सोबत प्राचार्य डॉ. संजय पाटील,डॉ. राजेंद्र पाटील,डॉ. विनायक पारळे ,डॉ.एस.एस.पाटील.

केसरी २३ फेब्रुवारी २०२४/६

एरोजेलवर संशोधनाच्या भरपूर संधी

डॉ. विनायक पारळे
केसरी वृत्तसेवा

बिद्री : एरोजेलवर संशोधन भारतात खूप कमी ठिकाणी होत आहे. मात्र त्याचे उपयोग भरपूर आहेत. त्यामुळे त्यात संशोधनाच्या खूप संधी आहेत, असे प्रतिपादन येनसाई विद्यापीठ, दक्षिण कोरिया येथील शास्त्रज्ञ डॉ. विनायक पारळे यांनी केले.

ते दूधसाखर महाविद्यालयात आयोजित राष्ट्रीय चर्चासत्रात प्रमुख मार्गदर्शक म्हणून बोलत होते. दुसऱ्या सत्रात संरक्षण, संशोधन व विकास संस्थेचे शास्त्रज्ञ डॉ. राजेंद्र पाटील यांचे व्याख्यान झाले. संशोधन क्षेत्रातील संरक्षण, संशोधन व देशाची स्वयंपूर्णता यावर त्यांनी विवेचन केले. तिसऱ्या सत्रात सिमेट, पुणे, येथील शास्त्रज्ञ डॉ.संतोष पाटील यांनी नॅनो मटेरियल यावर व्याख्यान झाले. त्यानंतर इनचॉन विद्यापीठ, कोरिया येथील प्रा. तेजा पाटील यांचे सुपर कॅपॅसिटर या विषयावर व्याख्यान झाले. चर्चासत्राचे उद्घाटन दूधसाखर शिक्षण प्रसारक मंडळाचे सदस्य पंडितराव केणे यांनी रोपास पाणी देऊन केले. .

बिद्री : राष्ट्रीय चर्चासत्राचे रोपास पाणी देऊन उदघाटन करताना पंडितराव केणे, प्राचार्य डॉ. संजय पाटील, डॉ. राजेंद्र पाटील.

चर्चासत्रात सादर केलेल्या शोधनिबंधाचे परीक्षण डॉ. राजेंद्र पाटील, डॉ. विनायक पारळे यांनी केले. वारणा अभियांत्रिकी महाविद्यालयाच्या सतीक्षा पाटील व श्रुतिका पाटील यांच्या शोध निबंधाला प्रथम क्रमांक तर डॉ. घाळी महाविद्यालय, गडहिंग्लज च्या किरण पाटील यांना द्वितीय क्रमांक प्राप्त झाला.

प्राचार्य डॉ. संजय पाटील यांनी मनोगत व्यक्त केले. स्वागत डॉ. एस. एन. कुलकर्णी तर प्रास्ताविक डॉ. एस. ए. साळोखे, आभार डॉ. एस. एस. पाटील यांनी केले. चर्चासत्राच्या यशस्वितेसाठी डॉ. एस. एन. झेंडे, प्रा. सुनील मिठारी, डॉ. एस. के. सावंत, डॉ. एस. ए. गंगावणे यांनी परिश्रम घेतले.