

Chapter 4
Academic activities of the Constituent Unit/Department
During 01-07-2022 to 30-06-2023
Month-wise brief report of Important Workshop/CME /Function/Days conducted by the department along with photographs

Campus Placement Interview

Date: 2nd July 2022

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Name of Company: Competent Systems, Pune

Post: Biomedical Sales and Services

Name of Applicants:

1.Pooja Kolekar	M.Sc. Medical Biotechnology IV th sem
2.Mane Prajakta Avinash	M.Sc. Medical Biotechnology IV th sem
3.Patil Sonal Vilas	M.Sc. Medical Biotechnology IV th sem
4.Redekar Sudarshan Narayan	M.Sc. Medical Biotechnology IV th sem
5.Suraj Jadhav	M.Sc Medical Biotechnology IV th sem
6.Snehal Hajare	M.Sc. Medical Biotechnology III rd sem
7.Akshay Kawale	M.Sc. Stem Cell and Regenerative Medicine
8.Kajal Gaikwad	M.Sc. Medical Biotechnology

Name of Selected Candidates:

- 1.Mane Prajakta Avinash
- 2.Pooja Kolekar



Teachers Day Report-2022

Date- 6th September 2022

We celebrate Teacher's day every year throughout the country on the 5th of September. Students express their gratitude and appreciation towards their teachers on this day. The former president of India Dr. Sarvepalli Radhakrishnan's birthday is celebrated as a teacher's day, all over India. He was a great teacher and philosopher.

All the research scholars of the department of Centre for Interdisciplinary Research (CIR), D. Y. Patil Education Society (Institution Deemed to be University), Kolhapur have organized an event on the occasion of Teacher's Day on 6th September 2022. The event was held at the seminar hall of CIR department at 4. 30 pm. The whole program was hosted by Miss Rutuja Gambhir.

The program was started with a welcome address followed by felicitation of all the teachers as well as non-teaching staff by giving a plant as a token of love and appreciation. The teacher's day was celebrated by cutting a cake by the auspicious hand of Prof. Dr. C. D. Lokhande, Dean and Research Director, D. Y. Patil Education Society (Institution Deemed to be University), Kolhapur. After the felicitation, research students Miss Priti Bagwade and Mr. Yogesh Chitare spoke about the importance of teacher's day. Dr. Vishwajit Khot and Dr. Ashwini Jadhav was also highlighted the importance of teachers in everyone life in their speech. Further, Prof. Dr. C. D. Lokhande enlightened all the teachers as well as students through his speech. For this program, Dr. J. L. Gunjekar, Dr. U. M. Patil, Dr. Patil, Dr. Mayakanan, all teaching, non-teaching staff and research students of CIR department were present. The program was ended with a vote of thanks by Vikas Magdum.



“Startup Workshop Part I”

Date- 08thSeptember, 2022.

In accordance with the objectives stated above, Department of Stem Cell and Regenerative Medicine, Centre of Interdisciplinary Research, has organized “Startup Workshop Part I” on 08thSeptember, 2022. This is the first year for the arrangement of international conference activity.

For this workshop Dr. Abinandan Patil (Associate Professor, College of Pharmacy), Dr. Deepak Sawant, Tutor (Department of Microbiology), have delivered expert talks related to theme of workshop.

The program was conducted at CIR and was open to participants from the all departments of University and others. The brochure was prepared by Dr. Shivaji B. Kashte, organizing secretary of the event and gave them a wide publicity on social media platforms such as Whatsapp, Telegram, Facebook, LinkedIn etc.

The program started at 2:30pm on 8thSeptember, 2022. Prof. Dr. C. D. Lokhande, Dean, CIR and Research Director and chairman of the program, inaugurated the event, and highlighted the importance of “Startup Workshop”. Dr. Shivaji Kashte introduced the first speaker Dr. Deepak Sawant. Dr. Deepak Sawantdiscussed the various aspects of Startup and Pitching Practices. The next



talk was delivered by Dr. Abinandan Patil. He has shared his experience of Startup Hero Maharashtra state 2018. The program was ended with vote of thanks by Dr. Shivaji Kashte, Convener. All the sessions were interactive with huge response from participants (50).

“Virtual, UK Products for Education of Medical Physics and Radiation Physics.”

Date- 14th September 2022

In accordance with the objectives stated above, the department of medical physics, Centre of Interdisciplinary Research, has organized “Online demo on “Virtual, UK Products for Education of Medical Physics and Radiation Physics” on September 14, 2022 at CIR seminar hall.

Contribution of medical physics in healthcare is multidimensional. The recent advancements in medical physics be it in Radiodiagnosis, radiation therapy, nuclear medicine and various fields using ionizing radiation has made tremendous sprints. For the Education of Medical Physics and Radiation Physics the new products and software’s are developed which will help students to learn the theoretical principles visually. At this lecture Ms. **Claire product specialist for**

Radiotherapy, has given an online demonstration of these products.

The program was conducted at CIR seminar hall for the medical physics students. The program started at 3:30 pm, at CIR hall. Ms. Pooja Patil introduced speaker Ms. **Claire**. She given a demonstration on “Virtual, UK Products for Education of Medical Physics and Radiation Physics. It was followed by question session for the faculties and students for 10 minutes. The session was interesting and interactive with good response from participants. The program was ended with vote of thanks by Dr. K. Mayakannan.

Induction program 2022

Date- 16th September 2022

Name of Resource Persons- 1. Dr. R. K. Mudgal, Vice-Chancellor

2. Dr. R. S. Patil, Coordinator, Allied Health Science

Objectives-

To create a vibrant local environment for incoming students.

To inculcate in them the ethos of the institution with a sense of larger purpose

Description-

Dr. R. K. Mudgal sir has presented the scenario of DYPES and explained the idea behind the establishment of CIR in the context of global research. He also highlighted the uniqueness of the programs being offered at CIR, Kolhapur. Dr. R. S. Patil has welcomed all students by introducing to them about the DYPES culture and made them aware dos and donts in the campus. The program concluded in the afternoon with a visit to Simulation skill center at DYP hospital

Outcome- Students felt comfort upon interaction with peers and their seniors

No. of participants- 53

One Day Seminar on “Industry -Academia association: A forward step for bringing the scientific innovation from research lab to market”

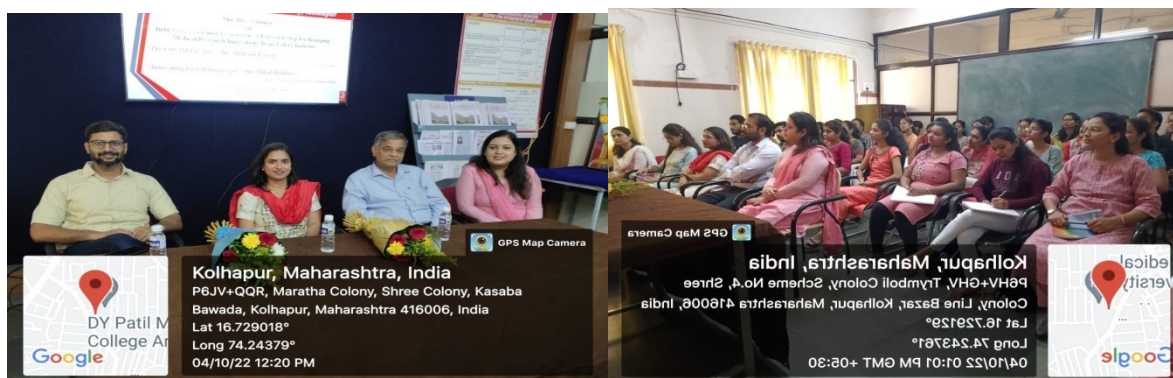
Date- 04th October 2022

Department of Medical Biotechnology and Stem Cell for Interdisciplinary Research, Centre for Interdisciplinary Studies of D. Y. Patil Education Society, Deemed to be University, Kolhapur has organized One Day Seminar on Industry -Academia association: A forward step for bringing the scientific innovation from research lab to market On 4/10/2022 at CIR Conference Hall.

The talk on “**The Coviself Story**” was delivered by **Dr Shrikant Pawar**. The Talk focused on the development of first Covid -19 antigen detection kit. **Dr. Minal Dakhve** delivered the talk on My

Lab: Innovating for Billion People describing her journey towards India's first RT-PCR based Covid detection kit.

Total number of student participants of the seminar was 41. The Seminar was attended by the faculties and students of Department of Medical Biotechnology and Stem Cell and Regenerative Medicine, Center for Interdisciplinary Research, Kolhapur.



Industrial Visit Date- 12th October 2022

1. "StemPlus Cryopreservation Pvt. Ltd. Sangli"
2. "Om Sai Clinical Research Pvt. Ltd. Sangli"
3. "Aureus Research Pvt. Ltd. Sangli"

Report

In accordance with the objectives stated above, Department of Stem Cell and Regenerative Medicine, Centre of Interdisciplinary Research, has organized "**Industrial Visit at Om Sai Clinical Research Pvt. Ltd. Sangli, Aureus Research Pvt. Ltd. Sangli and Stem Plus Cryopreservation Pvt. Ltd. Sangli**" on October 12th, 2022.

We have started our journey at 10:30 am from D. Y. Patil Education Society (Institution Deemed to be University) and reached to Sangli at around 11.20 am. We have reached to Om Sai Clinical Research Pvt. Ltd. Sangli around 11.30 am. We visited the facility and interacted with the staff of Om Sai Clinical Research Pvt. Ltd. Sangli. Om Sai Clinical Research Pvt. Ltd. (OSCR) specializes in conducting clinical research –Bioequivalence and Bioavailability studies. They have fully Loaded Clinical unit with ICU Beds. Analytical laboratory is equipped with 2 LC-MS/MS AB Sciex API 3200 & AB Sciex API 4000 instrument, other modern instruments & equipments.

We have reached to Aureus Research Pvt. Ltd. Sangli around 2:00 pm. Aureus Research Private Limited is a Private incorporated on 30 June 2015. They provide Water testing service in Maharashtra. Directors of Aureus Research Private Limited are Anjali Abhay Patkar and Abhay Narsinh Patkar. The refreshment was served to all participants.

We have reached to Stem Plus Cryopreservation Pvt. Ltd. at around 03:30 pm. All the

participants were separated into batches and all the facilities and process of cord blood and stem cell banking were explained to them by technicians from Stem Plus Cryopreservation Pvt. Ltd.

Around 5:30 pm we have started the return journey to Kolhapur and reached near around 6:30 pm. All the MSc. Stem Cell and Regenerative Medicine and MSc. Medical Biotechnology students participated in to this industrial visit with 100% attendance.

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“Startup Workshop Part II”

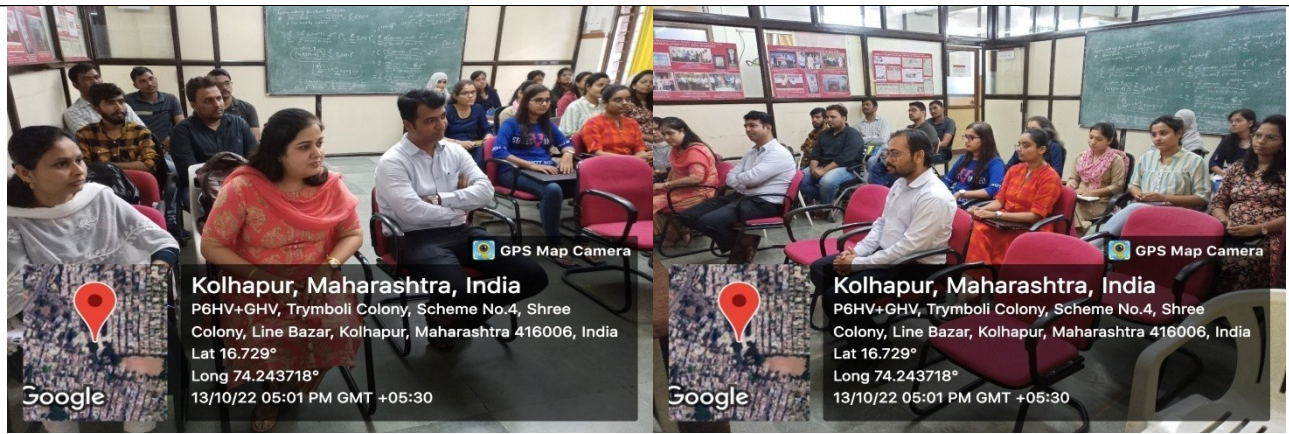
Date- 13th October 2022

Report

In accordance with the objectives stated above, Department of Stem Cell and Regenerative Medicine, Centre of Interdisciplinary Research, has organized “Startup Workshop Part I” on 13th October, 2022. This is the first year for the arrangement of international conference activity.

For this workshop Dr. Abinandan Patil (Associate Professor, College of Pharmacy) have delivered expert talks related to theme of workshop. The program was conducted at CIR and was open to participants from the all departments of University and others. The brochure was prepared by Dr. Shivaji B. Kashte, organizing secretary of the event and gave them a wide publicity on social media platforms such as Whatsapp, Telegram, Facebook, LinkedIn etc.

The program started at 4.00 pm on 13thOctober 2022. Prof. Dr. C. D. Lokhande, Dean, CIR and Research Director and chairman of the program, inaugurated the event, and highlighted the importance of “Startup Workshop”. Dr. Shivaji Kashte introduced the speaker Dr. Abinandan Patil. He has shared his experience of Startup Hero Maharashtra state 2018. The program was ended with vote of thanks by Dr. Shivaji Kashte, Convener. All the sessions were interactive with huge response from participants (50).



“Poster Competition”

Date- 14th October 2022

Report

In accordance with the objectives stated above, Department of Stem Cell and Regenerative Medicine, Centre of Interdisciplinary Research, has organized “Poster Competition” on Friday, October 14, 2022.

This is the first year for the arrangement of Poster Competition on Stem Cells and Regenerative Medicine. Hon. Vice-Chancellor Prof. R. K. Mudgal was a Chief guest at this Competition program. He along with Chairman, Prof. C. D. Lokhande inaugurated the program by light lamping followed by cutting the ribbon, on the auspicious hands of chief guest around 12.15 pm. Convener, Dr. M. G. Joshi and Organizing Secretary of the program Dr. Shivaji Kashte were also present. The inauguration program was ended with vote of thanks by Dr. Shivaji Kashte, organizing secretary.

The program was conducted at terrace of CIR and was open to participants from the departments. Participants presented their poster. Hon. Vice-Chancellor Prof. R. K. Mudgal, Prof. C.D. Lokhande appreciated and motivated the students by visiting the posters and guiding them. Other faculties of department, Dr. Arpita. Tiwari, Dr. Ashwini Jadhav, Dr. Vishwajeet Khot, Dr. U. M. Patil also visited the posters.

The examiners Dr. Vishwajeet Khot and Prof. R. S. Patil have thoroughly evaluated all the posters and drawn out four best posters. First Prize was presented to Ms. Susmita Patil, Second prize was presented to Ms. Tanaya Chavan By Prof. C. D. Lokhande at the Prize distribution ceremony.

Third prize was presented to Mr. Raj Verma by Prof. R.S. Patil. All these participants received a Book and Certificate as Prize. The valedictory program was ended with vote of thanks by Dr. Ashwini Jadhav.

All the students have participated (23) and presented their posters. Session was interactive with huge response from participants.



INYAS Science Camp -2022 Report

Date: 16th and 17th December 2022

Venue: D. Y. Patil knowledge campus, Salokhenagar, Kolhapur

Date: 16th and 17th December 2022

A) Faculties involves in events:

1) Dr. Jayavant L. Gunjekar,

INYAS member, Ramanujan Fellow, Centre for Interdisciplinary Research (CIR)

2) Prof. Dr. Chandrakant D. Lokhande,

Dean and Research Director, Centre for Interdisciplinary Research (CIR)

3) Dr. Vishwajit M. Khot

Asso. Prof. Centre for Interdisciplinary Research (CIR)

4) Dr. Sharad B. Patil

Asst. Prof. Centre for Interdisciplinary Research (CIR)

5) Dr. Vijay S. Kumbhar

Asst. Prof. Centre for Interdisciplinary Research (CIR)

B) Brief description about event / activities:

INYAS Science Camp- 2022 organized by Indian National Young Academy of Science (INYAS) in association with D. Y. Patil Education Society (Institution Deemed to be University), Kolhapur, Indian National Science Academy (INSA) and D. Y. Patil Knowledge Campus, Salokhenagar jointly organized 2 days INYAS science camp for students in 7th to 9th standards at D. Y. Patil knowledge campus, Salokhenagar, Kolhapur.

Around 400 students from host school as well as from 8 other schools were participated in the camp.

The camp was enlightened with the light of knowledge with numerous enormous scientists and

enthusiastic volunteers who converted the 2 days science camp into a huge success.

On the first day, the camp proceeded with the inaugural function by watering the plants in the presence of Prof. Mudgal (Vice Chancellor, D. Y. Patil Education Society, Kolhapur) and Prof. Lokhande (Dean and Research Director, D. Y. Patil Education Society, Kolhapur). Mr. Dadhiwale hosted the inaugural function and familiarized the guests to the students. Then, Dr. Vivek Parkar highlighted the schedule of the camp and explained the role of INYAS in developing scientific curiosity in the students' mind. Further, Prof. Lokhande and Prof. Mudgal shared their thoughts regarding the importance of science in every aspect of the daily life. Upon completing the inaugural function, the actual camp began. 400 students were arranged in 2 different halls and simultaneous sessions were performed. Stationary as well as experimental kits were distributed to all students who used those kits throughout the two days to perform their experiments. First session was performed by Rafik Shaikh and Avanish Singh who made the students to explore the world of microscopy using the foldscope. Students learnt the use of foldscope for observing small insects which was reflected on their curious faces. Then lunch recess took place. Followed by lunch, second session was conducted by Sujata Agre and Dr. Hemraj Yadav who demonstrated fabrication of various scientific toys and explained the science behind them. The important thing among all was each and every material required to perform the experiment was provided by organizers. At the end of first day, refreshments were distributed among all students. Dr. Gunjekar and Dr. Parkar managed the schedule of the camp and hospitality of all the guests. Student's faces revealed their excitement for the second day which was worth watching.

Second day began with scientific toys experimentation demonstration by a renowned scientist Dr. Jayant Joshi who showed the daily life physics behind many things happening around. At the same time, Dr. Vijay Kumbhar demonstrated the lemon battery and electromagnetic induction experiments with its basic introduction using power point presentation. Student's satisfactory faces and curious questions showed the level of response coming from them. Upon finishing this session, lunch break took place. Followed by lunch break, students were exchanged from both halls and made sure to familiarize everyone with all the experiments. At last, an important activity was carried out by separating girls and boys in different halls. The last session was dedicated to the adolescent health for boys and girls. Prof. More and Dr. Leena conducted the power point presentations for boys and girls respectively and taught the important care taking tips to the students. This session helped students to understand the physical and emotional changes that take place at their age and how to respond to these changes. The camp was then announced as finished and refreshments were distributed again to the students. Eventually a group photo was taken at the school campus which showed the enormous response of the students for the camp.

Following are the people who attended the sessions:

1. Rafik Shaikh

2. Avanish Singh
3. Sujata Agre
4. Hemraj Yadav
5. Dr. Jayavant Gunjekar
6. Dr. Vivek Parkar
7. Dr. Jayant Joshi
8. Dr. Vijay Kumbhar
9. Dr. Tulsidas More
10. Dr. Leena Salunkhe

Along with these peoples, around 25 Ph.D. scholars were involved as volunteers who helped the students to perform the experimental demonstration. Also, teachers from the host school as well as invited school were involved along with several peons and helping staff.

The synergistic effect from all these hands made the camp one of the highly successful camp which helped the students to awaken a scientific interest in their mind. The feedback form revealed the excitement of students to attend the next camp is quite impressive.

Attached below are some important photographs that gives a glimpse at the science camp.



“International Seminar Series on Nanotechnology for Energy, Environment and Sustainability 3.0”

Date- 4th - 5th , January 2023

Report

In accordance with the objectives stated above, Department of Medical Physics has organized “International seminar series on Nanotechnology for Environment and Sustainability 3.0” on 4th-5th January 2023.

This is a third consecutive year for the arrangement of International Seminar Series. This year, Dr. Deepak Dubal (Queensland University of Technology, Australia), Dr. Mahesh Suryawanshi (University of New South Wales, Australia), Dr. Hemraj Yadav (Shivaji University Kolhapur) and Dr. Vijay Kumbhar (D. Y. Patil Education Society, Kolhapur) have delivered

expert talks related to theme of seminar series which is Nanotechnology for Energy, Environment and Sustainability. The program was conducted at seminar hall of center for Interdisciplinary Research and was open to participants from all disciplines. The brochure was prepared by Dr. V. M. Khot, organizing secretary of this event and gave them a wide publicity through Whatsapp, gmail etc.

As a result of this, 63 participants have registered for this international seminar series within very short span of time. The program inaugurated at 11.00 am on 4th January 2023 by auspicious hand of Hon'ble vice-chancellor Prof. Rakesh Kumar Mudagal, and Dean, CIR, Prof. C. D. Lokhande sir. The inaugural talk was delivered by Dr. Deepak Dubal, Queensland University of Technology, Australia. Prof. C. D. Lokhande, Convener, of the program introduced the guest to participants and described the key contributions of Dr. Dubal in the field of Energy devices. Being the youngest Professor in the history of QUT, Dr. Dubal shared his views on, "Sustainable Materials and Energy Storage" and explored his journey from remote place in India to recognized position in Australia along with recent advances in the field. Dr. Vishwajeet Khot, organizing secretary introduced the next speaker, Dr. Mahesh Suryawanshi, Lecturer, ARC

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DECRA Fellow, School of Photovoltaic and Renewable Energy Engineering (SPREE), University of New South Wales (UNSW), Australia. Dr. Suryawanshi discussed the key findings in "Earth-abundant Copper Chalcogenide Compounds for Solar Energy Conversion" and highlighted the scope for Researcher in this field. The last talk of the day was delivered by Dr. Vijay Kumbhar, Assistant Professor of D. Y. Patil Education Society (Deemed University), Kolhapur. Dr. Kumbhar explained how nanoparticles are playing important role in sustainable development of society. He also provided thoughtful suggestions for overall development of scientific temper among students.

The next day of the seminar series started with the talk by Dr. Hemraj Yadav, from School of NanoScience and Technology, Shivaji University. During his talk, he highlighted, role of well-defined Nanostructures for next-generation energy storage and conversion systems. Dr. Yadav provided insights regarding funding and research opportunities in abroad for Indian budding researcher. In the last lecture, Dr. Sharad Patil, Assistant Professor, D. Y. Patil Education Society, Kolhapur explained Development of nanomaterials for energy storage applications. The session and day end with vote of thanks by Dr. Jayawant Gunjekar, Associate Professor, DYPES.

Due to the renowned speakers and interesting topics, all the sessions were interactive with huge response from participants. The feedback of the conference was conducted post conference and certificates are provided online to each participant.



Workshop On 3D Bioprinting Technique

Date- 06th Jan 2023

Report

Department of Stem Cell and Regenerative Medicine in Centre For Interdisciplinary Research, Department of obstetrics and Gynaecology and Department of Surgery constituent units of DY Patil Education Society (Deemed to be University) Kolhapur jointly organized a 'workshop on 3D Bioprinting technique'. This workshop was held on 6th Jan 2023 in Auditorium, 1st floor, DY Patil Medical College, Kolhapur. The program was inaugurated by Honourable Vice Chancellor, Prof. Dr. R. K. Mudgal sir. The Invited Speaker Ms. Arti Gupta and Ms. Anubha Mehra welcomed by offering University plaque by the auspicious hands of Honourable VC sir. Welcome and introductory speech given by Prof. Dr. Meghnad Joshi, Professor and Head, Dept. Cell and Regenerative Medicine and Medical Biotechnology.

The workshop is started with the talk by Ms. Anubha Mehra, Ass. Engineer, NBIL, Bangalore. She has given excellent talk on topic 3D Bioprinting and its applications in various fields like tissue engineering, cancer therapy and Neurological disorders. After her talk The demonstration of TRIVIMA 3D Bioprinter given by Ms. Arti Gupta, Ass. Engineer, NBIL, Bangalore.

Participants were interacted with resource person in question-answer session. All participants were satisfied with his talk.

Dr. Arpita Pandey Tiwari, Dr. Ashwini Jadhav, Dr. Shrivaji Kashte from Department of SCRM were also present in this event. Students of M.Sc. Stem Cell and Regenerative Medicine, M.Sc. Medical Biotechnology and PhD Students of CIR (Total 55 Students) were actively participated for this workshop. At the end of session vote of thanks was presented by Dr. Ashwini Jadhav, Asst. Prof., and Department of SCRM. The workshop was very much useful and very much informative and useful to all participants.



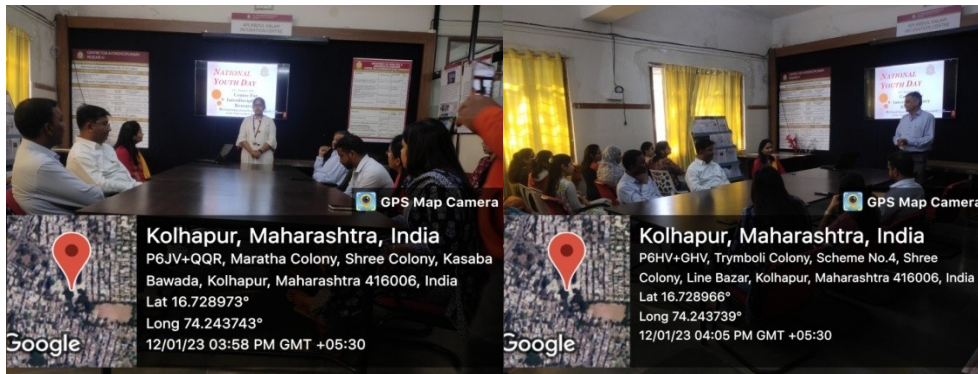
National Youth Day

Date- 12th January 2023

Celebrated National Youth Day on 12th January 2023. Students of M.Sc. Medical Biotechnology Ms. Pranoti Naikawade, Ms. Susmita Patil gave speech on history and contribution of great leader Swami Vivekanandaji. Prof. (Dr.) C. D. Lokhande, Dean CIR was given messages to youth about following the ideal thoughts of Swami Vivekanandaji on the occasion of his birth anniversary.

Dr. Arpita Pandey Tiwari, Dr. Ashwini Jadhav, Dr. Jayavant Gunjekar, Dr. Sharad Patil, Ms. Pooja Patil were present on the program.

Students of M.Sc. Stem Cell and Regenerative Medicine, M.Sc. Medical Biotechnology and PhD Students of CIR (Total 27 Students) were participated in this youth day Celebration activity.



KALAAVISHKAR-2023 (Traditional, Cultural and Sports program)

Date- 27th-29th Jan 2023

Title- KALAAVISHKAR-2023 (Traditional, Cultural and Sports program)

Date- 27th-29th Jan 2023

- Objectives- To promote quality and artistic renewal
- To promote a dynamic cultural heritage that is preserved, used and developed
- To promote national and intercultural exchange and cooperation
- To improve the sports personality and physical fitness

To improve the mental abilities and intellectual trainings

Outcome- The cultural activities provided students opportunities that expressed themselves to build confidence, and developed social skills.

The involvement of students in sports taught them various interpersonal skills such as patience, communication, leadership, punctuality, teamwork etc.

Participant- 140

“Research Methodology Workshop-2023”

Date-01st to 10th Feb 2023

Title-“Research Methodology Workshop-2023”

Date-01st to 10th Feb 2023

1. Prof Rakesh K Mudgal
2. Prof R. K. Sharma
3. Prof C. D. Lokhande
4. Prof K. Y. Rajpure
5. Prof R. S. Patil
6. Prof M.V. Takale
7. Prof Bhange
8. Mrs Desai
9. Prof S. M. Pawar
10. Dr V. M. Khot
11. Dr. Jayavant Gunjekar
12. Prof. Niraj Haval
13. Dr. Kabir G. Kharade
14. Dr. Anusha Ramanathan
15. Indrajit Khamble
16. Dr. Anjali Upadhye
17. Dr. Umakant Patil
18. Dr. Arpita Pandey Tiwari
19. Dr. Ashvini Jadhav
20. Dr. Mehnad Josji
21. Dr. Sharad Patil

22. Dr. Vijay Kumbhar
23. Dr. Sivaji Ksahte
24. Miss Pooja Patil
25. Dr. K. Mayakannan



Workshop on Intellectual Property Rights 2023

Date- 13th Feb 2023

REPORT

Internal Quality Assurance Cell and Research Guidance Cell, D.Y. PATIL EDUCATION SOCIETY, DEEMED TO BE UNIVERSITY, KOLHAPUR, has organized the “One-day workshop on Intellectual Property Rights” during 13 Feb 2023. The main objective of this workshop was to discuss the basics of patent filling and original research property rights. The total 50 participants including Ph.D. students, PG students, faculty members of University attended the workshop in offline as well through online (Microsoft Teams).

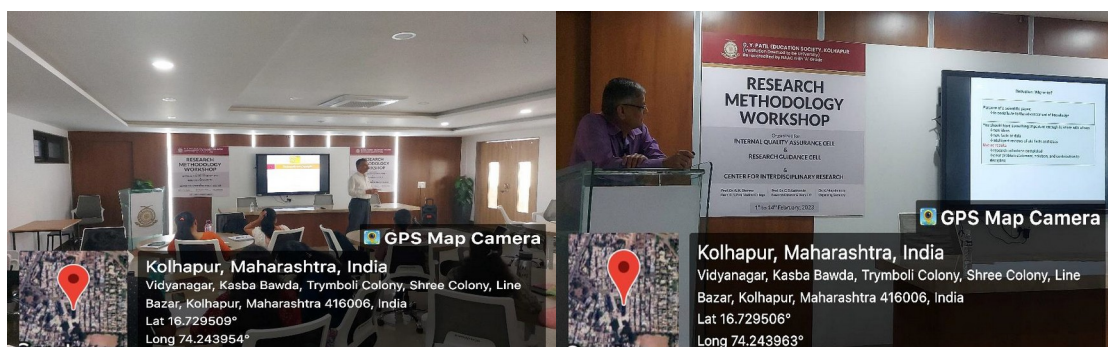
The workshop was inaugurated with Chief Guest, Hon’ble Vice Chancellor, Prof. Rakesh K Mudgal. Prof. C. D. Lokhande, Research Director briefed about the workshop. Hon’ble Vice Chancellor, in his inaugural talk expressed his ambition to create a world class research facility at D.Y. Patil Education Society, Deemed to be University, Kolhapur and shared his thoughts on basics of research. which is

very useful for every stage of research. Dr. K. Mayakannan, coordinator, R & D, CIR concluded the inauguration function with vote of thanks.

The workshop featured a diverse range of scientific sessions focusing on basics of research and statistical tools for research. The scientific session was started on topic of “IPR Policy 2016” by Hon’ble Vice Chancellor, Prof. Dr. Rakesh K Mudgal. Followed by two talks on “Indian Patent Filing” and “Measures of Research Excellence” by Prof. C. D. Lokhande, Research Director, CIR. Prof. C. D. Lokhande Sir explained in details about the basics of patent filing, and what can bet patent, what cannot be, how to patent in India and foreign countries. Also sir clearly described the various measures of Research excellence. 23

We are thankful to Dr. V.V. Bhosale, Registrar, Mr. A Narayanswami, FO for support, encouragement and hour to hour guidance. Last, but not the least, due to the efforts of IQAC, Research Guidance Cell members and CIR staff the workshop has turned to be a grand success.

The program was concluded with felicitation by Dr. K. Mayakannan



One Day Workshop on Research Grant Writing

Date- 14th February 2023

Title- “One Day Workshop on Research Grant Writing”

Date- 14th Feb 2023

Objectives- To understand the available Funding for Medical Research, Agencies & procedures

To understand how to write a Research Grant Project

To understand the Research paper writing (Scientific Paper)

Description- Three sessions by three speakers presented about the Research grants Project writings for various Funding Agencies such as UGC, BRFS, BRNS, SRF etc., Ethics in Research, and scientific paper writings.

Outcome- Prof. Rakesh K. Mudgal: Participants clearly understood the Important and aim of the program and Funding for Medical Research, Agencies & procedures

Prof C. D. Lokhande: Participants Understood about the Research Grant project writing.

Dr. Anusha Ramanathan: Participants Understood about the Scientific paper writing

No. of Participant- 50 (Students, Faculties etc.,



Seminar on Advances and Career opportunity in Biotechnology

Date- 25th February 2023

Centre For Interdisciplinary Research, and Dr. D Y Patil Medical College Hospital Research Institute Kolhapur constituent units of D Y Patil Education Society (Deemed to be University) Kolhapur jointly organized a seminar of Prof. Dr. Dinakar Salunke, Arturo Falaschi Emeritus Scientist, Former Director National Institute of Molecular Biology and Biotechnology on topic . Chairman for this Guest lecture Prof. Dr. C. D. Lokhande , Dean CIR welcomed the invited speaker. Prof. Dr. R. K. Sharma, Dean, DY Patil Medical College, Dr. V. Gaikwad, MS D Y Patil Medical College, Dr. R. S. Patil, Co-ordinator DYP School of Allied Health Science, Prof. Dr. M. Joshi, Dr. Arpita Pandey Tiwari, Dr. Ashwini Jadhav, Asst. Prof., Department of SCRM and other CIR faculties and medical college were present for this guest lecture. Students of M.Sc. Stem Cell and Regenerative Medicine, M.Sc. Medical Biotechnology and PhD Students of CIR (Total 55 Students) were present for this seminar.

Prof. Dr. Dinakar salunke covered following areas of research in his talk.

1. Mutations in virus
2. Vaccine production
3. Challenges in antiviral drug development.
4. Antivenom production.
5. SARS CoV2 pandemic
6. Opportunities of research in the areas of immunology and biotechnology.

The interactive session were conducted after his talk. Most of the students asked their questions related to the research and opportunities. Dr. Salunke satisfactorily answered all the questions. At the end of session vote of thanks was given by Prof. Dr. Meghnad Joshi, HOD and Convener of this program. This activity was very much useful and his talk was very much informative and useful to all participants.



Seminar on “How to make scientific poster effectively”

Date- 6th March 2023

Objectives- To develop competitive excellence among student and train them to fitting need of Industries.

To provide a platform to interact with eminent personalities

Description- The speaker has explained importance of the making presentation/posters in an efficient manner. Speaker has also presented examples of good scientific posters. There was overwhelming response from the participants across the globe. The session was interesting, interactive with active participation by students and faculty

Outcome- Participants got exposure to interact with expert in the field of applied research. Participants acquired knowledge about how to make presentation/poster effectively which will help their research to gain recognition from the peers in their respective fields.

No. of participants- 54

International Women's day

Date-8th March 2023

Name of program : Guest Lecture on Gender equality in innovation and Technology

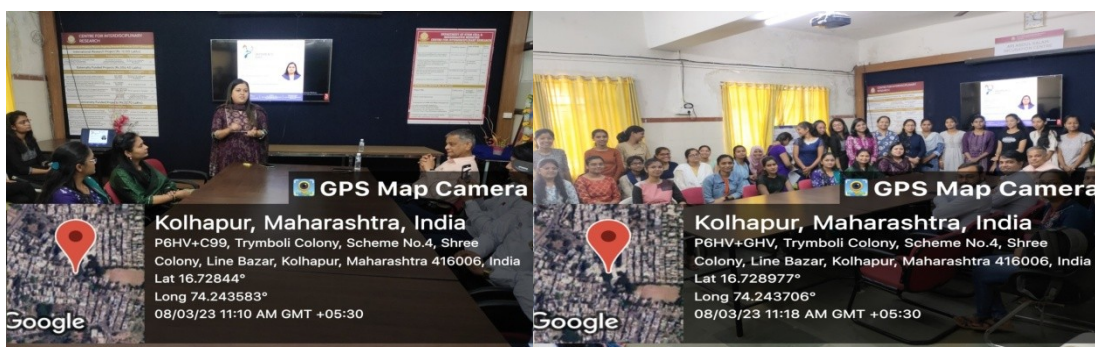
Name of the speaker- Dr. Arpita Pandey Tiwari, Associate Professor, CIR, DYPES

Date-8th March 2023

Objective- International Women's Day 2023 is celebrated to raise the awareness of topics including gender equality, access to abortion, and violence and abuse against women.

Description- Dr. Arpita Pandey Tiwari given as talk on Gender equality in innovation and Technology. In her talk she emphasized on 'How Women's Leadership & Collective Action can make a difference for an inspiring conversation with women leaders from across the globe about the power of collective action to drive progress towards gender equality and empowerment.'

No. of participants- Students: 44, Faculty: 08



DNYANSHODH -2023 (Search for Knowledge)

Date- 09th March 2023

Centre for Interdisciplinary Studies of D. Y. Patil Education Society, Deemed to be University, Kolhapur has organized "DNYANSHODH-2023" (Search for Knowledge).

The event was inaugurated by Honorable Vice –Chancellor Dr. Rakesh Kumar Mudgal in the august presence of Registrar Dr. V.V. Bhosale, Chief Finance Officer Mr. S. Narayanaswamy, Head of the Department of Stem cell and Regenerative Medicine Prof S. Mohan Karuppaiyl, Faculty of CIR and research students.

Honorable Vice –Chancellor Dr. Rakesh Kumar Mudgal inaugurated the activity by an eye-opening interactive talk on Ethics in teaching and Research and also emphasized the importance and purpose of

scientific research.

Vote of thanks at the inaugural function was delivered by Dr. Arpita Pandey Tiwari, Co-ordinator of Dnyanshodh 2023.

An orientation lecture by Prof. R.S Patil, Co-ordinator Allied health sciences, on topic “Science of materials-Macro to Nano” was delivered, which covered recent advances and interesting applications of material science. The lecture session was followed by interactive session. The involvement of faculty of center for interdisciplinary research and research students in scientific discussion was extensive and led to some brainstorming discussions, challenges and research gaps in areas of material science which can be taken into account by the researchers working in field of material science.

A poster presentation was organized in post Lunch session. Over 100 research scholars and PG students presented their research work in the form of posters. The posters were evaluated by faculty experts. The best posters were awarded during Valedictory session.

The Award giving ceremony was organized at CIR. Three best posters for Ph.D. and M.Sc. category was awarded with certificate and cash prize and certificates , by the hands of Prof. C. D. Lokhande Dean, CIR and Prof. R. G. Sonkawade , Professor of Physics, Shivaji University, Kolhapur, (M.S.) India.



“Industrial Visit” Date-13th April 2023

In accordance with the objectives stated above, Department of Stem Cell and Regenerative Medicine, Centre of Interdisciplinary Research, has organized **“Industrial Visit at iSERA Biological Pvt Ltd., Shirala” on April 13th, 2023.**

We have started our journey at 09:00 am from D. Y. Patil Education Society (Institution Deemed to be University) and reached to Shiral at around 10.00 am. We have reached to iSERA Biological Pvt Ltd., Shirala around 10.10 am. We visited the facility and interacted with the staff of to iSERA Biological Pvt Ltd., Shirala. to iSERA Biological Pvt Ltd., Shirala specializes in Antivenom production and Purification techniques, Polyclonal antibody development for various diseases.

All the participants visited the cGMP compliant Manufacturing facility, R & D facility, Quality control Laboratory with Microbiology, Analytical and Biological sections, Endotoxin free purified water generation plant, CPCSEA approved Small animal house facility, CPCSEA approved Equine facility, Diagnostic laboratory and Protein purification laboratory at to iSERA Biological Pvt Ltd., Shirala. The principle and working of the facilities were explained to students by respective staff members of the facilities.

All the participants interacted with the staff members Mr. Dhairysheel Yadav, and Dr. Sharad Yadav. All the queries and doubts of students were clarified by the staff members.

Around 02:00 pm we have started the return journey to Kolhapur and reached near around 03:30 pm. All the M.Sc. Stem Cell and Regenerative Medicine and M.Sc. Medical Biotechnology students participated in to this industrial visit with 100% attendance.



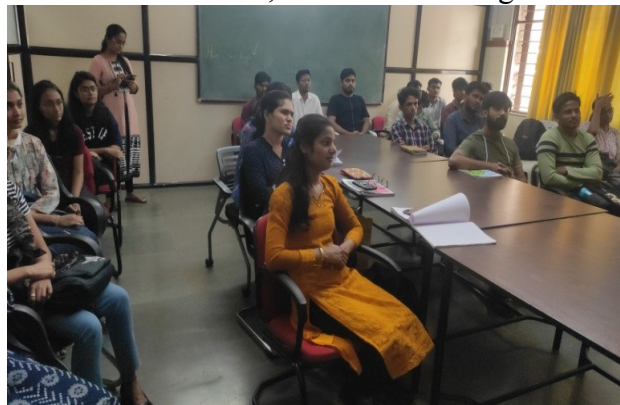
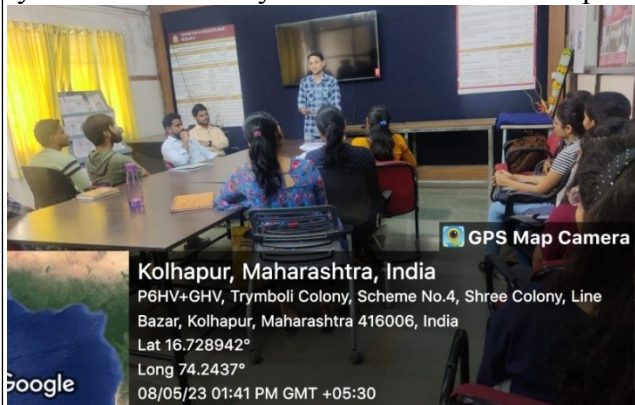
Alumni Interaction session - “Guidance on internship opportunities and skill development”

Date- 8th May 2023

Report

In accordance with the objectives stated above, the department of medical physics, Centre of Interdisciplinary Research, has organized “Alumni interaction session on 8th May 2023 at CIR seminar hall.

The program was conducted at CIR seminar hall for the medical physics students. The program started at 1 pm, at CIR hall. Dr. K. Maykannan introduced speakers Mr. **Vaibhav Patil** and Mr. **Pushkar Patil**. They interacted with students and talked about “**Guidance on internship opportunities and skill development**”. They have given suggestions to students that once you joined for the internship you should actively seek out additional responsibilities and initiatives, so students can gain valuable



hands-on experience. This practical experience allows them to apply their knowledge, develop new skills, and gain a deeper understanding of their chosen field. Hands-on experience is highly regarded by employers and can set students apart from their peers in the job market.

The session was interesting and interactive with good response from participants. The program was ended with vote of thanks by Pooja R. Patil..

Necessity and Easiness of English Language (English Communication Improvement Program)

Date- 18th May 2023

Centre for Interdisciplinary Research (CIR) of D. Y. Patil Education Society (Deemed to be University), Kolhapur had organized Necessity and Easiness of English Language (English Communication Improvement Program). The program was coordinated by Dr. Vijay Shamrao Kumbhar. Mr. Akshay Joshi was the speaker and Prof. R.S. Patil Sir chaired the program. Dr. Kumbhar introduced Mr. Joshi and requested him to guide the students. The Mr. Joshi nicely explained about the importance of English speaking and common mistakes made by the students while writing and speaking English. Moreover, he encouraged the students. Overall, it was great experience to both the students and faculty. Prof. R. S. Patil delivered the presidential address wherein he explained about the importance of English as a global language. Finally, the session was end with the vote of thanks by Dr. Vijay S. Kumbhar. Total number of participants 50.

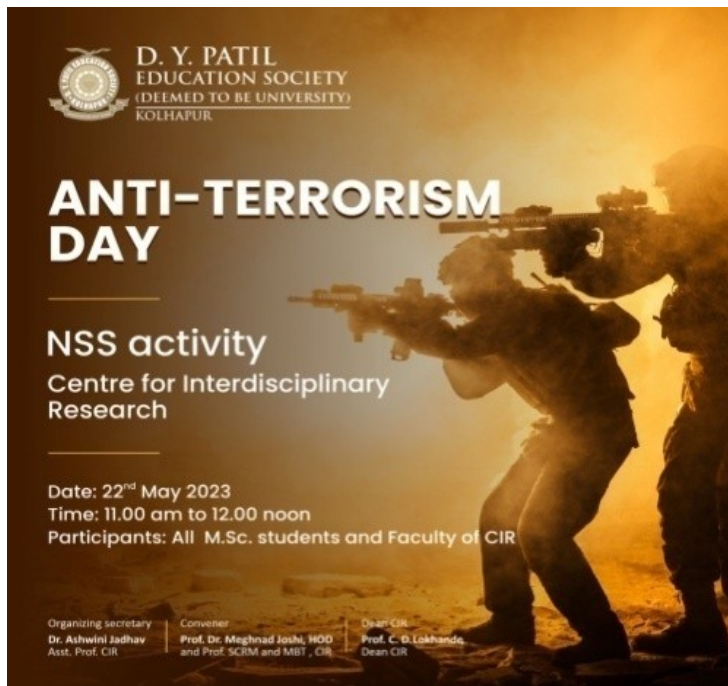


Anti-terrorism Day 2023

Date- 22th May 2023

It was in 1991 when the official date for National Anti-Terrorism Day was established, after the assassination of India's seventh Prime Minister Rajiv Gandhi on 21 May 1991. He was killed in Tamil Nadu by members of the LTTE while he was attending a campaign. A woman came in front of him who was a member of the Liberation of Tamil Tigers Eelam (LTTE) a terrorist group. She had explosives under her clothes and approached PM and bent down as if she wants to touch his feet. Suddenly a bomb explosion took place killing PM and approx 25 people. This is the inland terrorism that had created fear and our country lost PM.

The objective of the day is to promote national harmony, mitigate terrorism, and unity among people of all caste, creeds, and sex. The day holds importance when it comes to 'terrorism'. The day spread awareness about the violence caused by the terrorists. The 'Anti-Terrorism Pledge' is taken by the students and faculty on this day. It is observed to provide knowledge to the youth about terrorism, its impact on human suffering, and lives. This day also makes people aware of an anti-social act of terrorism. Every day we come to know about one terrorist act or another via newspaper or TV. Basically, the terrorists want to create fear in the minds of the common people. Without any remorse, they kill thousands of people because they don't have any conscience. It is necessary to propagate the message of humanity and peace. The Indian Government has taken the step of celebrating Anti-Terrorism every year to highlight the importance of fighting the activities of terrorism. Total number of participants students 30, Faculties : 07,



Farewell Program

Date - 30th May 2023

Invited Speaker - Mr. Vaibhav Dhere, Joint commissioner, Income Tax, Kolhapur

Objectives- To express compassion and gratitude towards teachers and institution by the Final year students.

To bid a cheerful adieu to the students passing out this year.

To make friendship of the juniors & seniors more stronger.

To wish final year students good luck for their future.

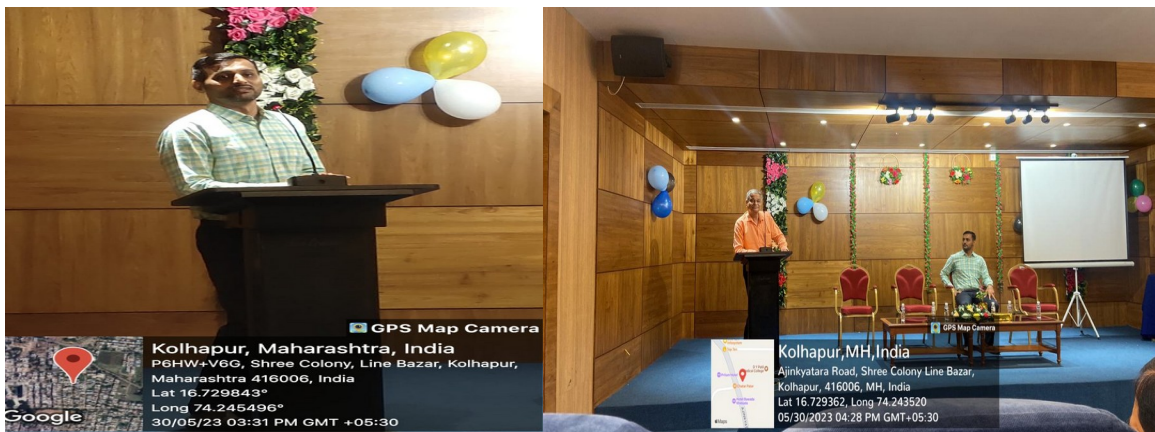
To make their college days lifelong memorable.

To conduct Annual sport Day Prize distribution program

Description - The program was organized by M. Sc. first year students of CIR. Two final year students expressed their views and experience in the CIR. A wonderful motivational speech given by Chief Guest of the program, Mr. Vaibhav Dhere, Joint

commissioner, Income Tax, Kolhapur for the participants. The Prof. C. D. Lokhande, Dean CIR given presidential address in the program. The ultimate message from both of them was ‘Set your Goals High and always Dream Big’. The program was very much successful.

No. of participants- 75 students and 10 Faculties



Chapter 5 Student Activities

During 01-07-2022 to 30-06-2023

Achievements by the students (Awards, conference, participated in quiz, sports)

1. **Mr. Ranjit Nikam- Best Poster Prize**

International Conference name - Advanced material synthesis , characterization and Applications (AMSCA Maverick- 2022)

Place - Department of physics, Savitribai Phule Pune University, Pune

Date- 18th - 20th October 2022

2. **Ms. Shraddha Bhosale- 3rd Prize in poster presentation**

Dynanshodh-2023, CIR, D. Y. Patil Education Society, Kolhapur

Date-9th March 2023

3. **Mr. Ajinkya G. Bagde- Best Research Paper Award**

Three days International Conference on “Nano Composite for Aerospace Applications”,
Date- 2th to 4th February 2023,

Place-Department of Basic Science and Electronics and Communication Engineering,
Cambridge Institute of Technology, Bengaluru.

4. **Ms. Divya Pawar- Best Paper Award**

Three days International Conference on “Nano Composite for Aerospace Applications”,
Date- 2th to 4th February 2023,

Place-Department of Basic Science and Electronics and Communication Engineering,
Cambridge Institute of Technology, Bengaluru.

5. **Ms. Ketaki Kadam**- First prize on Poster Presentation
International Conference on “Emerging Trends in Material Science”
Date- 9th & 10th November, 2022
Place- Department of Physics & Chemistry, D. P. Bhosale College, Koregaon,
6. **Ms. Sargun Basrani & Dr. Ashwini Jadhav**- Second rank in poster presentation
International Conference on Emerging Trends in Applied Microbiology and Food Sciences
Date- 2-3 December 2022
Place- Yashvantrao Chavan Institute of Science, Satara.
7. **Mr. Rakesh Mohite**-First Prize in Oral Presentation
International Conference on “Recent Trends in Pure and Applied Sciences”
Date- 23th & 24th March 2023
Place- Shivaji University, Kolhapur
8. **Mr. Sohel Shaikh**- Best Poster Award
International e-Conference on “Chemicals and Materials for emergent Technologies
(CheMET-2022) Organized by Qatar University Qatar
Date- 17th & 18th October 2022

Chapter 6 Research Activities

During 01-07-2022 to 30-06-2023

Research Projects ongoing (Extramural)

Sr. No.	Research Project Title	Funding Agency	Principal Investigator/ Co- Investigator	Outlay (Rs. In lacs)
1	Pillared Nanohybrids Based on 2D Inorganic Nanosheets for Highly Efficient and Stable Solar Assisted H ₂ Production. (August2017- August2022)	Ramanujan Fellowship, DST-SERB, New Delhi	Dr. Jayavant L. Gunjekar	108
2	Quantum dot for cancer detection. (August 2021-August 2023)	My lab Discovery Solutions Pvt.Ltd.	Dr. Arpita Pandey Tiwari	2.0
3	Probiotics from Lab to Scaleup.	Pollen Healthcure Private Limited, Pune	Dr. Abhinandan R. Patil (PI) Dr. Vishwajeet M. Khot(Co-PI)	3.0

Research Projects Submitted

During 01-07-2022 to 30-06-2023

Sr. No.	Project/Proposal Title		Funding Agency	Outlay (Rs. In lacs)
1	Bio-inspired Injectable magnetic hydrogel containing alginate for tissue regeneration and anti-cancer therapy.	PI-Dr. V. M. Khot Co-PI- S. B. Kashte	SERB-SURE	22.80
2	Controllable engineering of highly ordered CoSe ₂ nanotubes array decorated with Ni _x Co _{1-x} Se ₂ nanoparticles for high energy density all-solid-state asymmetric supercapacitors.	PI-Dr. Vijay Kumbhar	SERB-SURE	29.93
3	Development of free-standing cathode using 2D titanoniobate-reduced rapheme oxide hybrid with high sulfur loading for lithium-sulfur battery.	PI-Dr. S. B. Patil	SERB-SURE	29.67
4	Immunomagnetic electrochemical biosensing of salivary biomarkers for early-stage Alzheimer's disease detection.	PI-Arpita Pandey Tiwari	DST-SERB	25.96
5	Formulation of capric acid and caprylic acid-based hydrogel for cutaneous candidiasis.	PI- Ashwini K. Jadhav Co-PI- S. B. Kashte	BIRAC	17
6	Lattice-engineered Co-Mn-layered double hydroxides for the electrochemical energy storage: A prototype device development.	PI-Dr. J. L. Gunjekar	SERB	66
7	Formulation of fluconazole-Allyl isothiocyanate combination based tropical antifungal hydrogel against candidiasis.	PI- Ashwini K. Jadhav Co-PI- S. B. Kashte	SERB-CRG	23.65
8	Development of Bone Organoids.	PI-Dr. S. B. Kashte	DBT	35
9	Biomacromolecules bioink based nanoscaffolds for tissue repair/wound healing	PI-Dr. Anju Manuja Co-PI-Prof. M. G. Joshi	DST-SERB	40
10	Expression of Hepatocyte Transcription Factors In Different Stages Of Alcoholic Fatty Liver Cirrhosis And Its Biochemical And Clinical Correlation.	PI-Dr. Shimpa Sharma Co-PI-Prof. M. G. Joshi	DST-SERB	32

University Funded Research Projects

During 01-07-2022 to 30-06-2023

Sr. No.	Project Title	Principal Investigator	Outlay (Rs.)
1	Glucosinolates as Antifungals: An Exploratory study on <i>Candida albicans</i> .	Dr. Ashwini Jadhav	10
2	Targeted Destruction of Cancer Stem Cells by Surface (CD271+) Functionalized Iron Oxide Nanoparticles.	Dr. Arpita Pandey Tiwari	10
3	Preparation and Characterization of Herbal Based Scaffolds for full Thickness.	Dr. Shivaji Kashte	10
4	Development of Biocompatible $Zn_xFe_{3-x}O_4$ ($x=0$ to 1) Magnetic Nanocrystals as an Efficient Heating Mediator in Magnetic Hyperthermia.	Dr. V. M. Khot	9.90
5	Synthesis of rGo/WO ₃ and rGo/ MoO ₃ films for supercapacitors and antimicrobial applications.	Prof. C. D. Lokhande	6.30
6	Glutathione-responsive superparamagnetic iron oxide nanoparticles for in vitro magneto-chemotherapy of cancer stem cell.	Prof. R. S. Patil (PI) Dr. V. M. Khot (Co-PI)	6.90
7	Synthesis of M-Vanadate/Rgo (M=Ni and/or Co) Composite Thin Film Electrode for Hybrid Supercapacitor Device.	Dr. Umakant M. Patil	7.20
8	Lattice engineering route for Ni-Fe-layered double hydroxide-polyoxovanadate nanohybrids: Application in electrocatalytic oxygen evolution reaction and device development.	Dr. Jayavant L. Gunjekar	7.20
9	Repositioning of anti-depressants as antifungals: a study in <i>Candida albicans</i> .	Dr. G. R. Harshe (PI) Prof. S. Mohan Kauppayil (Co-PI)	5.76
10	Generation of Urinary bladder using decellularized human chorion membrane and <i>Lagocephalus inermis</i> (puffer fish) skin scaffold for the potential use in urinary bladder	Dr. Meghnad G. Joshi	10.00

	reconstruction		
11	Mo-doped BiVO ₄ hybridized with 2D TiNbO ₅ nanosheets for photocatalytic degradation of tetracycline.	Dr. Sharad B.Patil (PI)	7.90
12	Layered MnO ₂ nanosheets coated NiCo ₂ O ₄ nanoflakes based hybrid capacitive deionization	Dr. Vijay Kumbhar	8.50
13	Electrochemical biosensor based Prototype for Detection of Dengue Infection	Dr. Arpita Pandey Tiwari	10.00
14	Lactobacillus Species Loaded with Magnetic Nanoparticles for Anticancer Activity in Colon.	Dr. Abhinandan R. Patil (PI) Dr. V. M. Khot (Co-PI)	8.80

Patents filed/sanctioned

During 01-07-2022 to 30-06-2023

Sr. No.	Title of Invention	Name of Inventor	Patent Number	Status Filed/sanctioned
1.	Chemically deposited large area and nanostructured samarium oxide thin film for energy storage	Prof. C. D. Lokhande, Mr. R. B. Pujari, Dr. V. V. Bhosale, Dr. V. C. Lokhande, Mr. S. B. Ubale	201821022705	Granted 10/10/2022 408690
2.	Process for embedding oleic acid coated superparamagnetic iron oxide nanoparticles in lipidic	Dr. Arvind Gulbake, Prof. C. D. Lokhande, Dr. V.V.Bhosale, Mr. Satyajeet Harugale, Ms. Taihseen Momin	201921019463	Granted 23/12/2022 415257
3.	Chemically coated ytterbium phosphate film on solid surface and energy storage application thereof.	Prof. C. D. Lokhande, Mr. S. B. Ubale, Dr. V. V. Bhosale, and Mr. V. C. Lokhande	201921042840	Granted 08/07/2022 401088
4.	Asymmetric solid-state supercapacitor.	Prof. C. D. Lokhande, Ms. P. P. Bagwade, Ms. T. T. Ghogare, and Dr. V. V. Bhosale	202021000458	Granted 02/08/2022 402827
5.	A method of preparation of thin films of zinc chromium layered double hydroxide nanotubes with porous walls.	Dr. J. L. Gunjekar, Miss. R. B. Shinde, Mr. N. S. Padalkar, Mr. S. V. Sadavar,	202021039044	Granted 04/08/2022 403021

		Mr. A. S. Patil, Prof. C. D. Lokhande, Dr. V. V. Bhosale		
6.	A morphous nickel phosphate film electrode by chemical method for supercapacitor application.	Dr. Umakant Patil, Mr. Sachin S. Pujari, Prof. C. D. Lokhande, Dr. V. V. Bhosale	202021041651	Granted 28/04/2023 430650
7.	Method of Synthesizing Nickel Tungsten Oxide Films for Glucose Sensing Application.	Dr. P. N. Pawaskar, Mr. S. B. Jadhav, Dr. D. B. Malavekar, Prof. C. D. Lokhnade	202221004462	Granted 10/04/2023 428615
8.	A Chemical Synthesis Process for cobalt-iron phosphate and use as electrocatalyst thereof.	Dr. Umakant Mahadev Patil, Mr. Suraj Anandrao Khalate, Mr. Sachin Shivaji Pujari	202221021487	Application in Hearing
9.	Chemical Synthesis of reduced graphene oxide-dysprosium selenide composite thin films for energy storage.	Prof. C. D. Lokhande, Mr. S. D. Khot, Mr. R. P. Nikam, Ms. P. P. Bagwade, Dr. D. B. Malavekar	202221021506	Granted 29/05/2023 433033
10.	Chemical method for growing a cobalt vanadium oxide thin film on solid substrate.	Dr. Umakant M. Patil, Mr. Sambhaji S. Kumbhar, Mrs. Shaddha B. Bhosale, Mr. Vinod V. Patil, Prof. C. D. Lokhande, Dr. Prashant Ravasaheb Deshmukh	202221020670	Application in Hearing
11.	Cobalt vanadium oxide, preparation method for the same and supercapacitor comprising the same.	Dr. Umakant M. Patil, Mr. Sambhaji S. Kumbhar, Mrs. Shaddha B. Bhosale, Mr. Vinod V. Patil, Prof. C. D. Lokhande, Dr. Rahul R. Salunkhe	202221020648	Reply Filed. Application in amended examination
12.	Nickel vanadate thin film on conducting substrate, preparation method for the same and supercapacitor comprising the same.	Dr. J. L. Gunjekar, Ms. S. B. Bhosale, Dr. U. M. Patil, Mr. S. S. Kumbhar, Mr. V. V. Patil, Prof. C. D. Lokhande	202221020652	FER Issued; Reply not Filed

13.	Nickel cobalt phosphate thin-film electrodes: chemical method for preparation of the same, application for supercapacitor and electrocatalysis using the same.	Dr. Umakant M. Patil, Mr. Vinod V. Patil, Mr. Sambhaji S. Kumbhar, Ms. Sharaddha B. Bhosale, Prof. C. D. Lokhande	202221020644	Granted 19/05/2023 432303
14.	A chemical synthesis process of manganese ferrite thin films on conducting substrates for energy storage.	Dr. Vinayak S. Jamadade, Mr. Rushiraj P. Bhosale, Dr. Shivaji B. Ubale, Mr. Sambhaji S. Kumbhar and Prof. C. D. Lokhande	202221005137	Granted 27/12/2022 415578
15.	Electrochemical Supercapacitor Device	Prof. C. D. Lokhande, Ms. P. P. Bagwade, Mr. D. B. Malavekar, Mr. S. D. Khot, Mr. R. P. Nikam	202221029730	Application referred u/s 12 for examination
16.	A electrochemical method of preparation of manganese ferrite thin films on conducting substrates for energy storage.	Dr. Vinayak S. Jamadade, Mr. Rushiraj P. Bhosale, Dr. N. L. Tarwal, Ms. P. P. Bagwade and Prof. C. D. Lokhande	202221030806	FER Issued; Reply not Filed
17.	A Method of Synthesizing Composite of Reduced Graphene Oxide and Nickel Tungstate for Energy Storage.	Prof. C. D. Lokhande, Mr. Dilip J. Patil, Dr. D. B. Malavekar Mr. S. D. Khot, Mr. R. P. Nikam	202221039656	Reply Filed. FER
18.	A Method for RNA Isolation from Viral/Human Serum Samples Using Functionalized Magnetic Nanoparticles.	Dr. Arpita Pandey Tiwari, Ms. Rutuja Prasant Gambhir	202221045186	Application in Hearing
19.	A Method of Preparation of Lanthanum Strontium Tungsten Oxide Composite Electrode for Supercapacitor Application.	Prof. Appasaheb P. Torane, Mr. Aniruddh A. Mohite, Mr. Rushiraj P. Bhosale, Dr. Shivaji B. Ubale, Mr. Sambhaji S. Kumbhar, Prof. Chandrakant D. Lokhande, Prof.	202221046044	Reply Filed. Application in amended examination

		Bharat T. Jadhav		
20.	Electrodeposition of Lanthanum Selenide thin Film and Their Application in Oxygen Evolution Reaction.	Prof. Chandrakant D. Lokhande, Mr. Ranjit P. Nikam, Mr. Sohel B. Shaikh	202221054562	Granted 13/06/2023 434444
21.	Crystalline Cristobalite alpha low silicon dioxide anodes for lithium-ion batteries and lithium-ion capacitors for future zero carbon dioxide electric cars.	Dr. Manisha R. Phadatare. Prof. C. D. Lokhande, Mr. Sohan S. Thombare, Mr. Rohan A. Patil	202221061157	Application on referred u/s 12 for examination.
22.	A Chemical Synthesis Process for Cobalt Tungstate/Reduced Graphene Oxide Composite Thin Film and use as Electrocatalyst Thereof.	Prof. C. D. Lokhande, Ms. P. P. Bagwade, Mr. S. D. Khot, Mr. R. P. Nikam	202221066956	Awaiting Request for Examination
23.	DNA Nano biosensor for TB Detection	Dr. Deepak V. Sawant, Prof. C. D. Lokhande, Ms. Siddhi D. Sawant	202221062514	Application on not yet published
24.	Biosensing Device for Detecting Bio Molecules.	Dr. Arpita Pansey Tiwari, Prof. C. D. Lokhande	367488001	Indian Design Patent Granted 06/04/2023
25.	A Method for detection of viral/bacterial nucleic acid using gold nanoparticles.	Dr. Arpita Pandey Tiwari, Ms. Tejaswini P. Patil, Prof. C. D. Lokhande	202321003114	Application Awaiting Examination
26.	Method of Synthesizing Reduced Graphene Oxide/Polyaniline Coating for Energy Storage Application Thereof.	Prof. C. D. Lokhande, Ms. D. C. Pawar, Mr. A. G. Bagade, Mr. S. R. Sankapal	202321016608	Awaiting Request for Examination
27.	A Method for Detection of Folic Acid from Human Serum/Urine Samples Using Surface Functionalized Carbon Quantum Dots.	Dr. Arpita Pandey Tiwari, Ms. Anuja Vibhute, Prof. C. D. Lokhande	202321020467	Application ready for publication
28.	Chemical Synthesis of Dysprosium Sulphide Coating for Energy Storage.	Prof. C. D. Lokhande, Mr. S. D. Khot, Dr. V. C. Lokhande	202321020957	Application Awaiting Examination
29.	Aminated iron oxide	Dr. V. M. Khot, Mr.	202321038532	Application ready

	nanoparticles for hyperthermia application.	Satish S. Phalake, Dr. A. B. Salunkhe		for publication
30.	To Synthesis of Highly Porous Zinc Iron Oxide Nanoparticles for Photocatalytic Dye Degradation.	Dr. V. M. Khot, Ms. K. V. Kadam, Dr. A. B. Salunkhe	202321038527	Application ready for publication
31.	Porous reduced graphene oxide/ruthenium oxide coating for energy storage application	Prof. C. D. Lokhande, Mr. A. G. Bagde, Ms. D. C. Pawar, Mrs. J. P. Thorat, Dr. A. C. Lokhande	202321038525	Application ready for publication

Chapter 7
Seminars/Conferences/CMEs/Workshops
During 01-07-2022 to 30-06-2023

Sr. No.	Name of Faculty	Title of Conference (Full)	Status Level International/ National/ State/District (Please Tick)	Date (Duration)			Resource Person/ Chairperson/ Guest Speaker/ Attended/ Paper Presented
				DD	MM	YYYY	
1.	Prof. C. D. Lokhande	International Conference on “ Emerging trends in material science”, D. P.Bhosale College, Koregoan	International	09	11	2022	Resource Person
2.	Prof. C. D. Lokhande	Global Opportunity in higher education, Shrimant Babasaheb Deshmukh Mahavidhyalay, Aatpadi	National	29	11	2022	Chief Guest
3.	Prof. C. D. Lokhande	Student organization of research and development (SORT), Dr. J.J.Magdum College of Engineering, Jaysinghpur	National	13	12	2022	Chief Guest
4.	Prof. C. D.	Indian Patent	National	28	12	2022	Guest Lecture

	Lokhande	Filing, NIPER Guwahati					
5.	Prof. C. D. Lokhande	International Conference on Innovation in Smart and Technomaterials, SGM Karad	International	16	01	2023	Resource Person
6.	Prof. C. D. Lokhande	Trends in the techniques of preparation and characterization of smart materials, Govt College of Arts, Science & Commerce, Goa	National	03	03	2023	Resource Person
7.	Prof. C. D. Lokhande	International Conference on “Recent trends in fabrication of nano-materials and their applications” Shahu College, Kolhapur	International	15	03	2023	Key note speaker
8.	Prof. C. D. Lokhande	International Conference on Material Science and Nanotechnology for sustainable applications at MGM University	International	24	03	2023	Invited Talk
9.	Prof. C. D. Lokhande	National conference on Emerging trends in chemical sciences and nanomaterials	National	25	02	2023	Chief Guest
10.	Dr. M. G. Joshi	International Conference on Biomedical and Clinical Research, Dharwad Karnataka	International	21 th & 22 th	11	2022	Resource Person
11.	Dr. M. G. Joshi	National Conference on “Innovation Trends in Biological Research	National	9	11	2022	Resource Person

12.	Dr. V. M. Khot	Research Methodology	National	06	02	2023	Resource Person
13.	Dr. K. Mayakannan	Research Methodology	National	1 st to 10 th	02	2023	Organizing Secretary
14.	Dr. K. Mayakannan	One Day Workshop on Intellectual property Rights	National	13	02	2023	Coordinator
15.	Dr. K. Mayakannan	One Day Workshop on Research Grant Writing	National	14	02	2023	Organizing Coordinator
16.	Dr. S. B. Patil	Research Methodology	National	02	02	2023	Resource Person
17.	Dr. S. B. Patil	Faculty Development program on Capacity Building of HEIS	National	11 th & 12 th	11	2022	Attended
18.	Dr. S. B. Patil	Meet the Scientist	National	20	12	2022	Resource Person
19.	Ms. P. R. Patil	Research Methodology	National	10	02	2023	Resource Person
20.	Dr. S. B. Kashte	Research Methodology in Annasaheb Dange Ayurvedic Medical College, Ashta	National	16	11	2022	Resource Person
21.	Dr. S. B. Kashte	Guest Lecture, Vivekanande College Kolhapur	National	15	11	2022	Resource Person
22.	Dr. S. B. Kashte	All India Division Level, Science Conclave	National	23	09	2022	Examiner

23.	Dr. S. B. Kashte	Research Methodology Workshop DYPES	National	07 th & 13 th	02	2023	Resource Person
24.	Dr. J. L. Gunjekar	Research Methodology Workshop DYPES	National	01 st & 2 nd	02	2023	Resource Person
25.	Dr. J. L. Gunjekar	INYAS Science Camp (DYP Eng. Salokhenagar)	National	16 th & 17 th	12	2022	Organizer & Resource Person
26.	Dr. J. L. Gunjekar	INYAS Science Camp (Gadhinglaj)	National	14 th & 15 th	12	2022	Organizer & Resource Person
27.	Dr. J. L. Gunjekar	Recent Scenerio in Chemical Sciences and Material Sciences (RSCSMS-2023)	National	03 rd & 04 th	03	2023	Resource Person
28.	Dr. J. L. Gunjekar	Advanced Material Synthesis, Characterization and Applications (AMSCA-2022)	International	18 th to 20 th	10	2022	Resource Person
29.	Dr. J. L. Gunjekar	Nanomaterials for renewable energy and opportunities	International	27	12	2022	Convener & attended
30.	Dr. Arpita Pandey Tiwari	National webinar on Intellectual property Rights otganized by Gobindgarh Public College, Khanna	National	26	05	2023	Resource person
31.	Dr. Arpita Pandey Tiwari	Start up Yatra boot camp,	National		10	2022	Jury member
32.	Dr. Arpita Pandey Tiwari	Research Methodology Workshop organized by Hon. Shri. Annasaheb Dange Ayerved College Ashta	National	14	11	2022	Invited Talk
33.	Dr. Ashwini Jadhav	Literature Review and Database; in Research		14	11	2022	Invited Talk

		methodology workshop organized by Shri. Annasaheb Dange Ayurved College Ashta					
34.	Dr. Ashwini Jadhav	'RTPCR Technique and its applications' organized by Rajarambapu College of Pharmacy, Kasegaon		4	02	2023	Invited Talk
35.	Dr. Ashwini Jadhav	"Approaches towards affordable clean energy, good health and well-being' dept. of Life sciences, Garden City University, Bengluru	International	2 nd & 3 rd	03	2023	Chairperson

Publications/Journal presented by faculty & Publication of Books/Book Chapter

During 01-07-2022 to 30-06-2023

Research Publications

Sr. No.	Title of Paper	Name/s of the author/s	Name of the journal	Name of the journal
1.	pH-responsive glycine functionalized magnetic iron oxide nanoparticles for SARS-CoV-2 RNA extraction from clinical sample	R. P. Gambhir, Arun Kumar Parthasarathy, S. Sharma , S. Kale, V. V. Magdum, A. Pandey Tiwari	Materials for Life Sciences	July 2022;57(28):13620-13631
2.	Binder-free synthesis of mesoporous nickel tungstate for aqueous asymmetric supercapacitor applications: Effect of film thickness	D. J. Patil, D. B. Malvekar, V. C. Lokhande, P. P. Bagwade, S. D. Khot, Taeksoo Ji, C. D. Lokhande	Energy Technology	August 2022;10(8):1-15
3.	Inhibitory effect of selected Indian honey on colon cancer cell growth by inducing apoptosis and	N. Das, N. Roy, A. R. Patil , S. S. Saini, B.	Food and Function	August 2022;1:13(15):8283-8303

	targeting the Beta-catenin/Wnt pathway	Waghmode, S. B. Patil, C. S. Mote		
4.	2D-2D Nanohybrids of Ni-Cr-Layered Double Hydroxide and Graphene Oxide Nanosheets: Electrode for Hybrid Asymmetric Supercapacitors	N. S. Padalkar, S. V. Sadavar,	Electrochimica Acta	August 2022;424:1406-15
5.	Hydrothermally synthesized nickel copper phosphate thin film cathodes for high-performance hybrid supercapacitor devices	S. S. Pujari, S. A. Kadam, Yuan-Ron Ma, S. B. Jadhav, S. S. Kumbhar, S. B. Bhosale, J. L. Gunjekar, C. D. Lokhande, U. M. Patil	Journal of Energy Storage	August 2022;52©:105-037
6.	Fluorescent Carbon Quantum Dots Functionalized by Poly L-Lysine: Efficient Material for Antibacterial, Bioimaging and Antiangiogenesis Applications	A. Vibhute, O. Nille, G. Kolekar, S. Rohiwal, S. Patil, S. Lee, A. Pandey Tiwari	Journal of Fluorescence	September 2022;32(5):1789-1800
7.	Tissue engineering of human ear pinna	N. C. Bhamare, K. Tardalkar, A. Khadilkar, P. Parulekar, M. G. Joshi	Cell and Tissue Banking	September 2022;23(3):441-457
8.	Nano-magnetite supported N-heterocyclic carbene-gold complex with pendant ferrocenyl group as a multi-modal anti-breast cancer agent	P. V. Patil, P. A. Bansode, S. P. Gajare, A. H. Deshmukh, A. Pandey Tiwari, V. M. Khot, D. M. Pore, G. S. Rashinkar	Research Square	September 2022;
9.	Stem cells: Therapeutic implications in chemotherapy and radiotherapy resistance in cancer therapy	T. Patil, S. S. Rohiwal, A. Pandey Tiwari	Current Stem Cell Research and Therapy	September 2022;):1-16
10.	Fluorescent carbon quantum dots: Synthesis methods, functionalization and biomedical applications	A. Vibhute, T. Patil, R. Gambhir, A. Pandey Tiwari	Applied Surface Science Advances	October 2022;11:10031-1
11.	Multifunctional surface functionalized magnetic iron oxide nanoparticles for biomedical applications: A review	R. P. Gambhir, S. S. Rohiwal, A. Pandey Tiwari	Applied Surface Science Advances	October 2022;11:10030-3
12.	Hydrous and amorphous cobalt phosphate thin film electrodes synthesized by the SILAR method	V. V. Patil, S. S. Pujari, S. B. Bhosale, S. S.	Energy and Fuels	October 2022; 36(20):12791-12806

	for high-performing flexible hybrid energy storage devices	Kumbhar, V. G. Parale, J. L. Gunjekar, Hyung-HO Park, C. D. Lokhande, M. G. Mali, D. S. Mhamane, U. M. Patil		
13.	Synthesis, characterization and visible light driven dye degradation performance of one-pot synthesized amorphous CoWO ₄ powder	P. P. Bagwade, V. V. Magdum, D. B. Malvekar, Y. M. Chitare, J. L. Gunjekar, U. M. Patil, C. D. Lokhande	Journal of Material Science: Materials in Electronics	October 2022;33:24646–24662
14.	Design of monodispersed PVP functionalized biocompatible manganese ferrite nanoparticles for hyperthermia application	P. Ghutepatil, V. M. Khot , A. B. Salunkhe	Materials Today: Proceedings	October 2022;62(8):5341-5346
15.	A binder-free facile synthetic approach for amorphous, hydrous nickel copper phosphate thin film electrode preparation and its application as a highly stable cathode for hybrid asymmetric supercapacitors	S. S. Pujari, S. A. Kadam, Yuan-Ron Ma, S. B. Jadhav, S. S. Kumbhar, S. B. Bhosale, V. V. Patil, J. L. Gunjekar, C. D. Lokhande, U. M. Patil	Sustainable Energy & Fuels	November 2022;6(24):5608-5620
16.	Nanocrystalline cobalt tungstate thin films prepared by SILAR method for electrocatalytic oxygen evolution reaction	P. P. Bagwade, D. B. Malvekar, V. V. Magdum, S. D. Khot, R. P. Nikam, D. J. Patil, U. M. Patil, C. D. Lokhande	International Journal of Hydrogen Energy	November 2022; 48(23):8465-8477
17.	Application of Mn _x Fe _{1-x} Fe ₂ O ₄ (x=0-1) nanoparticles in magnetic fluid hyperthermia: Correlation with cation distribution and magnetostructural properties	S. S. Phalake, M. S. Lad, K. V. Kadam, Syed A. M. Tofail, N. D. Thorat, V. M. Khot	ACS Omega	November 2022;7(48):44187-44198
18.	Chemical synthesis and photoelectrochemical study of CdS/rGO nanocomposite films	R. P. Nikam, A. C. Lokhande, S. D. Khot, V. J. Mane, C. D. Lokhande	Journal of the Korean Ceramic Society	November 2022; 60, 238–251
19.	Heparin coated decellularized xenogeneic small diameter	K. R. Tardalkar, T. B.	Cell Tissue Bank	November 2022;

	vascular conduit for vascular repair with early luminal reendothelialization	Marsale, N. C. Bhamare, J. R. Kshersagar, J. K. Patil , A. Adnaik, M. G. Joshi		
20.	Soluble MICA in biofluids as biomarker in tracing oral malignant growth which relates with disease stage	J. Kshersagar, M. N. Damle, P. Bedge, R. Jagdale, K. Tardalkar, S. Jagadale, D. Jadhav, Y. Toro, M. G. Joshi	Annals of Cancer Research and Therapy	November 2022;30(2):131-138
21.	Surface modification of copper selenide for reliable non-enzymatic glucose sensing	D. B. Malavekar, S. B. Jadhav, S. B. Kale, U. M. Patil, C. D. Lokhande	Materials Today sustainability	December 2022;20:100215
22.	Single-cell multiomics revealed the dynamics of antigen presentation, immune response and T cell activation in the COVID-19 positive and recovered individuals	P. Chattopadhyay, K. Khare, M. Kumar, P. Mishra, A. Anand, R. Maurya, R. Gupta, S. Sanhi, A. Gupta, S. Wadhwa, A. Yadav, P. Devi, K. Tardalkar, M. G. Joshi , T. Sethi, R. Pandey	Frontiers in Immunology	December 2022;11(12):1-3
23.	Chemical route to the synthesis of novel ternary CuCr ₂ S ₄ cathodes for asymmetric supercapacitors	R. N. Bulakhe, C. Ryu, J. L. Gunjekar , Jung Bin In	Journal of Energy Storage	December 2022;56©:106175
24.	Downregulation of MICA/B tumor surface expressions and augmented soluble MICA serum levels correlate with disease stage in breast cancer	J. Kshersagar, M. N. Damle, P. Bedge, R. Jagdale, K. Tardalkar, S. Jagadale, D. Jadhav, Y. Toro, R. Sharma , M. G. Joshi	Breast Disease	December 2022;41(1):471-480.
25.	Effect of Mn doping on electrochemically synthesized Mn-	S. B. Jadhav, D. B. Malavekar,	Journal of Materials Science: Materials	January 2023;

	La ₂ O ₃ thin films non-enzymatic glucose sensor	P.N.Pawaskar, S.B.Kale, S.R.Sable, R.K.Sharma, C.D.Lokhande	in Electronics	
26.	Profile of adverse events following COVID-19 vaccination: Insights from Covishield, Covaxin and Corbevax beneficiaries in India	S.B.Kashte, R.K.Sharma, S.Kadam	Journal of Krishna Institute of Medical Sciences University	January-March 2023;12(1):86-96
27.	Strategic development of piezoelectric nanogenerator and biomedical applications	O.Y.Pawar, S.L.Patil, R.S.Redekar, S.B.Patil, S.Lim, N.L.Tarwal	Applied Sciences	February 2023, 13(5), 2891
28.	Green synthesis of gold nanoparticles via Capsicum annum fruit extract: Characterization, antiangiogenic, antioxidant and anti-inflammatory activities	T.P.Patil, A.A.Vibhute, S.L.Patil, T.D. Dongale, A. Pandey Tiwari,	Applied Surface Science Advances	February 2023;13:100372
29.	Green synthesis of fluorescent carbon dots from Annona squamosa leaves: Optical and structural properties with bactericidal, anti-inflammatory, anti-angiogenesis applications	A. Vibhute, T. Patil, D. Malavekar, S. Patil, S. Lee, A. Pandey Tiwari	Journal of Fluorescence	February 2023;33:1619–162
30.	Effect of electrolytes on the performance of graphene oxide anode material for ultracapacitor, Li-ion capacitor, and Li-ion battery: Three-in-one approach	S.Thombare, R.Patil, D.Malavekar, N.Bolmquist, H. Olin, K.Gavhane, J.Meshram, C.Lokhande, M.Phadatara	Indian Journal of Physics	March 2023;
31.	Efficient electrochemical water splitting through self-supported copper selenide nanosheets on Cu foil: Effect of immersion time	D.B.Malavekar, S.B.Kale, H.D.Shelke, H.M.Pathan, C.D.Lokhande,	Energy Technology	March 2023;11(6):2201300
32.	Nanocrystalline cobalt tungstate thin films prepared by SILAR method for electrocatalytic oxygen	P.P.Bagwade, D.B. Malavekar,	International Journal of Hydrogen Energy	March 2023;28(23):8465-8477

	evolution reaction	V.V.Magdum, S. D. Khot, R. P. Nikam, D. J. Patil, U. M. Patil, C. D. Lokhande		
33.	To analyze the TB-PCR positivity rate by using real time PCR for early detection of tuberculosis	D. Sawant, R.K.Sharma,R. A. Chougule	Asian Journal of Pharmaceutical & Clinical Research	April 2023;16(4):16 7-70,
34.	Studies on radiation shielding properties of newly developed high-density concrete for advanced radiotherapy facilities	A.Kaur, G.Sahani, M.Mudgal, R.K.Chouhan, A.K.Srivastava, P.N.Pawaskar	Radiation Protection Dosimetry	April 2023;199(5):39 9-409
35.	Pseudocapacitive performance of amorphous ruthenium oxide deposited by successive ionic layer adsorption and reaction (SILAR): Effect of thickness	A.G.Bagde, D.B.Malavekar, D.C.Pawar, S.D.Khot, C.D.Lokhande	Journal of Physies and Chemistry of Solids	April 2023;179:1113 86
36.	Carbon synthesized magnetic nanoparticles for selective inhibiton of osteosarcoma cancer	R.P.Gambhir, S.Kale, T.Dongale, S.Patil, D. Malvekar, A.Pandey Tiwari		April 2023;25(4):
37.	Optimization of radiation shielding considerations for designing halcyon vault	A. Kaur, G.Sahani,A.Shr ivastava, P.N.Pawaskar	Jurnal of Medical Physics	April 2023;48:1-12
38.	Surgical cotton microfibers loaded with proteins and apatite: A potential platform for bone tissue engineering	S.Singh, S.Bhushan, H.Khan, L.R.Choudhari, A.Ali, A.Das, A.Barui, Y.S.Negi, M.G.Joshi, D.Dutt	International Journal of Biological Macromolecules	<u>May</u> 2023;236:1238 <u>12</u>
39.	Cerium oxide nanoparticles disseminated chitosan gelatin scaffold for bone tissue	S.Bhushan, S.Singh, T.K. Maiti, A. Das,	International Journal of Biological	May 2023;236:1238 13

	engineering applications	A. Barui, L.R.Chaudhari, M.G.Joshi, D.Dutt	Macromolecules	
40.	Natural biwaste derived fluorescent carbon quantum dots: Synthesis, characterization and biocompatibility study	P. Kamble, D. Malvekar, A. Pandey Tiwari	Journal of Fluorescence	May 2023;
41.	Photoelectrocatalytic activity of methylene blue using chemically sprayed Bi ₂ WO ₆ photoanode under natural sunlight	R.S.Pedanekar, S.V.Mohite, S.B.Madake, Y.Kim, J.L.Gunjakar, K.Y.Rajure	Journal of Alloys and Compounds	May 2023;942:1688-66
42.	Synthesis of reduced graphene oxide (rGO)/dysprosium selenide (Dy ₂ Se ₃) composite electrode for energy storage; flexible asymmetric supercapacitor	S.D.Khot, D.B.Malvekar, P.P.Bagwade. R.P.Nikam, C.D.Lokhande,	Journal of Physics and Chemistry of Solids	May 2023;179(2023):111419
43.	Performance of chemically synthesized polyaniline film based asymmetric supercapacitors: Effect of reaction bath temperature	D.C. Pawar, D.B. Malvekar, S.D.Khot, A.G.Bagde, C.D.Lokhande	Materials Science and Engineering B	<u>June 2023: 292:116432</u>
44.	Porous NiCo ₂ O ₄ electrodes for high-energy asymmetric supercapacitor: effect of annealing	J.P.Thorat, R.P.Nikam, V.C.Lokhande, C.D.Lokhande	Journal of Material Science & Energy Materials	June 2023;58:9586-9604
45.	MnS-La ₂ S ₃ /GO composite electrodes for high-performance flexible symmetric supercapacitor	V.J.Mane, A.C.Lokhande, R.P.Nikam, N.S.Padalkar,V. C.Lokhande, D.S.Dhawale,C. D.Lokhande	Applied Surface Science Advances	<u>June 2023;15:10039-9</u>

Sr. No.	Name of Faculty	Title of Publication/ Journal Paper	Journal Name Vol No., Page No., Year
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BOOK			
1	Prof. C. D. Lokhande	Chemically Synthesized Yb ₂ S ₃ @ GO Composite Thin Film, Scholars Press	978-613-8-63911-4
2	Prof. C. D. Lokhande	Solid State Supercapacitors based on Manganese Dioxide Thin Film. LAP Lambert Academic Publishing	978-613-9-45924-7
3	Dr. Arpita Pandey Tiwari	Stem Cell Culture: Techniques and Protocols, Lambert Academic Publishing	978-620-4-95524-7
4	Prof. C. D. Lokhande	Copper Chalcogenide based asymmetric solid-state supercapacitors, LAP Lambert Academic Publishing	978-620-4-74280-9
5	Dr. U. M. Patil, Prof. C. D. Lokhande	Chemical deposition of TiO ₂ RuO ₂ Thin Film, Scholars Press	978-613-8-97025-6
6	Dr. U. M. Patil,	Deposition of Nickel cobalt phosphate thin films, Scholars Press	978-620-2-31823-5
7	Dr. J. L. Gunjekar	Hybridized with Polyoxometalate and Graphene Oxide in Supercapacitor Application, Scholars Press	978-613-8-97515-1
8	Dr. A. R. Gulbake	Micro-and Nanotechnologies-Based Product Development, CRC Press	978-036-7-48845-1
9	Prof. C. D. Lokhande	Chemically Deposited Metal Chalcogenide-based Carbon Composites for Versatile Applications, Springer	978-3-031-23400-2
10	Prof. C. D. Lokhande	Simple Chemical Methods for Thin Film Deposition Synthesis and Applications, Springer	978-981-99-0960-5
11	Dr. Sachin Pujari, Dr. Umakant Patil	Transition Metal Phosphate for Supercapacitor Application, LAP Lambert Academic Publishing	978-620-5-64147-7
12	Dr. Abhinandhan Patil, Mrs. Vinita Chougule, Mr. Masidd Khalate, Ms. Divya Lad	DNA THE SECRET OF LIFE, monomousumi Servises	978-93-91244-84-2
BOOK Chapter			
1	Dr. A. R. Gulbake	Micro-and Nanotechnology Approaches Concepts and Application, CRC Press	978-036-7-48845-1

2	Dr. A. R. Gulbake	Resealed Erythrocytes A Biological Carrier for Drug Delivery, CRC Press	978-036-7-48845-1
3	Dr. A. R. Gulbake	Multifunctional Carbon Nanotubes in Drug Delivery, CRC Press	978-036-7-48845-1
4	Dr. A. R. Gulbake	Role of Polymers in Formulation Design and Drug Delivery, CRC Press	978-036-7-48845-1
5	Dr. A. R. Gulbake	Validation, Scale-Up and Technology, CRC Press	978-036-7-48845-1
6	Dr. Shivaji B. Kashte, Dr. M. G. Joshi	Pathophysiology of Spinal Cord Injury and Tissue Engineering Approach for Its Neuronal Regeneration: Current Status and Future Prospects, Springer	0065-2598
7	Shital B. Kale, Dhanaji B. Malavekar and Chandrakant D. Lokhande	Smart Materials for Electrochemical Water Oxidation (Artificial Intelligence, Internet of Things (IoT) and Smart Materials for Energy Applications)	978-10-32115-0-30
8	Dhanaji B. Malavekar, Shital B. Kale and Chandrakant D. Lokhande	Carbonaceous Composites of Rare Earth Metal Chalcogenides: Synthesis, Properties and Supercapacitive Applications (Artificial Intelligence, Internet of Things (IoT) and Smart Materials for Energy Applications)	978-10-32115-0-30
9	S. S. Rohiwal, Z. Ellederova and A. P. Tiwari	Silk Fibroin: Advancement in Wound Healing Technologies (Silk Fibroin: Advances in Applications and Research)	979-8-88697-402-7
10	Ashwini Khanderao Jadhav and Sankunni Mohan Karuppaiyl	Essential Oil Components: Anti- viral Properties (Antimicrobials in Pharmaceutical and Medicinal Research)	978-1-03221-554-9
11	S.S.Kumbhar, S.M.Marje, V.V.Patil, S.B.Bhosale, S.S.Pujari, J.L.Gunjakar, C.D.Lokhande, U.M.Patil,	1D,2D,and 3D structured metal chalcogenides for supercapacitor application (Chemically Deposited Metal Chalcogenide-based Carbon Composites for Versatile	978-3-031-23400-2

		Applications)	
12	V.C.Lokhande, V.J.Mane, A.C.Lokhande, C.D.Lokhande, taeksooji	Nanostructure design supercapacitor application	978-3-031-23400-2
13	V.J.Mane, V.C.Lokhande A.C.Lokhande, C.D.Lokhande, D.Shevale	Emerging novel chalcogenide based material for electro water splitting applications	978-3-031-23400-2
14	A.C.Lokhande, V.C.Karande, V.C.Lokhande C.D.Lokhande, Jin Hyeok Kim	Chemical processing of Cu ₂ SnS ₃ nanoparticles for solar cells (Chemically Deposited Metal Chalcogenide-based Carbon Composites for Versatile Applications)	978-3-031-23400-2
15	Y.C.Chitare, V.V.Magdum, S.B.Jadhav, S.P.Kulkarni, C.D.Lokhande, J.L.Gunjakar	Rare earth element based nonenzymatic glucose sensor (Chemically Deposited Metal Chalcogenide-based Carbon Composites for Versatile Applications)	978-3-031-23400-2
16	R.P.Gambhir, A.A.Vibhute, T.P.Patil, A.Pandey Tiwari	Surface functionalized iron oxide (Fe ₃ O ₄) nanoparticles for biomedical applications (Chemically Deposited Metal Chalcogenide-based Carbon Composites for Versatile Applications)	978-3-031-23400-2
Conference Proceeding			
1	Prof. C. D. Lokhande	Characterization of soft chemically deposited yttrium sulfide (Y ₂ S ₃) thin films, Elsevier Materials today: proceedings	2214-7853
2	Dr. D. V. Sawant, Dr. R. K. Sharma, Prof. C. D. Lokhande	DNA Nanobiosensor : Rapid On-Spot Direct Observation of Mycobacterium Tuberculosis in Pulmonary Sputum Sample Prarup Publication	978-81-956739-3-3

3	Prof. C. D. Lokhande	Photo Electrochemical Studies of Pure CdSe Thin Film-A Review, Prarup Publication	978-81-956739-3-3
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Chapter 10
Visit of the Dignitaries/Guest Speakers
During 01-07-2022 to 30-06-2023

Sr. No.	Name	Affiliation/ Institute	Date		
			DD	MM	YYYY
1	Dr. C. Senthamil Selvan	Mahatma Gandhi Medical College & Research Institute, Puducherry	18	08	2022
2	Dr Mohamathu Rafic Kather Hussain	Government Medical College and Hospital, Pudukkottai, Tamilnadu	30	08	2022
3	Ms. Claire	UK	14	09	2022
4	Dr. Pradip B. Sarawade	<i>Asso Prof., Dept. of Physics, Mumbai University</i>	09	09	2022
5	Dr. Minal Dakhave, Dr Shrikant Pawar	MY LAB, Pune	04	10	2022
6	Prof. Dr. UdayanApte	Professor, KU Medical Centre, University of Kansas	30	11	2022
7	<i>Dr. Chinna D. Bathula</i>	<i>Asso. Prof. Dongguk University, South Korea</i>	27	12	2022
8	<i>Dr. Abhijit N. Kadam</i>	<i>Gachon University, Seoul, South Korea</i>	27	12	2022
9	Dr. Deepak Dubal	Queensland University of Technology, Australia	04/05	01	2023
10	Dr. MaheshSuryawanshi	University of New South Wales, Australia	04/05	01	2023

11	Dr. Hemraj Yadav	Shivaji University Kolhapur	04/05	01	2023
12	Anubha Mehra, Arti Gupta	Associate Engineers, Next Bib Innovation Labs, Bangalore	06	01	2023
13	Dr. Mahesh J Kulkarni	CSIR-National Chemical Laboratory Pune	10	01	2023
14	Prof. J. H. Kim	Chonnam National University, South Korea	18	01	2023
15	Prof. Dr. DinakarSalunke	Arturo Falaschi Emeritus Scientist, Former Director National Institute of Molecular Biology and Biotechnology	25	02	2023
16	Prof. Kuppusamy Thayalan	HeadMedical Physics Division, Dr. Kamakshi Memorial Hospital Pvt. LtD. Chennai.	18	04	2023
17	Prof. R. G. Sonkawade	Shivaji University, Kolhapur	20	04	2023
18	Dr. Akshay Joshi	Industry	19	05	2023
19	Mr. Vaibhav Dhere	Joint Commissioner, Income Tax, Kolhapur	30	05	2023
20	Dr. Rupesh S. Devan	Associate Professor, IIT, Indore	06	06	2023

Honors & Awards
Positions held by faculty in respective associations during

Sr. No.	Department	Name of staff/ students	Position/ Achievement
1	Stem Cell & Regenerative Medicine & Medical Biotechnology, CIR	Dr. Shivaji Kashte	Best Citation Award Springer Nature

Paste color photos of new purchased equipments with name and also give its information



Incubator

This device used to grow and maintain microbiological cultures. The incubator maintains optimal temperature, humidity of atmosphere inside. Incubators are essential for much experimental work in cell biology, microbiology and molecular biology and are used to culture bacterial cells. This instrument is used for incubation of bacteria which are used for antibacterial assays.



Probe Sonicator

Ultrasonic Homogenizers or Probe sonicators are recommended for the homogenization of laboratory samples. A sonicator comprises three major components: generator, converter, and probe (or horn). Like falling dominos, they create a chain reaction to deliver ultrasonic energy for the desired result. The generator provides power, in the form of electronic pulses, to the sonicator. The converter transforms these pulses into mechanical vibrations, fed into the probe, which rests in the sample medium. Probe sonication is widely used in various scientific and industrial applications, including cell disruption, nanoparticle synthesis, sample preparation, emulsification, and dispersion of materials. It offers precise control over the sonication conditions and is particularly useful for processing small volumes of samples.

Paste important color photos of Guest Lectures/Conferences/Celebration of days



Guest Lecture - Dr Mohamathu Rafic Kather Hussain



Dr. Pradip B. Sarawade (Dept. of Physics., Mumbai University)



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Dr. Mahesh Kulkarni



Kolhapur, Maharashtra, India
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Prof. J. H. Kim



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 Note : Captured by GPS Map Camera

Dr. Rupesh Deven