



Mahatma Gandhi Vidyamandir's
Loknete Vyankatrao Hiray Arts, Science and Commerce
College,
Panchavati, Nashik.
(Re-Accredited by NAAC with "A" Grade)



REPORT
ON
INTERNATIONAL E-CONFERENCE
ON
"CURRENT RESEARCH IN CHEMISTRY
AND NANOSCIENCES"
(CRCNS-2022)
ORGANIZED
BY
DEPARTMENT OF CHEMISTRY
IN ASSOCIATION WITH
BOS IN CHEMISTRY, MGV, NASHIK
DATE: 18/01/2022 to 20/01/2022

CONFERENCE BROCHURE

Mahatma Gandhi Vidyamandir's Loknete Vyankatrao Hiray Arts, Science and Commerce College, Panchavati, Nashik-3

[Accredited with "A" grade by NAAC & Recipient of "Best College Award" by SPPU]
Certified by ISO 9001:2015

Golden Jubilee Year Celebration 2021-22

Under the aegis of

Department of Chemistry
& Internal Quality Assurance Cell
in association with MGV's BOS, Chemistry

Organizes
INTERNATIONAL e-CONFERENCE-2022
On

**CURRENT RESEARCH IN CHEMISTRY
AND NANO SCIENCES**

(CRCNS-2022)

18th to 20th January 2022

Live Broadcast **Webinar ID**
896 8519 4131
Passcode
12345

11.00 am
onwards

About College

Loknete Vyankatrao Hiray Arts, science and Commerce College, is a leading educational institution in Nashik, established in the year 1971, at the banks of river Godawari. Under the Chairmanship of Loknete Vyankatrao Hiray the institute, "Adivasi Seva Samiti" started the functioning of this college. Later on, the college functioning was transferred to "Mahatma Gandhi Vidyamandir, Malegaon Camp". The College is affiliated to the Savitribai Phule Pune University and recognized under 2(f) and 12B of UGC Act. Along with the UG courses, the college has several PG Departments. The College offers 25 subjects at special level UG and 13 at PG level. PG courses in English, Psychology, History, Economics, Geography, Commerce, Electronic Science, Zoology, Organic Chemistry, Inorganic Chemistry, Physical Chemistry, Botany and Mathematics are conducted in the college. The college also administers Research centers in Chemistry, Psychology, Electronics, Zoology, Botany and Commerce. The college conducts PG Diploma in Industrial Psychology and Certificate Courses in English for Business, Modi-Script, Tourism, Event Management and Soft Skill Development. The college also functions as a study center for the various courses conducted by Yashwantrao Chavan Maharashtra Open University. The College has a well maintained library, having around 73878 books with latest magazines and journals. The library is well equipped with Audio Visual Aids and it is computerized. Special scheme for poor students i.e. Poor Boys Book Bank Facility is implemented consisting of 3000 books, which are given to the students for the academic year. The college library has a linkage with the British Library, Pune. The college library has the Inter Library borrowing facility with YCMOU, Nashik. Since the college houses YCMOU study center, our sister institute like Pharmacy College and Institute of Management are also linked with the Library. The teaching staff of the college is well qualified; several faculty members are Ph.D, M.Phil. and newly appointed staff are NET, SET qualified. The staff is consistently busy in several research activities along with consultancy activities. Many of them are working with Minor and Major research projects funded by UGC and Savitribai Phule Pune University.

About Conference

Our college warmly welcomes participants from all over the world to attend Online International Conference on CURRENT RESEARCH IN CHEMISTRY AND NANO SCIENCES 2022. This is a three-day conference going to be organized from January 18-20, 2022. We are delighted to invite speakers, research scholars, academicians, industrialists, students, and delegates from all over the world to attend the conference. The theme of the conference is "Chemistry and Nanosciences Advancements and Applications" covering a wide extent of critically vital sessions of Chemistry, Chemical Engineering and Nanosciences equally. The conference includes Keynote and Plenary Sessions, Speaker Sessions, Young Researcher Forum, Video Presentations, Poster presentations, E-Posters, and also an opportunity for B2B meetings on the most recent improvements in the field of Chemistry and Nanosciences.

Targeted Audience

- Directors, Deans and Head of the Departments from Universities and other Institutions/Experts and Research Scholars
- Professors, Assistant and Associate professors
- Directors, Presidents and CEO's from industries, companies and instrument vendors
- Directors, Presidents and CEO's from associations, societies and related organizations
- Delegates from various Chemistry, Chemical Engineering and Nanosciences companies.

CHIEF PATRONS

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Former Minister of Transport and Protocol, MS,
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Trustee MGV & CDC Chairperson (LVH College, Nashik)
Hon'ble Dr. Vikthal S. More
Joint-Secretary, MGV Nashik

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& Senate Member, SPPU)
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(Dean Arts & Humanities, MGV
and IQAC Coordinator)
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(Dean, Science &
Vocational, MGV)
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(Dean, Faculty of Technical, MGV)
Prin. Dr. D. F. Shirude
(MSG College, Malegaon)
Dr. Vinit Rakibe
(Supervisor (HR & Finance))
Dr. Santosh S. Chobe
(Supervisor (Academic & Examination))

Prof. (Dr.) Avinash Kumbhar
Dept. of Chemistry, SPPU
Prof. (Dr.) Vaishali Shinde
Dept. of Chemistry, SPPU
Dr. C. V. Rode
Chief Scientist, NCL Pune
Prof. Ponnadurai Ramasami
University of Mauritius
Prin. Dr. C. G. Dighavkar
(ASC College, Surgana)
Prin. Dr. S. R. Tambe
(Pharmacy College, Malegaon)
Dr. Kishore R. Nikam
NAAC Coordinator
Dr. Rajendra Patil
(M. J. College, Jalgaon)
Dr. S. D. Patil
Supervisor (Estate)

CONVENOR

Hon'ble Dr. B. S. Jagdale
Principal & Trustee MGV

CO-CONVENOR

Prof. (Dr.) K. H. Kapadnis
Head, Dept. of Chemistry

COORDINATOR

Prof. (Dr.) T. B. Pawar

CO-COORDINATOR

Dr. Vishnu A. Adole

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(BoS Member, Electronics, MGV)
Dr. Dhushan Khairnar (SPPU, Pune)
Mr. Sunil L. Dhanorkar
Mrs. Aruna B. Salunke
Mrs. Vaishali P. Shinde
Mrs. Sayali P. Joshi
Miss Geeta K. Chaudhari



CHIEF GUESTS

Inaugural Session
18th January, 2022 11:00 am onwards
Hon'ble Dr. Aapoorva Prashant Hiray
Coordinator
Mahatma Gandhi Vidyamandir,
Nashik.

Valedictory Session
20th January, 2022 3:00 pm onwards
Dr. Vitthal S. More
Joint-Secretary
Mahatma Gandhi Vidyamandir
Nashik

Guest of Honour
Prof. (Dr.) Nitin Karmalkar
Vice-Chancellor,
Savitribai Phule Pune University, Pune
Dr. Manohar Chaskar
Dean,
Faculty of Science & Technology
Savitribai Phule Pune University, Pune



Day I
(18th January, 2022)

PROGRAMME SCHEDULE

Day 3
(20th January, 2022)

Inaugural Session	11:00 AM - 11:45 AM
Keynote address and Technical Session-I	11:45 AM - 1:00 PM
Lunch Break	01:00 PM - 01:30 PM
Technical Session - II	01:30 PM - 02:30 PM
Technical Session - III	02:30 PM - 03:30 PM

Day 2 (19th January, 2022)	
Technical Session - IV	11:30 AM - 12:30 PM
Technical Session - V	12:30 PM - 1:30 PM
Lunch Break	01:30 PM - 2:00 PM
Paper and Poster Presentation	02:00 PM onwards

Technical Session - VI	11:30 AM - 12:30 PM
Technical Session - VII	12:30 PM - 1:30 PM
Lunch Break	01:30 PM - 2:00 PM
Paper and Poster Presentation	02:00 PM - 3:00 PM
Valedictory Session	3.00 PM onwards

CALL FOR PAPERS AND SUGGESTED THEMES

The Conference invites full-length original research contributions of professionals from Academic Institutions, Government Undertakings, Research Scholars, and Student communities across the Nation.

Conference Tracks

Nanochemistry	Physical Chemistry
Organic Chemistry	Petro Chemistry
Inorganic Chemistry	Forensic Chemistry
Biochemistry	Chemistry Education and Research
Medicinal Chemistry	Nanopolymers, Nanotubes and Nanoporous Materials
Pharmaceutical Chemistry	Nanocatalysis and Application in Chemical Industry
Food Chemistry	Nanobiotechnology
Agricultural Chemistry	Nanomedicine
Environmental Chemistry	Nano Based Drug and Gene Delivery
Polymer Chemistry	Nanophysics
Material Chemistry	Nanosensors
Analytical Chemistry	Graphene and Applications
Theoretical Chemistry	Quantum Dots and Nanomagnetism
Marine Chemistry	

Peer reviewed selected Accepted Papers of registered author will be considered for publication in UGC-CARE Listed Journal

The manuscript should be prepared in the following format:

- Title of the Paper, Name, Position, Affiliation, Contact No. & Email Id.
- Abstract of not more than 500 words with 3-4 keywords at the end of the abstract.
- Abstract font size (12, Times new roman, 1.5 lines spacing)
- The title of the Paper should be font size 16 & aligned.
- The paper should be submitted in Ms-Word file only.

All references should follow the following style:

Nakamura C, Kawasaki N, Miyataka H, Jayachandran E, et al. 2002. Synthesis and biological activities of fluorinated chalcone derivatives. Bioorg. Med. Chem., 2002; 10(3):699-706.

Abstract and Research Paper/Poster should be sent to: crncs2022@gmail.com

Eminent Speaker

Prof. Ponnadurai Ramasami
University of Mauritius
Prof. (Dr.) Avinash Kumbhar
Dept. of Chemistry, SPPU
Prof. (Dr.) Vaishali Shinde
Dept. of Chemistry, SPPU
Dr. C. V. Rode
Chief Scientist, NCL, Pune
Dr. Mahesh Prakash Patil
PKN University, Busan
Republic of Korea
Dr. Moreswar Chaudhari
Marie Curie
Post Doctoral Fellow
ICIQ, Spain
Dr. Pravin Ingole
CSIR-NEIST,
Jorhat, Assam

IMPORTANT DATES

Abstract Submission	10th January, 2022	Beneficiary Name	The Principal LVH Arts, Science and Commerce College, Panchavati, Nashik
Full Paper Submission	15th January, 2022	Account Number	97580200000240
Notification of Acceptance of Full Paper	As per Editorial Board Decision	RTGS / NEFT IFSC Code:	BARBODBADGA FIFTH LETTER IS "ZERO"
Last Date for Registration Fees	18th January, 2022	Account type	Current Account
Conference Date	18th to 20th January, 2022	Branch Name	Adgaon Naka, Panchavati, Nashik

Conference Fees Publication charges (2500 INR/\$80) are to be paid within 7 days after the acceptance of full length paper

Particulars	Indian	International
Research Paper Presentation and Publication in UGC-CARE listed Journal	3000 INR	\$ 80
Research Paper/Poster Presentation	1000 INR	\$ 30
Participant	500 INR	\$ 20

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To join e-Conference

Click Here

Department of Chemistry

Mahatma Gandhi Vidyamandir's
Loknete Vyankatrao Hiray Arts, Science and Commerce College, Panchavati, Nashik-3 (MS)
Website: www.lvhcollege.com Email: lvhcollege@gmail.com Ph. 0253-2512924

For further Details Contact
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Prof. (Dr.) T. B. Pawar
(+91) 94235 38674
Co-coordinator
Dr. Vishnu A. Adole
(+91) 80072 28114

CONFERENCE SCHEDULE

International e-conference on "Current Research in Chemistry and Nano sciences" January 2022 (CRCNS-2022).

SCHEDULE

Day -1: Tuesday, 18th January 2022.

- 1) 11.30 to 12.30 **Inauguration Function**
- 2) 12.30 to 01.30 Technical Session-1: **Prof. Ponnadurai Ramasami ,
University of Mauritius**
- RECESS***
- 3) 02.00 to 03.00 Technical Session-2: **Prof. (Dr.)Avinash Kumbhar
Dept. of Chemistry, SPPU PUNE**
- 4) 03.00 to 04.00 Technical Session-3: **Dr.Moreshwar Chaudhari
Marie Curie Post Doctor Fellow ICIQ Spain.**

Day -2: Wednesday, 19th January 2022.

- 1) 11.30 to 12.30 Technical Session-4: **Dr. Mahesh Kumar Prakash Patil**
PKN University , Bussan, Republic of Korea
- 2) 12.30 to 01.30 Technical Session-5: **Prof. (Dr.) Vaishali Shinde**
Dept. of Chemistry, SPPU PUNE
RECESS
- 3) 02.30 to 04.30: **Paper/ Poster presentation**

Day -3: Thursday, 20th January 2022.


- 1) 11.30 to 12.30 Technical Session-6: **Dr. C.V. Rode**
Chief. Scientist NCL PUNE
- 2) 12.30 to 01.30 Technical Session-7: **Dr. Pravin Ingole**
CSIR-NEIST, Jorhat, Assam.
RECESS
- 3) 02.30 to 04.00: **Paper/ Poster presentation.**
- 4) 4.00 to 04.30: **Valedictory Function.**

CONFERENCE SPEAKERS


Mahatma Gandhi Vidyamandir's
Loknete Vyankatrao Hiray Arts, Science and Commerce College,
Panchavati, Nashik-422003
(Affiliated to SPPU, Pune, Reaccredited with 'A' grade, Recipient of Best College Award by SPPU)

Golden Jubilee Year 2021-22 A three days International e-conference on
Current Research in Chemistry and Nanosciences (CRCNS-2022)


Inaugural Function Date: 18th January 2022



Chief guest
Hon 'ble Dr. Aapoorva P. Hiray
(Ex-MLC Maharashtra State & Coordinator
Mahatma Gandhi Vidyamandir, Nashik.)



Guest of Honour
Hon 'ble Prof.(Dr.) Nitin Karmalkar
(Vice Chancellor, SPPU, Pune)



Guest of Honour
Hon 'ble Dr. Manohar Chaskar
(Dean, faculty of Science and Technology,
SPPU, Pune)

Jointly organized by
Department of Chemistry in association with IQAC and BOS Chemistry MGV trust

Mahatma Gandhi Vidyamandir's
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Golden Jubilee Year 2021-22 A three days International e-conference on
Current Research in Chemistry and Nanosciences (CRCNS-2022)

Eminent Speaker



Prof. Ponnadurai Ramasami
(University of Mauritius)



Prof. (Dr.) Avinash Kumbhar
(Dept. of Chemistry SPPU,Pune)



Prof. (Dr.) Vaishali Shinde
(Dept. of Chemistry SPPU,Pune)




Dr. C.V.Rode
(Chief Scientist, NCL,Pune)


Mahatma Gandhi Vidyamandir's
Loknete Vyankatrao Hiray Arts, Science and Commerce College,
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Golden Jubilee Year 2021-22 A three days International e-conference on
Current Research in Chemistry and Nanosciences (CRCNS-2022)


Eminent Speaker



Dr. Mahesh P. Patil
(PKN University, Busan Republic of Korea)



Dr. Moreshwar Chaudhari
(Marie Curie Post Doctoral Fellow ICIQ, Spain)



Dr. Pravin Ingole
(Marie Curie Post Doctoral Fellow ICIQ, Spain)

CONFERENCE INAUGURATION AND SESSION DETAILS

MGVs Loknete Vyankatrao Hiray College has completed 50 years since its inception hence on the occasion of the Golden Jubilee Year celebration 2021-22. Under the able guidance of Prin. Dr. B.S. Jagdale (convener of the conference), department of chemistry, LVH Arts, Science and Commerce College, Panchavati, Nashik, in association with IQAC of the college and Board of Studies in Chemistry of Mahatma Gandhi Vidyamandir, Nashik have organized Three Day's International e-Conference on "CURRENT RESEARCH IN CHEMISTRY AND NANOSCIENCES" during 18th to 20th January 2022.

First day: The e-conference and abstract book were inaugurated, by the guest of honor Prof. Dr. Nitin R. Karmalkar (Vice-Chancellor SPPU Pune), Dr. Manohar Chaskar (Dean Science and technology SPPU Pune), and chief guest Hon. Dr. Aapoorva P. Hiray (Coordinator, MGVI institute, Nashik).

Prof. Dr. K. H. Kapadnis co-convener of the conference gave a concept note. He presented a brief background for organizing the conference.

Dr. Vishnu Adole co-coordinator of the conference introduced the guest of honor and chief guest.

Guest of honor and keynote speaker of the inaugural session, Prof. Dr. Nitin R. Karmalkar, in his speech, gave best wishes for the golden jubilee year of college and congratulated the college for organizing an international conference in a challenging pandemic period. Another guest of honour Dr. Manohar Chaskar, congratulated for organizing this international e-conference covering nanotechnology. The chief guest of the inaugural function Hon. Dr. Aapoorva Prashant Hiray, (Coordinator MGVI Nashik) gave best wishes for the success of the international e-conference and appreciated the efforts of the college and department for organizing the international conference. Dr. V.S. More, Joint Director of MGVI Nashik and gave his best wishes for the conference.

Prof. Dr. T. B. Pawar, (Coordinator of the conference), proposed a vote of thanks for the inaugural session.

In today's proceedings, there were three plenary lectures by renowned academicians and researchers. In the first plenary lecture, Dr. Mahesh Kumar P. Patil from South Korea talked about metallic nanoparticles, green synthesis, and their biomedical application. He also discussed the methods for nanoparticle synthesis from plant extract and microorganisms. This session was chaired by Prin. Dr A.V. Patil (Dean, Science and Technology, MGV, Nashik). In the second plenary lecture, Prof. Dr. Avinash Kumbar (Head, Department of chemistry, SPPU, Pune), talked on the topic of water splitting by transition metal polypyridyl complexes. This session was chaired by Prof. Dr B.M. Bhanage (Senior Scientist, ICT, Mumbai).

Dr. Moreshwar Chaudhari (ICIQ, Spain) talked on the topic of polymer-supported asymmetric organocatalyst continued flow "a Powerful Strategy for process intensification" in the third session. The session was chaired by Prof. Dr. K. H. Kapadnis (HOD chemistry and Chairman, BOS in Chemistry, MGV, Nashik).

The inaugural session was anchored by Prof. Peerzada while the first session by Dr. V.A. Adole, the second by Prof. Nutan Sadgir, and the third by Dr. S.S. Chobe. In these sessions, the introduction of guests and vote of thanks were proposed by Prof. Nutan Sadgir, Prof. Satish Ahire and Dr. V.A. Adole. More than 350 participants from various parts of India and abroad were present through the zoom platform. For successful organization of the conference Prof. Dr. N.B. Pawar (Vice-principal), Prof. Dr. Mrunal Bhardwaj (IQAC coordinator), Dr. S.S. Chobe (Academic supervisor), Dr. S.D. Patil (Estate Supervisor), Dr. Vinit Rakibe (Hr and finance Supervisor), Mr. Dhonnar S.L, Mrs. Jadhav S.P., Mrs. Chaudhari M.A., Miss. Shinde Vaishali, Mrs. Salunke A.B., Mrs. Joshi S.P., Miss. Nerkar J.N. have been taken the efforts.

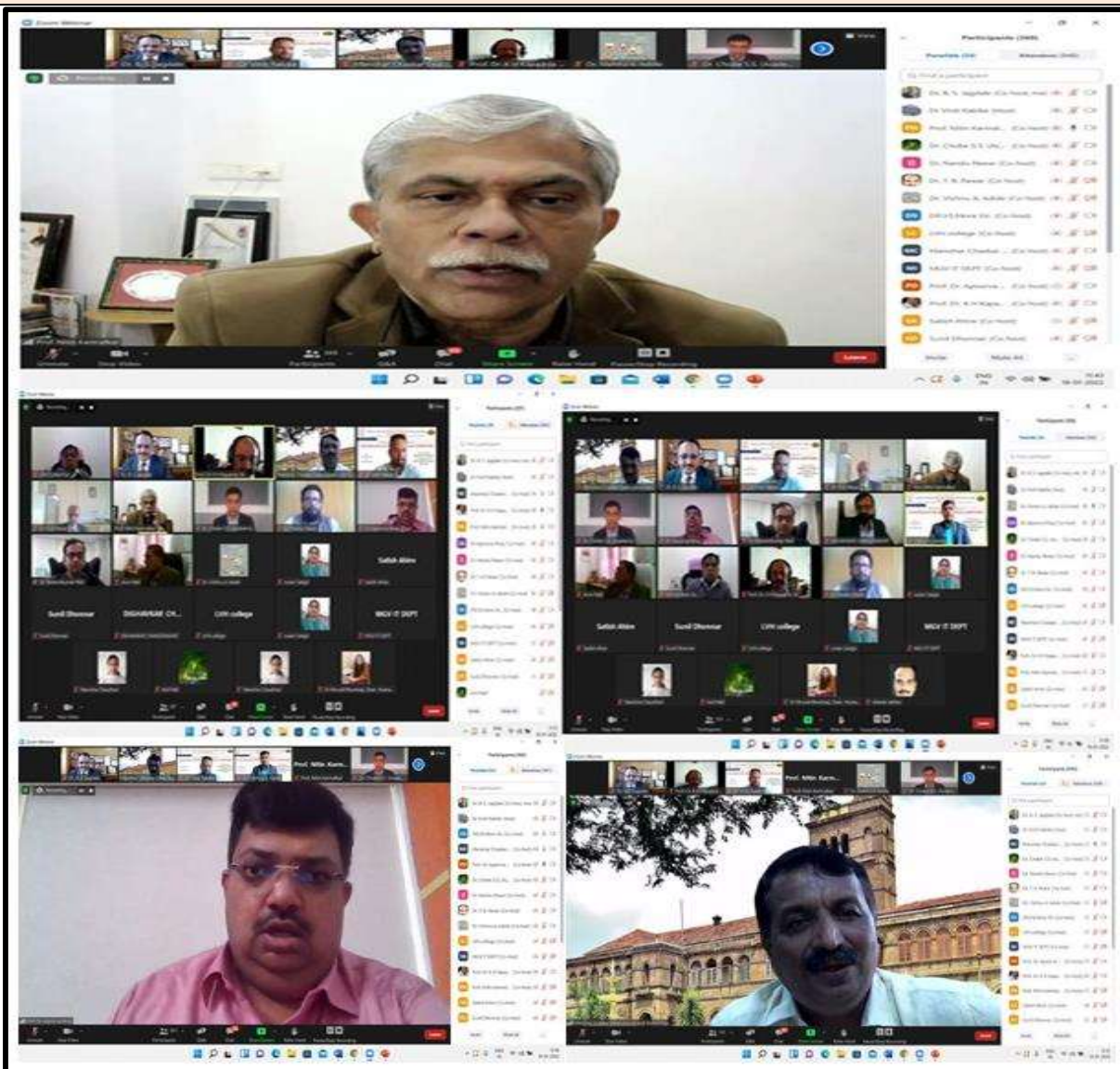
Second day: In the first plenary lecture, Dr. C.V. Rode (Chemical Engineering and Process Development division, CSIR-National chemical laboratory, Pune) talked about Catalysis, Green Chemistry & Biorefinery concepts, Fossil derived & biomass-derived feedstock. He also discussed how green chemistry implications in actual practice. This session was chaired by Dr.S.S. Chobe. In the second plenary lecture, Dr. Pravin Ingole (Engineering Science & Technology Division CSIR-North east institute of science & Technology, Jorhat, Assam) talked on the topic of Polymeric composite/Nanocomposite Membrane. In his session, he discussed an overview of membrane, separation process, development of polymer membrane, thin film composite membrane & membrane technologies for industrial use. The session was chaired by Dr. R.D. Patil. In the third plenary lecture Dr. Verla Andrew Wrinkor (Green Researchers in Analytical Chemistry, Environment & Climates change) From Imo State University Nigeria. He talked about the topic of green chemistry for sustainability. The session was chaired by Dr. U.B. Kadam

Third day: The first session anchored by prof. N.V. Sadgir, second by prof S.A. Ahire and third by Mrs. M.A. Chaudhari. In these sessions, the introduction of guests gave by Prof. N.V. Sadgir, the session second gave by Prof S.L. Dhonnar & Third session introduction was given by Prof. A.B Salunke. The vote of thanks was given by Mrs. S.P. Jadhav, Prof. S.L. Dhonnar & Prof. N.V. Sadgir. After these three sessions, the researchers & Students gave the paper presentation under the monitoring of Prof. Dr. T.B. Pawar, Dr. S.S. Chobe, and Dr. Sandip Pathade.

The chief guest of the valedictory function was Dr. V.S. More appreciated the organizing committee for the success of the international e- conference. Dr. T.B. Pawar sir gave a brief report on the three-day international e- conference. The valuable feedback was given by Dr. Rethinagiri & other participants. In that, all appreciated the team for taking efforts for organizing the international e- conference. At the last convener of the conference Prin. Dr. B.S. Jagdale discussed how the conference was

useful to enhance the research culture in UG, PG, and Research students. Dr. V.A. Adole anchored the valedictory session & Dr. S. S. Chobe proposed the vote of thanks. **More than 350 participants from various parts of India and abroad were present through the zoom platform.** The organizing committee members took huge efforts for the successful organization of the conference.

Some clicks





Sample certificate

	<p>Mahatma Gandhi Vidyamandir's</p> <p>Loknete Vyankatrao Hiray Arts, Science and Commerce College,</p> <p>Panchavati, Nashik-422003</p> <p><small>(Affiliated to SPPU, Pune, Reaccredited with 'A' grade, Recipient of Best College Award by SPPU)</small></p>	
<p>Certificate No.107 Date: Feb 1, 2022</p>		
<p>CERTIFICATE</p>		
<p>This is to certify that, MISS. CHETANA PATHADIYA of, L V H College Panchvati (Nashik) has Presented Poster entitled as Synthesis, Spectroscopic Characterization and antimicrobial activity of chalcone derivatives in a three day International e-conference on Current Research in Chemistry and Nanosciences (CRCNS-2022) Jointly organized by Department of Chemistry in association with IQAC and BOS Chemistry MGV from 18th to 20th January 2022</p>		
 Dr. V. A. Adole (Co-Coordinator)	 Prof. (Dr.) T. B. Pawar (Co-ordinator)	 Prof. (Dr.) K. H. Kapadnis (Co-Convenor)
 Dr. B. S. Jagdale (Convener and Principal)		 Dr. Yogita A. Hiray. (Chairperson, CDC)

Inauguration of abstract book and publication of conference proceedings



(Inaugurated by Dr. Nitin Karmalkar (Vice-Chancellor, SPPU, Pune), Dr. Prashant V. Hiray (Secretary, Mahatma Gandhi Vidyamandir, Nashik), Dr. Aapporva Prashant Hiray (Coordinator, Mahatma Gandhi Vidyamandir, Nashik), Dr. V. S. More (Joint Secretary, Mahatma Gandhi Vidyamandir, Nashik), Dr. Prafulla Pawar (Registrar, SPPU, Pune), Dr. Manohar Chaskar (Dean, Science and Technology, SPPU, Pune), Dr. Parag Kalkar (Dean, Commerce and Management, SPPU, Pune), Prin. Dr. B.S. Jagdale (Principal, LVH College), Prof. Dr. K. H. Kapadnis (BOS chairman, MGVS, Nashik and HOD, Chemistry Department), Chemistry Staff (LVH College))



Mahatma Gandhi Vidyamandir's
**Loknete Vyankatrao Hiray Arts, Science
and Commerce College**

Panchavati, Nashik-03
Affiliated to Savitribai Phule Pune University, Pune

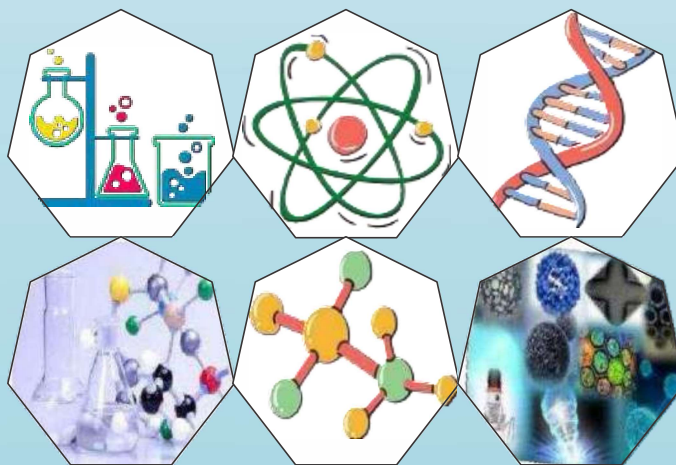


INTERNATIONAL e- CONFERENCE 2022
ON
CURRENT RESEARCH IN CHEMISTRY AND NANOSCIENCES
18th to 20th January 2022

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Abstract Book

Organized by
Department of Chemistry and
IQAC in association with MGVS BOS, Chemistry



Editor in Chief
Prin. Dr. B. S. Jagdale

Dr. S.S. Chobe
Academic Supervisor

Prof. (Dr.) M. A. Bhardwaj
IQAC Coordinator

Prof. (Dr.) N.B. Pawar
VicePrincipal

Dr. V.A. Adole
Co-coordinator

Prof. (Dr.) T. B. Pawar
Coordinator

Prof. (Dr.) K. H. Kapadnis
Co-convenor

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(Dean, Science & Vocational, MG V)

Prin. Dr. R. S. Bhambar
(Dean, Faculty of Technical, MG V)

Prin. Dr. D. F. Shirude
(MSG College, Malegaon)

Dr. Vinit Rakihe
Supervisor (HR & Finance)

Dr. Santosh S. Chobe
Supervisor (Academic & Examination)

Dr. S. D. Patil
Supervisor (Estate)

Prof. (Dr.) Avinash Kumbhar
Dept. of Chemistry, SPPU

Prof. (Dr.) Vaishali Shinde
Dept. of Chemistry, SPPU

Dr. C. V. Rode
Chief Scientist, NCL Pune

Prof. Ponnadurai Ramasami
University of Mauritius

Prin. Dr. C. G. Dighavkar
(ASC College, Surgana)

Prin. Dr. S. R. Tambe
(Pharmacy College, Malegaon)

Dr. Kishore R. Nikam
NAAC Coordinator

Dr. Rajendra Patil
(M. J. College, Jalgaon)

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(Chairperson, BoS Physics)

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(ICT-Mumbai)

Smt. Bharti V. Shewale
(BoS Member, Chemistry, MG V)

Dr. Sandip S. Pathade
(BoS Member, Chemistry, MG V)

Dr. Sandip B. Nahire
(BoS Member, Chemistry, MG V)

Mr. Vinayak R. Bagul
(BoS Member, Chemistry, MG V)

Dr. D. K. Halwar
(BoS Member, Electronics, MG V)

Dr. U. J. Tupe
(BoS Member, Electronics, MG V)

Mr. Satish A. Ahire

Mrs. Nutan V. Sadgir

Smt. Charushila K. Nerkar

Mrs. Sheetal P. Jadhav

Mrs. Manisha A. Chaudhari

Miss. Jagruti N. Nerker

Dr. U. B. Kadam
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Prof. (Dr.) U. P. Shinde
(BoS Member, Electronics, MG V)

Dr. Sunil J. Patil
(BoS Member, Physics, MG V)

Dr. K. S. Thakare
(BoS Member, Physics, MG V)

Mr. U. D. Lad
(BoS Member, Physics, MG V)

Dr. Arun Garde
(BoS Member, Physics, MG V)

Mr. C. R. Yevale
(BoS Member, Physics, MG V)

Mrs. V. T. Salunke
(BoS Member, Electronics, MG V)
Dr. Bhushan Khairnar (SPPU, Pune)

Mr. Sunil L. Dhonnar

Mrs. Aruna B. Salunke

Mrs. Vaishali P. Shinde

Mrs. Sayali P. Joshi
Miss Geeta K Chaudhari

About the Institute

Mahatma Gandhi Vidyamandir, Nashik was established in the year 1952, under the dynamic leadership of Late Hon'ble Karmeer Bhausahab Hiray, a committed freedom fighter, an ardent educationalist and former Minister for Revenue of Bombay Province. His son Late Hon'ble Vyankatrao Hiray, a great visionary, took over the responsibility of the institution in 1961. Under his visionary approach, M.G. Vidyamandir started a number of schools and colleges imparting education from primary level to higher education, also technical and professional education. Since 1980, Hon'ble Smt. Pushpatai Hiray, Former Minister of Health, Govt. of Maharashtra, and Hon'ble Dr. Prashant V. Hiray, Former State Minister of Transport and Protocol, Govt. of Maharashtra have been efficiently managing the institution. Hon'ble Dr. Aapoorva Prashant Hiray, Former MLC, Maharashtra State has been taking extraneous efforts to enhance the quality of education in the era of competitive globalization. At present, 110 educational Institutions ranging from primary level to postgraduate and technical to professional level are operational under his able leadership. The devotional motto of the institute is "Bahujan Hitay, Bahujan Sukhay" is to provide the educational facilities to the students coming from all spheres of urban, rural & tribal areas and to empower them to become successful, sensitive and responsible citizen likewise contribute and strengthen the Indian Democracy.

About the Collage

Loknete Vyankatrao Hiray Arts, Science and Commerce College, Panchavati, Nashik, is a leading Institute in Nashik ever since its establishment in 1971. The present strength of more than 6000 students reflects the academic excellence of the college, which is reaccruited with 'A' Grade by NAAC and has been recognized as the "Best College in 2016-17 by Savitribai Phule Pune University, Pune. The college possess excellent infrastructure, highly qualified faculty who are performing creditable work in the field of research and extension are also appreciated by all the stakeholders. Through this e-conference, we all, hence, take an opportunity to invite the eminent academicians, Gandhi scholars, Gandhi followers, researchers, peace activists and students to share and exchange their knowledge and views on "Platinum Jubilee of Indian Independence: Relevance of Gandhian Ideology". We envisage that the outcomes of this conference would be very fruitful to the professors, industrialists, research scholars and PG students and ultimately a contribution to nation building.



Our Patrons



Hon'ble Smt. Pushpatai V. Hiray
Chairperson
Mahatma Gandhi Vidyamandir
Nashik



Hon'ble Dr. Prashant V. Hiray
General Secretary
Mahatma Gandhi Vidyamandir
Nashik



Hon'ble Dr. Smitatai Prashant Hiray
Treasurer
Mahatma Gandhi Vidyamandir,
Nashik



Hon'ble Dr. Aapoorva Prashant Hiray
Coordinator
Mahatma Gandhi Vidyamandir,
Nashik

Message from Hon'ble Dr. Prashant V. Hiray
(General Secretary, Mahatma Gandhi Vidyamandir, Nashik)

PREFACE...

Any scientific research is motivated by the goal of meeting human needs in the most user-friendly manner possible. Nanosciences is a scientific discipline with its various emerging trends which are making significant contributions to this endeavour. The success of any study is determined by how useful it is to the rest of humanity. Science, for the common person, is a necessity of the hour, thereby the proposed Three-Day International E-Conference on "Current Research in Chemistry and Nanosciences" (CRCNS-2022) will be very fruitful for one and all.

I believe that this e-conference will be an excellent international forum for the exchange of ideas, knowledge, and results in the theory, methodology, and application of nano sciences, as well as for the presentation of new research findings. Additionally, the inventions and nano sciences have had an impact on every aspect of our lives, and the portable gadgets that we use on a daily basis is a perfect embodiment of this. The deliberations in the conference would definitely prove to be harbinger of many innovative changes in research in basic sciences that would lead to the welfare of human society.

On behalf of Mahatma Gandhi Vidyamandir and Adivasi Seva Samiti, I congratulate the Science Faculty for undertaking this scientific mission. I also appreciate the efforts taken by Principal Dr B.S. Jagdale and faculty members to organize this Three-Day International E-Conference on the occasion of celebration of Golden Jubilee Year of the college. I heartily welcome all the delegates, participants, investigators, researchers from different parts of India and abroad as well.

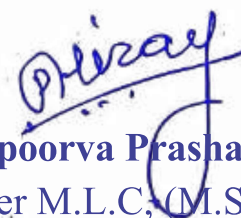


Dr. Prashant V. Hiray
Former Minister of Transport & Protocol (M.S)
General Secretary,
Mahatma Gandhi Vidyamandir, Panchavayi, Nashik

Message from Hon'ble Dr. Aapoorva Prashant Hiray
(Coordinator, Mahatma Gandhi Vidyamandir, Nashik)

FOREWORD...

I extend a very warm welcome to the eminent scholars, researchers, professors across the world to participate in an international conference organised on the occasion of Golden Jubilee Year Celebration of Mahatma Gandhi Vidyamandir's Loknete Vyankatrao Hiray Arts, Science and Commerce College by the Faculty of Science. The latest advancements in nanotechnology and the study of nanoparticles have been a focus of recent research in Chemistry and Nano Sciences. The use of nanotechnology in the field of Chemistry is gaining attention from scientists around the world. The benefits of Nano sciences are many, and the potential to create a more sustainable world is just one of them. Likewise, using the latest methods to create better chemicals is essential for the development of sustainable energy sources. Simultaneously, the new technologies could also have a positive impact on the environment. I am absolutely sure that this E-Conference will be a global platform in a true sense for researchers, professors to present their expertise in Current Research in Chemistry and Nano Sciences (CRCNS-2022). similarly, a healthy discussion with the world-renowned scholars who will be sharing their expertise as resource persons. Undoubtedly, this conference will form a basis for collaborative research in the field of Current Research in Chemistry and Nanosciences. Moreover, I am very optimistic that the outcomes of this conference will be beneficial for inculcating research culture among university and colleges teachers and students. Additionally, I hope that the ultimate aim of this E-Conference is to contribute in the field of research in particular and to human kind in general will be achieved.



Dr. Aapoorva Prashant Hiray
Former M.L.C, (M.S), India
Coordinator, MGVS, Nashik

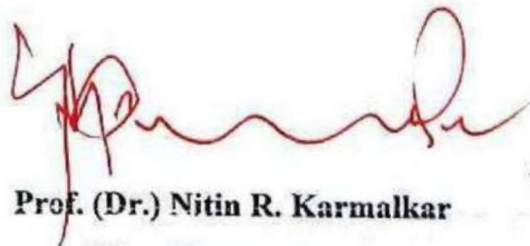
**Message From Prof. (Dr.) Nitin R. Karmalkar
(Vice-Chancellor, SPPU, Pune)**

Forward ..

My heartfelt greetings to the distinguished scholars, researchers, and educators from across the world who will be attending this International E-Conference on “Current Research in Chemistry and Nanosciences” (CRCNS-2022) hosted by Loknete Vyankatrao Hiray Arts, Science, and Commerce College of Mahatma Gandhi Vidyamandir’s simultaneously I would congratulate the college for completing fifty years since its inception rather, I would say, the college have served the society for last fifty years would continue their service in nurturing the secular, moral and constitutional values amongst their students.

The fields of Material Science and Nanosciences intersect in wide range of areas. Novel chemical pathways into advanced materials are the primary focus of major research thrusts. The chemistry involved in such development spans organic, bimolecular, and polymeric materials, and can lead to porous, solid-state materials that mimic living systems. These materials can change the paradigms in biomedicine and energy. However, the research is largely exploratory in nature from drug delivery to advanced energy storage, these innovations improve our quality of life and thanks to discoveries and innovative applications, we are now more aware than ever of what is happening in our world.

It gives me a great pleasure to welcome all delegates and participants to this E-Conference, coming from near and far. I extend my best wishes to the organizers of the International E-Conference and wish the publication every success.



Prof. (Dr.) Nitin R. Karmalkar

Vice-Chancellor

Savitribai Phule Pune University,

Pune-7 (M.S), India

Message From Dr. Manohar Chaskar
(Dean - Faculty of Science & Technology, SPPU, Pune)



सावित्रीबाई फुले पुणे विद्यापीठ

(पूर्वीचे पुणे विद्यापीठ)

गणेशखिंड, पुणे - ४११००७, भारत.

Savitribai Phule Pune University

(formerly University of Pune)
Ganeshkhind, Pune-411007, India.

डॉ. एम. जी. चासकर
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Date :


It is a great privilege for me to be a part of this International E-Conference. I am extremely delighted that the Mahatma Gandhi Vidyamandir's Loknete Vyankatrao Hiray, Arts, Science & Commerce College, Panchavati, Nashik, is celebrating its Golden Jubilee Year by hosting a Three-Day International E-Conference on "Current Research in Chemistry and Nanosciences" (CRCNS-2022).

The ultimate goal of this e-conference is to bring together under the one umbrella the leading Scientists, Research Scholars, Professor, Staff members to exchange and share their experiences likewise research results related to all aspects of Chemistry and Nanosciences. Additionally, it will serve as a premier knowledge-sharing forum for researchers, practitioners, and educators to present and discuss the most recent innovations, trends, and issues, as well as practical challenges encountered and solutions adopted in the field of current trends in Chemistry and Nanosciences, as well as to network with one another. I am highly affirmative that the E-conference's programmes will cover a wide range of topics related to Nonmaterial and their application in drug discovery and delivery.

I would like to take this opportunity to congratulate Principal Dr. B. S. Jagdale and the Organising Committee of this International E-Conference for undertaking such a herculean task.

I wish you all a fruitful discourse.

Thank you!


Dr. Manohar Chaskar
Dean

Faculty of Science and Technology
Savitribai Phule Pune University, Pune-7

Message from Dr. B.S. Jagdale (Principal and Convener)

Mahatma Gandhi Vidyamandir's Loknete Vyankatrao Hiray College is situated on the sacred banks of river Godavari, in the midst of Nashik city, one of the Metropolitans of Maharashtra. Since its inception in 1971, the college has been pursuing the dreams and follows the path shown by our Founding Father, Late Shri Karmaveer Bhausaheb Hiray. Further, our college has completed fifty years, thus 2021-22 is our Golden Jubilee Year, hence the departments of our college are undertaking various events to celebrate and make the year memorial. In this eventful journey the college have received many accolades and one of such is the Best College Award of Savitribai Phule Pune University, one of the top ten universities of India and reaccreditation with 'A' grade by NAAC. Moreover, our college is the most acclaimed institute in Maharashtra providing traditional as well as professional education in all streams: running 06 research & 14 PG centers, H.Sc. Vocational, B.Voc. M.Voc. along with Community College of Diploma & Certificate Courses. Additionally, for yearlong our faculties are engaged in publishing research articles in the reputed and peer-reviewed journals having decent impact factor. It is worth mentioning here that some of our faculties have patents at their credit.

The strength and backbone of our college is our dedicated teaching staff that takes care of the academic interests of the students. Our teachers also contribute as counselors and guide the students in all walks of life. The Faculty of Science is our asset. We always try to update the quality and facilities to provide good infrastructure that will create a symbiotic relationship between students and teachers. The faculties are continuously engaged in motivating the excellence in students not merely in field of sciences but in all fields of life. This surely enhances the potential of students for the betterment of society. Through this Three-Day International E-Conference on "Current research in Chemistry and Nanosciences" (CRCNS-2022), we have tried to bring together the eminent scientist, research scholar, professor of India and of abroad. I am very sure that this E-conference will be a platform for the interaction of our research scholars and teachers for sharing their ideas and views. Thus, it gives me immense pleasure to welcome all the participants, delegates and research scholars and acknowledge the efforts of Faculty of Science to make this event a grand success.



Dr. B.S. Jagdale
Principal

Loknete Vyankartao Hiray
Arts, Science and Commerce College,
Panchavati, Nashik-03

**Message from Prof. Dr. K.H. Kapadnis
(HOD, Chemistry and Co-Convener)**

Dear all

On behalf of the Department of chemistry, MGV's Loknete Vyankatrao Hiray Arts, Science and Commerce College I welcome you all for three days International e-Conference entitled "Current Research in Chemistry and Nano Sciences (CRCNS-2022)" on 18th January to 20th January 2022, Organized by Department of Chemistry and IQAC in association with BOS of chemistry MGV.

Speakers, research experts, academicians, industrialists, students, and delegates from all over the world have been invited to participate in the conference. The conference's theme is "Chemistry and Nanoscience Advancements and Applications," and it will feature a wide range of critically important sessions in Chemistry, Chemical Engineering, and Nanoscience's. Keynote and Plenary Sessions, Speaker Sessions, Young Researcher Forum, Video Presentations, Poster Presentations, E-Posters, and B2B meetings on the most recent advancements in the field of Chemistry and Nanoscience are all part of the conference.

I add my best wishes for a successful and fruitful conference and my thanks to all organizers We're looking forward to an excellent meeting with great scientists from different countries around the world and sharing new and exciting results in Chemistry and Nanosciences.



**Prof. (Dr.) K.H. Kapadnis
Head of the department**

Message from Coordinators

Dear Professors and Researchers,

On behalf of the Organizing Committee, we warmly welcome all Chemistry and Nano Sciences professionals to the 1st International e-Conference entitled “Current Research in Chemistry and Nano Sciences (CRCNS-2022) organized by Department of Chemistry and IQAC in association with BOS in Chemistry, MGV on the occasion of celebration of Golden Jubilee Year of our college. The foremost aim of organizing the International e-Conference is to share and upgrade the knowledge of each and every individual in this fast-moving Information Era. We have given a nice opportunity for those who have a thirst in knowing the present chemistry and nanotechnology advancements and furthermore share their thoughts. Moreover, this conference will likewise facilitate the participants to explore and share various novel ideas. The conference intends to bridge the researchers working in the scholarly community and other professionals through research presentations and keynote addresses in current trends of Chemistry and Nanosciences. It reflects the thriving interest in the field of research and practice for contribution and better opportunities in academics and industry. You will get ample opportunities to augment your knowledge and network. We want to thank in advance the conference committee for extending their valuable time in organizing the program and all the authors, reviewers, and other contributors for their sparkling efforts and their belief in excellence. We look forward to learning the most recent results from top industrial, government, and academic scientists on these topics and everything else that is presented. We are without a doubt in a period of extraordinary advancement in current research in Chemistry and Nanosciences, so come and enjoy the research, and report your results!



Dr. Vishnu A. Adole
Co-Coordinator



Prof. Dr. Thansing B. Pawar
Coordinator

Index

Sr. No.	Title	Author/s	Page No.
1.	Computational chemistry and its application in pharmacy and drug development	Prof. P. Ramasami	1
2.	Polymer supported asymmetric organocatalysis in continuous-flow: A powerful strategy for process intensification	Moreswar B. Chaudhari	2
3.	Metallic Nanoparticles: Green synthesis and their Biomedical Applications	Maheshkumar P Patil	4
4.	Chemo- and Bio-Catalytic Avenues for Bio-Refinery	C. V. Rode	5
5.	Fabrication of Curcumin Based Nanogels and Nanofibers for controlled release and wound healing applications	Vaishali S. Shinde	6
6.	Polymeric Composite/Nanocomposite Membranes: Journey from Lab to Industry	Pravin G. Ingole	7
7.	An effective electrochemical approach and surface morphological analysis on carbon mild steel via nanobased green inhibition in 1M oil of vitriol solution	B. Gowri Shannkari, R. Sayee Kannan	8
8.	Investigation and Inhibition Metal Corrosion in Acid Solutions by Organic Compound.	V.Rethinagiri	9
9.	Monitoring and Assessment of Drinking Water for Chemical Pollutants: A Three-Year Study in Nadia District, West Bengal	Ajanta Mukherji	10
10.	Ocimum Sanctum Leaf Extract Mediated Green Synthesis of Iron Oxide Nanoparticles: Characterization and its Antimicrobial Activity	D. T. Sakhare	11
11.	Analysis of ground water quality based on WQI and SAR in and around Salem district, Tamil Nadu, India	R.Abdul Vahith, I.Sajitha, J.Sirajudeen, J.Muneer Ahamath, S.S.Syed Abuthahir ¹	12
12.	Preparation and Study of 2-mercapto-N'-(1-(4-hydroxycumarinyl)ethylidene)benzohydrazide."	Dr. S.S. Chandole, Mr. S.S. Anjanikar	13
13.	Omeprazole Drug As Effective Corrosion Inhibitor For Mild Steel In 1M Sulfuric Acid	Pratap kamble, R.S.Dubey	14
14.	Solid State Electronic Spectra of Two Lohabhasma Samples	Dr Rupali Ajesh Gulalkari	15
15.	Fe ₃ O ₄ nanoparticles: Efficient, solvent-free, magnetically recoverable, green heterogeneous catalysis for the synthesis of Biginelli adducts	Ganesh B. Yelmame, and Shrikant B. Jagtap	16
16.	Design, characterization and <i>in-silico</i> studies of novel heterocyclic compound	S. Mohamed Rabeek, M. Seeni Mubarak, M. Syed Ali	17
17.	Microwave assisted and sulfamic acid catalyzed synthesis of carbazole linked benzimidazole motifs as powerful antitubercular and antibacterial agents	Mahendra Ramdas Thomare	18

18.	Nanofluids: an innovative tool for heat transfer	Quadri Firdose Basheer	19
19.	Thermophysical and sonochemical studies of [(ch ₃) ₄ nbr - (c ₄ h ₉) ₄ nbr)] solutions in aqueous ethanol at 308.15 k	T. B. Pawar	20
20.	Synthesis, Characterization Gas Sensing Performance of LaCoO ₃ Nanostructure by Thick Film Fabrication	Rohini Gangadhar Borse	21
21.	Thermodynamic Studies of Transition Metal Ions With Lisinopril Drug in Mixed Solvent Media	Ramesh Ware	22
22.	Application Of Quinoline Schiff Bases	Mr. S.S. Anjanikar, Dr. S.S. Chandole	23
23.	Synthesis and Characterization of Novel CoCr ₂ O ₄ @GeO ₂ @ZnO Core-shell Nanostructure: Focus on Electrical Conductivity and Gas Sensing Properties	S. S. Kushare, V. D. Bobade, A.V. Borhade	24
24.	Low frequency Dielectric properties of agriculture soil contaminated by chemical fertilizers.	A. S. Biraris and P.R.Chaudhari	25
25.	Influence of Cu-doping on structural, optical and electrical properties of CdS thin film prepared by electrochemical deposition technique	J.A.Borse,A.S. Garde, B.P.Patil,S.K. ardeshi ⁴	26
26.	Screen printed ZnO thick films for NH ₃ sensing.	Vaishali T. Salunke. P.B. Buchade, A.D. Shaligram and R.Y. Borse	27
27.	Molecular docking, synthesis, and biological evaluation of α , β - unsaturated carbonyl composites via Green approach	Dr. A. P. Hiray, Dr. B. S.Jagdale, C. K. Nerkar, N. V.Sadgir, S. L. Dhonnar S. A. Ahire,S. S. Chobe	28
28.	Synthesis and Characterization of Multi-walled Carbon Nanotube Functionalized Co ₃ O ₄ /ZnO Nanocomposite as an Effective Photocatalyst for the Photodegradation of Eosine Blue Dye	Vishnu A. Adole Aapoorva P. Hiray, Thansing B. Pawar, Bapu S. Jagdale	29
29.	Comparative DFT Investigation of Pyridine Tagged Anti-Bacterially Potent Chalcone Derivatives	Rahul A. Shinde. Vishnu A. Adole. Rohit S. Shinde. Bhatu S. Desale, Bapu S. Jagdale	30
30.	Optimization and validation of a RP-HPLC method for the simultaneous determination of binary mixture pesticides in combined dosage form through derivatization technique	Vilas K. Patil and Hemant P. Narkhede	31
31.	Synthesis and Characterization of Ni doped ZnO Nanomaterial as an Effective Photocatalyst for Photodegradation of Methylene Blue	Mansi H. Magar, Archana B. Dhongade' Rohit S. Shinde, Thansing B. Pawar	32
32.	Synthesis and DFT Studies of 3-[3-(4-Methoxy-phenyl)-acryloyl]-Chromen-2-one by using Green solvent	Kuldeep T. Padhyar, Ramesh S. Nirwan, Navanand B.	33

		Wadwale	
33.	Study on the biological activity of synthesized 2-aminothiazole derivatives	Bhausahab B. Bachhav, Ujjain B. Kadam	34
34.	Use of Thiazole and its Derivatives in Pharmaceuticals: A Review	Avinash U. Nerkar	35
35.	Synthesis, Spectroscopic and DFT based quantum chemical study of (z)-2-(4-chlorobenzylidene)-5,6-dimethoxy-2,3-dihydro-1h-inden-1-one	Nutan V. Sadgir, Sunil L. Dhonnar Bapu Jagdale ^a santosh Chobe Bhagyashri Waghmare	36
36.	THE WORLD WAR AGAINST "COVID-19" Ani	Anita patil	37
37.	Fabrication of nitrogen modified tin oxide nanomaterial for environmental remediation.	V.R.Bagul, G.R.Bhagure, S.A.Ahire, A.V.Patil	38
38.	Research study of structural, morphological and optical properties of screen printed solid thick films of titanium oxide with tin oxide composition at high temperature	Kaveri B Bhamare, Aditi N Ahirrao Rohit M Nikam	39
39.	Viscosity, Density and Ultrasonic Study of Officinale Zingiber with ZnCl ₂ at 318.15 K	Pallavi B. Nalle, Sangita U. Shinde, K. M. Jadhav	40
40.	Potentiometric Study and Statistical Analysis of Human Urine Samples Using Reduced Graphene Oxide Screen Printed Electrodes	Anil B. Patil, Umesh. J. Tupe, Vikas V. Deshmane, Dharma K. Halwar, Sunil J. Patil, Arun V. Patil	41
41.	Thermophysical, acoustic and FTIR study on binary mixtures of nitrobenzene and aniline with 2-methyl-2-propanol at temperature 308.15 K and atmospheric pressure.	Narendra A Dokhe, Pankaj S pawar, Vinod S Aaynor	42
42.	A New, Solvent-Free, and Versatile Multicomponent One-Pot Synthesis of Thiazole Derivatives By Using Green Method.	Tidke Atul D Kapadnis Kailas H.	43
43.	An eco-friendly method for the synthesis of solvent-free reaction of oxazine derivatives".	Samin Shaikh, Shivaji Labhade, Raju Kale, Charushila Nerkar, Santosh Chobe Satish Ahire ,Amar Patil	44
44.	Green approach for the synthesis of chalcone: review of methods	Bhagyashri B.Waghmare, Bapu S.Jagdale, Nutan V. Sadgir	45
45.	MoO ₃ : NIO nano-composite as ethanol sensor	Dharma Kisan. Halwar, Vikas Vasant. Deshmane, Arun Vitthal Patil	46
46.	Viscosity, UV and FTIR study of ternary mixtures of	Sunil G Wagh, Vaman	47

	DCFC, DMSO and alkanols at 303.15 K temperature with synthesis and characterization of DCFC	R Mandwade, Walmik B Shirsath	
47.	The effect calcination temperature on undoped ZnO nanoparticles prepared via co precipitation method	V.R.Bagul, G.R.Bhagure	48
48.	DFT study of interaction between 2-naphthol with water, methanol and their binary solvent systems	Dr. Chandrakant S. Aher	49
49.	Combined experimental and computational exploration of 4-(4-bromophenyl)-6-(3,4-dimethoxyphenyl)-5,6-dihydropyrimidin-2(1H)-one	Sandip Babu S. Jagdale	50
50.	Green Synthesis of TiO ₂ Nanoparticles Using Aloe vera and orange fruit extract	Vaishali. Shinde, Manisha Chaudhari, Aruna B. Salunke, Sayali. P Joshi	51
51.	Synthesis of Biologically Potent α -Amino phosphonates Derivatives Catalysed by Nano(PAni-Mn) Catalyst.	Kamalakar K. Wavhal, Deepak M. Nagrik	52
52.	-Cost Capacitance Measurement System using Arduino WeMos D1R1	Somnath Wankhede, Vijay Kale, A. D. Shaligram, Arun Patil ⁴ Dharma K Halwar	53
53.	“Study of Molecular Interactions present in Binary Liquid Mixtures of Di-ethyl ether, Isopropyl Ether and n-Di-butyl Ether with 2- Pentanol at different temperatures”	Kailaspati. Jadhav, Kailas. Kapadnis ^a , Anita Patil, Pankaj Pawar, Ujjain Kadam, Raghunath Sonawane	54
54.	Green Methodology in Nanotechnology : Novel Development of Metal Nanostructures and Its Applications as a catalyst: A Review	Amol Ratan Pagare, Rajashri B. Sawant	55
55.	UV light induced photocatalytic degradation of methylene blue by pure ZnO and designed 5% Fe-ZnO semiconducting nanomaterials prepared by co-precipitation method.	Ravindra H. Waghchahure. Babu S. Jagdale	56
56.	ion-ion and ion-solvent interactions of lithium halides in mixed methanol-water system at 308.15K.	V.V.Kadam, A.B.Niku mbh, T.B.Pawar, R.P.H iray, V.A.Adole, V.R.Bagul, A.V.Gajbhiye	57
57.	Influence on conductivity of nano crystalline znbio films with variation in doping concentration	L M Mahajan, C K Nerkar, S L Wagh	58
58.	DFT Investigation of the 2,4 diphenylthiazole Molecular Structure, Bond Length, Bond Angle, HOMO-LUMO, MEP, Mulliken Charges, and Global Reactivity Parameters	Abhijit R. Bukane, Babu S. Jagdale	59
59.	Synthesis, Molecular Structure, HOMO-LUMO, Spectroscopic (UV-Vis and IR), Thermochemical Study of 5-Acetyl-4-(4-chlorophenyl)-6-methyl-3,4-dihydropyrimidin-2(1H)-one: A DFT Study	Archana B. Dhongade, Thansing B. Pawar	60
60.	PEG- 200: Green Synthesis towards a new class of 5,6,7,8-tetrahydroquinoline-3-carbonitrile derivatives as Antimicrobial Agents	Charushila K. Nerkar	61

61.	PEG-400 mediated one pot synthesis, characterization, antimicrobial, antioxidant and computational study of novel bis-thiazole based Schiff base analogues	Vishnu A. Adole, Bapu S. Jagdale	62
62.	An efficient and green catalyst for the synthesis of dihydropyrimidinone derivatives	Vinayak V. Kadam	63
63.	Photocatalytic applications of Fe ₃ O ₄ Nanoparticles: A review	Rohit S. Shinde, Vishnu A. Adole, Rahul A. Shinde, Bhatu S. Desale, Archana B Dhongade, Mansi H.Magar, Thansing B. Pawar	64
64.	Interpretation of Viscometric, Thermodynamic and Acoustic properties of Maltose in aqueous solutions of sodium fluoride at different concentrations and Temperatures.	Raghunath K.Sonawane, Kailas. H. Kapadnis, Arun B. Nikumbh, Anita Patil, Vishnu A. Adole Kailaspati K.Jadhav	65
65.	Structural Properties of Nanocrystalline CdS Thin Films Deposited by Successive Ionic Layer Adsorption and Reaction Method	Deepak R. Patil	66
66.	total phenolic and flavonoid contents, phytochemical screening and in-vitro antioxidant activity of drakshasav a herbal drug	R.K.Pawar, Dr. G. R. Bhagure	67
67.	ZnFe ₂ O ₄ nanoparticles as a robust and reusable magnetically catalyst in the three component synthesis of 5-amino -3-(3,4-dimethoxyphenyl)-1H -pyrazole 4-carbonitriles.	Rahul Dinkar Jadhav,Chetan Laxman Raundal,Shubham Popat Wagh,Sujata Pagar,Salunke Aruna Balasaheb	68
68.	Facile one-pot four component synthesis of 2-amino-4-(4-methoxyphenyl)-5-H-indeno[1,2-b]pyridine-3-carbonitrile catalysed by ZnFe ₂ O ₄ magnetic nanoparticles in water	Aruna Balasaheb Salunke,Dr. Ramesh.S. Nirwan,Nilesh Dattu Pingale	69
69.	Green nanotechnology: A Review on Synthesis Silver Nanoparticles an eco-friendly approach	N. B. Shirsath, R. S. Patil, Y. Chandrakor, B. Deore	70
70.	Molecular structure, Vibrational Spectra (FT-IR), HOMO-LUMO and MEP surface analysis of 2, 5-diphenyl-1, 3, 4-oxadiazole using DFT method	Sunil L.Dhonnar, Bapu S.Jagdale	71
71.	Thermodynamics and sonochemical studies of binary mixtures of (o-, m- and p-) xylenes with butan-1-ol at different temperatures	Tulshidas S. Savale	72
72.	Physicochemical Study of Deep Eutectic Solvents at Room Temperature	Manisha A Chaudhari, Vaishali.P. Shinde,Nutan V Sadgir	73

73.	Solubility of acetanilide in pure water and octanol at various temperatures	Atul S. Kale	74
74.	Study of physico-chemical properties of wild honey sample from nashik district of maharashtra	Sachin Sagar, Keshav Gangurde And Deepak Tope	75
75.	C ₃ N ₄ -Fe ₃ O ₄ nanocomposite material for degradation of xylenol orange dye via photocatalytic route: Mechanism, kinetics, equilibrium and thermodynamic aspects	Prashant Bhimrao koli, Kailas Haribhau Kapadnis, Minakshi D. Birari	76
76.	Synthesis, characterization, and antimicrobial activity of para-toluidine and ortho-toluidine Schiff base and its Cu(II) and Ni(II) complexes	Jadhav Sheetal, Kapadnis Kailas H., Sadgir N.V.	77
77.	Preparation and nano structural investigation on screen printed cobalt oxide (Co ₃ O ₄) thick film with annealing temperature	Ujwala M. Pagar, U. P. Shinde	78
78.	Application of ultrasonic sensor for plant height detection and infrared sensor for speed measurement	Seema V. Aware and U. P. Shinde	79
79.	comprehensive review on metal oxide nanomaterials and their applications.	Satish A. Ahire, Ashwini A. Bachhav, Prof. Dr. Arun V. Patil, Mr. Vinayak R. Bagul, Dr. Santosh S. Chobe, Mrs. Charushila K. Nerkar, Prof. Dr. Thansing B. Pawar	80
80.	Synthesis, Spectroscopic characterization and antimicrobial activity of chalcone derivatives	Chetna Pathadiya, Mansi Patel, Nutan Sadgir	81
81.	Synthesis, Antibacterial, Antifungal and DFT Studies on Structural, Electronic and Chemical Reactivity of (<i>E</i>)-4-methyl-2-(1-(2-(4-phenylthiazol-2-yl)hydrazono)ethyl)thiazole	Poonam Dhage, Thansing B. Pawar	82
82.	Synthesis, characterization and exploration of catalytic performance of Bi ₂ O ₃ /NiO core shell nanomaterial for photocatalysis of methyl orange	Pandit M. Chavan, Vishnu A. Adole, Bapu S. Jagdale	83
83.	Thiophene based chalcones: synthesis, computational, spectral, antibacterial and antifungal exploration	Kiran B. Sumrao, Vishnu A. Adole, Bapu S. Jagdale	84
84.	Synthesis, characterization and photocatalytic application of Co ₃ O ₄ /ZnO binary nanocomposite for the photocatalytic degradation of methyl violet dye	Aaliya A. Shaikh, Vishnu A. Adole, Bapu S. Jagdale	85
85.	Sulfamic acid promoted synthesis of 2-phenyl-2,3-dihydroquinazolin-4(1H)-one and its computational investigation using DFT method	Rehana A. Khan, Vishnu A. Adole, Bapu S. Jagdale	86
86.	-linked Schiff bases: synthesis, density functional theory, and antimicrobial studies with antioxidant correlations	Rukhsana A. Sumrao, Vishnu A. Adole, Bapu S. Jagdale	87
87.	Theoretical and Infrared studies of Ethyl methyl ketone, Methyl isobutyl ketone, Propiophenone and	Vijay J. Naukudkar	88

	Cyclohexane with o-dichlorobenzene and o-chlorophenol		
88.	Facile synthesis and characterization of polyaniline (PANI-Mn) Nano-catalyst by using oxidative polymerization	K. K.Wavhal, D. M Nagrik	89
89.	Synthesis, Characterisation, Antimicrobial and Molecular Docking Studies of Novel Mannich Bases	Dr. S. Farnok Bash Dr. M. Syed A Padusha and Dr. S Mohamed Raheek	90
90.	Comparative Study of Electrical and Gas Sensing Properties of Undoped and Tin Oxide Doped with Antimony and Cadmium	K. S. Thakare, S. J. Patil, R. R. Ahire	91
91.	Synthesis and Characterization of Schiff Base complexes prepared from Aniline and 3-Nitro Salicylaldehyde.	Lavkush Pandey, Sheetal Jadhav, K.H Kapadnis	92
92.	Synthesis and Characterization of Schiff Base complexes prepared from Aniline and 5-Bromo Salicylaldehyde.	Vivek Sonawane, Sheetal Jadhav, K.H Kapadnis	93
93.	Effort to convert rocky soil into fertile soil by using three tier system	W. R. Shirsath	94
94.	Synthetic methods and pharmacological applications of coumarin appended heterocyclic compounds and their derivatives: A review	Keshav Gangurde, Dattatray Ghotekar and Sandip Pathade	95

A J O M C

Volume 7, Number 2

April–June 2022

ISSN: 2456-8937

Asian Journal of Organic & Medicinal Chemistry



<http://ajomc.asianpubs.org>



Asian Publication Corporation
Sahibabad (India)
<http://asianpubs.org>

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Asian Journal of Organic & Medicinal Chemistry

Special Issue

on

Current Research in Chemistry and Nanosciences
(CRCNS-2022)

CONTENTS

Research Study of Structural, Morphological and Optical Properties of Screen Printed thick Films of Titanium Oxide with Tin Oxide Composition K.B. Bhamare, A.N. Ahirrao and R.M. Nikam	1
Acid-base Modified Biosorbent for Heavy Metal Removal - A Review Bharat N. Shelke, Manohar K. Jopale, Manoj R. Gaware and Amol H. Katgaonkar	7
The Study of Physico-Chemical properties and Detection of Heavy Metals in Water of Electro Plating Industries from MIDC Ambad Nashik (M.S.) Pradeep P. Talware	16
Preparation and Nano Structural Investigation of Screen-Printed Cobalt Oxide (Co ₃ O ₄) Thick Film with Annealing Temperature U.M. Pagar and U.P. Shinde	20
Design, Characterization and <i>in-silico</i> Studies of Novel Heterocyclic Compound S. Mohamed Rabeek, M. Seeni Mubarak and M. Syed Ali	29
Synthesis of Polyaniline (PANI) and its Catalytical Application in Kabachnik-Fields Reaction Kamalakar K. Wavhal and Deepak M. Nagrik	33
Synthesis, Characterization and Antimicrobial Activity of Cu(II) Complexes Derived from Heterocyclic Schiff Bases Ligands D.T. Sakhare	41
Theoretical and Infrared Studies of Ethyl Methyl Ketone, Methyl Isobutyl Ketone, Propiophenone and Cyclohexane with <i>o</i> -Dichlorobenzene and <i>o</i> -Chlorophenol V.J. Naukudkar	48
One Pot Synthesis, Spectroscopic Characterization, and Computational Studies of Benzo[d][1,3]dioxol-5-yl(3-(4-isopropylphenyl)oxiran-2-yl)methanone and Benzo[d][1,3]dioxol-5-yl(3-(4-chlorophenyl)oxiran-2-yl)methanone N.V. Sadgir, S.L. Dhonnar, B.S. Jagdale, B.B. Waghmare, S.P. Jadhav and S.A. Ahire	59
Review on Application of Various Nanocomposites for the Production of Biodiesel G.M. Shende, V.S. Shrivastava, M.R. Patil and N.M. Patil	68
Nanofluids: An Innovative Technology for Heat Transfer Mechanism F.B. Quadri and Sangeeta Shinde	72
A Systematic Review on Growth, Characterization Techniques and Applications of Various Doped Metals in Tartrate System Charushila B. Pawar, Madhuri S. Patil and Jayshree S. Pail	79
IoT Based Low-Cost Capacitance Measurement System using Arduino WeMos D1R1 Somnath Wankhede, Vijay Kale, Arvind Shaligram, Arun Patil and Dharma K Halwar	86
Green Methodology in Nanotechnology: Novel Development of Metal Nanostructures and Its Applications as a catalyst: A Review Amol Ratan Pagare and Rajashri B. Sawant	94
Green Approach for the Synthesis of Chalcone: Review of Methods B.B. Waghmare, B.S. Jagdale and N.V. Sadgir	100
Infra-red Spectroscopy and Elastic properties of Ce ³⁺ Ion Substituted Cu-Zn Ferrite Jayshree S. Patil, Umakant B. Shetti and Charushila B. Pawar	103
Viscosity, Density and Ultrasonic Study of <i>officinale zingiber</i> with ZnCl ₂ at 318.15 K P. Nalle, S. Shinde and K. Jadhav	110
An Electrochemical Approach and Surface Analysis Studies on Carbon Mild Steel by Nanobased Green Inhibition in 1 M Oil of Vitriol Solution B. Gowri Shannkari and R. Sayee Kannan	115
Study of Molecular Interactions present in Binary Liquid Mixtures of Di-ethyl ether, Isopropyl Ether and n-Di-butyl Ether with 2-Pentanol at Different Temperatures Kailaspati Jadhav, Kailas. Kapadnis, Anita Patil, Pankaj Pawar, Ujjain Kadam and Raghunath Sonawane	128
Review on Chalcone (Green Synthesis of Chalcone (Microwave), Some Other Methods for Preparation of Chalcone, Medical and Biological Applications) Milind C. Nagare and Ramesh S. Nirwan	135

DFT Study of Interaction between 2-Naphthol with Water, Methanol and their Binary Solvent Systems C.S. Aher	142
Pimelic Acid Solubility in Pure and Mixed Solvent (Water + Methanol): Experimental Data, Correlation and Thermodynamic Analysis S.B. Nahire and R.K. Pawar	157
Synthesis, Characterization and Gas Sensing Performance of LaCoO ₃ Nanostructure by Thick Film Fabrication Rohini Gangadhar Borse, Sharad Shankar Gaikwad, Akanksha Changdeo Gurule and Chetana Yogesh Patil	165
Investigation and Inhibition of Metal Corrosion in Acidic Solutions by Organic Compound V. Rethinagiri	172
Green Nanotechnology: A Review on Synthesis of Silver Nanoparticles an Eco-friendly Approach Nandkishor B. Shirsath, Rajendra S. Patil, Yogita S. Chandrakor and Bhushan T. Deore	178
Photocatalytic Applications of Doped Fe ₃ O ₄ Nanoparticles for Degradation of Methyl Orange and Methylene Blue Dyes: A Review Rohit S. Shinde, Vishnu A. Adole, Rahul A. Shinde, Bhatu S. Desale, Archana B. Dhongade, Mansi H. Magar and Thansing B. Pawar	185
Influence of Cu-Doping on Structural, Optical and Electrical Properties of CdS Thin Film Prepared by Electrochemical Deposition Technique J.A. Borse, A.S. Garde, B.P. Patil and S.K. Pardeshi	194
Interpretation of Viscometric, Thermodynamic and Acoustic Properties of Maltose in Aqueous Sodium Fluoride Raghunath K. Sonawane, Kailas. H. Kapadnis, Arun B. Nikumbh, Anita Patil, Vishnu A. Adole and Kailaspati K. Jadhav	204
A Review on Synthesis and Biological Applications of Imidazole and its Derivatives A.V. Gajbhiye, S. Sagar and V.V. Kadam	214
Synthesis, Molecular Structure, HOMO-LUMO, Spectroscopic (UV-Vis and IR), Thermochemical Study of 5-Acetyl-4-(4-chlorophenyl)-6-methyl- 3,4-dihydropyrimidin-2(1H)-one: A DFT Study Archana B. Dhongade, Vishnu A. Adole, Rahul A. Shinde, Mansi H. Magar, Rohit S. Shinde and Thansing B. Pawar	227
Potentiometric Study and Statistical Analysis of Human Urine Samples using Reduced Graphene Oxide Screen Printed Electrodes Anil B. Patil, Umesh. J. Tupe, Vikas V. Deshmane, Dharma K. Halwar, Sunil J. Patil and Arun V. Patil	237
Preparation and Characterization of WO ₃ Thick Film Resistors using Screen Printing Technique S.J. Patil, A.V. Patil, K.S. Thakare, A.B. Patil and R.R. Ahire	243
Synthesis, Characterization and Antimicrobial Activity of <i>para</i> -Toluidine and <i>ortho</i> -Toluidine Schiff Base and its Cu(II) and Ni(II) Complexes P. Jadhav Sheetal, H. Kapadnis Kailas and N.V. Sadgir	252
Monitoring and Assessment of Drinking Water for Chemical Pollutants: A Three-Year Study in Nadia District, West Bengal A. Mukherji	257
PEG-200: Green Synthesis towards a New Class of 5,6,7,8-Tetrahydroquinoline-3-carbonitrile Derivatives as Antimicrobial Agents Charushila K. Nerkar	266
Synthesis and DFT Insights on Molecular Structure, FMO's, MESP and Chemical Reactivity of the 2,4-Diphenylthiazole A.R. Bukane and B.S. Jagdale	270
An Eco-friendly Method for the Synthesis of Solvent-Free Reaction of Oxazine Derivatives S.A. Shaikh, S.R. Labhade, R.R. Kale, C.K. Nerkar, S.B. Ghoderao, S.S. Chobe and S.A. Ahire	278
Impact on Ground Water Quality in and Around Omalur Taluk, Salem District, Tamil Nadu, India I. Sajitha, R. Abdul Vahith, J. Sirajudeen and J. Muneer Ahamath	282
Solid State Electronic Spectra of Two Lohabhasma Samples Rupali Ajesh Gulalkari	297

Evaluation of Physico-Chemical Qualities of Ground Water from Pimpalner region of Dhule District of Maharashtra (India)	
W.B. Shirsath, S.G. Wagh and V.R. Mandwade	300
Comparative Study of Electrical and Gas Sensing Properties of Undoped and Tin Oxide Doped with Antimony and Cadmium	
K.S. Thakare, S.J. Patil and R.R. Ahire	306
Thermophysical, Acoustic and FTIR Study on Binary Mixtures of Nitrobenzene and Aniline with 2-Methyl-2-propanol at Temperature 308.15 K and Atmospheric Pressure	
Narendra A. Dokhe, Pankaj S. Pawar and Vinod S. Aaynor	313
The World War against "COVID-19"	
Anita P. Patil	320
Study of Physico-chemical Properties of Wild Honey from Nashik District of Maharashtra	
Sachin Sagar, Keshav Gangurde, Deepak Tope, S.V. Patil and Ashish Gajbhiye	328
Estimation of Total Phenolic and Flavonoid Contents, Phytochemical Screening and <i>in vitro</i> Antioxidant Activity of Drakshasav A Herbal Drug	
R.K. Pawar and G.R. Bhagure	332
An Efficient and Green Catalyst for the Synthesis of Dihydropyrimidinone Derivatives	
V.V. Kadam	337
Combined Experimental and Computational Exploration of 4-(4-Bromophenyl)-6-(3,4-dimethoxyphenyl)-5,6-dihydropyrimidin-2(1H)-one	
Sandip S. Pathade and Bapu S. Jagdale	341
Synthesis, Characterisation, Antimicrobial and Molecular Docking Studies of Novel Mannich Bases	
S. Farook Basha, M. Syed Ali Padusha and S. Mohamed Rabeek	350
Facile Synthesis and Characterization of Polyaniline (PANI-Mn) Nano-catalyst by using Oxidative Polymerization	
K.K. Wavhal and D.M. Nagrik	361