

**Seminar
Report**

**National e-Seminar
on
Advances in Physical
&
Mathematical Science**

Saturday, 10th October, 2020



Organised by

Department of Physics & Mathematics

Mahatma Gandhi Arts, Science and Late

Nasaruddinbhai Panjwani Commerce College

Armori, Dist. – Gadchiroli (M.S.), India – 441208

NAAC Reaccredited with 'A' Grade

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1. Background:

The whole world is suffering from CORONA virus (Covid -19) pandemic. Almost all educational and research institutions are closed and working from home. Our college is striving to utilise this period for conducting research, co-curricular and extension activities.

The college has been organising a series of e - Seminars/ Conferences/ Workshops. One day national e - Seminar on “Advances in Physical and Mathematical Science” organised by Department of Physics and Mathematics held on 10th October, 2020 was one such educational intervention designed to provide participants with an opportunity to understand recent advances in the field of Physics and Mathematics.

2. Aims & Objectives:

This e - Seminar focused on

- Nano materials
- Dielectrics
- Thermoelasticity
- Polymer
- Microfluidic
- Fractional Order Differentiation
- Modeling & Simulation
- Computational Analysis

3. Platform of the e - Seminar and Organising Committee:

The e - Seminar was held online platform using Zoom meeting app and YouTube Live Streaming. The links to register and join the event are as follows:

Registration link –	https://forms.gle/oNEb6vHHemnm644e6
Link to Join Telegram Group -	https://t.me/joinchat/QETEjkoUNSomYVkuDzxiIw
Zoom meeting links –	https://us02web.zoom.us/j/3032836362
ZOOM Meeting ID –	3032836362
YouTube Live link -	https://youtu.be/3q5hMQQIKLA
Feedback link –	https://forms.gle/1DAFupBzpsaV3w3s6

The organising committee of the e - Seminar was as follows:

Dr. L. H. Khalsa (Principal):	Organizer
Dr. R. M. Thombre	Convener
Prof. S. B. Gedam	Organising Secretary
Dr. C. D. Mungmode:	Organising Secretary

4. Inaugural Session and Expert Talks:

In the Inaugural Session, **Dr. L. H. Khalsa**, Principal, M. G. College, Armori chaired the function and delivered the introductory remark, briefing the aim and objectives of the workshop. He asserted that educational institutes should raise the bar to conduct educational and research activities following government guidelines to combat Covid -19. **Dr. C. D. Mungmode**, Organising Secretary of the e - Seminar, welcomed the invited speakers, dignitaries and participants. Dr. K. S. Nisar, Professor, Dept. of Mathematics, College of Arts & Sciences, Wadi Aldawaser, Kingdom of Saudi Arabia, Dr. Arun Banpurkar, Professor, Dept. of Physics, Savitribai Phule Pune University, Pune, Dr. DVNS Suresh, Associate Professor, Dr. Amberkar College, Nagpur, Dr. Devendra Kumar Sahu, Professor, Dept. of Physics, P. G. Government College, Lalitpur, Jhansi, Dr. Vinod Varghese, Head, Department of Mathematics, Late R. Bharti Arts, Commerce & Smt. S. R. Bharti Science College, Arni, Yavatmal and Dr. Kishorchandra Rewatkar, Professor, Dept. of Physics, Dr. Ambedkar College, Nagpur graced the Programme as the Chief Guest. After this, technical session followed.

Dr. DVNS Suresh, Associate Professor, Dr. Amberkar College, Nagpur delivered expert talk in technical session one. He delivered talk on “Covid: Understanding Combating in a Better Way”. In his talk, he explained the structure of CORONA virus and how the human being gets infected by covid -19. The measures to be taken to combat Covid - 19 were explained by him.

Second technical session was started with the discussion of **Dr. Vinod Varghese**, Head, Department of Mathematics, Late R. Bharti Arts, Commerce & Smt. S. R. Bharti Science College, Arni, Yavatmal. His topic was “Analysis of Fractional Order Model of Covid – 19 Pandemics with Nonlinear Incident Rate”. He talked about the spread of Covid - 19 in India. He presented the mathematical modelling of the Coronavirus disease (COVID-19) outbreak in India by using Susceptible-Infectious-Recovered (SIR) framework and Fractional Calculus. The models predict the peak and ending of the pandemic in India and estimate the number of people that would be affected under the prevailing conditions.

Third technical session was conducted by **Dr. A. G. Banpurkar**, Professor, Dept. of Physics, Savitribai Phule Pune University, Pune. His topic was “Spread of Diseases by Droplet and Aerosol: Physics of Droplets from Coughing, Sneezing and Speech”. He explained the spread of particles (virus) through droplets and aerosol forming due to coughing, sneezing and speech with the help of Brownian motion. He also explained the working of microfluidic chip to test Covid infection.

Dr. Devendra Kumar Sahu, Professor, Dept. of Physics, P. G. Government College, Lalitpur, Jhansi delivered an expert talk on the topic “Electrical Properties of Conducting Polymer in Electret State” in 4th technical session. He explained various electrical properties of Polymer in Electret State using thermally stimulated discharge current (TSDC) technique.

In fifth technical session, **Dr. K. S. Nisar**, Professor, Dept. of Mathematics, College of Arts & Sciences, Wadi Aldawaser, Kingdom of Saudi Arabia delivered talk on “How to Prepare Quality Research Paper”. He emphasised on preparing quality manuscript of research paper and selecting Scopus / Web of Science indexed journal for publication. He also explained how to achieve research skill while doing research.

In last 6th session, **Dr. Kishorchandra Rewatkar**, Professor, Dept. of Physics, Dr. Ambedkar College, Nagpur, delivered talk on “Nanotechnology and Its Applications”. In his talk he explained various type of nano materials that can be synthesised and their current and future applications in various fields.

After each technical session participants discuss their queries with resource persons.


The event was compiled by **Prof. P. S. Ganvir** and vote of thanks was proposed by **Prof. S. B. Gedam**, Organising Secretary of the e - Seminar.

5. Participants of the Programme:


In this national e - Seminar, **764** participants were registered, out of which **23** participants from other countries and **741** participants from different states of India.

Overall, the programme went well and all the dignitaries and concern person attended the programme and made it a very successful.

Date: 20/10/2020


(Dr. C.D. Muny mode)
Organizing Secretary




PRINCIPAL
M.G.Arts, Science &
Late N.P.Commerce College
ARMORI Distt Gadchiroli

Annexure I: Programme Schedule

Manoharbai Shikshan Prasarak Mandal, Armori's
M. G. Arts, Science & Late N. P. Commerce College, Armori

One Day National e-Seminar on

“Advances in Physical and Mathematical Science”

Saturday, 10th October, 2020

SCHEDULE

- 10:30 a.m.– 10:35 a.m. : Welcome Speech – **Dr. C. D. Mungmode**
- 10:35 a.m.– 10:45 a.m. : Inauguration & Introductory Remark:
Dr. L. H. Khalsa, Principal
- 10:45 a.m. – 11.20 a.m. : Technical Session -1: **Dr. DVNS Suresh**
Associate Professor, Dr. Amberkar College, Nagpur
Topic: Covid: Understanding Combating in a Better Way
- 11:25 a.m. – 12:00 p.m. : Technical Session -2: **Dr. Vinod Varghese**
Associate Professor, Dept. of Mathematics,
Late R. Bharti Arts, Commerce & Smt. S. R. Bharti Science
College, Arni, Yavatmal
**Topic: Analysis of Fractional Order Model of Covid – 19
Pandemics with Nonlinear Incident Rate**
- 12:05 p.m. – 12:40 p.m. : Technical Session -3: **Dr. A. G. Banpurkar**
Professor, Dept. of Physics,
Savitribai Phule Pune University, Pune.
**Topic: Spread of Diseases by Droplet and Aerosol: Physics
of Droplets from Coughing, Sneezing and Speech**
- 12:45 p.m. – 01.20 p.m. : Technical Session – 4: **Dr. Devendra Kumar Sahu**
Professor, Dept. of Physics,
P. G. Government College, Lalitpur, Jhansi.
**Topic: Electrical Properties of Conducting Polymer in
Electret State**

01:25 p.m. – 02:00 p.m. : Technical Session -5: **Dr. K. S. Nisar**

Professor, Dept. of Mathematics,
College of Arts & Sciences, Wadi Aldawaser
Kingdom of Saudi Arabia.

Topic: How to Prepare Quality Research Paper

02:05 p.m.– 02:40 p.m. : Technical Session -6: **Dr. Kishorchandra Rewatkar**

Professor, Dept. of Physics,
Dr. Ambedkar College, Nagpur

Topic: Nanotechnology and Its Applications

02:45 p.m. to 2:55 p.m. : Valedictory Function

Vote of Thanks- **Prof. S. B. Gedam**

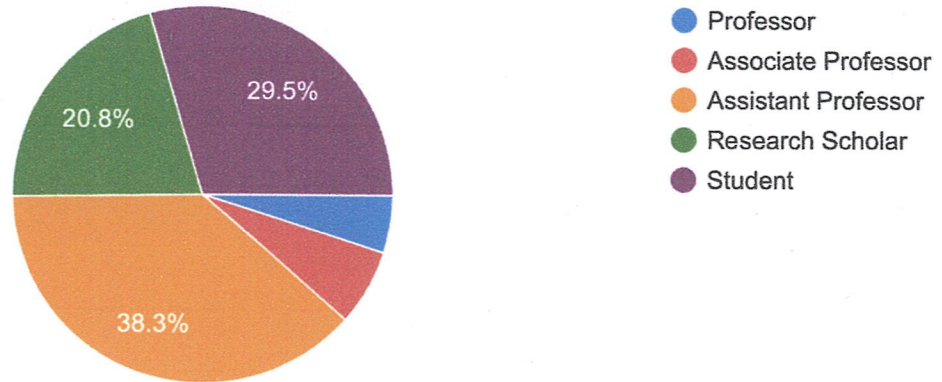
Note: 05 Minutes are reserved for Question & Answer session after each Technical Session.



Annexure II : Feedback Analysis

Designation

645 responses



E-Seminar Feedback Form - Google Forms

27/10/20, 11:52 AM

Organisation/Institution/College

645 responses

MAHILA TEACHERS' TRAINING COLLEGE, JODHPUR (RAJASTHAN)

Bayero University Kano

Vaish College Rohtak

Deccan College of Engineering and Technology

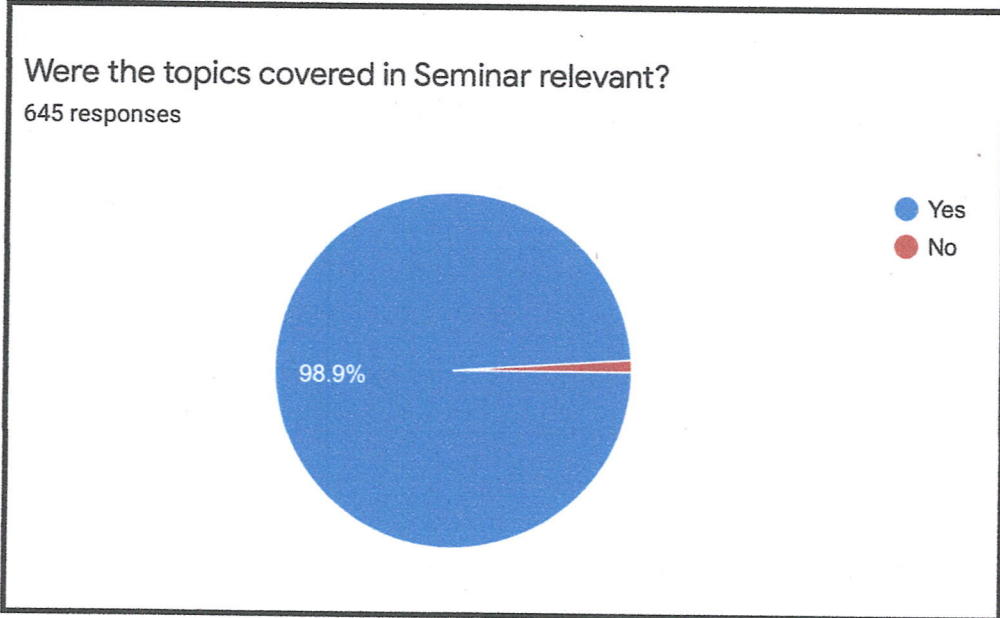
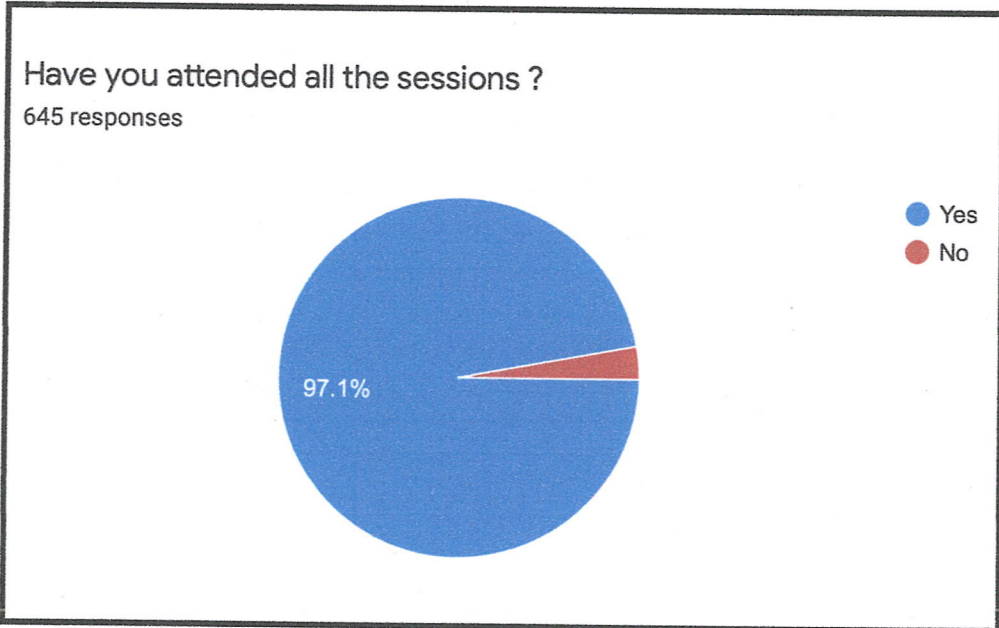
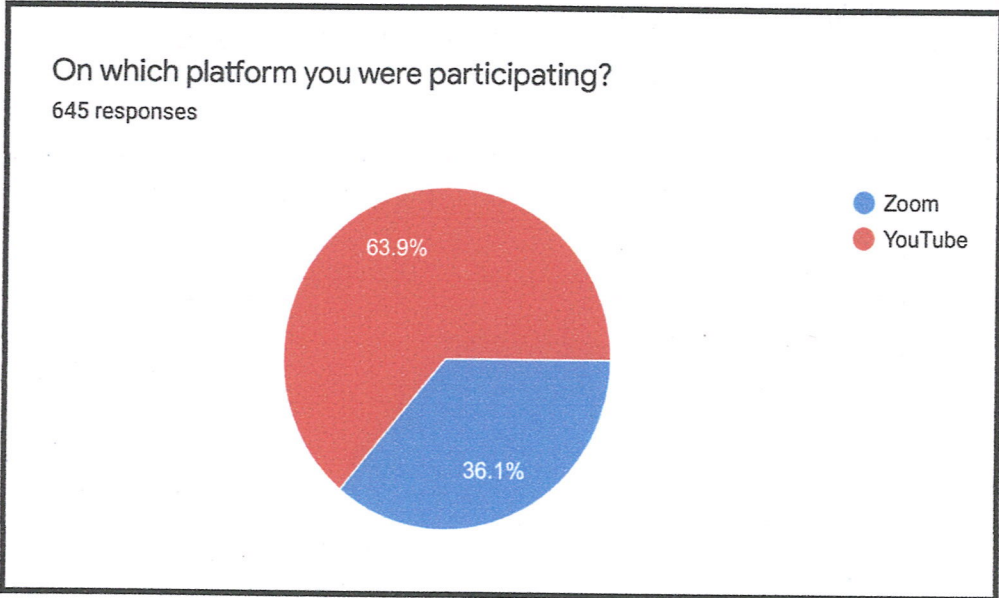
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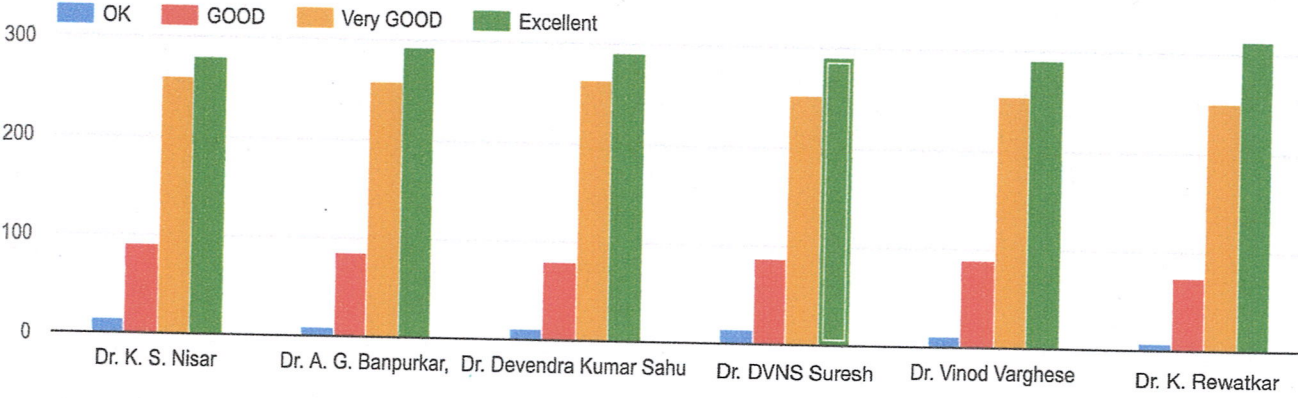
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VEMANA INSTITUTE OF TECHNOLOGY

Aligarh Muslim University

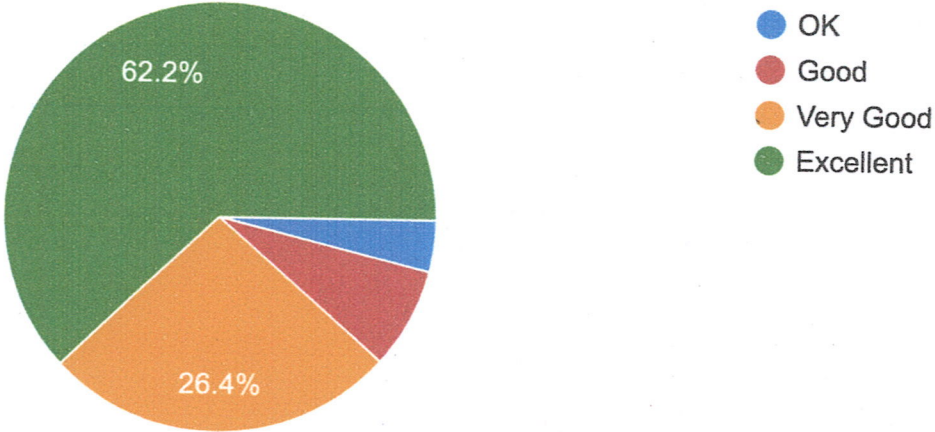


How do you rate the speakers?

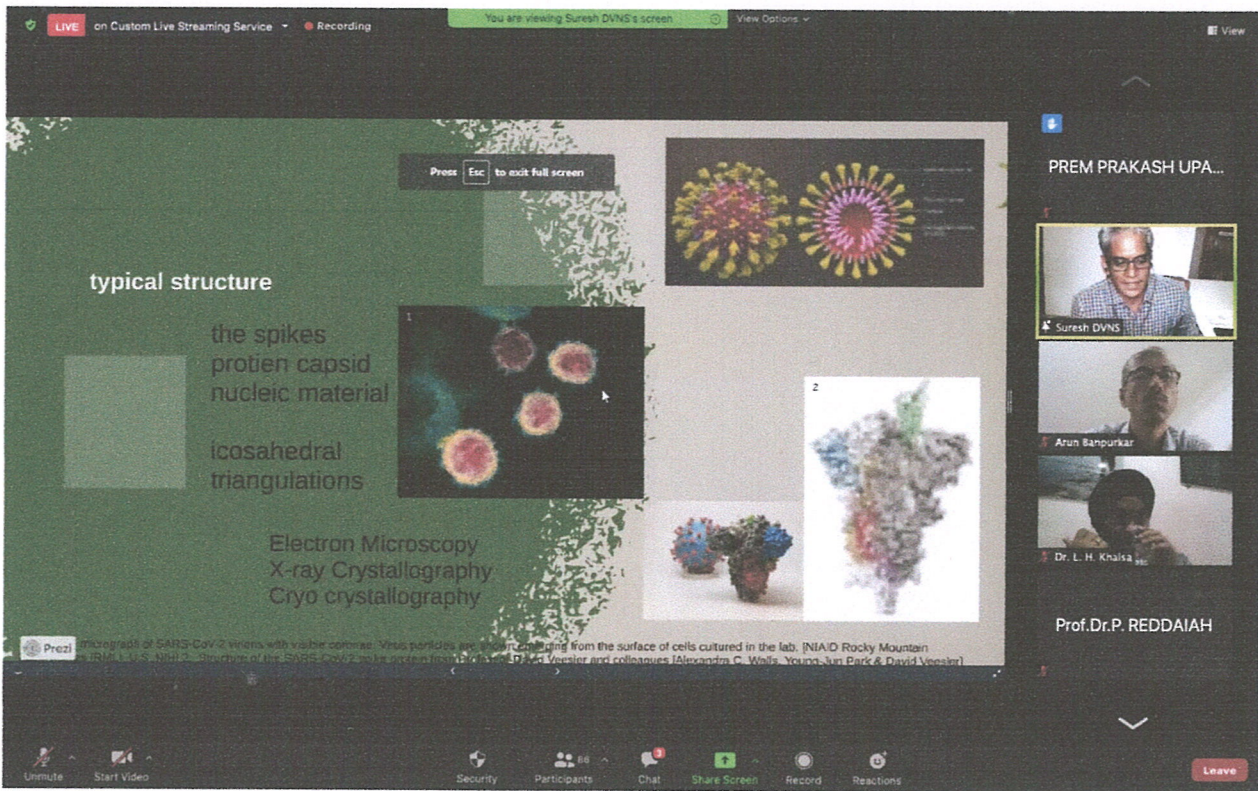


Overall rating of the Seminar.

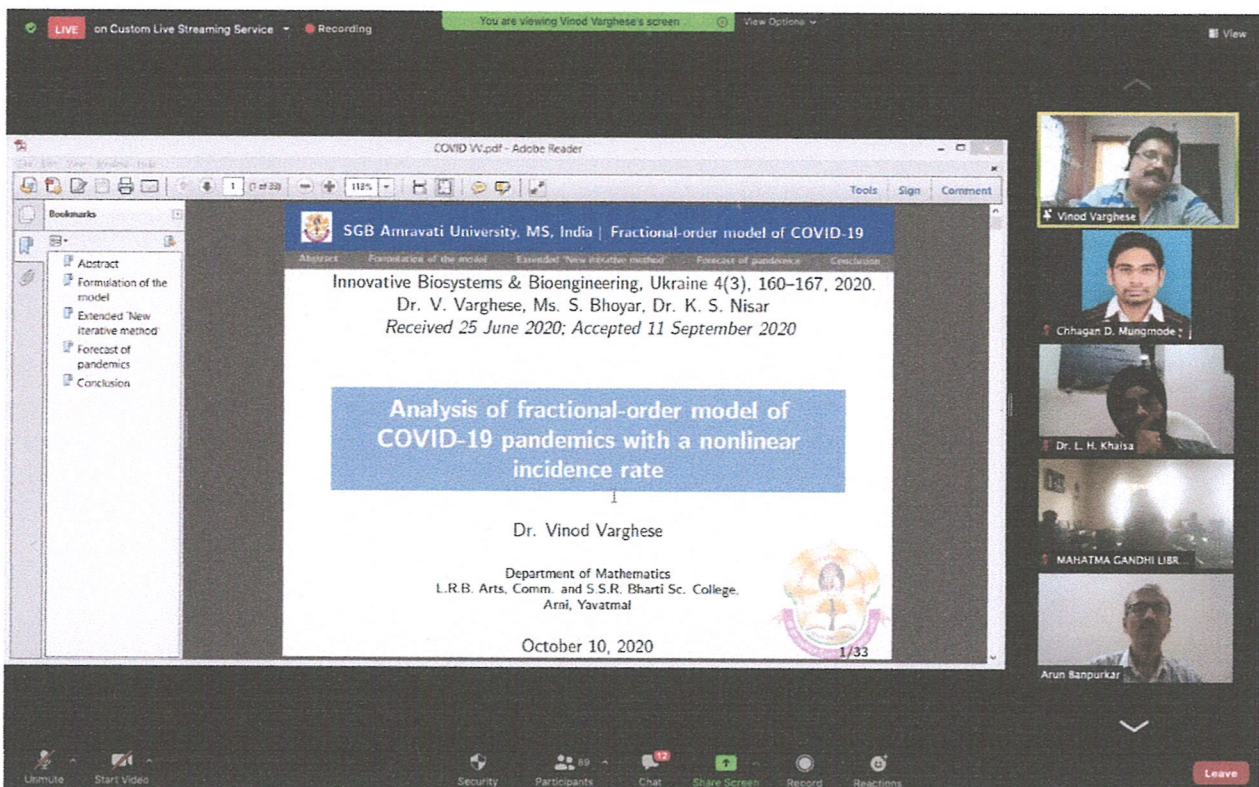
645 responses



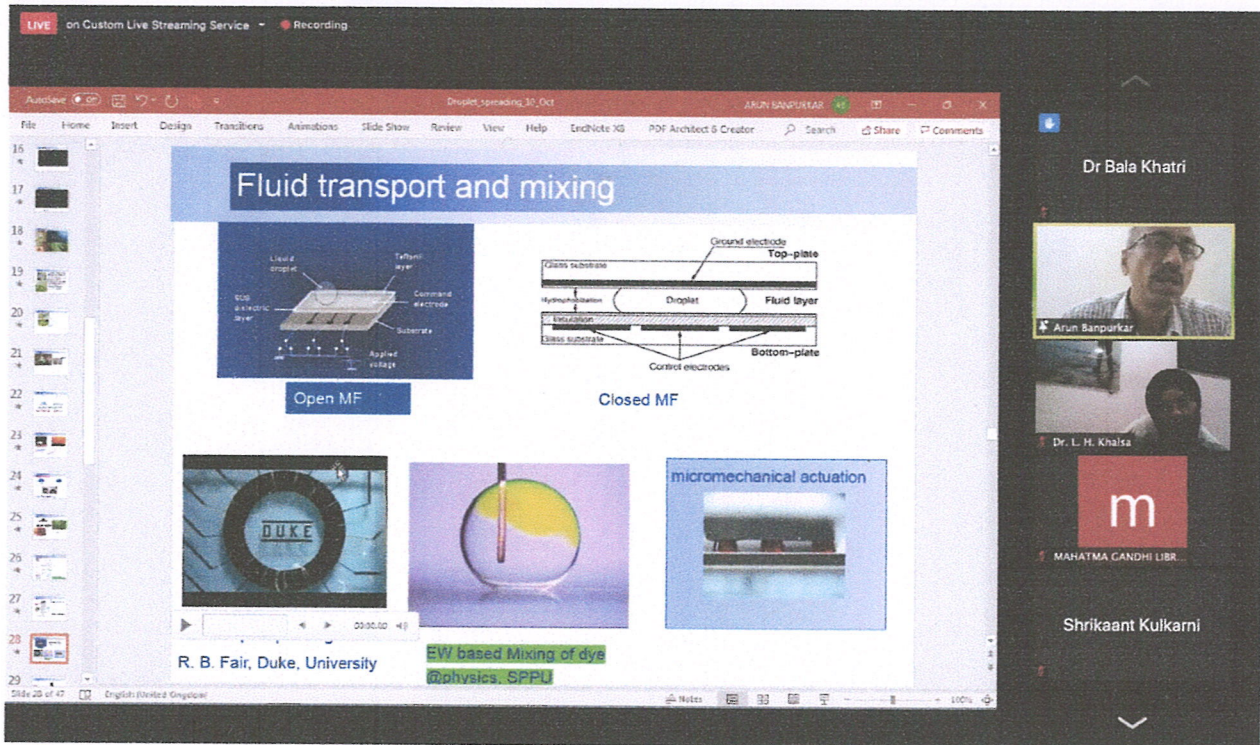
Annexure III : Glimpses of Event & Press Coverage



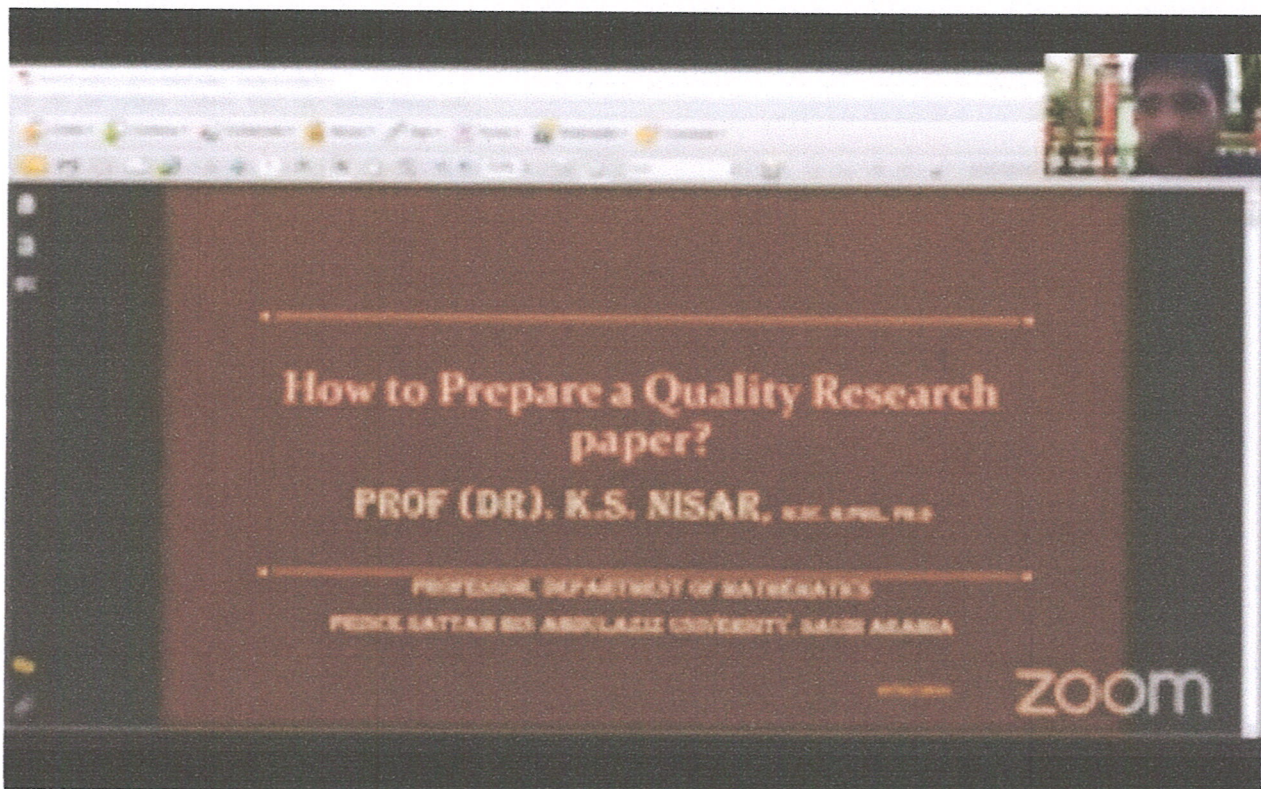
Expert Talk By Dr. DVNS Suresh



Expert Talk By Dr. Vinod Varghese




Expert Talk By Dr. A. G. Banpurkar



Expert Talk By Dr. K. S. Nisar

Electrical Properties of Conducting Polymer in Electret State



Priyadarshan ...

Dr D. K. Sahu
Department of Physics
R. S. Government P.G. College, Lalitpur (U.P.)-284403
Affiliated to
Bundelkhand University, Jhansi (U.P.)-284128

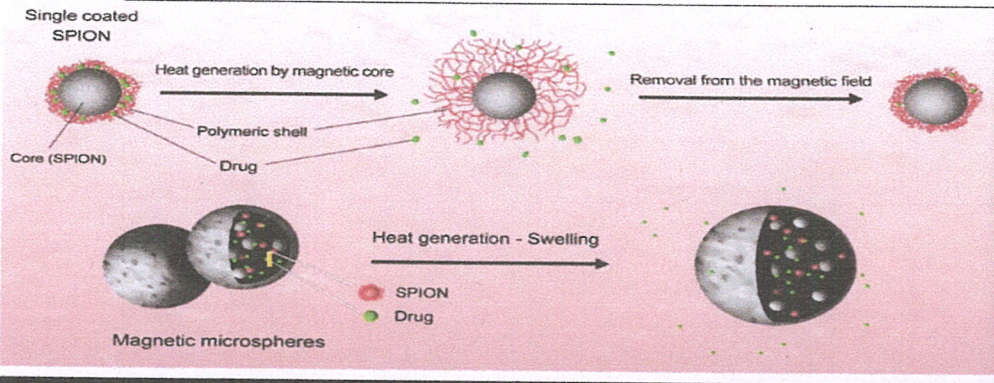
zoom

Expert Talk By Dr. Devendra Kumar Sahu

LIVE on Custom Live Streaming Service Recording You are viewing Kishorchandra Rewatkar's screen View Options


Magnetic materials : Smart system for Multi-purpose Bio-applications

Smart system consist of magnetic core for heat production and multi-stimuli sensitive shell (pH and thermo-sensitive)



Magnetic microspheres

Legend: SPION (red dot), Drug (green dot)



Kishorchandra Rewatkar

Utmute Start Video Participants 67 Chat Share Screen Record Reactions Leave

Expert Talk By Dr. Kishorchandra Rewatkar

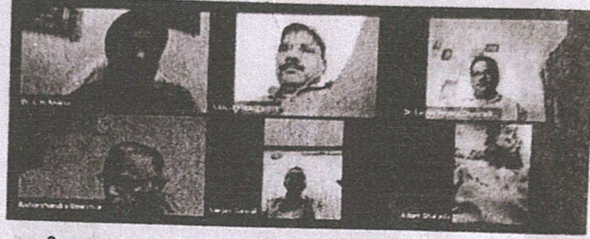


Press Coverage

महात्मा गांधी महाविद्यालयात ऑनलाइन चर्चासत्र

आरमोरी : शहरातील महात्मा गांधी कला, विज्ञान व स्व.न.पं. वाणिज्य महाविद्यालयात प्राचार्य डॉ. लालसिंग खालसा यांच्या मार्गदर्शनाखाली 'एडव्हॉंसेस इन फिजिकल अॅण्ड मॅथेमॅटिकल सायन्स' या विषयावर एक दिवसीय ऑनलाइन चर्चासत्र नुकतेच पार पडले.

या चर्चासत्रात विविध देशातून सहभागी झालेल्या व तज्ज्ञ संशोधकांनी सहभाग घेतलेल्या सौदी अरेबिया देशातून सत्ताम बीन अब्दुलझीझ विद्यापीठातील गणित विषयाचे प्रो. डॉ. के.एस. निसार, शासकीय महाविद्यालय लखीतपूरचे (झांसी) भौतिकशास्त्र पदव्युत्तर विभागाचे प्रो. डॉ. देवेंद्रकुमार साहू, डॉ. बाबासाहेब आंबेडकर महाविद्यालय दीक्षाभूमी नागपूरचे प्रा. किशोरचंद्र रैवतकर, डॉ. डी.व्ही. एन.एस. सुरेश, सावित्रीबाई फुले पुणे विद्यापीठ पुणेचे डॉ. अरुण बनपूरकर, स्व. आर. भारती आर्ट, क्लामर्स व श्रीमती एस.आर.



भारती सायन्स कॉलेज आणी, यवतमाळचे डॉ. विनोद बर्गीस सहभागी झाले. याप्रसंगी महात्मा गांधी महाविद्यालयाचे प्राचार्य डॉ. लालसिंग खालसा यांनी राष्ट्रीय ई-चर्चासत्राची संकल्पना स्पष्ट केली. कोविड १९ आजाराच्या आपातकालिन परिस्थितीचा सामना करण्यासाठी विशेष सूचना दिल्या. संसर्गजन्य आजाराच्या होणाऱ्या चुकीच्या अफवाबद्दल दक्ष व सावध राहून शिक्षण कार्य सुव्यवस्थित पार पाडण्याचे आवाहन केले. तर डॉ. सुरेश यांनी 'भ्रामक कल्पना' या विषयावर कोविड १९ च्या प्रसाराची व्हिडीओ क्लिप दाखविली. या आजाराच्या विषाणूचा प्रसार

रोखण्यासाठी घेतल्या जाणाऱ्या चाण्यांचा परिचय करून दिले. डॉ. विनोद बर्गीस यांनी कोविड १९ चा होणारा परिणाम व त्यावरील उपाय सांगताना रुग्णांचे संख्येची सद्याची आणि भविष्यातील आकडेवारी एसआयआर माडेल प्रकशनलच्या माध्यमातून स्पष्ट केली. देवेंद्रकुमार साहू यांनी पालमर या पदार्थाचे गुणधर्म स्पष्ट करताना पॉलीमरची संकल्पना, विद्युतवाहक पॉलीमरचे गुणधर्म टीएसडीसी या प्रायोगिक तंत्राच्या माध्यमातून विषद केले. प्रास्ताविक प्रा.डॉ. छगन मुंगमोडे यांनी केले. संचालन प्रा. प्रियदर्शन गणवीर तर आभार प्रा. शशीकांत गेडाम यांनी मानले.

म.गांधी महाविद्यालयात चर्चासत्र

आरमोरी - स्थानिक महात्मा गांधी महाविद्यालयात प्राचार्य डॉ. लालसिंग खालसा यांच्या मार्गदर्शनाखाली 'एडव्हॉंसेस इन फिजिकल अॅण्ड मॅथेमॅटिकल सायन्स' या विषयावर एक दिवसीय ऑनलाईन चर्चासत्र नुकतेच पार पडले.

विविध देशातून सहभागी झालेल्या व तज्ज्ञ संशोधकांनी सहभाग घेतलेल्या या चर्चासत्रात सौदी अरेबिया देशातून सत्ताम बीन अब्दुलझीझ विद्यापीठातील गणित विषयाचे प्रोफेसर डॉ. के. एस. निसार, शासकीय महाविद्यालय ललितपूर-झांसी येथील भौतिकशास्त्र पदव्युत्तर विभागाचे प्रोफेसर डॉ. देवेंद्रकुमार साहू, डॉ. बाबासाहेब



आंबेडकर महाविद्यालय, दीक्षाभूमी नागपूर येथील भौतिकशास्त्र विभागाचे प्रा. किशोरचंद्र रैवतकर व डॉ. सुरेश, सावित्रीबाई फुले पुणे विद्यापीठ, पूणे चे डॉ. अरुण बनपूरकर, स्व. आर. भारती महाविद्यालय यवतमाळचे डॉ. विनोद वर्गीस मार्गदर्शक म्हणून सहभागी झाले.

महाविद्यालयाचे प्राचार्य डॉ. लालसिंग खालसा यांनी राष्ट्रीय ई-चर्चासत्राची संकल्पना स्पष्ट केली. आभार प्रा. शशीकांत गेडाम यांनी मानले.

Annexure III : Brochure & Certificate

Patrons

Hon'ble Smt. Sunitatai Murlidharrao Wanmali
President, M.S.P.M., Armori

Hon'ble Shri Manojbhai Wananraoji Wanmali
Secretary, M.S.P.M., Armori

Organiser

Dr. L. H. Khalsa
Principal

Convener

Dr. R. M. Thombre
Head, Dept. of Physics
(Mob. No. 9421734471)

Organising Secretary

Prof. S. B. Gedam **Dr. C. D. Mungmode**
(Mob. No. 9423422000) (Mob. No. 8600376986)
Assistant Professor, Dept. of Physics

Website: www.mgcollegearmori.ac.in
Note: E-Certificates will be provided to all the participants after submission of Feedback Form.





**Manoharbhair Shikshan Prasarak Mandal Armori's
Mahatma Gandhi Arts, Science and Late Nasaruddinbhai Panjwani
Commerce College**
Armori, Dist. - Gadchiroli (M.S.), India - 441208
NAAC Reaccredited with 'A' Grade



**National e-Seminar
on
Advances in Physical & Mathematical Science**
SATURDAY, 10th OCTOBER, 2020

Organised by
Department of Physics & Department of Mathematics

Dear Sir/Madam,
The organising Committee cordially invites you to participate in the National e-Seminar on 'Advances in Physical & Mathematical Science' going to held on 10th October, 2020.

<p>Conference Sub Theme:</p> <ul style="list-style-type: none"> • Nano materials • Dielectrics • Thermoelasticity • Polymer • Microfluidic 	<p>Invited Speakers</p> <ul style="list-style-type: none"> • Dr. K. S. Nisar, Professor, Dept. of Mathematics, College of Arts & Sciences, Wadi Aldawasir, Prince Sattam Bin Abdulaziz University, Kingdom of Saudi Arabia. • Dr. A. G. Banpurkar, Professor, Dept. of Physics, University of Pune, Pune. • Dr. Devendrakumar Sahu, Professor, Dept. of Physics, P. G. Government College, Lalitpur, Jhansi. • Dr. Davalura Vekat Suresh, Professor, Dept. of Physics, Dr. Ambedkar College, Nagpur • Dr. Vinod Varghese, Associate Professor, Dept. of Mathematics, Late R. Bharti Arts, Commerce & Smt. S. R. Bharti Science College, Arni, Yavatmal • Dr. Kishorchandra Rewatkar, Professor, Dept. of Physics, Dr. Ambedkar College, Nagpur 	<p>Online Mode through  & </p> <p>Registration: Free Link For Online Registration: https://forms.gle/oNEb6vHfemnm644e6 Link To Join Telegram Group: https://t.me/joinchat/QETEjkoUNSomYVkuDzxIw</p> <p>Important Dates: Date of Conference: 10th October, 2020 Time: 10.30 a.m. Last Date of Registration: 09th October, 2020</p>
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**Manoharbhair Shikshan Prasarak Mandal, Armori's
MAHATMA GANDHI ARTS, SCIENCE
& LATE N. P. COMMERCE COLLEGE
ARMORI, DIST- GADCHIROLI,
MAHARASHTRA, INDIA- 441208
Established - 1981
Reaccredited by NAAC with 'A' Grade (2017)
Affiliated to Gondwana University,
Gadchiroli, Maharashtra.**



CERTIFICATE OF PARTICIPATION

is hereby granted to

for participation in

**National e-Seminar on
"Advances in Physical & Mathematical Science"**
Saturday, 10th October 2020


Dr. Lalsingh H. Khalsa
Principal, Organizer


Mr. S. B. Gedam


Dr. C. D. Mungmode
Organizing Secretary

