



# **DAYANAND SCIENCE COLLEGE, LATUR.**

## **FINAL WORKDONE AND UTILISATION REPORT**

**Academies' Three Days Lecture workshop**

**Scheduled on 5-7<sup>th</sup> January 2019**

**Sanction No:- SEP/LW/January/2019, Date:- 4<sup>th</sup> December 2018**

**★TITLE★**

**"LECTURE WORKSHOP ON THEORETICAL CHEMISTRY"  
(FOR M. SC. CHEMISTRY STUDENTS)**

**★SPONSORED BY★**

- ❖ **INDIAN ACADEMY OF SCIENCES, BENGALURU**
- ❖ **INDIAN NATIONAL SCIENCE ACADEMY, NEW DELHI**
- ❖ **THE NATIONAL ACADEMY OF SCIENCES, ALLAHABAD**

**★SUBMITTED TO★**

**The Co-ordinator,  
Science Education Programme  
Indian Academy of Sciences,  
Bengaluru-560080  
India**

**★By★**

**Principal  
Dayanand Science College,  
Latur – 413512, Maharashtra (INDIA)**

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### Acknowledgements

Management of Dayanand Science College Latur, Principal, Coordinator and staff are very thankful to Indian Academy of Sciences, Bangalore, Indian National Sciences Academy, New Delhi and The National Academy of Sciences India, Allahabad for supporting through their sponsorship to this three days lecture workshop.

On behalf of Dayanand Science College, Coordinator would like to express her gratitude to Prof. Anand Pathak Sir (**Convener**) for his enormous cooperation in the organization of this workshop.

Also coordinator would like to mention her deep sense of appreciation to Key Note Speaker and all Resource Persons who shared their expertise and experiences with us during the workshop and to all college principals who believed us and sent their students to attend this workshop. Also coordinator greatly acknowledged the college Management and Principal for their encouragement and support for organizing the above lecture workshop. Finally coordinator registered her profuse thanks to all participants who attended this workshop.

Organizing Coordinator:

**Dr. Nanda S. Korde,**

Assistant Professor

(Member of Board of Studies, SRTMU Nanded)

Chemistry Department

Latur -413512

Email: [nandineekorde0@gmail.com](mailto:nandineekorde0@gmail.com)

Organizing Convener:

**Prof. Anand Pathak,**

School of Physics

University of Hyderabad

Hydrabad 500046

Email: [anandp5@yahoo.com](mailto:anandp5@yahoo.com)

## **1 - Background of the Workshop**

The purpose of workshop is to bring together a PG Chemistry students from different institutions to learn about basic chemistry and identify valuable opportunities in different research fields.

### **Participant's Profile:**

The 152 workshop participants from home and other 5 organization as Rajarshi Shahu Mahavidyalaya Latur, Maharashtra Udaygiri Mahavidyalaya Udgir, Shivaji Mahavidyalaya Udgir, Yogeshwari Mahavidyalaya Ambajogai and Dr. Babasaheb Ambedkar Marathwada University Sub-Centre Osmanabad etc participated in this workshop. The list of participants is attached as annexure-2.

## **2 - Aims and Objectives**

The workshop was planned with the following objectives:

- To give the opportunity to M. Sc. students to learn about Fundamental Chemistry in more detail and motivate them for higher studies like M Phil and Ph D.
- To increase numerical problem-solving skill and memorization.
- To develop more interest in research in chemistry after completion of PG.
- To prepare students for SET, NET, GATE and competitive examination

## **3 - Inauguration and Plenary Presentations**

An inauguration Ceremony of the workshop was conducted by the following authorities:

- President: Dr. J. S. Dargad , Principal Dayanand Science College, Latur
- Chief Guest : Prof. Anand Pathak, Convener and Fellow of Academy , School of Physics, University of Hyderabad, Hyderabad
- Special Guest : Prof. R. H. Ladda, Ex-Principal Dayanand Science College, Latur

- Guest of honour: Prof. Sangita Makone, Ex-Director, School of Chemical Sciences, Swami Ramanand Teert Marathwad University, Nanded

The workshop was inaugurated on 5<sup>th</sup> January 2019 at 9:15 am- 9:45 am by auspicious hands of Principal Hon. Dr. J. S. Dargad and Chief Guest and Convener Prof. Anand Pathak in presence of Hon. Ex-Principal Prof. R.H.Ladda.

Chief Guest and convener of this lecture workshop, Prof. Anand Pathak, delivered his inaugural and introductory address. In his address, he insisted the role of Colleges for the development of society through the science and technology and he also elaborated the activities of all the three Science Academies for the spreading of scientific knowledge in India. He spoke that in today's modern era, brilliant and hard working students must gain interdisciplinary knowledge so that in future, in Modern Scientific Research, India reaches at the top. He also emphasized that Dayanand Science College is always organizing such type of workshops which are very useful for the students and surely students from this college and region become good researchers and he wished the college will conduct similar programmes in future also.

Coordinator of this workshop had given a brief introduction about the workshop. The Principal Dr. J. S. Dargad spoke about the importance of Academies' workshop. In his speech he said that at universal level, Indians having good opportunities in research in Chemistry, pharmaceutical science and Bio-Chemistry branches so that students must be curious in nature and hard working to achieve their goals. He pointed various application of this topic in diverse fields and hoped that the participants will be highly benefited by the sessions.

In this inaugural ceremony, a book entitled "Practical Physical and Inorganic Chemistry" written by Coordinator Dr N. S. Korde was inaugurated.

In the end Dr. N. S. Korde, Coordinator offered the vote of thanks to all dignitaries for gracing the occasion by their solemn presence and to all the participants of the workshop who were the main ingredient of this workshop. She also thanked to all three Academy for providing all kind of facility to conduct such workshops in the college.

#### **4 - Session Detailed**

Day-1	
Date: <b>05.01.2019</b>	
<b>Resource Person</b>	<b>Topic</b>
Prof. Anand Pathak	Chemistry in nanoscience and technology
Prof. Sangita Makone	Electrochemistry

First session was started immediately at 10:00am and Prof. Anand Pathak , Convener of the workshop, Fellow of academy, School of Physics, University of Hyderabad, Hyderabad delivered his energetic talk on Chemistry of Nano-materials and their studies using Ion Beams and Lasers . He focused on nano-materials and ion solid interaction using high energy accelerators such as ion implantation, Rutherford Backscattering Spectroscopy, ERTA and in the later session he discussed about the new research investigation and applications of nano-structuring materials in electronics and optoelectronics . Also application of laser for structuring as well as characterization is discussed in detailed.

Prof. Sangita Makone had given useful information of Electrochemistry. She focused on conversions of chemical energy to electrical energy through electrolysis processes, concept of electrode potentials, half cell reactions, electrolyte and its use in electrochemical cell, Daniel cell, dry cell with construction, working and applications. The related questions on this syllabus for various competitive examinations such as SET/NET/GATE also described in details. In next session she discussed about the concept of battery, its design, production of batteries in industries, the innovative changes in designing battery, concept of fuel cells and its applications. Also application of zinc-carbon battery, nickel-cadmium battery, and lead-acid batteries is discussed briefly. The lithium - ion battery is described considering recent innovations in the shape, sizes, mass, portability for its use in the laptop and table note pad. The exciting information regarding thermal battery and its military applications was attractive feature of this lecture.

Day-2	
Date: <b>06.01.2019</b>	
<b>Resource Person</b>	<b>Topic</b>
Prof. Bhimrao Khade	Coordination Chemistry of transition elements
Prof. Vivek Bobade	Spectroscopy

First session was chaired by Prof. Vivek Bobade at 10 am. He delivered a talk on NMR Spectroscopy. He discussed about the basic principles of NMR including instrumentation, CW and FT-NMR, factors responsible for chemical shifts, coupling constants, decoupling experiment, NOE and made the session alive. Second session led by Prof. B. C. Khade at 11:45am on Coordination chemistry of transition elements. He discussed about the shape of d orbitals, postulates of CFT, splitting of d orbitals in octahedral, tetrahedral, tetragonal and square planar complexes, calculation of crystal field stabilization energy, magnetic behaviour of complexes with their magnetic moment. Application of coordination compound with respect to colour also studied.

In post lunch session, the first talk was given by Prof. B. C. Khade. In this session he focused on basic principle and interpretation of esr spectra of transition metal complexes, activity, number of lines on esr spectra, hyper fine splitting and relative intensities, on the basis of gyro's splitting factor determination of structure of metal complexes. Also hyper fine structure of transition metal complexes, distribution of electron density and number of unpaired electrons which discussed very detailed manner. The session was very interactive and many of our participants were actively interacted with the resource person. It was ever memorable for many of our participants.

Last session started by Prof. Vivek Bobade at 4:00pm. Numerical problems were solved on PMR.

Day-3	
Date: <b>07.01.2019</b>	
<b>Resource Person</b>	<b>Topic</b>
Prof. Arvind Natu	Bio-organic Chemistry
Prof. Vivek Bobade	Spectroscopy

Third day first session started by Prof. Arvind Natu at 10:00am. He discussed about Bio-organic Chemistry. He focused on chemical origins of biology as DNA, RNA, lipids and importance of this symbiotic relation and how they follow chemical equation, thermodynamics, kinetics, cell energy requirements and importance of ATP to ADP conversions. The session was very informative and many of our participants were actively interacted with Prof. Arvind Natu. Second session started by Prof. Vivek Bobade on CMR Spectroscopy theory, chemical shifts of carbons, PND, off-resonance, APT, DEPT techniques. Third session started by Pr. Arvind Natu on Bio-organic chemistry. He focused about nucleoside to nucleotide to oligomers to genes to chromosome travel. Also the application of synthetic oligonucleotides in diagnostics as well as recently developed Antisense Technology using examples of contemporary drug molecules studied in details. Last session led by Prof. Vivek Bobade at 4:00pm on Spectroscopy. He solved numerical on CMR and joint applications of PMR and CMR.

#### **5 - Conclusions and outcomes of Workshop:**

In the concluding session the feedbacks were given by student delegates. They told that the program was informative and helpful to them to learn recent inventions in chemistry and all the speakers motivated them to learn lot of things in Chemistry. Shinde Rushikesh the student of Dayanand Science College Latur expressed in his feedback that the organization in all was very fantastic including resource persons, lectures, hospitality, lunch, breakfast etc. He also expressed the overall impact of this workshop will be benefitable in future. Also students from other institutes gave very positive feedback.

Miss Mrudula Nilangekar, student of Rajarshi Shahu College, Latur said that the workshop was very interactive which profiled all the participants enormously. Shri. Chavan Kailas student of Swami Ramanand Teerth Marathawada University Nanded said that this workshop was useful, insightful, entertaining and memorable. Prof. Pathan



Inam. T. W. from Shivaji College Udgir said that this workshop opens our minds to a new field of research which is totally neglected. This workshop was excellent which gave introduction about the research field. Shri. Haval Nitin, student of Dr. Babasaheb Ambedkar Marathwada University sub-center Osmanabad said that the style and knowledge of presenters were totally amazing. The Bio-organic chemistry and Coordination Chemistry in particular of Prof. Arvind Natu & Dr. Bhimrao Khade were highly impressive and interactive for the students.

**Outcomes:**

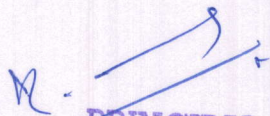
- This workshop was informative and helpful to learn recent inventions in chemistry, biochemistry and nano-material chemistry.
- This workshop created awareness about the opportunities in different research field.
- This workshop was a very worthwhile for young students to increase the scientific temper.
- This workshop was helpful to the teachers and students to learn and understand the impact of the chemistry in societal and environmental context .
- This workshop was helpful to the teachers and students to apply the knowledge of chemistry to the solution of complex chemistry problems.
- This workshop was helpful to the students for successive preparation of SET, NET, GATE and competitive examinations.


**6 - Valedictory Ceremony:**

The three days lecture workshop was concluded with a valedictory function at the end of the workshop. This function started at 5:30pm on 7<sup>th</sup> January 2019 . The stage was graced by the presence of the Principal Dr. J. S. Dargad, Vice-Principal Dr. S. S. Bellale and Prof. Vivek Bobade as Chief-Guest. In feedback session, the students and staff from other college expressed their views about the Lecture Workshop. They expressed their gratitude for making excellent arrangements for food and hospitality. Many participants requested that similar lecture workshops must organize in various colleges in this region.

In the valedictory session Prof. Vivek Bobade, Chief Guest gave concluding remarks about all the sessions of the workshop. He also advised the students to make the best use of the opportunities available in the present days and appreciated the efforts of the organizers for the successful conduct of the workshop.

The president of the function Principal Dr. J. S. Dargad appreciated the coordinator for conducting such intellectual workshop for the benefit of young faculty, scholars and students and also congratulated the participants. This was followed by Dr. Nanda S. Korde, the Coordinator of the Science Academies' lecture workshop has thanked the three Science Academies for their financial support and encouragement for organizing the above lecture workshop. She greatly acknowledged the college Management and Principal for their encouragement and support for organizing the above lecture workshop. She thanked the all resource persons for coming over to Dayanand Science College, Latur and delivering the lectures in the workshop and all the participants from in and around Colleges were acknowledged for their active participation in the Science Academies' lecture workshop. In the end all assembled arose to sing the National Anthem. After valedictory programme the participants were given certificates for attending the Science Academies' lecture Workshop.

  
PRINCIPAL  
Dayanand Science College  
LATUR

  
Dr. N. S. Korde  
Organizing Co-ordinator

**Academy of Sciences, Bangalore**  
**Indian National Science Academy, New Delhi**  
**The National Academy of Sciences India, Allahabad**

*in collaboration with*

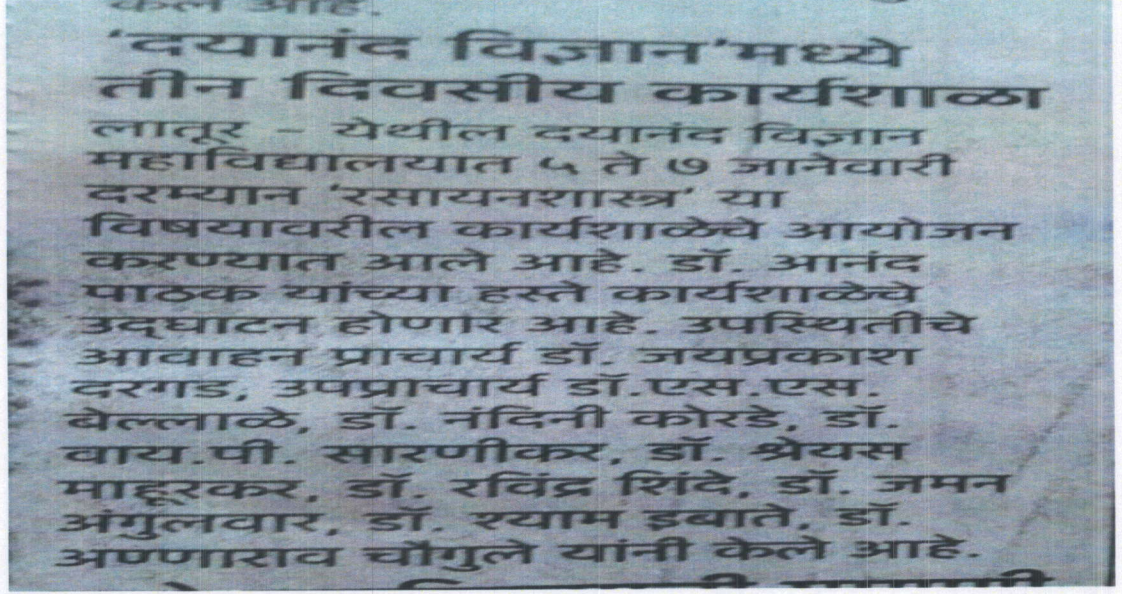
**Dayanand Science College, Latur-413512**  
**Maharashtra**

**Schedule of the workshop**

<b>Time</b>	<b>Session/Event</b>	<b>Topic</b>	<b>Resource Person</b>
<b>Day 1, 05/01/2019</b>			
8:30 am- 9:15am	Registration		
9:15am-9:45am	Inauguration		
9:45am-10am			
10:00am- 11:30am	I	Chemistry in nanoscience and technology	<b>Prof. Anand Pathak</b> School of Physics, University of Hyderabad Hydrabad-500046
11:30am -11:45am	<b>Interval</b>		
11:45am-1:15pm	II	Electrochemistry	<b>Prof. Sangita Makone</b> <b>Ex- Director</b> School of Chemical Sciences Swami Ramanand Teerth Marathwada University, Nanded-431606
1:15pm-2:15pm	<b>Lunch Break</b>		
2:15pm-3:45pm	III	Electrochemistry	<b>Prof. Sangita Makone</b> <b>Ex- Director</b> School of Chemical Sciences Swami Ramanand Teerth Marathwada University, Nanded-431606
3:45pm-4:00pm	<b>Tea- break</b>		
4:00pm-5:30pm	IV	Chemistry in nanoscience and technology	<b>Prof. Anand Pathak</b> School of Physics, University of Hyderabad Hydrabad-500046
<b>Day 2, 06/01/2019</b>			
10:00am-11:30am	I	Spectroscopy	<b>Prof. Vivek Bobade</b> Deptatment of Chemistry Gokhale Education

			Society's H.P.T. Arts and R.Y.K. Science College, Nashik-422005
11:30am-11:45am		<b>Interval</b>	
11:45am – 1:15pm	II	Co-ordination Chemistry of transition element	<b>Prof. Bhimrao Khade</b> Department of Chemistry Dnyanopasak College, Parbhani-431401
1:15pm – 2:15pm		<b>Lunch- Break</b>	
2:15pm-3:45pm	III	Co-ordination Chemistry of transition element	<b>Prof. Bhimrao Khade</b> Department of Chemistry Dnyanopasak College, Parbhani-431401
3:45pm-4:00pm		<b>Tea-Break</b>	
4:00pm-5:30	IV	Spectroscopy	<b>Prof. Vivek Bobade</b> Depatment of Chemistry Gokhale Education Society's H.P.T. Arts and R.Y.K. Science College, Nashik-422005
<b>Day 3, 07/01/2019</b>			
10:00am-11:30am	I	Bio-organic Chemistry	<b>Prof. Arvind Natu</b> IISER, Pune-411008
11:30am-11:45am		<b>Interval</b>	
11:45am-1:15pm	II	Spectroscopy	<b>Prof. Vivek Bobade</b> Depatment of Chemistry Gokhale Education Society's H.P.T. Arts and R.Y.K. Science College, Nashik-422005
1:15pm-2:15pm		<b>Lunch-Break</b>	
2:15pm-3:45pm	III	Bio-organic Chemistry	<b>Prof. Arvind Natu</b> IISER, Pune-411008
3:45pm-4:00pm		<b>Tea-Break</b>	
4:00pm-5:30pm	IV	Spectroscopy	<b>Prof. Vivek Bobade</b> Depatment of Chemistry Gokhale Education Society's H.P.T. Arts and R.Y.K. Science College, Nashik-422005
5:30pm-6:00pm	Concluding Session	Valedictory program	

News in News paper published -



## उपक्रमांमुळे विद्यार्थी संशोधक बनतील



▶ लातूर : दयानंद महाविद्यालयात कार्यशाळेचे उद्घाटन डॉ. आनंद पाठक यांच्या हस्ते झाले. यावेळी डॉ. जयप्रकाश दरगड, आर. एच. लड्डा, डॉ. नंदिनी कोरडे व अन्य.

### संचार वृत्तसेवा

▶ लातूर, दि. ६ - विज्ञानविषयक अनेक उपक्रम राबविल्याचा फायदा घेत दयानंद महाविद्यालयाचे विद्यार्थी भविष्यात विज्ञानाचे मोठे संशोधक बनतील, असा विश्वास हैदराबाद विद्यापीठातील भौतिकशास्त्र अकादमीचे फेलो डॉ. आनंद पाठक यांनी व्यक्त केला.

येथील दयानंद विज्ञान महाविद्यालयात बंगळुरुच्या भारतीय विज्ञान अकादमीच्यावतीने

आयोजित पदव्युत्तर विद्यार्थ्यांसाठी रसायनशास्त्र विषयात तीन दिवसीय कार्यशाळेच्या उद्घाटनप्रसंगी ते बोलत होते. यावेळी प्राचार्य डॉ. जयप्रकाश दरगड, माजी प्राचार्य आर. एच. लड्डा, समन्वयक डॉ. नंदिनी कोरडे, डॉ. श्रेयस माहूरकर, विद्यापीठातील डॉ. माकोणे उपस्थित होते.

डॉ. आनंद पाठक म्हणाले, भारतीय विज्ञान अकादमीद्वारे विज्ञानातील विविध विषयांतर्गत कार्यशाळा आयोजित

करण्यासाठी महाविद्यालय, विद्यापीठ व इतर वैज्ञानिक संस्थांना प्रोत्साहन देऊन प्रज्ञार्थत विद्यार्थ्यांनी विज्ञानातील अंतर्गत ज्ञान आत्मसात करावे.

यामुळे भविष्यात आधुनिक वैज्ञानिक संशोधनात भारताचा सर्वाधिक वाटा राहिल. दयानंद विज्ञान महाविद्यालय सातत्याने विद्यार्थ्यांच्या गुणवत्ता वाढीसाठी असे उपक्रम राबवत असल्याने येथील विद्यार्थी भविष्यात निश्चित विज्ञानाच्या क्षेत्रातील मोठा पल्ला गाठतील, असेही त्यांनी सांगितले.

रसायनशास्त्र संशोधनात भारतीयांना चांगली संधी असून विद्यार्थ्यांनी जिज्ञासू वृत्ती, प्रखर ध्येयनिष्ठा आणि कठोर परिश्रम केल्यास भारतासारख्या देशाचे या क्षेत्रातील स्थान बळकट होईल, अशी अपेक्षा प्राचार्य डॉ. जयप्रकाश दरगड यांनी अध्यक्षीय भाषणात व्यक्त केली. रसायनशास्त्र, औषध निर्माणशास्त्र, जैव रसायनशास्त्र यात संशोधनास वाव आहे.

# मराठवाडा नेता

Thursday 2019/01/10

## विज्ञानाच्या ज्ञानाचा उपयोग समाजासाठी करावे : डॉ. बोबडे



लातूर, दि. ९ :....

येथील दयानंद विज्ञान महाविद्यालय आणि बंगळूर येथील भारतीय विज्ञान अकादमी यांच्या संयुक्त विद्यमाने दि. ०५ ते ०७ जानेवारी २०१९ दरम्यान आयोजित 'रसायनशास्त्र' या विषयाच्या पदव्युत्तर वर्गातील विद्यार्थ्यांसाठीच्या तीन दिवसीय कार्यशाळेचा समारोप एच. पी. टी. कला आणि आर. वाय. के. विज्ञान

महाविद्यालय, नाशिक येथील प्रो. डॉ. विवेक बोबडे या प्रमुख पाहुण्यांच्या उपस्थितीत संपन्न झाला. याप्रसंगी व्यासपीठावर कार्यक्रमाचे अध्यक्ष प्राचार्य डॉ. जयप्रकाश दगड, उपप्राचार्य डॉ. एस. एस. बेळगाळे, कार्यशाळा समन्वयक डॉ. नंदिनी कोरडे यांची प्रमुख उपस्थिती होती. यावेळी प्रो. डॉ. विवेक बोबडे म्हणाले की, कोणताही माणूस हा आयुष्यभर विद्यार्थी

असतो. त्यामुळे प्रत्येक विद्यार्थ्यांनी आयुष्यभर विद्यार्थी राहून विज्ञानाचे ज्ञान आत्मसात करावे. कारण ज्ञानाचे भांडार अवाढव्य आहे. त्यामुळे मेहनत, जिद्द आणि अभ्यास यांच्या जोरावर वेळेचा सदुपयोग करून भावी आयुष्य उज्वल करावे. आपण ज्या समाजात जन्माला

आलो, त्या समाजाचे काही तरी देणे लागते. त्यामुळे आपण विज्ञानाबरोबर कोणत्याही क्षेत्राच्या माध्यमातून समाजासाठी काहीतरी करावे. याशिवाय या कार्यशाळेतील तज्ञ व्यक्तींचे मार्गदर्शन, वेगवेगळे सिध्दांत यांच्या माध्यमातून मिळवलेले जे ज्ञान आहे त्याचा उपयोग समाजासाठी करावे असे ते म्हणाले.

मराठवाडा नेता

# विद्यार्थ्यांनी अंतःविषयक ज्ञान आत्मसात करावे

▶ प्रा. डॉ. आनंद पाठक ▶ दयानंद विज्ञान महाविद्यालयात ३ दिवसीय रसायनशास्त्र विषयातील कार्यशाळेचे आयोजन

लातूर : प्रतिनिधी

भारतीय विज्ञान अकादमीद्वारे विज्ञानातील विविध विषयांतर्गत कार्यशाळेचे आयोजन करण्यासाठी महाविद्यालय, विद्यापीठ व इतर वैज्ञानिक संस्थाना प्रोत्साहन देऊन प्रज्ञावंत विद्यार्थ्यांनी विज्ञानातील अंतःविषयक ज्ञान (Interdisciplinary Knowledge) आत्मसात केले पाहिजे. जेणे करून भविष्यामध्ये आधुनिक वैज्ञानिक संशोधनामध्ये भारताचा सर्वाधिक वाटा राहिला पाहिजे. दयानंद विज्ञान महाविद्यालय सातत्याने पुढाकार घेऊन असे उपक्रम विद्यार्थ्यांसाठी राबवत असल्यामुळे येथील विद्यार्थी हे भविष्यामध्ये निश्चितच विज्ञानाच्या क्षेत्रातील मोठा पल्लू गाठतील, असे प्रतिपादन प्रा. डॉ. आनंद पाठक यांनी केले.

येथील दयानंद विज्ञान महाविद्यालयात बेंगलोर येथील भारतीय विज्ञान अकादमीच्या माध्यमाने आयोजित पदव्युत्तर विद्यार्थ्यांसाठी रसायनशास्त्र विषयामध्ये ३ दिवसीय



कार्यशाळेचे उद्घाटन हैद्राबाद विद्यापीठातील भौतिकशास्त्र व अकादमीचे फेलो डॉ. आनंद पाठक यांच्या हस्ते करण्यात आले. त्यावेळी डॉ. पाठक बोलत होते. या प्रसंगी प्राचार्य डॉ. जयप्रकाश दरगड, माजी प्राचार्य आर. एच. लड्डू कार्यशाळेचे समन्वयक डॉ. नंदिनी कोरडे, डॉ. श्रेयश माहूरकर, स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ येथील डॉ. माकोणे उपस्थित होते.

अध्यक्षीय समारोपात प्राचार्य डॉ.

दरगड म्हणाले की, रसायनशास्त्र संशोधनात भारतीयांना चांगली संधी असून विद्यार्थ्यांनी जिज्ञासू वृत्ती, प्रखर ध्येयनिष्ठा आणि कठोर परिश्रम केल्यास भारतासारख्या देशाचे या क्षेत्रातील स्थान निश्चितच बळकट होईल. अशी अपेक्षा व्यक्त करून प्राचार्य डॉ. दरगड म्हणाले की, रसायनशास्त्र, औषध निर्माणशास्त्र, जैवसायन या विषयामध्ये संशोधनास प्रचंड वाव असून संशोधनात्मक दृष्टीकोनातून अशा प्रकारच्या

कार्यशाळा, रिफ्रेशर कोर्सेस महाविद्यालय विद्यार्थ्यांसाठी, प्राध्यापकांसाठी सातत्याने घेत असून विद्यार्थ्यांनी त्याचा लाभ घ्यावा असे ही प्रतिपादन डॉ. दरगड यांनी यावेळी केले.

या प्रसंगी डॉ. नंदिनी कोरडे लिखित Practical Physical And Inorganic Chemistry या पुस्तकाचे विमोचन ही करण्यात आले. या प्रसंगी या कार्यशाळेच्या समन्वयिका डॉ. नंदिनी कोरडे यांनी कार्यशाळेविषयीची माहिती प्रास्ताविका मधून केली.

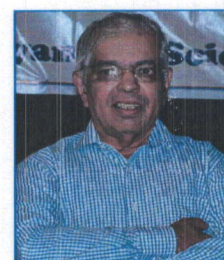
या कार्यशाळेमध्ये दयानंद विज्ञान, राजर्षी शाहू, विद्यापीठ उपकेंद्र उमानावाड, उदगीर येथील उदयगिरी महाविद्यालय आदि महाविद्यालयातील एकूण १५० विद्यार्थ्यांनी सहभाग नोंदविला आहे. आभार प्रदर्शन डॉ. श्रेयश माहूरकर यांनी मांडले तर सूत्रसंचालन विधी पलसापूर यांनी केले. या कार्यशाळेस महाविद्यालयातील शिक्षक, शिक्षकेत्तर कर्मचारी व विद्यार्थी बहुसंख्येने उपस्थित होते.

## Name and Addresses of Mentors

- 1) **Name** : **Dr. Anand Pathak**  
**Qualification** : Ph.D.  
**Address** : School of Physics, University of Hyderabad  
Physics Department, RGUKT Basar  
**Residential Address** : 184 Doyen Township  
Sentiyawpally Hyderabad - 500019  
**Mobile No.** : 9963423366  
**E-mail Address** : anandp5@yahoo.com
- 



- 2) **Name** : **Dr. Arvidn A. Natu**  
**Qualification** : M.Sc., Ph.D.  
**Address** : IISER, Pune 411000  
**Residential Address** : 24/ 8 S Nagar Pune 411005  
**Mobile No.** : 9410040021  
**E-mail Address** : aa.natu@iiserpune.ac.in
- 



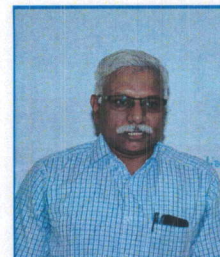
- 3) **Name** : **Dr. Bhimrao C. Khade**  
**Qualification** : Ph.D.  
**Address** : Dnyanopask Mahavidyalaya, Parbhani  
**Residential Address** : Mahatma Phule Nagar, Parbhani  
**Mobile No.** : 9423443275  
**E-mail Address** : bckhade@gmail.com
- 





## Name and Addresses of Mentors

- 4) **Name** : Prof. Dr. Vivek Bobade  
**Qualification** : M.Sc. Ph.D.  
**Address** : Department of Chemistry,  
HPT Arts and RYK Science College,  
Nashik  
**Residential Address** : 401, Asavari Apartment, Indira Nagar,  
Nashik - 422009  
**Mobile No.** : 9970499527  
**E-mail Address** : v\_bobade31@rediffmail.com



- 
- 5) **Name** : Prof. Dr. Sangita Makone  
**Qualification** : M.Sc. Ph.D.  
**Address** : School of Chemical Sciences,  
S.R.T.M.U. Vishnupuri,  
Nanded - 431606  
**Residential Address** : Flat No.2, Matoshri Apartment,  
Pundlikwadi, Mahaveer Chowk,  
Nanded - 431601  
**Mobile No.** : 9370247117 (0) (024462)229518  
**E-mail Address** : ss\_makone@rediffmail.com, ss\_makone@srtmun.ac.in



# SCIENCE ACADEMIES' EDUCATION PROGRAMME

SEP/LW/January/2019

4 December 2018

## JOINT SCIENCE EDUCATION PANEL

Dr N.S. Korde  
Asst. Professor  
Dept. of Chemistry  
Dayananda Science College  
Latur - 413 512

Sub: Lecture Workshop on "Theoretical Chemistry" at Dayananda Science College, Latur during 05-07 January 2019.

Dear Dr Korde,

This has reference to the letter forwarding a proposal and budget for organizing a three-day Lecture Workshop at Dayananda Science College Latur. The Joint Science Education Panel of the three Academies will be happy to sponsor and support the Lecture Workshop. We note that Prof. Anand Pathak (UoH, Hyderabad) will be the workshop Convener and that you will be the Workshop Co-ordinator.

(a) Your budget of Rs. 1,61,500/- excluding travel expenses (Resource Persons travel expenses (i) II tier A/C train fare for persons below the age of 60 (ii) air travel by Air India only for Resource Persons over the age of 60) However, the TA claims must be settled by the Coordinator and tickets submitted along with TA bill for settlement including the detailed report and statement of expenditure.) for 150 participants has been approved by the Science Education Panel. As per the guidelines, the ideal number of participants in a Lecture Workshop should be between 100 and 125 and in any case should not exceed 150, to maximize interaction between participants and resource persons. Please note that you have to adhere to our guidelines and the approved amount is strictly following the budget heads in the guideline.

(b) Please note that only the names of Convener and Coordinator of the Workshop should be included in brochure/invitation etc. Names of members of the management, organizing committees, patrons etc should be strictly avoided.

(c) Please ensure that the expenditure on individual items does not exceed the sanctioned BUDGET HEAD. If the actual expenditure exceeds the sanctioned budget, THE HOST INSTITUTION SHOULD TAKE CARE OF THE DIFFERENCE.

(d) Lecture Workshops are sponsored and supported by the three National Science Academies - IASc, INSA and NASI. The names of INDIAN ACADEMY OF SCIENCES (BENGALURU), INDIAN NATIONAL SCIENCE ACADEMY (NEW DELHI) and THE NATIONAL ACADEMY OF SCIENCES, INDIA (ALLAHABAD) should therefore be mentioned in all publicity material such as programme sheet, invitation cards, etc.

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Goswami, J.N.

### The National Academy of Sciences, India

Dimri, V.P.  
Khurana, Paramjit  
Misra, Gadadhar  
Mittal, J.P.

### Contact Address

Ravikumar, C.S.  
Coordinator  
Science Education  
Programme  
Indian Academy of  
Sciences  
P.B. No. 8005  
C.V. Raman Avenue  
Sadashivanagar P.O.  
Bengaluru 560 080  
India

### Telephone:

91-80-2266 1210  
91-80-2266 1207  
Fax:  
91-80-2361 6094



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(e) It may be noted that no formal certificates should be issued to participants. A letter of attendance signed by Coordinator may be issued to those who need it.

(f) The Workshop should be called Science Academies' Lecture Workshop in on "Theoretical Chemistry".

(g) You should send us three copies of the printed programme cards once it is printed.

(h) We urge you to open a new bank account in the name of the lecture workshop or in the name of the principal and provide full details of the account:

1. Account No;
2. Name of the Account Holder;
3. Name of the Bank;
4. Name of the Branch;
5. IFS code for non-SBI accounts.

Alternatively, you can provide us the existing college bank account number to which we can transfer the amount.

The audited expenditure statement/utilization certificate duly signed by competent authority (CA or Financial Controller) to be sent along with the report, once the Course is over. This is required for the audit compliance. The format will be sent to you separately.

You can go ahead with organizing the Workshop in consultation with Prof. Anand Pathak and keep in touch with the Academy about the progress.

With regards,

Yours sincerely,



C S Ravi Kumar  
Coordinator  
Science Education Programme

**Academy of Sciences, Bangalore  
Indian National Science Academy, New Delhi  
The National Academy of Sciences India, Allahabad**

*in collaboration with*

**Dayanand Science College, Latur-413512  
Maharashtra**

**Schedule of the workshop**

<b>Time</b>	<b>Session/Event</b>	<b>Topic</b>	<b>Resource Person</b>
<b>Day 1, 05/01/2019</b>			
8:30 am- 9:15am	Registration		
9:15am-9:45am	Inauguration		
9:45am-10am			
10:00am- 11:30am	I	Chemistry in nanoscience and technology	<b>Prof. Anand Pathak</b> School of Physics, University of Hydrabad of Hydrabad-500046
11:30am -11:45am	<b>Interval</b>		
11:45am-1:15pm	II	Electrochemistry	<b>Prof. Sangita Makone</b> <b>Ex- Director</b> School of Chemical Sciences Swami Ramanand Teerth Marathwada University, Nanded-431606
1:15pm-2:15pm	<b>Lunch Break</b>		
2:15pm-3:45pm	III	Electrochemistry	<b>Prof. Sangita Makone</b>
3:45pm-4:00pm	<b>Tea- break</b>		

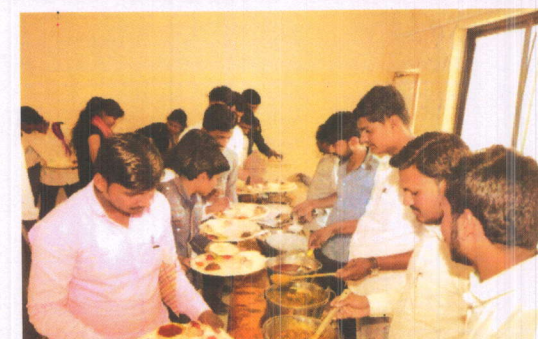
4:00pm-5:30pm	IV	Chemistry in nanoscience and technology	<b>Prof. Anand Pathak</b>
<b>Day 2, 06/01/2019</b>			
10:00am-11:30am	I	Spectroscopy	<b>Prof. Vivek Bobade</b> Department of Chemistry Gokhale Education Society's H.P.T. Arts and R.Y.K. Science College, Nashik-422005
11:30am-11:45am	<b>Interval</b>		
11:45am – 1:15pm	II	Co-ordination Chemistry of transition element	<b>Prof. Bhimrao Khade</b> Department of Chemistry Dnyanopasak College, Parbhani-431401
1:15pm – 2:15pm	<b>Lunch- Break</b>		
2:15pm-3:45pm	III	Co-ordination Chemistry of transition element	<b>Prof. Bhimrao Khade</b>
3:45pm-4:00pm	<b>Tea-Break</b>		
4:00pm-5:30	IV	Spectroscopy	<b>Prof. Vivek Bobade</b>
<b>Day 3, 07/01/2019</b>			
10:00am-11:30am	I	Bio-organic Chemistry	<b>Prof. Arvind Natu</b> IISER, Pune-411008
11:30am-11:45am	<b>Interval</b>		
11:45am-1:15pm	II	Spectroscopy	<b>Prof. Vivek Bobade</b>
1:15pm-2:15pm	<b>Lunch-Break</b>		

2:15pm-3:45pm	III	Bio-organic Chemistry	<b>Prof. Arvind Natu</b>
3:45pm-4:00pm	<b>Tea-Break</b>		
4:00pm-5:30pm	IV	Spectroscopy	<b>Prof. Vivek Bobade</b>
5:30pm-6:00pm	Concluding Session	Valedictory program	

# Glimpses of Science Academic Theoretical Chemistry Workshop - 2019

at Dayanand Science College, Latur

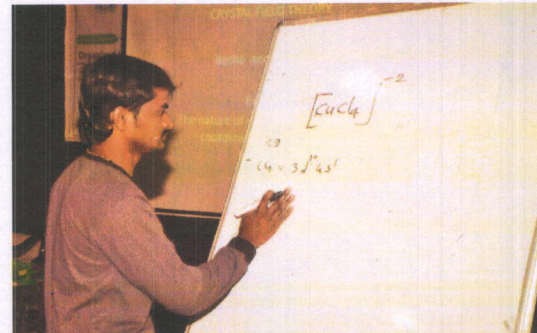
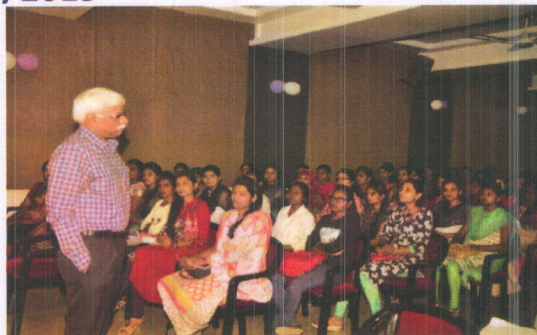
Jan. 5-7, 2019



# Glimpses of Science Academic Theoretical Chemistry Workshop - 2019

at Dayanand Science College, Latur

Jan. 5-7, 2019





# Glimpses of Science Academic Theoretical Chemistry Workshop - 2019

at Dayanand Science College, Latur

Jan. 5-7, 2019

