

Indian Academy of Sciences Lecture Workshop

Short-duration Lecture Workshops of Indian Academy of sciences form an important segment of the activities under the Science Academies' Programmes organized by the Joint Science Education Panel of the three Science Academies. These are of 2-3 days duration intended for the benefit of students and teachers at the undergraduate, graduate and research levels. The Workshop should be so designed as to have useful relevance to the materials covered in the graduate and under-graduate programmes and can then also cover some topics at research level.

Lecture Workshops are arranged on carefully chosen topics in physics, mathematics, chemistry, life sciences, basic sciences for UG & PG students by our college regularly by different departments for the benefit of local students and teachers. Speakers include Fellows and scientists from nearby institutions.

Organised Workshops

Sr. No.	Name of Workshop	Funding Agency	Year	From date	To date	Budget sanctioned
1)	Lecturer Workshop on Physics, Chemistry, Mathematics	Indian Academy Of Sciences, Bangalore	2016-2017	01.10.2016	03.10.2016	187750.00
2)	Lecturer Workshop on Conceptual Chemistry	Indian Academy Of Sciences, Bangalore	2017-2018	06.01.2018	08.01.2018	179500.00
3)	Lecturer Workshop on Theoretical chemistry	Indian Academy Of Sciences, Bangalore	2018-2019	05.01.2019	07.01.2019	161500.00
4)	Lecturer Workshop on Mathematics	Indian Academy Of Sciences, Bangalore	2018-2019	11.01.2019	13.01.2019	181500.00
5)	Virtual Lecture Workshop on Quantum Mechanics and Electronics	Indian Academy Of Sciences, Bangalore	2020-2021	01.03.2021	03.01.2021	47500.00
6)	Virtual Lecture Workshop on Fundamental Chemistry	Indian Academy Of Sciences, Bangalore	2020-2021	23.10.2021	25.10.2021	41500.00

1] Lecturer Workshop on Physics, Chemistry, Mathematics –

Coordinator

– **R. H. Ladda**
Ex. Principal
Bhagyanagar, Old AUSA Road,
Latur (Maharashtra)
Mob. 9420436904
Email rhladda@gmail.com

Convener

– **Dr. A. P. Pathak**
FNScA,
School of Physics
University of Hyderabad
Hyderabad 500019
Mob. 09963423366
Email - appsp@uohyd.ernet.in

Curriculum –

Chemistry :-

Organic Spectroscopy -

1. **U.V. Spectroscopy** :- Introduction, Types of electronic Transitions, Terms used in U.V. spectroscopy, Woodward Fieser rules for calculating absorption maximum in dienes.
2. **I.R. Spectroscopy** :- Introduction Principal of IR Spectroscopy fundamental modes and types of variations.
I. R. Spectrum :- Functional group region and finger print region. Applications of I. R. Spectroscopy.

Mathematics :-

Laplace Transforms :-

Introduction, Laplace Transform, Important Formulae, Properties of Laplace Transforms, Laplace Transforms of the derivative of $f(t)$, Laplace Transforms of derivative of order n , Laplace Transform of integral of $f(t)$, Laplace Transform of $t \cdot f(t)$ (Multiplication by t), Laplace Transform of $1/t \cdot f(t)$ (Division by t), Unit Step Function. Second Shifting Theorem, Impulse Function, Periodic Functions, Convolution Theorem, Evaluation of integrals, Formulae of Laplace transform, Properties of Laplace Transform.

Physics :-

Cosmology (6 Periods)

The Big-Bang Universe, The steady State Cosmology, The oscillating cosmology, the Hubble law and cosmological test

or

The solar system :-

The solar system, surface of sun, sunspot, sunspot cycle, the sun : Photosphere, chromosphere and corona, keplers laws of planetary motion, early history of planets structure, compositing and atmosphere of our solar system (all nine planets).

List of Mentors

-

Name and Addresses of Mentors

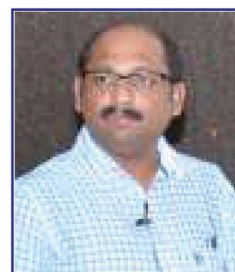
- 1) **Name** : **Prof. Dr. Prasenjit Ghosh**
Qualification : Ph.D.
Address : Department of Chemistry,
IIT Bombay, Powai, Mumbai - 400076
Maharashtra State.
Residential Address : B - 87, C/o Multi - Storey Bldg.,
IIT Bombay, Powai, Mumbai - 400076.
Mobile No. : 9820202914
E-mail Address : pghosh@chem.iitb.ac.in



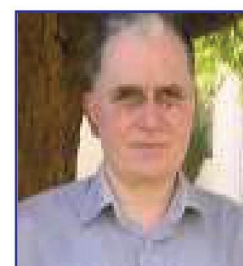
- 2) **Name** : **Dr. Radha**
Qualification : Ph.D.
Address : School of Mathematics
University of Hyderabad.
Residential Address : Anjanadvi Resi, Chandanagar, Hyderabad
Mobile No. : 9177529350
E-mail Address : repakar@yahoo.com



3) Name : **Dr. P. K. Suresh**
Qualification : Ph.D.
Address : School of Physics University of Hyderabad.
Hyderabad.
Residential Address : Flat No. 201, Srinivas Residences Maseadbanda,
Hyderabad
Mobile No. : 9493410285
E-mail Address : surehpt@uohy.ac.in



4) Name : **Dr. A. 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



5) Name : **Jyotshana V. Prajapat**
Qualification : Ph.D., M.Phil.
Address : Department of Mathematics,
University of Mumbai, Mumbai - 400098
Residential Address : B/304-305, Krishna Heights
Upper Govind Nagar, Malad(e), Mumbai - 400098
Mobile No. : 9869686033
E-mail Address : jvprajapat@gmail.com
head@mathematics.mu.ac.in



List of Participants -

Sr. No.	Name of the Students	Gender	Name of the College	Mobile No.
1	Arjune Govardhan Bhausahab	Male	Dayanand Science College, Latur	9637913628
2	Bakal Satish Bhanudas	Male	Dayanand Science College, Latur	9822424903
3	Balure Rahul Baburao	Male	Dayanand Science College, Latur	8888409454
4	Chatte Bhagyashri Dattrao	Female	Dayanand Science College, Latur	7741952062
5	Chavan Pratiksha Vitthal	Female	Dayanand Science College, Latur	9156557632
6	Chelkar Pooja Namdev	Female	Dayanand Science College, Latur	8180934179
7	Dige Shivani Anil	Female	Dayanand Science College, Latur	8007788777
8	Hindole Meera Nagnath	Female	Dayanand Science College, Latur	7218035115
9	Jawale Pratiksha Sudarshan	Female	Dayanand Science College, Latur	8308085250
10	Jethliya Pragati Shriramji	Female	Dayanand Science College, Latur	7507822185
11	Kalamgave Ganesh Gopalrao	Male	Dayanand Science College, Latur	7028181108
12	Kande Swapnil Satish	Male	Dayanand Science College, Latur	9130543213
13	Kendre Vaibhav Narayan	Male	Dayanand Science College, Latur	8975499655
14	Khose Nikita Nagorao	Female	Dayanand Science College, Latur	8857972404
15	Khose Shubham Bhusaheb	Male	Dayanand Science College, Latur	8793808550
16	Kutwade Pooja Vilas	Female	Dayanand Science College, Latur	8308050330
17	Mali Rahul Umakant	Male	Dayanand Science College, Latur	9403488102
18	Mundhe Pooja Sugriv	Female	Dayanand Science College, Latur	9175044388
19	Nade Dnyaneshwar Balaji	Male	Dayanand Science College, Latur	8975557277
20	Ovhal Sonali Shahuraj	Female	Dayanand Science College, Latur	8805986637
21	Parale Gangadhar Baburao	Male	Dayanand Science College, Latur	9604989355

22	Patil Vishnu Deelip	Male	Dayanand Science College, Latur	8805514735
23	Pawar Jyoti Sopan	Female	Dayanand Science College, Latur	8975394802
24	Pawar Sonali Suresh	Female	Dayanand Science College, Latur	9552676082
25	Swarikar Shradhha Srinivas	Female	Dayanand Science College, Latur	8600780294
26	Shelke Shubhangi Govind	Female	Dayanand Science College, Latur	9921541695
27	Shinde Pratisha Jaychand	Female	Dayanand Science College, Latur	9975439231
28	Shinde Sandip Uddhav	Male	Dayanand Science College, Latur	9168526121
29	Wadiwale Vikas Rameshwar	Male	Dayanand Science College, Latur	9420078542
30	Bhosale Anuja Anil	Female	Dayanand Science College, Latur	9637726348
31	Mugave Dhanshri Baburao	Female	Dayanand Science College, Latur	9404364311
32	Shaikh Naziya Begum Wahed	Female	Dayanand Science College, Latur	7083429094
33	Shaikh Sabiya Begum Wahed	Female	Dayanand Science College, Latur	7083429094
34	Sontakke Swati Sukanand	Female	Dayanand Science College, Latur	9011408614
35	Chat Sujata Vasantryao	Female	Dayanand Science College, Latur	8575604052
36	Ghodke Yogesh Ankush	Male	Dayanand Science College, Latur	8888170678
37	Harke Tejaswini Shivling	Female	Dayanand Science College, Latur	9049167914
38	Jagtap Snehlata Satish	Female	Dayanand Science College, Latur	9405413914
39	More Dushyant Dattatray	Male	Dayanand Science College, Latur	7028215161
40	Panchal Vishnu Pandit	Male	Dayanand Science College, Latur	8600660446
41	Mogekar Ashwini Baburao	Female	Dayanand Science College, Latur	9527417552
42	Suryawanshi Kavita Kashinath	Female	Dayanand Science College, Latur	9405445449
43	Wadiwale Anand Basavraj	Male	Dayanand Science College, Latur	7840916988
44	Kadam Netal Bhagirathrao	Female	Dayanand Science College, Latur	8855830863

45	Patil Monika Jayanand	Female	Dayanand Science College, Latur	8805434155
46	Kawale Ravikiran Balasaheb	Male	Dayanand Science College, Latur	9975764860
47	Panchal Sarita Nagnath	Female	Dayanand Science College, Latur	8605548994
48	Kopnar Shital	Female	Dayanand Science College, Latur	9823591279
49	Shinde Mayuri	Female	Dayanand Science College, Latur	9890575052
50	Sathe Tejashri	Female	Dayanand Science College, Latur	7387883941
51	More Jayshri	Female	Dayanand Science College, Latur	8806642484
52	Gaikwad Nisha	Female	Dayanand Science College, Latur	7038327580
53	Karpe Priyanka	Female	Dayanand Science College, Latur	8378802242
54	Chaunde Mohini	Female	Dayanand Science College, Latur	8421172923
55	Awad Pooja	Female	Dayanand Science College, Latur	9860074182
56	Shaikh Sabiha Mousa	Female	Dayanand Science College, Latur	9175405745
57	Kadam Surekha Shripati	Female	Dayanand Science College, Latur	9730705846
58	Kulkarni Sneha Umakant	Female	Dayanand Science College, Latur	7741846601
59	Shelke Pallavi Balaji	Female	Rajarshi Shahu Mahavidyalaya, Latur	9767935497
60	Sontakke Anil Suryakant	Male	Rajarshi Shahu Mahavidyalaya, Latur	9764977416
61	Jagtap Sangita Vijaykumar	Female	Rajarshi Shahu Mahavidyalaya, Latur	9604681165
62	Pawar Punam Bharat	Female	Rajarshi Shahu Mahavidyalaya, Latur	9970312288
63	Malwade Madhura Ram	Female	Rajarshi Shahu Mahavidyalaya, Latur	7558788108
64	Malwade Nikhita Namdev	Female	Rajarshi Shahu Mahavidyalaya, Latur	9657338384
65	Jadhav Aishwarya B.	Female	Rajarshi Shahu Mahavidyalaya, Latur	9923968949
66	Kanwate Supriya S.	Female	Rajarshi Shahu Mahavidyalaya, Latur	9923434948
67	Bidve Sejal Chandrashekhar	Female	Rajarshi Shahu Mahavidyalaya, Latur	7888030681

68	Bise Mallikarjun Prabhu	Male	Rajarshi Shahu Mahavidyalaya, Latur	9673353181
69	Gaikwad Ravi Shahuraj	Male	Rajarshi Shahu Mahavidyalaya, Latur	9975507574
70	Surwase Narayan Hanmant	Male	Rajarshi Shahu Mahavidyalaya, Latur	9823442904
71	Yenge Gokul Dattatrya	Male	Rajarshi Shahu Mahavidyalaya, Latur	9096870308
72	Sabde Sidhant Vijay	Male	Rajarshi Shahu Mahavidyalaya, Latur	7387522463
73	Ramdhave Shubham Anil	Male	Rajarshi Shahu Mahavidyalaya, Latur	8983732676
74	Gade Shubham Rajabhau	Male	Rajarshi Shahu Mahavidyalaya, Latur	9665859896
75	Gurme Gopikishan Gangadhar	Male	Rajarshi Shahu Mahavidyalaya, Latur	9421316099
76	Gangane Akshaykumar Pandurang	Male	Rajarshi Shahu Mahavidyalaya, Latur	9730706083
77	Suryawanshi Sumedha Vithal	Male	Rajarshi Shahu Mahavidyalaya, Latur	8855055516
78	Sayed Zeenat Shaukat	Female	Rajarshi Shahu Mahavidyalaya, Latur	8446301603
79	Wankhede Gitanjali Vidhyasagar	Female	Rajarshi Shahu Mahavidyalaya, Latur	9975072394
80	Narhare Nikita Bhagwat	Female	Rajarshi Shahu Mahavidyalaya, Latur	7387568165
81	Chame Nikita Muraharee	Female	Rajarshi Shahu Mahavidyalaya, Latur	9421486802
82	Chame Pallavi Vyankuram	Female	Rajarshi Shahu Mahavidyalaya, Latur	9923462707
83	Bodke Dipali Rajendra	Female	Rajarshi Shahu Mahavidyalaya, Latur	8600090359
84	Bawalge Pooja Panditrao	Female	Rajarshi Shahu Mahavidyalaya, Latur	7066748803
85	Gurme Nagnath Dilip	Male	Rajarshi Shahu Mahavidyalaya, Latur	8390242394
86	Salunke Ashwini Prakash	Female	Rajarshi Shahu Mahavidyalaya, Latur	8600022166
87	Dahatonde Neha Jawahar	Female	Rajarshi Shahu Mahavidyalaya, Latur	8412858372
88	Hake Pallavi Mansingrao	Female	Rajarshi Shahu Mahavidyalaya, Latur	8975404250
89	Dande Priyanka Umakant	Female	Rajarshi Shahu Mahavidyalaya, Latur	9850728543
90	Kshirsagar Pranita Prakash	Female	Rajarshi Shahu Mahavidyalaya, Latur	9405735706

91	Mali Pooja Hari	Female	Rajarshi Shahu Mahavidyalaya, Latur	9404158124
92	Kadam Sakshi Udhavrao	Female	Rajarshi Shahu Mahavidyalaya, Latur	8408837496
93	Patil Utkarsha Nagnath	Male	Rajarshi Shahu Mahavidyalaya, Latur	9850750171
94	Patil Shubhangi Pandurang	Female	Rajarshi Shahu Mahavidyalaya, Latur	7218435409
95	Thete Yogita D.	Female	Rajarshi Shahu Mahavidyalaya, Latur	7757085773
96	Pardeshi Nikita Anil	Female	Rajarshi Shahu Mahavidyalaya, Latur	9405044350
97	Naikwadi Purva Dilip	Female	Rajarshi Shahu Mahavidyalaya, Latur	8446063197
98	Lakal Shaweta Nanasaheb	Female	Rajarshi Shahu Mahavidyalaya, Latur	7219861777
99	Joshi Aarti Gunderao	Female	Rajarshi Shahu Mahavidyalaya, Latur	9420438990
100	Bhise Kirti Shivaji	Female	Rajarshi Shahu Mahavidyalaya, Latur	8698000876
101	Pabbe Narayan Shivaji	Male	Rajarshi Shahu Mahavidyalaya, Latur	9822050822
102	Dhaware Dipak Shivaji	Male	Rajarshi Shahu Mahavidyalaya, Latur	8149251158
103	Sonwane Vishnu Rajendra	Male	Rajarshi Shahu Mahavidyalaya, Latur	7249603469
104	Vasale Shaveta Hukumchand	Female	Rajarshi Shahu Mahavidyalaya, Latur	9404651518
105	Surwase Archana Baburao	Female	Rajarshi Shahu Mahavidyalaya, Latur	8087553617
106	Mehtre Sayali Vishwanath	Female	Rajarshi Shahu Mahavidyalaya, Latur	9404158132
107	Shaikh Nishat Mohsin	Female	Rajarshi Shahu Mahavidyalaya, Latur	9764068717
108	Pawar Komal Bhagwan	Female	Rajarshi Shahu Mahavidyalaya, Latur	9921615309
109	Sampate Gianjali Gyanba	Female	Rajarshi Shahu Mahavidyalaya, Latur	9890062659
110	Bhandare Akshata Atmaram	Female	Rajarshi Shahu Mahavidyalaya, Latur	9970929471
111	Kulkarni Tejasvini Prakahsrao	Female	Rajarshi Shahu Mahavidyalaya, Latur	8983506207
112	Kadam Ashok Shivaji	Male	Yogeshwari Mahavidyalaya, Ambajogai	9673721470
113	Kothule Changdev Babasaheb	Male	Yogeshwari Mahavidyalaya, Ambajogai	9421590154

114	Maske Mahadev Vithaldas	Male	Yogeshwari Mahavidyalaya, Ambajogai	8380899545
115	Deshmukh Bhagyashri Shripad	Female	Yogeshwari Mahavidyalaya, Ambajogai	9960276048
116	Joshi Supriya Santoshrao	Female	Yogeshwari Mahavidyalaya, Ambajogai	8624013011
117	Chhotraband Sneha Mohan	Male	Yogeshwari Mahavidyalaya, Ambajogai	9923645825
118	Jadhav Vikas Rokdoba	Male	Yogeshwari Mahavidyalaya, Ambajogai	9975473190
119	Deshmane Vishwajeet Ishwarchand	Male	Sanjeevane Mahavidyala, Chapoli	7219629362
120	Boke Sachin Sanjay	Male	Sanjeevane Mahavidyala, Chapoli	8698553574
121	Sontakke Mahesh Vitthalrao	Male	Sanjeevane Mahavidyala, Chapoli	8698553660
122	Polawar Anirudh Achyut	Male	Sanjeevane Mahavidyala, Chapoli	8411051088
123	Bhalerao Chardrakishor Vajinath	Male	Sanjeevane Mahavidyala, Chapoli	9970009253
124	Shaikh Mainodeen Yunus	Male	Sanjeevane Mahavidyala, Chapoli	9970383948
125	Panchal Dhiraj Vajinath	Male	Sanjeevane Mahavidyala, Chapoli	7720921665
126	Tatapure Nogesh Shankar	Male	Sanjeevane Mahavidyala, Chapoli	9850698936
127	Dube Shilpa Babuprasad	Female	Mahatma Basweshwar Mahavidyalaya, Latur	9422964522
128	Metale Swati Gopal	Female	Mahatma Basweshwar Mahavidyalaya, Latur	9860926319
129	Shete S. G.	Male	Mahatma Basweshwar Mahavidyalaya, Latur	9975522006
130	Junedi Humera Abdul Salam	Female	Mahatma Basweshwar Mahavidyalaya, Latur	9421694725
131	Bhosale Ashwini Santosh	Female	Mahatma Basweshwar Mahavidyalaya, Latur	7720860460
132	Deshmukh Jyoti Manohar	Female	Mahatma Basweshwar Mahavidyalaya, Latur	9326550506
133	Akade Akash Dayanand	Male	Mahatma Basweshwar Mahavidyalaya, Latur	9096796894
134	Phad Dnyaneshwar Ramrao	Male	Mahatma Basweshwar Mahavidyalaya, Latur	7083243983
135	Hande Aijnath Tulshiram	Male	Mahatma Basweshwar Mahavidyalaya, Latur	9096796894
136	Ghavle Akshay Bhaskar	Male	Mahatma Basweshwar Mahavidyalaya, Latur	8888965505

137	Deshmukh Harish Babruwan	Male	Mahatma Basweshwar Mahavidyalaya, Latur	8446424640
138	Babar Arun Madhavrao	Male	Mahatma Basweshwar Mahavidyalaya, Latur	9096796894
139	Ahire Vivek Bharat	Male	Mahatma Basweshwar Mahavidyalaya, Latur	8390010964
140	Gaikwad Sidheshwar Vithal	Male	Mahatma Basweshwar Mahavidyalaya, Latur	7745864429
141	Karale Prashant Popat	Male	Mahatma Basweshwar Mahavidyalaya, Latur	9881533839
142	Yadav Abhaysinh Lahu	Male	Mahatma Basweshwar Mahavidyalaya, Latur	9503554773
143	Godse Prasad Pradeep	Male	Mahatma Basweshwar Mahavidyalaya, Latur	9423719430
144	Jadhav Shreyas Shrimant	Male	Mahatma Basweshwar Mahavidyalaya, Latur	9423234657
145	Kolhe Keshav Ramesh	Male	Mahatma Basweshwar Mahavidyalaya, Latur	9975088419
146	Yengure Aslam Ayub	Male	Mahatma Basweshwar Mahavidyalaya, Latur	9130737238
147	Gaikwad Mohini Bhausahab	Female	Mahatma Basweshwar Mahavidyalaya, Latur	9923434205
148	Wangaskar Ashwini prakash	Female	Mahatma Basweshwar Mahavidyalaya, Latur	9049719167
149	Surayawanshi Dnyaeshwari Sudhakar	Female	Mahatma Basweshwar Mahavidyalaya, Latur	9545563705
150	Jadhavar Rushikesh Shrihari	Male	Mahatma Basweshwar Mahavidyalaya, Latur	7038887755

Report -

Science Academies Three days Lecture Workshop was organized in Dayanand Science College, Latur during 24th to 26th December 2016. The Inaugral function of this workshop was held at 8.45 AM The convener of the workshop Dr. A.P Pathak was the chief guest , Principal J.S.Dargad & the resource person Dr. Prangnjit Ghosh IIT, Mumbai & another resource person Dr. R. Radha were present for the inaugural function A photograph copy of this function is enclosed over here prior to the function breakfast was given to all the students & then they have Registered their names & a bag ,(file), pen & Register was issued to them. Ten staff members of different subjects Physics,Chemistry & Mathematics have attended the workshop. The students of Dayanand Science College, Latur were (59), Rajarushi Sahu College, Latur (53), Yogeshwari Mahavidyalaya, Ambejogai were (7) & Sanjivini College, Chapoli were (6) & Mahatma Bashweshwar College Latur were (24) present for all the Three days of the workshop.We have given wide publicity to organization of the workshop by printing Brouchers & distributing it to all the

students along with registration from one month in advance. It was declared in different News papers also & hence there was very good response of the students.

Academic Report -

The periods were taken as per the time table by all the five Resource Persons.

1. Dr. A.P.Pathak Prof university of Hydrabad - 2 period (Physics)
2. Dr. Prangnjit Ghosh prof IIT, Mumbai - 5 periods (Chemistry)
3. Dr. R.Radha prof university of Hydrabad - 2 periods (Mathematics)
4. Dr. Joshtena Prajapat Prof university of Mumbai - 3 periods (Mathematics)
5. Dr. Suresh P.K Prof university of Hydrabad - 3 period (Physics)

They have completed the syllabus as given in the proposal. The actual teaching for 60 minutes & 15 minutes interaction with the students. The students were satisfied. The photographs while teaching in the seminar hall are enclosed. The Resource persons were also satisfied. The Resource persons were welcomed & were given Bags (file).The valedictory function was also arranged as is shown in time table, wherein the 4 students have expressed their views about the workshop & also about the lunch which was provided to all 150 students. The students feedback was appreciated by the Resource persons. Convener Dr. A.P. Pathak , Chief guest Dr. Josthena Prajapat & Principal, Dr. J.S.Dargad have also expressed their views about the workshop & in general about the organisation. Lastly the coordinator thanked all the Resource persons, students & Dr. T. D. Mahabaleshwara the coordinator of science educational panel of the Indian Academy of sciences Bangluru for sanctioning the proposal & providing funds in advance. The letter of attendance (Certificates) were distributed to all the students.

Few Suggestions :-

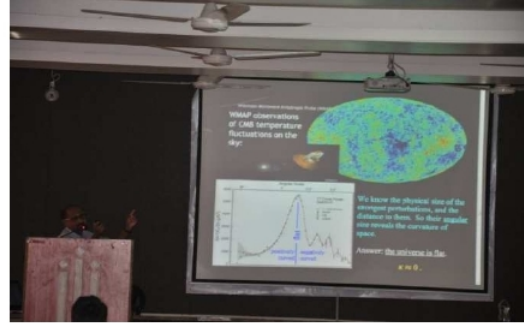
- 1) T.A. Bills given in the budget may be less or more. Request to sanction the T.A. Bills over & above the budget given because many resource persons travel by IInd A.C or Ist A.C & they claim the taxi charges from their residence to Railway Station & back which are more than the expected amount & we cannot refuse to pay.
- 2) Hotel charges (Lodging) Bills with Dinner, Breakfast etc is Rs.1250 per day per person.
But This is possible in Towns perhaps A.C. rooms with better accommodation & Dinner etc will not be sufficient amount of Rs. 1250/- Request to increase this amount, so that the resource persons will stay with comfort.

Photo Galary –











2] Lecturer Workshop on Conceptual Chemistry –

Coordinator

- Dr. Nanda S. Korde
Assistant Professor,
Chemistry Department
Dayanand Science College,
Latur-413512
Email: nandineekorde0@gmail.com

Convener

- Dr. A. P. Pathak
FNScA,
Professor,
School of Physics
University of Hyderabad
Hyderabad 500019
Mob. 09963423366
Email - anandp5@yahoo.com

Curriculum –

Organic Chemistry:

- I. Nanomaterials in Chemistry :** Introduction to nanochemistry, Principles of nanochemistry, properties of nanomaterials, carbon nano tubes, applications of nanomaterials,
- II. Bio-organic chemistry:** Introduction to bio-organic chemistry, chemical origins of biology, DNA, RNA, amino acids, peptides and protein structure, protein function, chemical approach to enzyme action.
- III. NMR Spectroscopy:** Introduction, principle of NMR spectroscopy, magnetic and non –magnetic nuclei, PMR-spectroscopy, equivalent and non-equivalent protons, shielding and non- shielding effects, chemical shift and its measurement by delta scale and tau scale, coupling constant (J-values), interpretation of PMR spectra

Physical Chemistry:

- I. **Electrochemistry** : Nernst equation, application of Nernst equation to oxidation half cell and reduction half cell, concentration cell with transference and without transference, application of emf measurement in determination of pH, potentiometric titrations.
- II. **Photocatalysis**: Introduction, photosynthesis, photocatalysis, photo electrochemical cell concepts, method of evaluation, photocatalyst systems, photocatalytic water splitting, photocatalysis for water splitting with sunlight.

Inorganic Chemistry :

Coordination chemistry : Valence bond theory(VBT) of coordination compound, inner orbital and outer orbital complexes of coordination number 4 and 6, limitation of VBT, Crystal Field Theory (CFT), splitting of d- orbital in octahedral complexes, tetrahedral complexes, tetragonal and square planar complexes, Crystal Field Stabilization Energy(CFSE), calculation of CFSE for octahedral and tetrahedral complexes, factors affecting magnitude of crystal field splitting, application of CFT, Jahn-Teller effect in octahedral complexes, limitation of CFT

List of Mentors -

Name and Addresses of Mentors

- 1) **Name** : **Prof. Dr. Sangita Sanjay Makone**
- Qualification** : M.Sc. M.Phil. Ph.D.
- Address** : Prof. & Director, School of Chemical Sciences,
S.R.T.M.U.Nanded Pin - 431606
- Residential Address** : Flat - 02, Matoshri Appt., Pundikwadi,
Mahaveer Chowk, nanded. Pin- 431601
- Mobile No.** : 9890373702
- E-mail Address** : ss_makone@rediffmail.com



2) Name : **Prof. Vivek Bobade**
Qualification : M.Sc., M.Phil., Ph.D.
Address : Gokhale Education Society's
H.P.T. Arts and R.Y. K. Science College,
Department of Chemistry Nashik.
Residential Address : 401, Asavari Apt., Indira Nagar Nashik - 422009.
Mobile No. : 9970499527
E-mail Address : v_bobade31@rediffmail.com



3) 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



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



5) **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



6) **Name** : **Dr. Gopinath C.**
Qualification : Ph.D.
Address : N.C.L. Pune
Residential Address : 702 Orange Life
140/2 Pashan Sus Road Pune - 411021
Mobile No. : 7028557277
E-mail Address : cs.gopinath@ncl.res.in



List of Participants –

Sr. No.	Name of the Students	Gender	Name of the College	Mobile No.
1	Salunke Amar Suresh	Male	Dayanand Science College, Latur	9421087756
2	Bhosale Shrihari Govind	Male	Dayanand Science College, Latur	9970716578
3	Patil Ajinkya Pradeep	Male	Dayanand Science College, Latur	8888738485
4	Patil Ashish Ajay	Male	Dayanand Science College, Latur	9405459746
5	Kukar Ramkrushna Laxman	Male	Dayanand Science College, Latur	7219344078
6	Pathan Arbazkhan Manzoorkhan	Male	Dayanand Science College, Latur	7385657854
7	Patil Ajay Vasantao	Male	Dayanand Science College, Latur	9421521121

8	Chavan Sandip Dinkar	Male	Dayanand Science College, Latur	9673449841
9	Wale Nishant Prabhuappa	Male	Dayanand Science College, Latur	7507021998
10	Udhale Bajrang Shivaji	Male	Dayanand Science College, Latur	9823047002
11	Jadhav Dagdusaheb Dnyanoba	Male	Dayanand Science College, Latur	8975286428
12	Shinde Shankar Gopal	Male	Dayanand Science College, Latur	7262817962
13	Murkute Shamsunder Laxman	Male	Dayanand Science College, Latur	8888760661
14	Bande Shastragan Dashrath	Male	Dayanand Science College, Latur	9145603205
15	Hallale Sandeep Dayanand	Male	Dayanand Science College, Latur	9145754468
16	Chate Govind Balasaheb	Male	Dayanand Science College, Latur	7219058699
17	Karad Shrikrishna Deepakrao	Male	Dayanand Science College, Latur	9604670361
18	Shidore Abhishek Virbhadra	Male	Dayanand Science College, Latur	9096936176
19	Deshmukh Prashant	Male	Dayanand Science College, Latur	7387915241
20	Jambkar Ranjeet Santosh	Male	Dayanand Science College, Latur	7757863368
21	Birajdar Suraj Revansiddha	Male	Dayanand Science College, Latur	8308399540
22	Rajput Ganesh Jagansingh	Male	Dayanand Science College, Latur	9730897452
23	Shaikh Irshad Chandpasha	Male	Dayanand Science College, Latur	7775905181
24	Suryawanshi Rohini Dattatray	Female	Dayanand Science College, Latur	9145730681
25	Mehetre Sushma Gyanoba	Female	Dayanand Science College, Latur	8806593638
26	Jadhav Suhubhangi Vasantao	Female	Dayanand Science College, Latur	9607482958
27	Kavya Komatwar	Female	Dayanand Science College, Latur	9011810403
28	Gaikwad Sneha Milind	Female	Dayanand Science College, Latur	9421133244
29	Patil Rupali Rajendra	Female	Dayanand Science College, Latur	9960115476

30	Malse Pratiksha Nivruti	Female	Dayanand Science College, Latur	7745852088
31	Chavan Arti Ram	Female	Dayanand Science College, Latur	9421435615
32	Manur Sumaiya Noorin Md. Iqbal	Female	Dayanand Science College, Latur	9511792481
33	Sabale Shrikant Vaijinath	Male	Dayanand Science College, Latur	9403870655
34	Tolmare Abhijit Shamppa	Male	Dayanand Science College, Latur	8668505755
35	Shaikh Ayesha Jalli	Female	Dayanand Science College, Latur	8888008033
36	Chaugule Rajkanya Shivaji	Female	Dayanand Science College, Latur	9075660602
37	Gulbile Rupali Balasaheb	Female	Dayanand Science College, Latur	9545442097
38	Birajdar Anuja Narshing	Female	Dayanand Science College, Latur	9767707453
39	Ubale Priya Sandipan	Female	Dayanand Science College, Latur	8668987604
40	Bhandare Sonali Netaji	Female	Dayanand Science College, Latur	9970376351
41	Kadam Monika Nandikumar	Female	Dayanand Science College, Latur	9146853021
42	Kshirsagar Dharti Satish	Female	Dayanand Science College, Latur	7558343024
43	Kadam Snehal Uttam	Female	Dayanand Science College, Latur	9657681405
44	Sarwade Pranjali Balasaheb	Female	Dayanand Science College, Latur	7057840668
45	Nagave Shrutika Suresh	Female	Dayanand Science College, Latur	9096039550
46	Ghughe Usha Balaji	Female	Dayanand Science College, Latur	9637647089
47	Rokade Prajakta Balaji	Female	Dayanand Science College, Latur	8806645659
48	Kohale Shilpa Sudarshan	Female	Dayanand Science College, Latur	9657387811
49	Gangotri Pooja Kashinath	Female	Dayanand Science College, Latur	7776851105
50	Jagtap Priyanka Pradip	Female	Dayanand Science College, Latur	7058951499
51	Pathan Ayesha Aziz Khan	Female	Dayanand Science College, Latur	8007900573

52	Jadhav Monika Dhondiram	Female	Dayanand Science College, Latur	8149770600
53	Kulkarni Vaishnavi Vikas	Female	Dayanand Science College, Latur	9309567126
54	Bajpai Amruta Narayanprasad	Female	Dayanand Science College, Latur	9421380144
55	Kale Varsha Vishnudas	Female	Dayanand Science College, Latur	8483850225
56	Chamle Madhurai Shyam	Female	Dayanand Science College, Latur	8600954407
57	Aradle Shital Yogiraj	Female	Dayanand Science College, Latur	8605703861
58	Shendge Pornima Vijaykumar	Female	Dayanand Science College, Latur	8007721135
59	Bhojne Ganesh Suresh	Male	Dayanand Science College, Latur	7709734228
60	Kadam Priti Ramraje	Female	Dayanand Science College, Latur	9923970121
61	Mane Pooja Panditrao	Female	Dayanand Science College, Latur	8408905669
62	Naik Sapna Uttamrao	Female	Dayanand Science College, Latur	9421374499
63	Dende Rastitrapal Bhagwat	Male	Dayanand Science College, Latur	9860167317
64	Chigure Dattatray Babasaheb	Male	Dayanand Science College, Latur	9665903403
65	Somwanshi Aniket H.	Male	Dayanand Science College, Latur	8975997549
66	Bhosale Vinod Achutrao	Male	Dayanand Science College, Latur	9158952547
67	Kale Rushikesh Bhaskar	Female	Dayanand Science College, Latur	9850999603
68	Bhise Dnyaneshwar Rajabhau	Male	Dayanand Science College, Latur	9404584026
69	Jangam Balaji Bapurao	Male	Dayanand Science College, Latur	9503578369
70	Bhujbal Gajanan Basweshwar	Male	Dayanand Science College, Latur	7038748209
71	Kadam Dipak Dilip	Male	Dayanand Science College, Latur	9096468084
72	Lahade Anjali Gajendra	Female	Dayanand Science College, Latur	9657681405
73	Shinde Rohini Ramesh	Female	Dayanand Science College, Latur	8482802500

74	Palsapure Vidhi Subhash	Female	Dayanand Science College, Latur	9822570998
75	Bachpalle Sanchita Prakash	Female	Dayanand Science College, Latur	7058851069
76	Shinde Padmavati Balaji	Female	Dayanand Science College, Latur	9075763676
77	Waghmare Archana Atmaram	Female	Dayanand Science College, Latur	8087373615
78	Cate Pranita Vinayak	Female	Dayanand Science College, Latur	8308108221
79	Devke Jayshree Uttamrao	Female	Dayanand Science College, Latur	8390268439
80	Akangire Naresh Dagdu	Male	Dayanand Science College, Latur	7709770887
81	Tamboli Shadab Sadik	Male	Dayanand Science College, Latur	8625954845
82	Kadere Vaibhav Vijaykumar	Male	Dayanand Science College, Latur	8421347638
83	Deshpande Darshan Rajkumar	Male	Dayanand Science College, Latur	8485823669
84	Waghmare Santosh Uttam	Male	Dayanand Science College, Latur	7758976719
85	Darfalkar Rupali Ramrao	Female	Dayanand Science College, Latur	7350679395
86	Patil Akash Dilip	Male	Dayanand Science College, Latur	9623812506
87	Sonkamble Vitthal Sanjiv	Male	Dayanand Science College, Latur	7249357683
88	Giri Ajinkya Ashokrao	Male	Dayanand Science College, Latur	8446959433
89	Kabade Kedareshwar Shivshankar	Male	Dayanand Science College, Latur	9767680391
90	Patil Suraj Ramakant	Male	Dayanand Science College, Latur	7558786660
91	Kondekar Abhay Ramesh	Male	Dayanand Science College, Latur	9766123388
92	Patil Vitthal Brahamanand	Male	Dayanand Science College, Latur	9970351408
93	Ringonkar Guptaling Atmaling	Male	Dayanand Science College, Latur	9096577940
94	Rakshe Kshitija Santosh	Female	Dayanand Science College, Latur	7387011675
95	Tarmude Amol Devidas	Male	Dayanand Science College, Latur	8329298172

96	Shaikh Shoaib Ahmad Aziz	Male	Yogeshwari Mahavidyalaya, Ambajogai	9975075163
97	Mane Savita Satish	Female	Yogeshwari Mahavidyalaya, Ambajogai	9834791698
98	Agale Pradnya Lalasaheb	Female	Yogeshwari Mahavidyalaya, Ambajogai	9527070266
99	Kale Pooja Sanjay	Female	Azad Mahavidyalaya, Ausa	7875740477
100	Yadav Pooja Baliram	Female	Azad Mahavidyalaya, Ausa	9146370564
101	Chavhan Sachin Narsing	Male	Azad Mahavidyalaya, Ausa	9172120943
102	Gaikwad Yogesh Vilas	Male	Azad Mahavidyalaya, Ausa	9130580824
103	Muske Vinod Bhart	Male	Azad Mahavidyalaya, Ausa	7741995733
104	Shaikh Nusrat Naimoddin	Female	Azad Mahavidyalaya, Ausa	8482962486
105	Karbhari Reshma Nabilal	Female	Azad Mahavidyalaya, Ausa	9823215452
106	Apsingekar Rasika Rajkumar	Female	Azad Mahavidyalaya, Ausa	8485860209
107	Shaikh Gulfam Ajaz	Female	Azad Mahavidyalaya, Ausa	9960295688
108	Shaikh Alim Mainoddin	Male	Azad Mahavidyalaya, Ausa	9552665528
109	Shaikh Farukh Begumiyar	Male	Azad Mahavidyalaya, Ausa	8806343326
110	Suryawanshi Jyoti Sharad	Female	Shri Kumarswami Mahavidyalaya,Ausa	9146347136
111	Bayas Mamta Gambhirsingh	Female	Shri Kumarswami Mahavidyalaya,Ausa	8421319018
112	Malwad Pooja Suresh	Female	Shri Kumarswami Mahavidyalaya,Ausa	9096794588
113	Chavan Aarti Giriraj	Female	Shri Kumarswami Mahavidyalaya,Ausa	9588472310
114	Panchal Kaushalya Ramesh	Female	Shri Kumarswami Mahavidyalaya,Ausa	9075952831
115	Gidde Mahejabin Gulam	Female	Shri Kumarswami Mahavidyalaya,Ausa	8600464045
116	Wade Saurabh Sanjay	Male	Shri Kumarswami Mahavidyalaya,Ausa	9890008954
117	Holkar Harikishan Gulabrao	Male	Shri Kumarswami Mahavidyalaya,Ausa	9168268740

118	Deshmukh Radhika Pramod	Female	Shri Kumarswami Mahavidyalaya,Ausa	9422649460
119	Tidake Ajay Nilkanth	Male	Shri Kumarswami Mahavidyalaya,Ausa	9168444029
120	Patil Manoj Rajendra	Male	Shri Kumarswami Mahavidyalaya,Ausa	8600732856
121	Bajulge Bhagyashree Abhang	Female	Shri Kumarswami Mahavidyalaya,Ausa	9503310279
122	Giri S.D.	Male	Shri Kumarswami Mahavidyalaya,Ausa	7776857508
123	Karanje A. R.	Male	Shri Kumarswami Mahavidyalaya,Ausa	9689699607
124	Murge Nagesh Umakant	Male	Shri Kumarswami Mahavidyalaya,Ausa	8149933869
125	Birajdar Nishigandha Balbhim	Female	Mahatma Basweshwar Mahavidyalaya, Latur	9921101151
126	Solanke Mohini Vasant	Female	Mahatma Basweshwar Mahavidyalaya, Latur	9552863574
127	Kharade Jyoti Bharat	Female	Mahatma Basweshwar Mahavidyalaya, Latur	9552388205
128	Sonwane Bhagyashri Madanrao	Female	Mahatma Basweshwar Mahavidyalaya, Latur	8806856371
129	Shinde Maya Hemanthrao	Female	Mahatma Basweshwar Mahavidyalaya, Latur	7448127682
130	Pare Pooja Sanjay	Female	Mahatma Basweshwar Mahavidyalaya, Latur	7972435627
131	Bharmaje Pranali Rachappa	Female	Mahatma Basweshwar Mahavidyalaya, Latur	7972378082
132	Rankhamb Nakshatra Rajesaheb	Female	Mahatma Basweshwar Mahavidyalaya, Latur	9518717071
133	Chaudhri Shivani Vilas	Female	Mahatma Basweshwar Mahavidyalaya, Latur	7620555755
134	Sankaye Madhuri Vinayak	Female	Mahatma Basweshwar Mahavidyalaya, Latur	7057674195
135	Bhuse Anant Babruwan	Male	Mahatma Basweshwar Mahavidyalaya, Latur	8999026915
136	Swami Pooja Omprakash	Female	Mahatma Basweshwar Mahavidyalaya, Latur	7721977416
137	Waghmare Narayan Suryakant	Male	Maharashtra Udaygiri Mahavidyalaya,Udgir	8554952177
138	More Nitin	Male	Maharashtra Udaygiri Mahavidyalaya,Udgir	9637223214
139	Ambengare Jaljakshi Laxmanrao	Female	Maharashtra Udaygiri Mahavidyalaya,Udgir	7249093651

140	Tilekar Deepali Vinod	Female	Maharashtra Udaygiri Mahavidyalaya,Udgir	8805676186
141	Mirza Nihalbaig Maulanabaig	Male	Maharashtra Udaygiri Mahavidyalaya,Udgir	7058637700
142	Kundgir Tulshidas Dnyanoba	Male	Maharashtra Udaygiri Mahavidyalaya,Udgir	9881898803
143	Dr. Hallale S. N.	Male	Maharashtra Udaygiri Mahavidyalaya,Udgir	7588390401
144	Jatal Priya Ravikant	Female	Shivaji Mahavidyalaya, Renapur	7057463940
145	Patil Pooja Bharat	Female	Shivaji Mahavidyalaya, Renapur	7057463940
146	Patil Shital Gopal	Female	Shivaji Mahavidyalaya, Renapur	9309144129
147	Jadhav Nikita Dattatraya	Female	Shivaji Mahavidyalaya, Renapur	7756852664
148	Madne Vishnu Govind	Male	Shivaji Mahavidyalaya, Renapur	7057783221
149	Kure Balaji Lahu	Male	Shivaji Mahavidyalaya, Renapur	7262935581
150	Kale Pravin M.	Male	Shivaji Mahavidyalaya, Renapur	8625089305
151	Swami Sacchidanand S.	Male	Shivaji Mahavidyalaya, Renapur	9503946834
152	Patnure Ravikant V.	Male	Shivaji Mahavidyalaya, Renapur	9049839785
153	Kale Akshay Ramesh	Male	Shivaji Mahavidyalaya, Renapur	9766939517
154	Dhole Asha Shivraj	Female	Shahu Mahavidyalay, Latur	8390734725
155	Shinde Shivratna	Male	Shahu Mahavidyalay, Latur	7410530058
156	Gurame Akash	Male	Shahu Mahavidyalay, Latur	9503414342

Report –

Indian Academy of Sciences, Bangalore, Indian National Science Academy, New Delhi, The National Academy of Sciences India, Allahabad, in the association with Dayanand Science College, Latur had successfully completed the three days Academies Lecture Workshop on “**Conceptual Chemistry**” in different emerging areas of chemical sciences for B. Sc. T. Y. students. The delegates from under graduation and college teachers had participated the workshop. The workshop is organized for three days

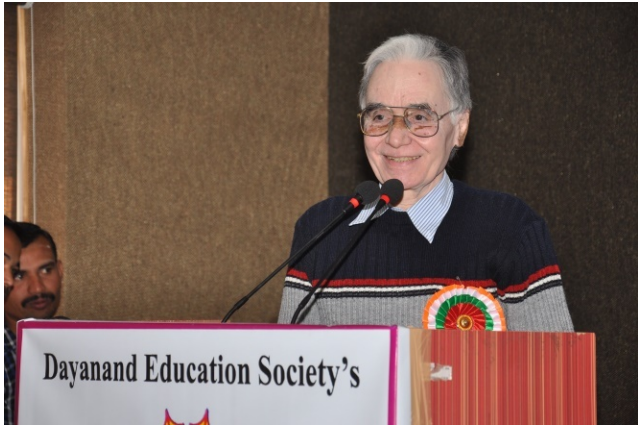
including of 12 sessions. Morning session 10am –1:15pm, lunch 1:15pm–2:15pm and an afternoon session 2:15pm – 5:30pm. A total of 156 student and teacher delegates attended the workshop. The delegates came from different colleges with our host institute Dayanand Science College Latur, Mahatma Basweshwar Mahavidyalaya, Latur, Rajarshi Shahu college Latur, Azad Mahavidyalaya, Ausa, Shri Kumarswami Mahavidyalaya, Ausa, Shri. Shivaji Mahavidyalaya, Renapur, Yogeshwari Mahavidyalaya, Ambajogai and Maharashtra Udaygiri Mahavidyalaya, Udgir. The resource persons came from university of Hyderabad, National Chemical Laboratory (NCL) Pune, IISER Pune, Swami Ramanand Terth Marathwada University, Nanded, H.P.T. Arts and R.Y.K. Science college, Nashik, Dnyanopasak college, Parbhani.

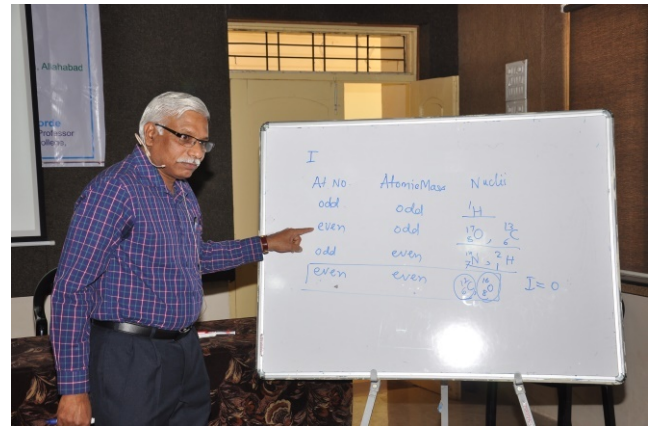
The workshop was started at 9:15am on 06-01-2018, Program was inaugurated by Chief Guest and Convener Prof. Anand Pathak. He spoke about the importance of basic science and he motivated the students to become good researchers and coordinator had given a brief introduction about the academic science workshop program and the Principal Dr. Jaiprakash Dargad spoke about the importance of the workshop. First session led by Prof. Anand Pathak delivered a lecture about nanotechnology and recent advances in nanotechnology in the later session he discussed about the nanomaterials in chemistry. Prof. Sangita Makone had given useful information of Electrochemistry. Second day sessions started by Prof. Vivek Bobade at 10 am delivered a talk on NMR Spectroscopy. Prof. Arvind Natu discussed about Bio-organic Chemistry. Third day sessions started by Prof. C. Gopinath at 10am delivered a talk on Photocatalysis. Prof. Bhimrao Khade discussed about Co-ordination Chemistry. In the concluding session the feedbacks were given by student delegates. They told that the program was helpful to them to learn recent inventions in the science spheres and all the speakers motivated them to learn lot of things in science. Vidhi Palsapure, the student of Dayanand Science College Latur expressed in her feedback that the organization in all was very fantastic including resource persons, lectures, hospitality, lunch, breakfast etc. She also expressed the overall impact of this workshop will be benifitable in future. Also students from other institutes give very positive feedback. The NMR Spectroscopy and Coordination Chemistry in particular of Dr. Vivek Bobade & Dr. Bhimrao Khade were highly impressive and interactive for the students. Organizing convener Prof. Anand Pathak, in his concluding remarks focused on the works of Science Academy's and had explained the role of Academy's motivation to the young generation towards the different aspects of pure science. The three day program highlighted the basic aspects in chemical sciences with recent ongoing research in the field. The workshop has been a very helpful for our young generations to learn the scientific achievements and to increase the scientific temper in the students. 65%

of the students are from local Latur colleges and 35% from rural village colleges. By conducting this program many of the students are delighted that they have got a bit of awareness about scientific research and inspired to take their career as a scientist in the future life. Principal, Coordinator, Staff and Management of Dayanand Science College, Latur are very thankful to all the three academies for the support through their sponsorship to the Science workshop and we hope you will be supporting us in future to conduct such type of useful and encouraging workshops to inspire the students of rural areas.

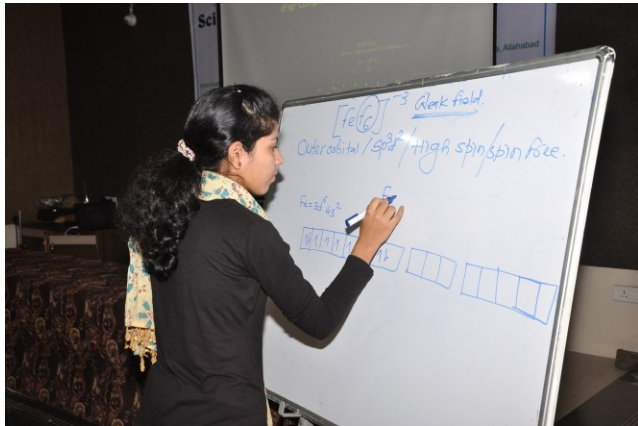
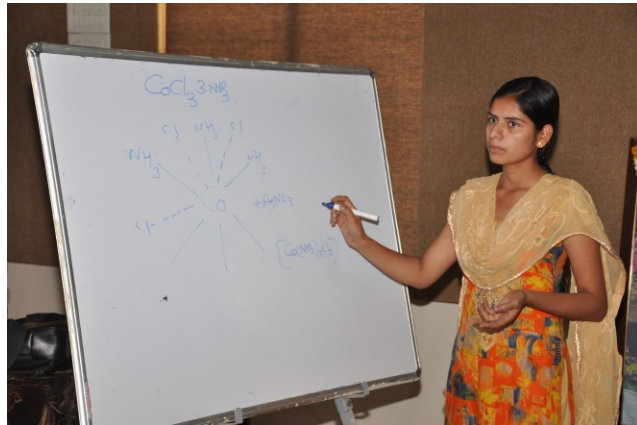
Photo Galary –



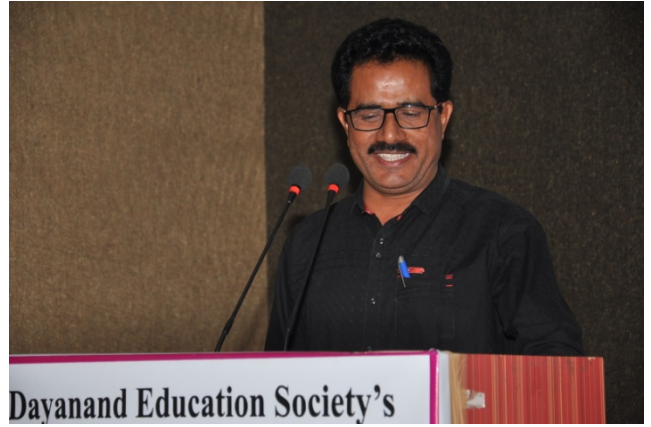












3] Lecturer Workshop on Theoretical Chemistry –

Coordinator

- **Dr. Nanda S. Korde**
Assistant Professor,
Chemistry Department
Dayanand Science College,
Latur-413512
Email: nandineekorde0@gmail.com

Convener

- **Dr. A. P. Pathak**
FNScA,
Professor, School of Physics, University of Hyderabad
Hyderabad 500019
Mob. 09963423366
Email - anandp5@yahoo.com

Curriculum –

- I. **Chemistry in nanoscience & technology** : Introduction to nanochemistry, Principles of nanochemistry, properties of nanomaterials, carbon nano tubes, applications of nanomaterials.
- II. **Bio-organic chemistry** : Introduction to bio-organic chemistry, chemical origins of biology, DNA, RNA, amino acids, peptides and protein structure, protein function, chemical approach to enzyme action.
- III. **Spectroscopy** : Introduction, principle of NMR spectroscopy, magnetic and non -magnetic nuclei, PMR-spectroscopy, equivalent and non-equivalent protons, shielding and non- shielding effects, chemical shift and its measurement by delta scale and tau scale, coupling constant(J-values), interpretation of PMR spectra
- IV. **Name reaction & rearrangements** : Favorskii reaction, Stork enamine reaction, Michael addition, Mannich reaction, Sharpless asymmetric epoxidation, ene reaction, Barton reaction, Hofmann Löffler-Freytag reaction, Shapiro reaction, Baeyer-Villiger reaction, Chichibabin reaction
- V. **Coordination chemistry of Transition Elements** : Valence bond theory(VBT) of coordination compound, inner orbital and outer orbital complexes of coordination number 4 and 6, limitation of VBT, Crystal Field Theory (CFT), splitting of d- orbital in octahedral complexes, tetrahedral complexes, tetragonal and square planar complexes, Crystal Field Stabilization Energy(CFSE),

calculation of CFSE for octahedral and tetrahedral complexes, factors affecting magnitude of crystal field splitting, application of CFT, John-Teller effect in octahedral complexes, limitation of CFT

- VI. **Electrochemistry** : Cell reactions, Nernst equation, redox systems, electrochemical cells; Debye-Huckel theory; electrolytic conductance – Kohlrausch’s law and its applications; ionic equilibria; conductometric and potentiometric titrations.

List of Mentors –

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



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**



List of Participants –

Sr. No.	Name of the Students	Name of the College	Mobile No.
1	SHINDE RUSHIKESH RAJESAHEB	DAYANAND SCIENCE COLLEGE, LATUR	7020267933
2	SAYYED ASEFALI SAYYED MUNAF	DAYANAND SCIENCE COLLEGE, LATUR	9156910066
3	ZADKE ATISH PRACHAND	DAYANAND SCIENCE COLLEGE, LATUR	7028339297
4	PAWAR SHUBHAM SATISH	DAYANAND SCIENCE COLLEGE, LATUR	7776806702
5	PATHAN NADEEM SALIM	DAYANAND SCIENCE COLLEGE, LATUR	7030686386
6	NAIK VAISHNAVI DEEPAKRAO	DAYANAND SCIENCE COLLEGE, LATUR	9975307582
7	SHAIKH SUGRABI AYUB	DAYANAND SCIENCE COLLEGE, LATUR	9960445986
8	KUKAR RAMKRUSHAN LAXMAN	DAYANAND SCIENCE COLLEGE, LATUR	7219344078
9	GAIKWAD SNEHA MILIND	DAYANAND SCIENCE COLLEGE, LATUR	9421133244
10	PATIL RUPALI RAJENDRA	DAYANAND SCIENCE COLLEGE, LATUR	7499116134
11	KOYALE VAISHALI PANDURANG	DAYANAND SCIENCE COLLEGE, LATUR	8888757113
12	CHAVAN ARTI GIRIRAJ	DAYANAND SCIENCE COLLEGE, LATUR	9588472310
13	PATWARI SHRADDHA SATISH	DAYANAND SCIENCE COLLEGE, LATUR	9421701303
14	GULBILE RUPALI BALASAHEB	DAYANAND SCIENCE COLLEGE, LATUR	9545442097
15	CHAUGLE RAJKANYA SHIVAJI	DAYANAND SCIENCE COLLEGE, LATUR	9545200197
16	DESHMUKH PRIYA NAGORAO	DAYANAND SCIENCE COLLEGE, LATUR	9604714264
17	DARFALKAR RUPALI RAMRAO	DAYANAND SCIENCE COLLEGE, LATUR	8698819541
18	JANGAM BALAJI BAPURAO	DAYANAND SCIENCE COLLEGE, LATUR	9834499127
19	SHAIKH IRSHAD CHANDPASHA	DAYANAND SCIENCE COLLEGE, LATUR	7775905181
20	KALE VARSHA VISHNUDAS	DAYANAND SCIENCE COLLEGE, LATUR	7559224207
21	KADAM PRITI RAMRAJE	DAYANAND SCIENCE COLLEGE, LATUR	9172968663
22	KHOSE NIKITA NAGORAO	DAYANAND SCIENCE COLLEGE, LATUR	8975867480
23	KULKARNI PRATIKSHA GOPALRAO	DAYANAND SCIENCE COLLEGE, LATUR	7767887099
24	GHODAKE SUWARNA KASHINATH	DAYANAND SCIENCE COLLEGE, LATUR	7517294635
25	PATIL MAHADEVI KALIDAS	DAYANAND SCIENCE COLLEGE, LATUR	7219858161
26	BASTAPURE RUTUJA RAVINDRA	DAYANAND SCIENCE COLLEGE, LATUR	7757881520
27	MALSE PRATIKSHA NIVRUTI	DAYANAND SCIENCE COLLEGE, LATUR	9604673724
28	KALAM SHASHIKANT ANGADRAO	DAYANAND SCIENCE COLLEGE, LATUR	9767160199
29	ARADLE SHITAL YOGIRAJ	DAYANAND SCIENCE COLLEGE, LATUR	8605703861
30	TELI MEENA MAHADEV	DAYANAND SCIENCE COLLEGE, LATUR	7083441146
31	PATIL PRATIKSHA ANANTRAO	DAYANAND SCIENCE COLLEGE, LATUR	9970208306
32	BAHIRE PRAJAKTA KHANDU	DAYANAND SCIENCE COLLEGE, LATUR	8806753602
33	KAMBLE SNEHAL KIRAN	DAYANAND SCIENCE COLLEGE, LATUR	9108929612
34	KOMATWAR KAVYA SUDHIR	DAYANAND SCIENCE COLLEGE, LATUR	9011810403
35	DHUMALE AKASH DATTATRAYA	DAYANAND SCIENCE COLLEGE, LATUR	9096352262
36	MULLA SALIM TALAP	DAYANAND SCIENCE COLLEGE, LATUR	9604497868
37	WAGHMORE RESHMA JYOTIRAM	DAYANAND SCIENCE COLLEGE, LATUR	9637880576
38	TALE PRITAM GUNDERAO	DAYANAND SCIENCE COLLEGE, LATUR	8308531782

39	SURYAWANSHI SHIVLILA RANGNATH	DAYANAND SCIENCE COLLEGE, LATUR	7249269215
40	PATIL SHIVAPRIYA DINKARRAO	DAYANAND SCIENCE COLLEGE, LATUR	7745849592
41	POTDAR AKSHAYKUMAR DEVANAND	DAYANAND SCIENCE COLLEGE, LATUR	8530130093
42	KADAM SUNIL NANDKUMAR	DAYANAND SCIENCE COLLEGE, LATUR	8007676311
43	BURASPATTE VIKAS SHIVAJI	DAYANAND SCIENCE COLLEGE, LATUR	7066064748
44	KULKARNI PRASHANT SHRINIVAS	DAYANAND SCIENCE COLLEGE, LATUR	7020801248
45	JADHAV MONIKA DHONDIRAM	DAYANAND SCIENCE COLLEGE, LATUR	9112030957
46	BIRAJDAR NIKHIL SHRIKANTRAO	DAYANAND SCIENCE COLLEGE, LATUR	8805893954
47	PATIL AKASH DILIP	DAYANAND SCIENCE COLLEGE, LATUR	8888738485
48	MULE VARASHA SHIVDARSHAN	DAYANAND SCIENCE COLLEGE, LATUR	9373207823
49	DIGE SHIVANI ANIL	DAYANAND SCIENCE COLLEGE, LATUR	9284253016
50	ARJUNE GOVARDHAN BHAUSAHEB	DAYANAND SCIENCE COLLEGE, LATUR	9637913628
51	MALKUNJE SONALI RAJENDRA	DAYANAND SCIENCE COLLEGE, LATUR	9890572331
52	GARAD PRATIMA JAIDEVRAO	DAYANAND SCIENCE COLLEGE, LATUR	9527691882
53	SWAMI POOJA SHIVKUMAR	DAYANAND SCIENCE COLLEGE, LATUR	8605388744
54	PATIL MOHINI RAJKUMAR	DAYANAND SCIENCE COLLEGE, LATUR	8788402551
55	DHEKANE N. S.	DAYANAND SCIENCE COLLEGE, LATUR	9011758258
56	VYAS NISHA	DAYANAND SCIENCE COLLEGE, LATUR	-
57	SHAIKH MAINODDHI YUNUS	DAYANAND SCIENCE COLLEGE, LATUR	9970383948
58	BHOSALE DIPAK RAMCHANDRA	DR. B.A.M.U. SUB. CENTER OSMANABAD	7767959507
59	BANSODE BALAJI HARIDAS	DR. B.A.M.U. SUB. CENTER OSMANABAD	9834142967
60	BIRAJDAR RAMCHANDRA SHASHIKANT	DR. B.A.M.U. SUB. CENTER OSMANABAD	9637910177
61	DHADKE SUSHMA SHIVLING	DR. B.A.M.U. SUB. CENTER OSMANABAD	8605673234
62	GHODKE ABHAY LIMBRAJ	DR. B.A.M.U. SUB. CENTER OSMANABAD	8605974669
63	HAVAL NITIN BALASAHEB	DR. B.A.M.U. SUB. CENTER OSMANABAD	9168473282
64	PAWAR SHRIKANT HANUMANT	DR. B.A.M.U. SUB. CENTER OSMANABAD	9975261370
65	VER PRANAV PRADEP	DR. B.A.M.U. SUB. CENTER OSMANABAD	9527919492
66	MANE KAUSTUBH BABHIMRAO	DR. B.A.M.U. SUB. CENTER OSMANABAD	9158103661
67	JADHAV BAJRANG SURESH	DR. B.A.M.U. SUB. CENTER OSMANABAD	9657294113
68	KAMBLE SUDHAKAR LADAPPA	DR. B.A.M.U. SUB. CENTER OSMANABAD	8579018519
69	KUMBHAR MANGESH RAM	DR. B.A.M.U. SUB. CENTER OSMANABAD	9657199976
70	PAWAR SHRIRAM BHAGWAN	DR. B.A.M.U. SUB. CENTER OSMANABAD	9764832644
71	PATIL VAIBHAV VILASRAO	DR. B.A.M.U. SUB. CENTER OSMANABAD	9657649615
72	SALUNKE SOMESH SIDDHESHWAR	DR. B.A.M.U. SUB. CENTER OSMANABAD	8605024438
73	PAWAR VINOD VISHWANATH	DR. B.A.M.U. SUB. CENTER OSMANABAD	8308313882
74	RAUT PRASHANT SHRIKISAN	DR. B.A.M.U. SUB. CENTER OSMANABAD	7559180461
75	THONGE PRITI SADASHIV	DR. B.A.M.U. SUB. CENTER OSMANABAD	7380813862
76	GURAV SHITAL ANIL	DR. B.A.M.U. SUB. CENTER OSMANABAD	9579501917
77	VEDPATHAK ASHWINI ASHOK	DR. B.A.M.U. SUB. CENTER OSMANABAD	7350368803

78	JADHAV AKASH YASHWANT	DR. B.A.M.U. SUB. CENTER OSMANABAD	9860576395
79	YADAV PRASHANT ARUN	DR. B.A.M.U. SUB. CENTER OSMANABAD	9960279785
80	SURVASE TRUPTI LAXMAN	DR. B.A.M.U. SUB. CENTER OSMANABAD	7722039117
81	BHISE POOJA VINYAK	DR. B.A.M.U. SUB. CENTER OSMANABAD	8530021078
82	SHAIKH ASHPAK AYUB	DR. B.A.M.U. SUB. CENTER OSMANABAD	-
83	GUND PORNIMA NAVNATH	DR. B.A.M.U. SUB. CENTER OSMANABAD	9284465983
84	BORADE SOMNATH ARJUN	DR. B.A.M.U. SUB. CENTER OSMANABAD	-
85	JADHAV SHANKAR BANUDAS	DR. B.A.M.U. SUB. CENTER OSMANABAD	9820999592
86	INGLE PRFULL PRALHAD	DR. B.A.M.U. SUB. CENTER OSMANABAD	8600051026
87	WAYKAR SHRAD SANJAY	DR. B.A.M.U. SUB. CENTER OSMANABAD	9923467854
88	KALKOTE SUMIT SANJAYRAO	MAHARASHTRA UDYAGIRI MAHAVIDYALAYA, UDGIR	8081092599
89	MANIYAR SHAKHLEN KHALIL	MAHARASHTRA UDYAGIRI MAHAVIDYALAYA, UDGIR	7387326086
90	MANE MUKESH SANJEEV	MAHARASHTRA UDYAGIRI MAHAVIDYALAYA, UDGIR	9049396469
91	BHEDE SATISH DHONDIRAM	MAHARASHTRA UDYAGIRI MAHAVIDYALAYA, UDGIR	9158779615
92	BIRADAR YESHWANT SHIVDAS	MAHARASHTRA UDYAGIRI MAHAVIDYALAYA, UDGIR	8308175973
93	BIRAJDAR AAKSHY SHANTIVEER	RAJARSHI SHAHU COLLEGE, LATUR	9850966268
94	KADAM AARTI DILIRAO	RAJARSHI SHAHU COLLEGE, LATUR	9503298064
95	NIHAL MIRZA	RAJARSHI SHAHU COLLEGE, LATUR	7058637700
96	MASKE SURAJ SANJAY	RAJARSHI SHAHU COLLEGE, LATUR	9975569374
97	JADHAV DATTATRYA SADASHIV	RAJARSHI SHAHU COLLEGE, LATUR	7796807180
98	PATIL SUSHMA BALASAHEB	RAJARSHI SHAHU COLLEGE, LATUR	9130409869
99	GURME ANKITA HANMANT	RAJARSHI SHAHU COLLEGE, LATUR	7083049842
100	MANE MUKTA BHASKAR	RAJARSHI SHAHU COLLEGE, LATUR	8411882841
101	DAITHNE PREMLA SITARAM	RAJARSHI SHAHU COLLEGE, LATUR	8007483790
102	JADHAV ROHINI SAHEBRAO	RAJARSHI SHAHU COLLEGE, LATUR	9850037564
103	SURYAWANSHI YOGITA DHANAJI	RAJARSHI SHAHU COLLEGE, LATUR	9420976006
104	BIRADAR PRASHANT VENKATRAO	RAJARSHI SHAHU COLLEGE, LATUR	8600951094
105	HENDGE ABHIJIT TUKARAM	RAJARSHI SHAHU COLLEGE, LATUR	7020006730
106	MORE NITIN SATISH	RAJARSHI SHAHU COLLEGE, LATUR	9637223214
107	SOMWANSHI ASHWINI GOPINATH	RAJARSHI SHAHU COLLEGE, LATUR	8329003668
108	THORAT JAGRUTI RAJABHAU	RAJARSHI SHAHU COLLEGE, LATUR	8788287104
109	ADODE AAKSHTA GANESH	RAJARSHI SHAHU COLLEGE, LATUR	9767671269
110	MAYBONE MANOJ VINAYAK	RAJARSHI SHAHU COLLEGE, LATUR	9552354816
111	TOLANURE SIDRAM CHANDRAM	RAJARSHI SHAHU COLLEGE, LATUR	8999358667
112	DHANURE SAMRIN MUKRAM	RAJARSHI SHAHU COLLEGE, LATUR	7038381565
113	KHURPE KAVITA PIRPASHA	RAJARSHI SHAHU COLLEGE, LATUR	7709637827
114	DESHMUKH HARISH BABRUWAN	RAJARSHI SHAHU COLLEGE, LATUR	8668370958
115	MURME ARBAJ MAHEBOOB	RAJARSHI SHAHU COLLEGE, LATUR	9075842482

116	NILANGEKAR MRUDULA ANANTRAO	RAJARSHI SHAHU COLLEGE, LATUR	9665665941
117	SHELKE AAKASH DILIPRAO	RAJARSHI SHAHU COLLEGE, LATUR	9623303770
118	GIRI PADMANABH RAMKRUSHN	RAJARSHI SHAHU COLLEGE, LATUR	8625919468
119	MALI POOJA PANDURANG	RAJARSHI SHAHU COLLEGE, LATUR	9359858859
120	SAYYED NISHANT AKBAR ALI	RAJARSHI SHAHU COLLEGE, LATUR	8308409364
121	SAYYAD NUSRAT MUNWAR ALI	RAJARSHI SHAHU COLLEGE, LATUR	8180073972
122	MONORE SHRADHA ANIL	RAJARSHI SHAHU COLLEGE, LATUR	8087830218
123	PACHBHAI MEGHA HANUMANT	RAJARSHI SHAHU COLLEGE, LATUR	9545954487
124	DIXIT AISHWARYA VIKAS	RAJARSHI SHAHU COLLEGE, LATUR	9960562550
125	HALIKAR DURGA ARVIND	RAJARSHI SHAHU COLLEGE, LATUR	8999734817
126	DETHNE POOJA SHIVAKUMAR	RAJARSHI SHAHU COLLEGE, LATUR	7838507787
127	SURWANSHI SWATI PRAKASH	RAJARSHI SHAHU COLLEGE, LATUR	9767729588
128	WANKHEDE GITANJALI VIDHYASAGAR	RAJARSHI SHAHU COLLEGE, LATUR	8956526039
129	GOUND OM RAMESHWAR	RAJARSHI SHAHU COLLEGE, LATUR	9049533632
130	DESHMUKH SAYALI PARMANAND	RAJARSHI SHAHU COLLEGE, LATUR	9172899918
131	RAJWAD SAMBHAJI SHIVAJI	RAJARSHI SHAHU COLLEGE, LATUR	7770065646
132	TAMBRE MOHINI MAHESH	RAJARSHI SHAHU COLLEGE, LATUR	9511850033
133	CHOPADEV ROHINI GOVARDHAN	RAJARSHI SHAHU COLLEGE, LATUR	8624976369
134	YAMULWAD MAHADEV HANMANT	RAJARSHI SHAHU COLLEGE, LATUR	9561157626
135	PATIL SHEWTA SATISH	RAJARSHI SHAHU COLLEGE, LATUR	9172900254
136	KHOT SHUBHAM TANAJI	RAJARSHI SHAHU COLLEGE, LATUR	7387425324
137	MIRKALE SANGMESHVAR SUKHDEV	RAJARSHI SHAHU COLLEGE, LATUR	9975043285
138	DHONDDEV SNEHLATA SUNIL	RAJARSHI SHAHU COLLEGE, LATUR	7709957435
139	BHANDARE AKSHAY ATMARAM	RAJARSHI SHAHU COLLEGE, LATUR	9970929471
140	DAHIPHE POOJA SHOKRAO	RAJARSHI SHAHU COLLEGE, LATUR	9764218192
141	BHANGE S. T.	RAJARSHI SHAHU COLLEGE, LATUR	9422612370
142	PATEL SHAIKH AFRA NAVEED	SHIVAJI COLLEGE UDGIR	9511781022
143	QURESHI HUERA	SHIVAJI COLLEGE UDGIR	7410173002
144	ALISHA JAIN	SHIVAJI COLLEGE UDGIR	8087532863
145	PATHAN INAMA T. W.	SHIVAJI COLLEGE UDGIR	7219031744
146	BIRADAR ASHWINI GOPALRAO	SHIVAJI COLLEGE UDGIR	9421380934
147	CHAVAN KAILAS BHIMRAO	SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED	8380976548
148	KULKARNI NILESH NAGESHRAO	YOGESHWARI MAHAVIDYALAYA AMABAJOGAI	9096766834
149	MANE KRISHNA SANJAY	YOGESHWARI MAHAVIDYALAYA AMABAJOGAI	9112046102
150	HARNAWAL ATUL BIBHISHAN	YOGESHWARI MAHAVIDYALAYA AMABAJOGAI	9096953626
151	SHAIKH ABED GULAB	YOGESHWARI MAHAVIDYALAYA AMABAJOGAI	9970631362
152	SHAIKH SALIM LATEEB	YOGESHWARI MAHAVIDYALAYA AMABAJOGAI	9561668855

Reports –

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 Chremical Sciences, Swami Ramanand Teert Marathwad University, Nanded

The workshop was inaugurated on 5th 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: 05.01.2019	
Resource Person	Topic
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: 06.01.2019	
Resource Person	Topic
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: 07.01.2019	
Resource Person	Topic
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 Marathwada 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 7th 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.

Photo Galary –

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



4] Lecturer Workshop on Mathematics –

Coordinator

- **R. H. Ladda**
Ex. Principal
Bhagyanagar, Old Ausa Raod,
Latur (Maharashtra)
Mob. 9420436904
Email rhladda@gmail.com

Convener

- **Dr. Sudhir R. Ghorpade**
Department of Mathematics
I.I.T. Bombay, Powai, Mumbai 400076
Mob. 9892768162
Email: srg@math.iitb.ac.in

Curriculum –

Number Theory : Review of basic notions: Divisibility, Linear Diophantine equations, Congruences. Arithmetical functions: Examples. Mobius inversion, Multiplicative functions. Quadratic residues, Law of quadratic reciprocity.

Algebra : Review of basic notions from Group Theory. Group actions, Sylow's Theorems. Applications.

Linear Algebra: Review of basic notions: Systems of linear equations, finite dimensional vector spaces, bases, matrices and linear transformations. Eigenvalues and eigenvectors. Notion of diagonalization. Diagonalization of real symmetric matrices. Examples and applications.

Real Analysis : Sequences of real numbers. Bolzano-Weierstrass Theorem and Cauchy Completeness Continuity. Basic theorems for real-valued continuous functions of a real variable. Differentiability. Mean-Value Theorem and Taylor's Theorem. Quick outline of Riemann integration. Fundamental Theorem of Calculus.

Mechanics : Generalised coordinates; Hamilton's canonical equations; Variational Principles-Hamilton's principles and principles of least action; Two dimensional motion of rigid bodies;

List of Mentors –

Name and Addresses of Mentors

- 1) **Name** : **Prof. Dr. Sudhir R. Ghorpade**
- Qualification** : Ph.D.
- Address** : IIT Powai, Mumbai 400076.
- Residential Address** : B-270 Nilgiri, IIT Powai, Mumbai 400076.
- Mobile No.** : 9892768162
- E-mail Address** : srg@math.iitb.ac.in



- 2) **Name** : **Prof. Dr. Nitin Nitsure**
- Qualification** : Ph.D.
- Address** : TIFR, Mumbai - 400005.
- Residential Address** : TIFR, Mumbai - 400005.
- Mobile No.** : 9869020788
- E-mail Address** : nitsure@math.tifr.res.in



List of Participants –

SR. NO	NAME OF THE STUDENTS	NAME OF COLLEGE	MOBILE NO.
1	SURYAWANSHI PRATIBHA CHANDRAKANT	DAYANAND SCIENCE COLLEGE, LATUR	9075909604
2	SHAIKH ALTAMASBANU BABA	DAYANAND SCIENCE COLLEGE, LATUR	9527413869
3	PATIL AMOL BABASAHEB	DAYANAND SCIENCE COLLEGE, LATUR	9922156559
4	RABBA BASANINGAPPA SIDDAPPA	DAYANAND SCIENCE COLLEGE, LATUR	9922028407
5	DUDHANI VINAYAK MALLINATH	DAYANAND SCIENCE COLLEGE, LATUR	8788828297
6	PATIL UDHAV ASHOKRAO	DAYANAND SCIENCE COLLEGE, LATUR	8605430446
7	JAGTAP YOGITA YOGIRAJ	DAYANAND SCIENCE COLLEGE, LATUR	9890090302
8	SHINDE SONALI RAMAKANT	DAYANAND SCIENCE COLLEGE, LATUR	7744045793
9	WAGHE RUPALI SURYAKANT	DAYANAND SCIENCE COLLEGE, LATUR	9921371038
10	KACHAVE PADMEEN PURBAJI	DAYANAND SCIENCE COLLEGE, LATUR	7397815725
11	PATIL POONAM BALAJI	DAYANAND SCIENCE COLLEGE, LATUR	8600217909
12	HAMBIR ANJALI GANRAJ	DAYANAND SCIENCE COLLEGE, LATUR	9112482331
13	DONGRE PRERNA SANJAY	DAYANAND SCIENCE COLLEGE, LATUR	9404660225
14	NIMAT SHUBHANGI NANASAHEB	DAYANAND SCIENCE COLLEGE, LATUR	9763275950
15	BEG AQSA TARNNUM BEGAM YUSUFSAB	DAYANAND SCIENCE COLLEGE, LATUR	8007627424
16	PUNE ANKITA CHANDRASHEKHAR	DAYANAND SCIENCE COLLEGE, LATUR	8552868262
17	BIRADAR PRIYANKA CHANDRAKANT	DAYANAND SCIENCE COLLEGE, LATUR	7447859399
18	LAHADE ANJALI GAJENDRA	DAYANAND SCIENCE COLLEGE, LATUR	9516688711
19	BAGWAN TAHESIN AYYAJ	DAYANAND SCIENCE COLLEGE, LATUR	9156299294
20	SARWADE AMOL GAJENDRA	DAYANAND SCIENCE COLLEGE, LATUR	7350878268
21	NADE MOHINI DATTATRAYA	DAYANAND SCIENCE COLLEGE, LATUR	9579814230
22	BAJPAI AMRUTA NARAYANPRASAD	DAYANAND SCIENCE COLLEGE, LATUR	9325247536
23	PATIL VAISHNAVI KAMKAKAR	DAYANAND SCIENCE COLLEGE, LATUR	9766913261
24	BHANDARE SONALI NETAJI	DAYANAND SCIENCE COLLEGE, LATUR	9970376351
25	BAGWAN ALISHA SHAKIL	DAYANAND SCIENCE COLLEGE, LATUR	7038863719
26	KARADKAR VARSHA JALINDAR	DAYANAND SCIENCE COLLEGE, LATUR	8275206945
27	JANGAM SUBHADRA RAM	DAYANAND SCIENCE COLLEGE, LATUR	9075266998
28	DUBE SHILPA BABUPRASAD	DAYANAND SCIENCE COLLEGE, LATUR	9422964522
29	SAYED NAWAL ATEEQUESAB	DAYANAND SCIENCE COLLEGE, LATUR	7620260321
30	PATHAN NAVEED AHMADKHAN	DAYANAND SCIENCE COLLEGE, LATUR	8600184008
31	KALBURGE MAHESH CHANDRAKANT	DAYANAND SCIENCE COLLEGE, LATUR	9175333088
32	PADWAL NEHA NETAJI	DAYANAND SCIENCE COLLEGE, LATUR	9689961011
33	CHAVAN PRATIKSHA VITTHAL	DAYANAND SCIENCE COLLEGE, LATUR	9653244461
34	UPADE NISHINGANDHA BHANUDASRAO	DAYANAND SCIENCE COLLEGE, LATUR	9766405605
35	NAWALE MAYURI GAJANAN	DAYANAND SCIENCE COLLEGE, LATUR	7350504712

36	SHAIKH JULEKHA GHUDUSAB	DAYANAND SCIENCE COLLEGE, LATUR	9623123190
37	PAWAR VAIBHAVI MAROTIRAO	DAYANAND SCIENCE COLLEGE, LATUR	7517398405
38	DHAGE DNYANESHWARI BHARAT	DAYANAND SCIENCE COLLEGE, LATUR	9673573115
39	JAMADAR GOKULSING BALASINGH	DAYANAND SCIENCE COLLEGE, LATUR	8975757138
40	PAWLE YOGESH SAHEBRAO	DAYANAND SCIENCE COLLEGE, LATUR	8007283427
41	BHIMPURE SANKET RAVIKANT	DAYANAND SCIENCE COLLEGE, LATUR	7066258995
42	PATIL TIRUPATI SURSHRAO	DAYANAND SCIENCE COLLEGE, LATUR	9595899456
43	UBALE PRIYA SANDIPAN	DAYANAND SCIENCE COLLEGE, LATUR	8668987604
44	KANADE MOHINI ANIL	DAYANAND SCIENCE COLLEGE, LATUR	8605832045
45	MUSTAPURE PRAKASH DIGAMBAR	DAYANAND SCIENCE COLLEGE, LATUR	9545204804
46	KHANDARE PRAVIN RAMAKANT	DAYANAND SCIENCE COLLEGE, LATUR	9503257284
47	NARWADE PRADIP GANGADHAR	DAYANAND SCIENCE COLLEGE, LATUR	9370131852
48	RAMESHWARE MANGESH AVINASH	DAYANAND SCIENCE COLLEGE, LATUR	7767023448
49	GULAMKAR SHITAL BHAJANDAS	DAYANAND SCIENCE COLLEGE, LATUR	9518572084
50	MAKUDE SAPNA DAJI	DAYANAND SCIENCE COLLEGE, LATUR	9527329799
51	MULADE POOJA PRAKASH	DAYANAND SCIENCE COLLEGE, LATUR	7218087646
52	THAKUR MRUNALINI NAYANSINH	DAYANAND SCIENCE COLLEGE, LATUR	9423029493
53	BIRADAR PRIYA RAMESHRAO	DAYANAND SCIENCE COLLEGE, LATUR	8378882800
54	DHEKANE PRITI HANUMANT	DAYANAND SCIENCE COLLEGE, LATUR	7218969390
55	KADAM PUJA SUNIL	DAYANAND SCIENCE COLLEGE, LATUR	8805127730
56	KAMBLE YASHODHARA PIRAJI	DAYANAND SCIENCE COLLEGE, LATUR	9665965361
57	GALAVE APPASO CHHAGAN	DAYANAND SCIENCE COLLEGE, LATUR	8381086460
58	RATHOD POOJA SANGRAM	DAYANAND SCIENCE COLLEGE, LATUR	9975305607
59	RODE SUSMITA JYOTIRAM	DAYANAND SCIENCE COLLEGE, LATUR	7758094865
60	GAIKWAD MINAKSHI MARUTI	DAYANAND SCIENCE COLLEGE, LATUR	7757854011
61	PAWAR VARSHA SIDDHESHWAR	DAYANAND SCIENCE COLLEGE, LATUR	9923011435
62	BIRADAR SHRADHA DINKAR	DAYANAND SCIENCE COLLEGE, LATUR	9689282199
63	HARKE TEJASWINI SHIVLING	DAYANAND SCIENCE COLLEGE, LATUR	7083195087
64	MANE CHAITANYA SHIVAJI	DAYANAND SCIENCE COLLEGE, LATUR	9146954456
65	KORAKE MONALI VIJAYKUMAR	DAYANAND SCIENCE COLLEGE, LATUR	8600326280
66	PISE PRIYANKA SAVATA	DAYANAND SCIENCE COLLEGE, LATUR	9665367422
67	SHAIKH TABBASUM RAFEEK	DAYANAND SCIENCE COLLEGE, LATUR	
68	CHIVADSHETTI RAJSHREE PIRAPPA	DAYANAND SCIENCE COLLEGE, LATUR	8805835745
69	CHAT SUJATA VASANTRAO	DAYANAND SCIENCE COLLEGE, LATUR	8275604052
70	MANISHA DATTATRI NIDWANICHE <i>karnatak</i>	DAYANAND SCIENCE COLLEGE, LATUR	7758929988
71	DAHIPHALE GANGADHAR DATTATRAYA	DAYANAND SCIENCE COLLEGE, LATUR	8668313295
72	MAHESH BALAJIRAO KALE	DAYANAND SCIENCE COLLEGE, LATUR	9923950695

73	GUNDRE SHRADHA NIVARATI	DAYANAND SCIENCE COLLEGE, LATUR	9823927462
74	DARODE JYOTI RAMBHAU	DAYANAND SCIENCE COLLEGE, LATUR	7743853237
75	MOMDGE PALLAVI PRAKASH	DAYANAND SCIENCE COLLEGE, LATUR	9175037530
76	BALDAWA RADHIKA HARIPRASAD (LECTURER)	DAYANAND SCIENCE COLLEGE, LATUR	8999040981
77	HEKAR ASHVINI UMAKANT (LECTURER)	DAYANAND SCIENCE COLLEGE, LATUR	8408083478
78	SHIVPRASAD PRABHU BIRAJDAR (LECTURER)	DAYANAND SCIENCE COLLEGE, LATUR	9421500515
79	POUL KRANTI SANJIV (LECTURER)	DAYANAND SCIENCE COLLEGE, LATUR	7057404289
80	ANGUL OMPRAKASH NARAYAN (LECTURER)	DAYANAND SCIENCE COLLEGE, LATUR	9730516090
81	DEVANE RENUKA SANJAY (LECTURER)	DAYANAND SCIENCE COLLEGE, LATUR	9970205465
82	RONGE POOJA KAKASAHEB	DAYANAND SCIENCE COLLEGE, LATUR	9673763099
83	CHANDE ANJALI ASHOKRAO	DAYANAND SCIENCE COLLEGE, LATUR	7385124152
84	KAUDGAVE SWATI KERABA	DAYANAND SCIENCE COLLEGE, LATUR	7066963646
85	BHOSALE ANUJA ANIL	DAYANAND SCIENCE COLLEGE, LATUR	9637726348
86	PAWAR JYOTI SOPAN	DAYANAND SCIENCE COLLEGE, LATUR	8975394802
87	SATHE TEJASHRI MANIKRAO	DAYANAND SCIENCE COLLEGE, LATUR	7387883941
88	BAKAL SATISH BHANUDAS	DAYANAND SCIENCE COLLEGE, LATUR	9822424903
89	PAWAR KAJAL BALASAHEB	DAYANAND SCIENCE COLLEGE, LATUR	7057740728
90	KSHIRSAGAR KIRAN ANKUSH	DAYANAND SCIENCE COLLEGE, LATUR	9552758244
91	MANE KALPANA ASHOK	MAHATMA BASWESHWAR COLLEGE, LATUR	7720828550
92	BUDDE SHUBHANGI PRALHAD	MAHATMA BASWESHWAR COLLEGE, LATUR	9922238972
93	UMBARGE SHITAL SHIVAJI	MAHATMA BASWESHWAR COLLEGE, LATUR	9373009056
94	JADHAV VAIJANATH VITTHALRAO	MAHATMA BASWESHWAR COLLEGE, LATUR	9657575439
95	HAGARE RAHUL MADHUKAR	MAHATMA BASWESHWAR COLLEGE, LATUR	9503875082
96	KULKARNI AJIT MAHADEV	MAHATMA BASWESHWAR COLLEGE, LATUR	8552029079
97	WANGASKAR ASHWINI PRAKASH	MAHATMA BASWESHWAR COLLEGE, LATUR	9049719167
98	CHAUDHARY AYUBMASTAN WAHID	MAHATMA BASWESHWAR COLLEGE, LATUR	9420847416
99	DHAKNE PRADIP NARSING	MAHATMA BASWESHWAR COLLEGE, LATUR	8806017892
100	CHITTE VIJAYALAXMI MALLINATH	MAHATMA BASWESHWAR COLLEGE, LATUR	8329177748
101	WALE NISHANT PRABHUAPPA	MAHATMA BASWESHWAR COLLEGE, LATUR	9284911641
102	SOLUNKE SHARDHA SATYWAN	MAHATMA BASWESHWAR COLLEGE, LATUR	9309823576
103	PAWAR SHYAM SHIVAJI	MAHATMA BASWESHWAR COLLEGE, LATUR	7776863183
104	NIPANIKAR TEJASHREE SUDHAKAR	MAHATMA BASWESHWAR COLLEGE, LATUR	7517883958
105	TONDARE HARSHADA SUBHASH	MAHATMA BASWESHWAR COLLEGE, LATUR	9689331222
106	MISHRA POOJA SHUBHAKAR	MAHATMA BASWESHWAR COLLEGE, LATUR	8655063066
107	GANEWAD SHITAL VITTHALRAO	MAHATMA BASWESHWAR COLLEGE, LATUR	8830552433

108	CHOGULE PRIYA BHIMRAO	MAHATMA BASWESHWAR COLLEGE, LATUR	9970130073
109	HINDOLE MEERA NAGNATH	MAHATMA BASWESHWAR COLLEGE, LATUR	7387225455
110	MUGAVE DHANSHRI BABURAO	MAHATMA BASWESHWAR COLLEGE, LATUR	7588613205
111	SURKUTLAWAR SUPRIYA NARAYAN	N.E.S. SCIENCE COLEGE SHEH NAGAR NANDED	8007528512
112	MAKA SHRADHA RAMESH	N.E.S. SCIENCE COLEGE SHEH NAGAR NANDED	7350053963
113	MAYUR SUDHAKAR NAPTE	N.E.S. SCIENCE COLEGE SHEH NAGAR NANDED	9011109329
114	CHAMANTWAR AKSHATA BABURAO	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7720881052
115	BUVA ANJU DNYANESHWAR	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8637702339
116	WAKALE PRADNYA CHANDRAKANT	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9370937549
117	FADNIS SHRUTI AKNATH	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9922236826
118	SHINDE MOHINI BHASKAR	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9881815411
119	SANGULE SNEHA NAORAO	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8766467885
120	KAPALE NANADESHWAR DIGAMBARAO	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9850450517
121	TELANGHE PARMESHWAR MAROTI	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9763629382
122	MANE OMPRAKASH UMAJI	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8208669333
123	GUNALE VAIBHAV RAJENDRA	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9309557643
124	SAGAR DINKARAO SHINDE	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7028003836
125	MADAVAKAR RESHMA ANIL	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8412988010
126	PHAD ANITA BHASKAR	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9637294978
127	SONWANE BHAGYASHRI MADANRAO	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8698185948
128	JADHAV MANISHA RAMESH	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9370509962
129	SHELKE PALLAVI BALAJI	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8793784074
130	GAVHANE AJIT VYANKATRAO	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7757083466
131	APSINGEKAR SUSMITA SUNIL	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9764860996
132	BIRAJDAR APARNA SHIVDAS	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9552272390
133	KESGIRE KANCHAN JANARDHAN	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8554848040
134	MALKALPATTE SUSMITA AJIT	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7083371225
135	JADHAV MAYA VISHVANATH	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7773952145

136	QURAIISHI HEENA KAUSAR DASTAGEER	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7378455842
137	JOGADE POOJA MAHADEV	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8412975052
138	JADHAV SHYAMSUNDR VITTHAL	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9766221058
139	SOLANKE MOHINI VASANT	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9552863574
140	GURME AKASH SURESH	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9503414342
141	WAGHMARE VAIBHAV JANARDHAN	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8999343783
142	JONDHALE SHUBHAM VAIJNATH	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8605810180
143	KALE PRATIKSHA PRADEEP	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9763831582
144	BHADANGE MOHINI RAJKUMAR	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8600849212
145	BAWALGE POOJA PANDITRAO	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7066748803
146	GURME GOPIKISHAN GANGADHAR	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9421316099
147	SONWANE VISHNU RAJENDRA	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7249603469
148	PATIL SHUBANGI PANDURANGRAO	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7218435409
149	LAKAL SHWETA NANASAHEB	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7219861777
150	KADAM SAKSHI UDDHAVRAO	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8408837496
151	MOHITE AKSHAY SAHEBRAO	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8805249677
152	MATHPATI RUPALI NAGNATH	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9284713498
153	TATE KIRAN MADHUKAR	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7066331715
154	CHAME PRATIKSHA SATYAWAN	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9075401740
155	YENGE PUJA MURHARI	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9767195393
156	THORAT MOHINI BALAJI	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8237917362
157	TIRAMPALLE PRIYANKA PANJABRAO	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9763676135
158	MORE JAYSHRI SURESH	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8975869045
159	PANDHARE AMOL BHARAT	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7028252434
160	PATIL BALAJI RAJENDRA	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	9766315732
161	BANSODE AKSHAY KAKASAHEB	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8485864883
162	PATIL ARTI SHRINIVASRAO	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	8412870077

163	HOLIKAR SANJIVANI BHALACHANDRA	RAJARSHI SHAHU MAHAVIDYALAYA, LATUR	7264969995
164	RAMPURE GANESH	SCHOOL OF MATHEMATICS S.R.T.M.U.NANDED	9766983944
165	SHINDE SANDIP UDDHAV	SCHOOL OF MATHEMATICS S.R.T.M.U.NANDED	8788600576
166	PAWAR PRATIKSHA RAMKISHAN	SCHOOL OF MATHEMATICS S.R.T.M.U.NANDED	9975420250
167	RAMPURE GANESH PRATAP	SCHOOL OF MATHEMATICS S.R.T.M.U.NANDED	9766983944
168	KHOSE HSUBHAM BAHUSAHEB	SCHOOL OF MATHEMATICS S.R.T.M.U.NANDED	8793808550
169	CHATTE BHAGYASHRI DATTRAO	SCHOOL OF MATHEMATICS S.R.T.M.U.NANDED	7741952062
170	GUNJAL INDRAJEET PANDURANG	SCHOOL OF MATHEMATICS S.R.T.M.U.NANDED	9730517697
171	GOSAVI SHAILAJA RAJABHAU	SCHOOL OF MATHEMATICS S.R.T.M.U.NANDED	9148232748
172	METE GANGADHAR BALAJI	SCHOOL OF MATHEMATICS S.R.T.M.U.NANDED	9637307443
173	PATIL SNEHA VIKAS	SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED	9588448198
174	RAJAMWAD NILKANTH HANMANT	SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED	8600961088
175	THAKARE SATISH BHAGWANRAO	SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED	8237572396
176	MUNESHWAR SUSHIL DNYANESHWAR	SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED	9284114807
177	HAKE RAJASHRI VISHNU	YOGESHWARI MAHAVIDHYALAY, AMBAJOGAI	8805098772
178	BORAGE BHAGYSHREE DATTATRAY	YOGESHWARI MAHAVIDHYALAY, AMBAJOGAI	8421567012
179	KHULE ANITA SHAMKUMAR	YOGESHWARI MAHAVIDHYALAY, AMBAJOGAI	9763670049
180	HAKE ARTI CHANDRAKANT	YOGESHWARI MAHAVIDHYALAY, AMBAJOGAI	7020613390

Reports –

The Broucher were printed and were posted to different Colleges and Universities in Maharashtra for publicity. Accordingly 180 Registration forms were received. On 11th Jan. 2019, 153 students have registered their names. File, Register, Pen and Time-Table etc. were given to these registered participants. There are 50 students from Rajarshi Shahu College, Latur, 10 Students from Mahatma Basweshwar College, Latur, 89 Students from Dayanand Science College, Latur, 4 students from Yogeshwari College,

Ambajogai and 16 students from S.R.T.M. University and other colleges from Nanded list of students from different colleges is enclosed .



Three Resource Persons were invited. At the 11th hour Dr. Jugal Verma has refused to come. Hence Dr. Sudhir R. Ghorpade and Dr. Nitin Nitsure have covered all the Topics 1) Algebra, Linear Algebra 2) Mechanics, 3) Number Theory and 4) Real Analysis as per Time – Table. The abstract of their topics covered are enclosed.

As per new suggestions we have obtained the feedback forms on the topics taught of the participants are also enclosed. Students of M.Sc. Part I, Part II have participated and have shown active part by interacting with the resource persons by asking different questions. Few problems were also solved.



Hard copies of the photographs are also enclosed while Teaching the Resource Persons in the class and such other few photographs. Notes given by resource persons on certain topics are Xeroxed and circulated to all students.

In a valedictory function 5 students have expressed their views about the Three Days Workshop. Attendance letters were issued to all the students. Dr. Sudhir Ghorpade and Dr. Nitin Nitsure have expressed their views about the Workshop. Principal Dr. J. S. Dargad has mentioned about the Refresher Courses and the Workshops, Inspire Camps etc during this Academic Year 2018-19 and how there were beneficial to the staff and students. Dr. S. S. Bellale Head Dept. of Maths and Vice-Principal were also present. At last I must thank to the coordinator. Ravikumar and Geetha madam for providing the funds and other necessary information on behalf of Indian Academy of Sciences Bangaluru.

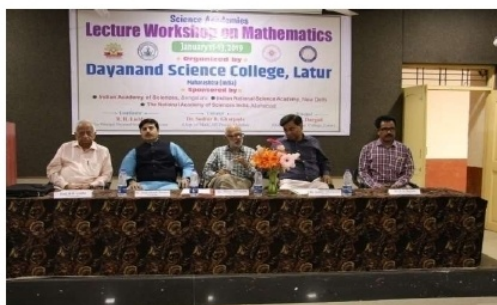


Photo Galary –

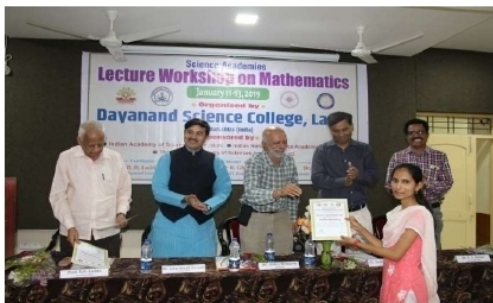
Glimpses of Science Academic Mathematics Workshop - 2019 at Dayanand Science College, Latur Jan. 11-13, 2019



Glimpses of Science Academic Mathematics Workshop - 2019 at Dayanand Science College, Latur Jan. 11-13, 2019



Glimpses of Science Academic Mathematics Workshop - 2019
at Dayanand Science College, Latur
Jan. 11-13, 2019



5] Virtual Lecturer Workshop on Quantum Mechanics and Electronics - (01st to 03rd Jan. 2021)

Coordinator	–	R. H. Ladda Ex. Principal Bhagyanagar, Old AUSA Raod, Latur (Maharashtra) Mob. 9420436904 Email rhladda@gmail.com
Convener	–	Dr. Rajaram Nitayananda
Organizer	–	Dr. J. S. Dargad, Principal, Dayanand Science College, Latur

Curriculum –

UNIT I : Quantum Mechanics :-

Quantum Mechanics in Twenty first century ‘technology’, Atomic clocks and the GPS, Two level system of quantum mechanics.

UNIT II : Microwaves and Measurements

Microwave Active Devices :-

Klystron, Reflex Klystron, Velocity modulation, Basic principle of magnetron, Principles and operations of magnetrons and traveling wave tube, Transfer electron devices, Gunn diode, Pin diode.

Microwave Passive Devices :-

Rectangular wave guide, Circular wave guide, Microwave cavities, Microwave hybrid circuit, Directional coupler, Circulators and ferrit devices, Attenuators, Scattering matrix, Isolators.

List of Mentors –

Name and Addresses of Mentors

1) **Name** : **Prof. Dr. Rajaram Nitayananda**
FNA, FASc,
Qualification : M.Sc. Ph.D.
Address : Faculty Member, IISER College, Pune
Residential Address : -
Mobile No. : 9611789391
E-mail Address : rajaram.nityananda@apu.edu.in



2) **Name** : **Prof. Dr. Shashikala Gangal**
Ex. Prof. Emeritus (UGC)
Qualification : M.Sc. Ph.D.
Address : Ex. ISRO Chair Professor
Ex- Prof & Head, Dept. of Electronics Science,
Savitribai Phule University, Pune.
Residential Address : -.
Mobile No. : 9881309279
E-mail Address : sagangal@gmail.com



3) Name : Prof. Dr. Vijaya Puri
UGC Research Scientist 'C'

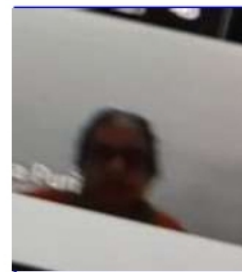
Qualification : M.Sc. Ph.D.

Address : UGC Research Scientist 'C' (Professor)
 Department of Physics,
 Shivaji University Kolhapur 416004. INDIA.

Residential Address : -

Mobile No. : 9922240559

E-mail Address : viyayapuri1@gmail.com



List of Participants –

SR. NO.	NAME OF PARTICIPANT	COLLEGE NAME
1	AMOL VYAVHARE	DAYANAND SCIENCE COLLEGE, LATUR
2	ARCHANA GIRI	DAYANAND SCIENCE COLLEGE, LATUR
3	ARTI MORE	DAYANAND SCIENCE COLLEGE, LATUR
4	ASHWINI DHANADE	DAYANAND SCIENCE COLLEGE, LATUR
5	BABYSUMAIYA SHAIKH	DAYANAND SCIENCE COLLEGE, LATUR
6	DARSHAN DESHPANDE	DAYANAND SCIENCE COLLEGE, LATUR
7	DR JAIPRAKASH DARGAD	DAYANAND SCIENCE COLLEGE, LATUR
8	DR. R. H. LADDA	DAYANAND SCIENCE COLLEGE, LATUR
9	GANESH MALEGAONKAR	DAYANAND SCIENCE COLLEGE, LATUR
10	GANESH PAWAR	DAYANAND SCIENCE COLLEGE, LATUR
11	KANCHAN DAPKE	DAYANAND SCIENCE COLLEGE, LATUR
12	LAHU KATHWATE	DAYANAND SCIENCE COLLEGE, LATUR
13	LALIT THAKRE	DAYANAND SCIENCE COLLEGE, LATUR
14	MANALI DALIMBE	DAYANAND SCIENCE COLLEGE, LATUR
15	MANE ASHWINI	DAYANAND SCIENCE COLLEGE, LATUR

16	MANISHA MATHPATI	DAYANAND SCIENCE COLLEGE, LATUR
17	MEERA SHINDE	DAYANAND SCIENCE COLLEGE, LATUR
18	MEHRAJ SAYYAD	DAYANAND SCIENCE COLLEGE, LATUR
19	MOHINI PATIL	DAYANAND SCIENCE COLLEGE, LATUR
20	NARENDRA SOLANKE	DAYANAND SCIENCE COLLEGE, LATUR
21	NAZIYA SHAIKH	DAYANAND SCIENCE COLLEGE, LATUR
22	NIKHIL HARE	DAYANAND SCIENCE COLLEGE, LATUR
23	NISHIGANDHA GHOGARE	DAYANAND SCIENCE COLLEGE, LATUR
24	PALLAVI SONAWANE	DAYANAND SCIENCE COLLEGE, LATUR
25	PRADIP KAWALE	DAYANAND SCIENCE COLLEGE, LATUR
26	PRANITA CHAFE	DAYANAND SCIENCE COLLEGE, LATUR
27	PRAPTI WAGHMARE	DAYANAND SCIENCE COLLEGE, LATUR
28	RADHIKA VYAS	DAYANAND SCIENCE COLLEGE, LATUR
29	RAKESHKUMAR KAMBLE	DAYANAND SCIENCE COLLEGE, LATUR
30	ROHINI SHINDE	DAYANAND SCIENCE COLLEGE, LATUR
31	SACHIN KADAM	DAYANAND SCIENCE COLLEGE, LATUR
32	SANDHYARANI SOMWANSHI	DAYANAND SCIENCE COLLEGE, LATUR
33	SHANTESHWAR DODKE	DAYANAND SCIENCE COLLEGE, LATUR
34	SHUBHANGI JADHAV	DAYANAND SCIENCE COLLEGE, LATUR
35	SHWETA LOKHANDE	DAYANAND SCIENCE COLLEGE, LATUR
36	SHWETA MANE	DAYANAND SCIENCE COLLEGE, LATUR
37	SUDARSHAN KAWADE	DAYANAND SCIENCE COLLEGE, LATUR
38	SWITI JADHAV	DAYANAND SCIENCE COLLEGE, LATUR
39	ULAGADDE KEDAR RAJKUMAR	DAYANAND SCIENCE COLLEGE, LATUR
40	VAISHALI CHANDAK	DAYANAND SCIENCE COLLEGE, LATUR
41	VITTHAL MULE	DAYANAND SCIENCE COLLEGE, LATUR
42	YATENDRA DIXIT	DAYANAND SCIENCE COLLEGE, LATUR
43	YOGESH KURHADE	DAYANAND SCIENCE COLLEGE, LATUR
44	DR. RAJARAM NITYANAND	IISER PUNE
45	ABHIJIT YADAV	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
46	ABHIMANYU KSHIRSAGAR	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
47	ALANGE TEJASHRI ARUN	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
48	ANNAPURNA BACHATE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.

49	ARCHANA UGILE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
50	BHOJANE PRADIP	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
51	BIRAJDAR NAMRATA SHIVAJI	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
52	BIRAJDAR PARMESHWAR	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
53	BUSHARA KOTWAL	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
54	CHINCHBANKAR SWATI SUBHASHRAO	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
55	DAYANAND RAJE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
56	DHUMAL PRASAD	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
57	GAJANAN UDBALE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
58	HAWALDAR MAYURI VENKATRAO	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
59	JAGTAP MAYURI HANMANT	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
60	KINNARI SHENDGE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
61	KRANTI BHOSALE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
62	KSHITIJA SUTAR	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
63	MALLIKARJUN BISE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
64	MANISHA RAUT	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
65	MARUTI KUMBHAR	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
66	MORE GITANJALI	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
67	NIKHIL BAWASKAR	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
68	NILESH CHAWALE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
69	OMPRASAD KSHIRSAGAR	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
70	PATIL RUTUJA ANKUSH	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
71	POOJA GANGOTRI	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
72	PRANAV BURNAPALLE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
73	RAVI BIRAJDAR	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.

74	RUSHIKESH NATHBONE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
75	SAMRIN SHAIKH	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
76	SAYYAD HAIDAR	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
77	SHAIKH HIRAM NIJAM	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
78	SHITAL PATIL	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
79	SHRADHA BOYANE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
80	SHUBHANGI SOMWANSHI	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
81	SUMIT BESKE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
82	SWAPNIL BHORDE	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
83	SWAPNIL UNDALKAR	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
84	THORAT POONAM VYANKATESH	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
85	VAISHNAVI PATIL	RAJARSHI SHAHU MAHAVIDYALA (AUTONOMOUS),LATUR.
86	DR. VIJAYA PURI	SHIVAJI UNIVERSITY, KOLHAPUR
87	ASHOK PADAMPALLE	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
88	AVINASH MALI	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
89	DIVYA ARBALE	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
90	HARIKISHAN HOLKAR	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
91	KAILASH METI	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
92	MANISHA SABANE	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
93	MARUTI PANDHARE	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
94	NAGESH GIRI	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
95	SAKSHI NALDURGKAR	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
96	SANDEEP PATIL	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
97	SATYEWAN NELWADE	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
98	SHAHURAJ PAWAR	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
99	SIDDHESHWAR SUBHEDAR	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
100	VAIBHAV SURWASE	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
101	VIRAYYA SWAMI	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
102	VISHWAJEET PATIL	SHRI. CHHATRAPATI SHIVAJI COLLEGE, OMERGA.
103	DR. SHASHIKALA GANGAL	SPPU, PUNE

Report –

The proposal for the Virtual Workshop was submitted to the Academy on 1st Oct. 2020 for sanction.

The Three days Virtual Workshop when it was approved on 24th December 2020. Then, I have to ask each Resource Persons about allotment of articles in the given Topics in the Proposal. Dr. Rajaram Nitayananda has expressed his inability to take 6 periods as was accepted initially. Hence those Two periods are allotted to Dr. Shashikala Gangal as extra periods, while framing the Time-Table. After preparing the Time-Table it was sent to the Three Resource Persons and to the Principals of Rajarshi Shahu College , Latur and Shri Chhatrapati Shivaji College Omerga and Asked them to gie list of participating students from M.Sc. Physics classes. Rajarshi Shahu College has given a list of 63 students, Shri Chhatrapati Shivaji College Omerga has given list of 20 students and from Dayanand Science College 53 students. Total participants are **136**.

We have informed Resource persons for a Demo (To check up) the connectivity with the given-link on 27th December 2020 at 5=00pm.

Also we have informed all the students for the demo on 30, 31 December 2020 at 11=00 am.

So, that there shouldn't be any difficulty in the regular periods. Formal inauguration was also declared in the Time-Table only and accordingly principal of Dayanand Science College, Latur Dr. J. S. Dargad, The organizer of the workshop, the chief guest and convener of the workshop Dr. Rajaram Nitayananda and myself have expressed the views regarding this Virtual Workshop and about the Academies providing the funds for organizing such workshops, seminars etc. was also explained to the students. The importance and opportunities in the subject of Quantum Mechanics and Electronics in their future carrier was explained to the students.

In virtual workshop I find certain difficulties of internet problem some times, problems in the mobiles of students having 2 GB data and charging etc on the very first day last period of Dr. Shashikala Gangal was completed within 15 minutes because of there internet problem. I have requested her to complete the Title of that period 4=15 to 5=15 pm the next day i.e. 02.01.2021 at 9.30 am. At an earlier time and students were informed accordingly.

The complete syllabus given in the proposal was covered by all the Resource persons Few Photographs are enclosed of the resource persons while teaching and few other photographs are also enclosed. Ten staff members of local two colleges hae attended this workshop. Principal of the college

Dr. J. S. Dargad, Dr. Rohini Shinde, Dr. Lalit Thakre and Prof. Shweta Lokhande and Shri. Vishnu Naikwade have cooperated and helped me in organizing the workshop successfully. Supporting Documents to the statements in the report are enclosed herewith. There was problem with Dr. Shashikala Gangal may be internet, or Laptop but on 02.01.2021 also but She covered the timetable by having extra time and covered the given topics. Everything was completed satisfactorily. The publicity was given by giving news in a state level papers about the Virtual Workshop in Quantum Mechanics and Electronics. The cuttings of the News paper are enclosed. Letter of attendance will be issued to the participants to those who have attended the workshop. The feedback and request for letter of attendance from few students are enclosed herewith.

Suggestions :-

- 1) I have to state that it will be better if you sanction the proposal at least fortnight earlier than the start of the workshop, so that we can get enough time to communicate and manage everything in a better way.
- 2) Also local supporting staff members will have to be paid an Honorarium. Otherwise it becomes very difficult for the co-coordinator alone to manage everything of the course. The staff will have assistance to the co-coordinator, but they avoid by saying I have got my regular work etc. in general.
- 3) Face to face (Actual) Workshops will be more effective than there tiring virtual workshops where there will no direct control on students to attend and so on. This is alright because of covid19.
- 4) Advance amount should be paid at least for payment of Resource Persons otherwise you can pay directly to them by getting list and amount to be paid. Local payments can be paid afterwards as such where from the payment can done.

I express my thanks to Ravikumar and Geetha Madam for getting sanction of our proposals of Workshop.

Photo Galary –

