



Ph : 080 - 26933221

BHS HIGHER EDUCATION SOCIETY

## VIJAYA COLLEGE

R V ROAD, BASAVANAGUDI, BANGALORE - 560 004

(ACCREDITED BY NAAC WITH 'B' GRADE &  
RECOGNIZED BY UGC AS CPE)

EMAIL ID :

principal@vijayacollege.ac.in

### Chemistry workshop



**BHS Higher Education Society**  
Jayanagar 4th Block Bangalore 11

**Vijaya College**  
R.V. Road, Bangalore - 4

*Two days workshop on "Hands-on training  
on Laboratory equipment and instrumentation"  
for faculty and Research scholars.*

Organised jointly by  
**Department of Chemistry  
and Biochemistry  
Vijaya college**  
R.V. Road, Basavanagudi, Bangalore-4  
and  
**Equiptronics, Mumbai**

In association with  
**DOS in Chemistry and Biochemistry  
BCU, BU & BNU, Chemistry Teachers Forum  
Bangalore University.**

**12<sup>th</sup> & 13<sup>th</sup> March 2019**

To, \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

From  
Dept. of Chemistry and Biochemistry  
Vijaya College, R.V. Road  
Basavanagudi, Bangalore - 04



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Organised jointly by  
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In association with  
**DOS in Chemistry and Biochemistry**  
**BCU, BU & BNU**  
**Chemistry Teachers Forum**  
Bangalore University.

**Date: 12th March 2019 and 13th March 2019**  
**Venue: Indoor Auditorium, Vijaya College**





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**About the College**  
Vijaya College was established in 1945 by BHS Higher Education Society situated in Basavanagudi. It is a well known landmark in South Bangalore. Known for its green nature & traditional culture, Vijaya College is an undergraduate and postgraduate institute for Science and Commerce, nurturing the needs of student community over a period of 70 years of its purposeful existence. Vijaya College is growing from strength to strength and is one of the best learning centres in Karnataka.  
College is accredited by NAAC in 2017 with B' grade and has CPE status.

**About Equipronics**  
With 38 years of experience in designing, innovation, expertise and skill the highly experienced team of equipronics has been working for the design, development and supply of reliable and cost effective digital instruments for analytical chemistry. The management of company has agreed to give support to the workshop and the company is deputed their expert team to show and share their rich experience in the workshop.

**About the Workshop**  
The workshop will focus on design and use of instruments along with frequently encountered problems while using the instruments. The faculty and Research Scholars will be trained in operation, calibration and safe handling of the instruments.  
The following instruments will be used for workshop purpose.

**pH meter**  
Digital Conductivity meter  
Digital Potentiometer  
Digital Colorimeter  
UV - Visible Digital Spectrophotometer  
Digital TDS meter.  
Digital Polarimeter  
Digital Photo Flourimeter

**9.30am to 10.30am**  
**10.30am to 11.45am**  
**Chief guest**

**Registration**  
**Inauguration**  
**Dr M. Pandurangappa**  
Chairman  
Department of  
Studies in Chemistry  
Bengaluru Central  
University

**Keynote Address**  
**A Novel Non Glass**  
**pH Sensor**  
**Dr. Ananth .K Atre**  
Dean, Vijaya College  
Joint secretary  
BHSHES

**President**  
**Prof. H. S. Balakrishna**  
Principal, Vijaya  
College, R.V. Road

**In the Presence of**  
**Mr M. Badshah**  
Chief advisor to  
CEO  
Equipronics Mumbai

**Chairman**  
**Prof. L. Jayakumar**  
H.O.D. Department  
of Chemistry & Bio  
Chemistry

Coffee / Tea Break  
11.45 to 12.00 noon

Session 1  
12.00pm to 1.30pm  
Video presentation on instrumentation, maintenance  
and application by Mr M. Badshah, Chief advisor to  
CEO Equipronics, Mumbai.

Lunch Break:  
1.30pm to 2.00pm

Session -2 | Session -3  
2.00pm to 3.30pm | 3.30pm to 5.00pm  
Hands on experience on application of instruments

**B.Sc. Biochemistry First Semester Biochemist**  
Unit-I 13 hr

**Day - 2 13-3-2019**

Session 1  
**10.30am to 11.45am**  
**Hands on experience on application of instruments**

Coffee / Tea Break  
11.45 to 12.00 noon

Session 2  
**12.00pm to 1.30pm**  
**Hands on experience on application of instruments**

Lunch Break:  
1.30pm to 2.00pm

Session 3  
**02.00pm to 3.00pm**  
**Group Discussion**

**3.00 to 4:30 p.m**  
**Chief guest**

**Valedictory function**  
**Dr V. R. Devaraj**  
Chairman, DOS  
Biochemistry  
Bengaluru Central  
University

**President**  
**Dr R. V. Prabhakara**  
Joint Secretary,  
BHSHES

**In the presence of**  
**Prof. H. S. Balakrishna**  
Principal, Vijaya  
College, R.V. Road  
Bangalore

**OOD FACILITY IS AVAILABLE**  
**Organizing Committe**

Chairman  
**Prof. L. Jayakumar**

Members  
**Prof. Kathyayini .S**

Convenor  
**Dr. Mahesh Arvind**

Organizing Secretary  
**Prof. Sarvamangala .M**

Treasurer  
**Prof. Srikanta .A .S**

**Prof. Jayashree .P**

**Prof. Lokesh .Y .C**

**Prof. Jyothi .R. Kumar**

**Prof. M. S. Ravindranath**

*you are welcome*

Contact : 9844411794 / 9481481545



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**BHS Higher Education Society**

Jayanagar 4th Block Bangalore 11

**Vijaya college RV Road Bangalore 4**

***Two days workshop on'hands on training on  
Laboratory equipment and instrumentation for  
faculty and Research scholars.***

Organised jointly by

**Department of chemistry and biochemistry Vijaya college**

RV road Basavanagudi Bangalore 4

and

**Equiptronics Mumbai**

In Association with

**DOSin Chemistry and Biochemistry BCU , BNU , BU .BANGALORE**

**Chemistry teachers forum Bangalore University.**

**Date:** 12 March 2019 and 13 March 2019

**Venue:** indoor Auditorium Vijaya college.

### **About the college**

Vijaya college was established in 1945 by BHS Higher Education Society situated in Basavanagudi is a well known landmark in South Bangalore. Known for its green nature and traditional culture. Vijaya college is an undergraduate and postgraduate institution for Science and Commerce , nurturing the needs of student community over a period of 70 years of its purposefull existence Vijaya college is growing from length to strength and is one of the best learning centres in Karnataka. College is accredited by NAAC in 2017 with B + grade and has CPE status.

### **About Equiptronics**

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### About the workshop

The Workshop will focus on design and use of instruments along with frequently encountered problems while using the instruments. The faculty and Research Scholars will be trained in operation, calibration and safe handling of the instruments.

The following instruments will be used for workshop purpose.

**pH metre**

**Digital conductivity meter**

**Digital potentiometer**

**Digital colorimeter**

**UV visible digital spectrophotometer**

**Digital TDS meter.**

### Day-1 . 12.3.2019

9.30am to 10.30am

#### Inauguration

#### Chief guest

Dr Pandurangappa  
Chairman DOS chemistry  
Bengaluru Central University

#### Keynote address

A novel non glass pH sensors

#### President

Dr Ananth K Atre  
Dean Vijaya college  
Joint secretary BSHES

#### In presence of

Prof H S Balakrishna  
principal Vijaya College  
R V Road Bangalore

Mr M Badshah  
Chief advisor to CEO  
Eqipteonix Mumbai

11.30 to 12.00 noon

#### Tea break

12.00pm to 1.30pm

#### Session 1

***Video presentation on instrumentation, maintenance and application.***

1.30pm to 2.00pm

#### Lunch break

2.00pm to 3.30pm

#### Session 2



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### ***Hands on experience on application of instruments***

3.30pm to 5.00pm

**Session 3**

### ***Hands on experience on application of instruments***

**Day-2 13.2.2019**

10:30 a.m. to 11:45 a.m

**Session 1**

### ***Hands on experience on application of instruments***

11.45 to 12.00pm

**Tea break**

12:00 p.m. to 1:30 p.m

**Session 2**

### ***Hands on experience on application of instruments***

1:30 p.m. to 2:00 p.m

**Lunch break**

2:00 p.m. to 3:00 p.m

**Session 3**

### **Group discussion**

3.00 to 4:30 p.m

**Valedictory function**

### **Chief guest**

Dr V R Devaraj  
chairman DOS biochemistry  
Bengaluru Central University

### **President**

Dr RV Prabhakara  
Joint secretary BSHES

### **In presence of**

Prof HS Balakrishna  
Principal Vijaya college  
RV Road Bangalore

*OOD Facility is available*

### **Contact numbers**

Prof L Jayakumar : 9844411794

Prof S A Srikanta : 9481481545

***YOU ARE INVITED***



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VIJAYA COLLEGE R V ROAD			
Sl.No	College	Faculty Name	Mob.No E.Mail. I D
1	NMIEKV College	Dr. G. S. Suresh	9448235894 Sureshsemr@ yahoo.co.in
2	The National College, Jaya- nagar, B'gr.	H. B. Mallesh.	9591536908 hbmakesh@gmail .com
3	K. R. Puram GrFGC.	Hemadri Reddy	9844593326.
4	Cyothia	Good Shepherd College.	9741362692
5	MES	Samshiya Rizwaka.	9880642429
6	Chennappa GrFGC.	Bindu.	8951643453.
7	Vijaya College, Jayanagar	L. K. Srinatha.	9448670337 lksrinatha@ yahoo.co.in



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### VIJAYA COLLEGE, RV Road, Bangalore-04

#### Workshop on Hands on training on laboratory equipments and instrumentation 2018-19

Sl.No	Name of equipment	Features	Model No
1	UV -Vis scanning spectrophotometer	Dual beam with auto scanning and micro processor λ-max, k-factor can be determined plot of concentration graph can be plotted information can be recalled when necessary	EQ-825A
2	Photoflorimeter	2 excitation wavelength(UV)& 3 Emission(Vis) filters with 0.1ppm sensitivity	EQ-870
3	Digital Conductivitymeter	Inbuilt magnetic stirrer & standard conductivity for conductometric titrations	EQ-664A
4	Micro controller based colorimeter with inbuilt filters	One button press micro controller based colorimeter with square cuvettes Feather touch switches 8 filters Inbuilt test tube stand	EQ -652
5	Digital flame photometer	Dual channel, separate filters, low ppm detection, low sample volume with LPG use Analysis of Na, K, Ca & Li of soil, in agriculture and pathology mining, metallurgy, pollution control, ceramic & glass industry Mixes gases uniformly Small quantity of sample	EQ-855A
6	Digital Beckman thermometer	Unbreakable bulb Non corrosive teflon temperature probe with shielded teflon	EQ-550

		wire	
7	Digital pHmeter	Freezing point can be determined inbuilt magnetic stirrer Electronic buffer PVC electrode	EQ-614A
8	Digital TDS meter	For water analysis	EQ-680
9	Digital potentiometer	0-1000 storage, PC compatibility battery back up Reading can be stored and recalled Can be used without PC	EQ-607
10	Digital turbidity meter (Nephelometer)	200/2000NTU For field work, soil testing, water industry ,research & pharma	EQ-811
11	2 in 1 Combo model	pH +potentiometer for simultaneous measurements	EQ-636
12	Digital boiling/melting point apparatus	Microprocessor, 0.1 temperature readily freezes on touch of a button.	
13	Digital flame photometer	Single channel Separate filters Low ppm detection low sample volume with LPG use LPG use	EQ-850A





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**Report of the two days Workshop on Hands-on Training on laboratory Equipment and Instrumentation for faculty and research scholars.**

This workshop was jointly organised by the Department of Chemistry and Biochemistry and Equiptronics, Mumbai in association with department of studies in chemistry and Biochemistry of Bangalore University, Bengaluru Central University and Bangalore North University along with Chemistry Teachers Forum on 12<sup>th</sup> and 13<sup>th</sup> March 2019.

Equiptronics, Mumbai, deputed their expert team to show and share their rich experience In the workshop. Mr. Mustafa Badshah and Mr. Ibrahim Kambatti were the resource persons from Equiptronics who trained the faculty and research scholars in operations, calibration and safe handling of instruments.

The following instruments were used for workshop purpose: pH meter, Digital conductivity meter, Digital potentiometer, Digital calorimeter, UV- visible Digital spectrophotometer, Digital TDS meter, Digital polarimeter and Digital photo fluorimeter.

The workshop was inaugurated by Dr. M. Pandurangappa, chairman, DOS in chemistry, BCU. In his inaugural address he highlighted the need for the training on instrumentation for faculty



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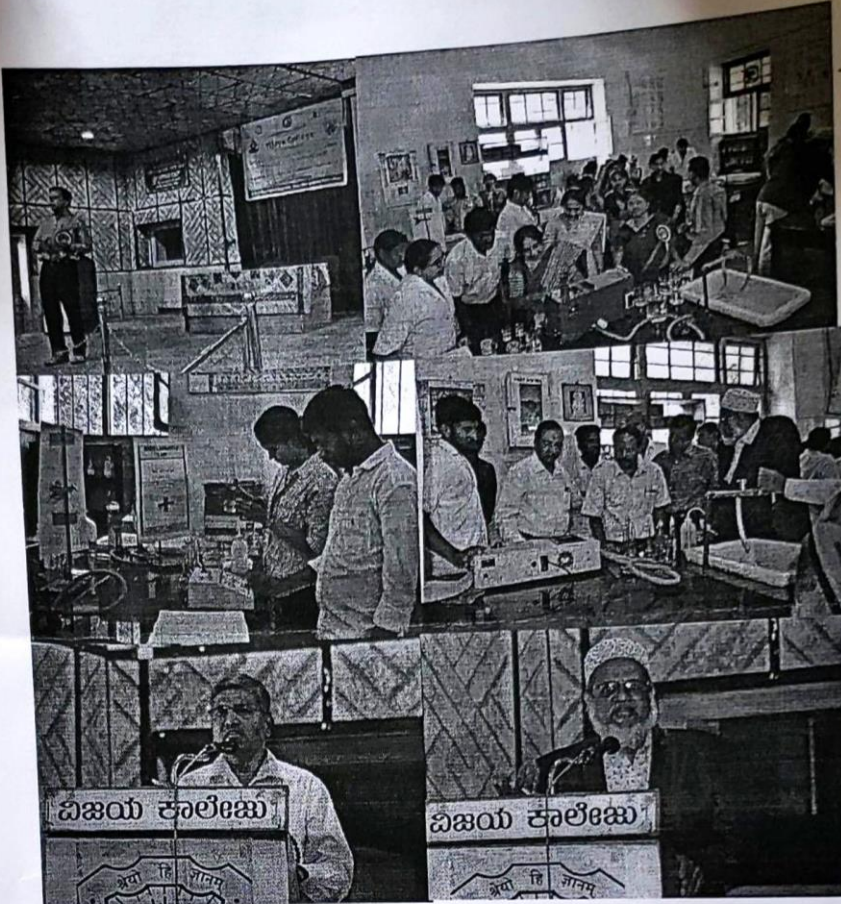
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19-02-2019

of PG studies in Chemistry were associated with the organising committee for smooth functioning.



Dr. Mahesh Arvind

Convener



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and research scholars. The inaugural function was presided by Dr. A.K Atre, Dean of Vijaya college and Joint Secretary, BSHSES. Prof. H.S Balakrishna, Principal, graced the occasion.

Technical sessions of the workshop started with the key-note address by Dr. M. Pandurangappa, Chairman, DOS in Chemistry, BCU. His talk was on 'A Novel Non- glass pH Sensor', concentrating on how pH is a critical parameter in wide domains; industries and laboratories. He discussed his patented work on pH sensor electrode for spot analysis.

This was followed by video presentation on instrumentation, maintenance and applications by Mr. M. Badshah. He described the use of various instruments and their maintenance along with good laboratory practices.

Hands on training of equipments and instruments were given in the three laboratories of Chemistry department, on both the days. The workshop focused on designing and use of instruments along with frequently encountered problems and troubleshooters for the same.

For the valedictory function Prof. V.R Devaraj, Chairman, DOS in Biochemistry, BCU was the Chief Guest and it was presided by Dr. R.V.Prabhakara, Joint Secretary, BSHSES, in the presence of the college Principal, Prof. H.S Balakrishna.

50 faculties from various institutions and 50 students attended the workshop. 50 student volunteers both from UG and PG took active participation on both the days.

The organising committee for the workshop comprised Prof. L. Jayakumar, HOD as Chairman, Dr. Mahesh Arvind as Convenor, Prof. S.A Srikanta as Organising Secretary, Prof. R. Radhika as Treasurer; Prof. Kathyayini. S, Prof. Sarvamangala . M , Prof. Jayashree P, Prof. Lokesh Y.C, Prof. Jyothi R Kumar and Prof. M.S Ravindranath as Members. Dr.Basavarajaiah, Dr.Netravathy, Dr.UmeshandDr.Kavitha