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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

**2017- 18**

**Biotechnology workshop**



Indian Academy  
of Sciences,  
Bengaluru



Indian National  
Science Academy,  
New Delhi



The National  
Academy of  
Sciences, India

Science Academies Lecture Workshop

on

**"BIOTECHNOLOGY – Opportunities and Challenges"**

14 - 15 September, 2017

Organized by

**Department of Biotechnology**



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Accorded by UGC as "CPE"

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**Inauguration Thursday, 14.09.2017 9.45 a.m.**

**Chief Guest** : Dr. K N Balaji, Ph.D, FASc, FNASc.  
J. C. Bose National Fellow  
Professor, Department of Microbiology and  
Cell Biology, Indian Institute of Science.

**Guest of Honour** : Sri G V Viswanath, IAS (Retd.)  
President, BHS Higher Education Society,  
Jayanagar, Bengaluru.

**President** : Dr. Anant K Atre, Ph.D  
Dean, Vijaya College, Joint Secretary, BHS HES.

**Valedictory Function Friday, 15.09.2017 3.35 p.m.**

**Chief Guest** : Sri Shreedhar Bhat  
Director, Shreedhar Bhat Laboratory,  
BSK II stage, Bengaluru.

**Guest of Honour** : Prof. B V Narayana Rao  
Secretary, BHS Higher Education Society,  
Jayanagar, Bengaluru.

**President** : Dr. N Manjula  
Principal, Vijaya College

**You are cordially invited**

**Principal, Convener, Staff and Students**



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**Friday, 15.09.2017**

9.30 to 10.45am **Session 5**

**Dr. Prathibha Ranganathan**  
Centre for Human Genetics, Bengaluru.  
**Topic: Genetics Research – Dr.Jekyll or Mr. Hyde**

10.45 to 11.00am **Tea break**

11.00am to 12.15pm **Session 6**

**Dr. Dipshika Chakravortty,**  
Professor, MCBL, IISc.  
**Topic: Microbes and Human health**

12.20 to 1.35pm **Session 7**

**Dr. Shyam Bhat,**  
Director, Bhat Biotech India (P) Ltd.  
**Topic: Opportunities in Biotech Industries**

1.35 to 2.05pm **Lunch break**

2.05 to 2.30 **Exhibition**

2.35 to 3.35pm **Session 8**

**Prof. Balaji K.N**  
J. C. Bose National Fellow, Professor,  
Department of Microbiology and  
Cell Biology, IISc.  
**Topic: Biotechnology - An insight and opportunities**

3.35 to 4.00pm **Valedictory**

## ABOUT THE LECTURE WORKSHOP

Short duration Lecture Workshops form an important part of the activities of the three Science Academies organised by the Joint Science Education Panel. The Lecture Workshop is designed for the benefit of students and teachers at the undergraduate and graduate level with relevant topics. Speakers include Fellows and scientists from renowned science institutions.

**Convener: Dr. Balaji K N, Ph.D., FASc, FNASc,**  
J. C. Bose National Fellow  
Prof., Dept. of Microbiology and Cell biology  
Indian Institute of Science  
Bengaluru – 560 012  
Phone: 91-80-22933223  
Email: balaji@mcbl.iisc.ernet.in

**Coordinator: Dr. Gopalakrishna, Ph.D.,**  
Associate Professor and Head,  
Department of Biotechnology  
Vijaya College, R. V. Road,  
Basavanagudi, Bengaluru – 560 004.  
Cell: 94485 78004/70192 72375  
Email: gopalkvc@gmail.com

Lecturer in charge: **Mr. Bharath M A.**  
Asst. Professor, Dept. of Biotechnology.  
Cell: 9480263676/8050426146

**Principal**  
**Prof. N Manjula, Ph.D.,**  
Vijaya College, R. V. Road,  
Basavanagudi, Bengaluru – 560 004.



Indian Academy  
of Sciences,  
Bengaluru



Indian National  
Science Academy,  
New Delhi



The National  
Academy of  
Sciences, India



## VIJAYA COLLEGE

Accredited by NAAC with 'B' Grade  
Accorded by UGC as "College with Potential  
for Excellence".  
R.V.Road, Basavanagudi, Bengaluru – 560 004.

### Science Academies Lecture Workshop

On  
**"Biotechnology -  
Opportunities and Challenges"**

14 - 15 September, 2017

Organised by  
Department of Biotechnology  
VIN-BT



Venue: Vijaya College, R. V. Road



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## ABOUT SCIENCE ACADEMIES

The Indian Academy of Sciences, Bengaluru, founded in 1934 by Prof. C V Raman, Nobel Laureate, endeavours by all means to promote the progress and uphold the cause of science.

The Academy recognises the special relationship of scientific creative activity with the process of education and upholds that the course of discovery includes the identification and nurturing of scientific talent amongst the young.

Indian Academy of Sciences in association with Indian National Science Academy, New Delhi and The National Academy of sciences, India, Allahabad has set up Joint Science Education Panel in order to meet the needs of the time. Under the Joint Science Education Panel, the Academies take up several activities like –

- Conducting symposia, refresher courses, seminars and Lecture workshops to provide means of exchange of scientific knowledge among scientists and to bring new knowledge to the attention of the whole scientific world.
- Promoting high quality journals in order to provide publication opportunities to Indian scientists at the international level.
- Recognizing and honouring excellence in various areas of science by institution of special awards.
- Giving special encouragement to young scientists by the award of scholarships and fellowships to enable them to pursue their interests.

## OUR COLLEGE

Vijaya College, established in 1945 by BHS Higher Education Society, situated in Basavanagudi is a well known land mark in South Bengaluru. Known for its old world charm and traditional culture, Vijaya College is an undergraduate and postgraduate institution of science and commerce nurturing the wonders of student community. Over a period of 72 years of its purposeful existence, Vijaya College is growing from strength to strength and is one of the best learning centres in Karnataka. The college accredited by NAAC and accorded 'College with Potential for Excellence' by UGC.

## OUR DEPARTMENT

Biotechnology was started in the college in the academic year 2007-08 with beginning of new combinations in B.Sc. like Chemistry, Botany, Biotechnology and Chemistry, Zoology, Biotechnology. The department has made remarkable progress in extending quality education and research. The department has designed Add-on courses with employable curriculum and regularly organises guest lectures by eminent personalities in the field of science and industrial visits and strives to train and encourage the students to take up higher studies and research.

To channelize the students' talent, department has started a student club – Vijaya College Innovative Club of Biotechnology – VIN-BT.

Through technical tie-up with industries the students are provided with hands on training in Biotechnology tools and techniques to update their skills and prepare them for industrial needs. The department has completed Minor research project granted by UGC.

## Thursday, 14.09.2017

9.00 to 9.45am Registration

9.50 to 10.15am Inauguration

10.20 to 11.35am Session 1

**Prof. Balaji K.N**

J. C. Bose National Fellow, Professor, Department of Microbiology and Cell Biology, IISc.

**Topic: Frontline Responders – Arsenals of innate immunity**

11.35am to 11.55am Tea break

12.00 to 1.15pm Session 2

**Dr. Dharma Prasad**

MD and Chief Technology Officer, Prosetta Bioinformatics Pvt. Ltd., Mysuru.

**Topic: Skills to win your dream job!**

1.15 to 1.50pm Lunch Break

1.55 to 3.05pm Session 3

**Dr. V Ravi**

Registrar and Professor of Virology, NIMHANS, Bengaluru

**Topic: Challenges in diagnosis of Viral infections**

3.05 to 3.20pm Tea break

3.20 to 4.35pm Session 4

**Dr. Anujith Kumar**

Associate Professor, Manipal Institute of Regenerative Medicine

**Topic: Stem cells meet Gene editing: Applications in Disease modelling and Translational biology**



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## **Report on Science Academies Lecture Workshop on “Biotechnology – Opportunities and Challenges”**

**Department of Biotechnology, Vijaya College, R. V. Road, Basavanagudi, Bengaluru.**

The 2 day **Science Academies’ Lecture Workshop on “Biotechnology – Opportunities and Challenges”** for

Students (Undergraduate and II PUC) and faculty of our college and different colleges in and around Bengaluru was organized by Department of Biotechnology, Vijaya College, Basavanagudi, Bengaluru in association with the Joint Science Education Panel of three National Science Academies- Indian Academy of Sciences (Bengaluru), The National Academy of Sciences (Allahabad) and Indian National Science Academy (New Delhi) on **14th & 15th September, 2017.**

There were 150 participants in this programme. Out of these 80 students were from various colleges (preference was given to students from rural colleges) spread in and around Bengaluru and the remaining students from our college.

The workshop consisted of 8 lectures spread over two days. The Lecture workshop began on 14<sup>th</sup> with the registration of participants between 9 am and 9.45 am. Participants were given files, notepads and pen. Inauguration of the workshop was done at 9.50 am. Sriyuth G.V.Viswanath, President of BHS Higher Education Society blessed the program with his thought provoking words.

The first lecture session at 10.20 am was given by Dr. K N Balaji, Professor, Dept. of Microbiology and Cell Biology, IISc, on the topic ‘Frontline respondents – Arsenal of Innate Immunity’. He spoke on basics of innate immunity and dealt on inflammation.

The second session between 12 noon and 1.15 pm was taken by Dr. Dharma Prasad, MD and CTO, Prosetta Bioinformatics, Mysuru, on the topic ‘Skills to win your Dream job’. He began with posing questions like –Do you all dream about your future? Would you like to be a leader or follower? Then he gave an explanation about imparting skills to achieve the dream job.

Then there was a brief lunch break. The 3<sup>rd</sup> Lecture session between 2pm and 3.15 pm was taken by Dr. Anutjith Kumar, Associate Professor, School of Regenerative Medicine, Manipal University, on the topic ‘Stem cells meet Gene editing’. He focussed on the future prospects of stem cell biology and its application dealing in detail about the genetic engineering techniques in editing the stem cells.

Last session of the 1<sup>st</sup> day between 3.35 and 4.50 pm was taken by Dr. Balaji on the topic ‘Biotechnology – an insight and opportunities’. He focussed on the development of transgenic



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animals for pharma research, development of pharma products and dwelled on opportunities available in different fields.

The 2<sup>nd</sup> day of the lecture workshop (15.9.2017) began at 9.30 am with a talk by Dr. Prathintha Ranganathan, Scientist from Centre for Human Genetics, on the topic 'Genetics research – Dr. Jekyll or Mr Hyde'. She spoke about the understanding of human genetic diseases and therapeutical strategies with relevant cases and movies.

After a short Tea break, the 6<sup>th</sup> session was held by Dr. Shama Bhat, Managing Director, Bhat Biotech India Ltd., Bengaluru, on the topic 'Opportunities in Biotech Industries'. He spoke about the job outlook, careertracks, technical skills and training in Biotechnology gave a pathway to students in Biotechnology career.

The 7<sup>th</sup> session was by Dr. Dipshika Chakravotty, Professor, Dept. of Microbioloy and Cell Biology, IISc at 12.15 pm. on Salmonella and the complexity of the pathogen entering the host. She also explained the remedies, control and preventive measures for typhoid and also about the new techniques of vaccine introduction.

After the lunch break, there was an Exhibition on Biotechnology in the college Biotechnology lab arranged by the students of our college. Participants appreciated the effort of the students on show casing the different aspects of Biotechnology through charts and models. Exhibition was inaugurated by Dr. G M Nijaguna, former Principal and Professor of Zoology.

The 8<sup>th</sup> and the last session of the lecture work shop was between 2.45 and 4.00 pm and was given by an eminent scientist Dr. V Ravi, Registrar and Professor of Virology, NIMHANS, Bengaluru, on the topic 'Challenges in diagnosing viral diseases'. He deliberated on new techniques and technological kit development for diagnosing viral infections. He emphasised on that it is the science which has bright future and drives the commerce.

Valedictory function of the 2 day Lecture work shop was held at 4.00 pm, Dr. Shreedhar Bhat, a Bio industrialist was the Chief guest and spoke about the opportunities available for students in our country and importance of conducting such workshops. Principal of the college Dr. N Manjula gave the presidential address hailing the efforts of the faculty of the department of Biotechnology in organizing this kind of lecture work shop for the benefit of students and mentioned about the support rendered by Joint Science Education Panel of the Science Academies.

Feedback from participants were taken, most of the participants said that, the lectures and the topics were wonderful, informative, educative and inspiring. Some felt, it will be nice if the college also conducts Practical workshops. PUC student participants said it was first of a kind for them and they all enjoyed the lectures.



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Dr. Balaji K N, Professor, Dept. of Microbiology and Cell Biology, IISc was the Convener and Dr. Gopalakrishna, Associate Professor and Head, Dept. of Biotechnology, Vijaya College was the Coordinator of the Two Day Lecture Workshop.

Dr. Gopalakrishna  
Associate Professor and Head,  
Dept. of Biotechnology,  
Vijaya College, Basavanagudi, Bengaluru.



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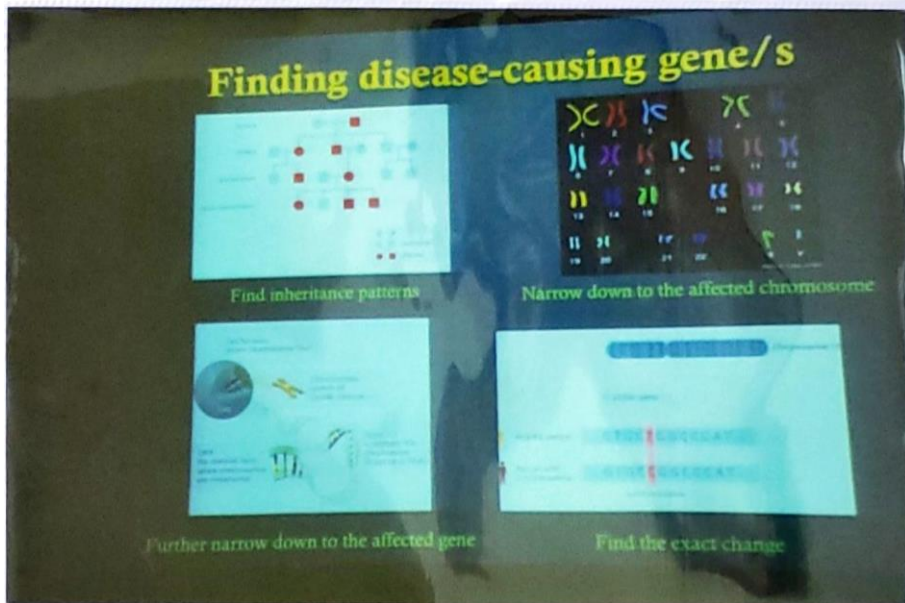
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