



CHILDREN'S EDUCATION SOCIETY (REGD.)

THE OXFORD COLLEGE OF SCIENCE



Annual Report 2017-18



CHILDREN'S EDUCATION SOCIETY (REGD.)

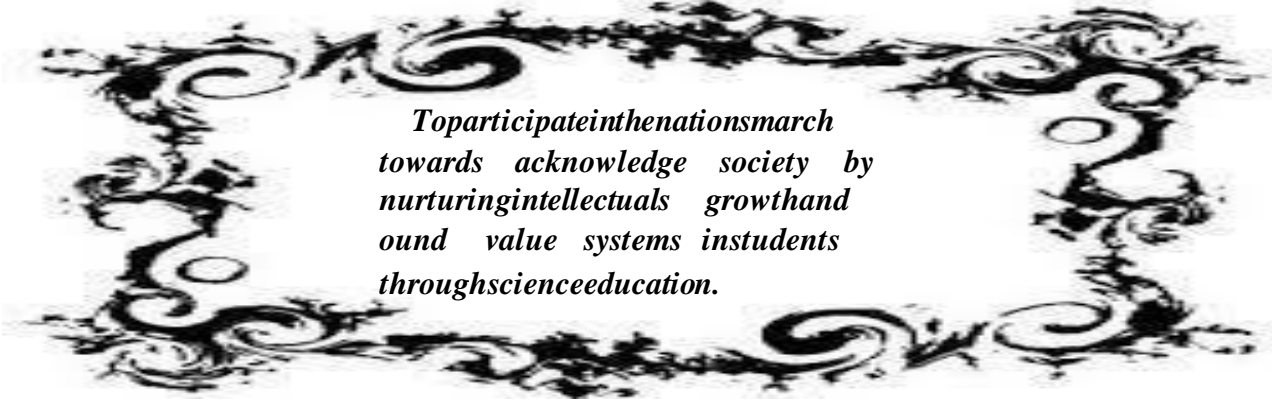


“VIDYA SARVATRA SHOBHATE”

The logo statement envisions the knowledge to one and all for better future. The Institution stresses the importance of nourishing young minds with enough food for thought, sensitizing them to the socio economic realities thereby energizing them to work for bright and prosperous tomorrow.

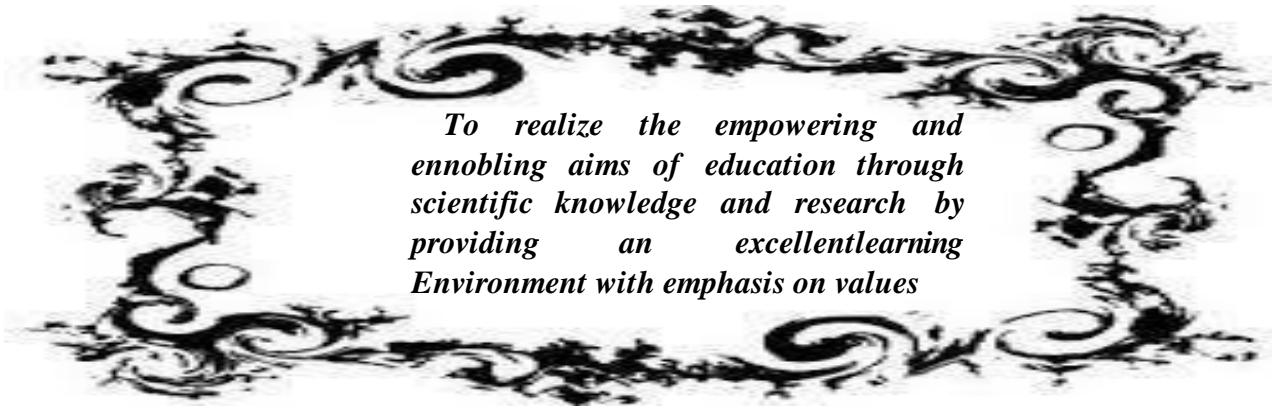
Goddess Saraswathi the repository of knowledge or "Vidya" stands for the overall development of the student's personality that results from an ideal combination of values, knowledge and skills.

VISION



To participate in the nations march towards acknowledge society by nurturing intellectuals growth and sound value systems in students through science education.

MISSION



To realize the empowering and ennobling aims of education through scientific knowledge and research by providing an excellent learning Environment with emphasis on values

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Founder Chairman

Sri S. Narasa Raju

(05.06.1941 - 16.05.2016)

The Oxford College of Science has adopted a dynamic, creative and communicative approach in education, research and development. Since science covers the broad field of knowledge that deals with observed facts and the relationships among these facts, faculty aims at facilitating the opportunities for the students and helps them to explore the world of these facts and their relationship. Keeping abreast of modern developments, the college is constantly restructuring itself and renovating its physical infrastructure as well as its research and education facilities. Our aim is to motivate and empower the students to be learners and critical thinkers throughout their lives.

"Time is the richest treasure, so take care of every single moment and spend it wisely and well".

Sri SNVL Narasimha Raju

President CES, Chairman, Oxford Educational Institutions



Education is the most powerful weapon which you can use to change the world. The function of education is to teach one to think intensively and to think critically. Purpose of our institution is to transfer knowledge and prepare young generation to participate in the nation's march. The Oxford College of Science in its long journey cherishes the efforts laid by the management, faculty and students to achieve exemplary credits in the annals of education. The institution is committed to provide quality education in an enviable environment built with diligence perseverance and excellence.

Dr. Kavyashree

Principal, The Oxford College of Science



COLLEGE PROFILE



ACCOMPLISHMENTS:

- Best Learning Environment Award by EDTECH
- Recognized Centre of Biotechnology Skill Enhancement Program
- Recognized as Research Centre by Bangalore University
- Minor Research Project–UGC, GoI
- Research Grant for Scientist/Faculty(RGS/F)
- Women Scientists Scheme (WoS-A), DST, GoI
- Centre of Innovative Science Education(CISE)
- Karnataka Fund for Infrastructure in Science & Technology(K-FIST)
- Seed Money for Young Scientist Research(SMYSR)
- Small Projects in College Education (SPiCE)
- Ranked No. 2 in Karnataka - MDRA survey- India Today
- Ranked No. 6 in Karnataka–Hansa Research survey-The Week

HIGHLIGHTS

- 05 University ranks with 85% graduation rate
- Best Teacher Award for the faculty for outstanding contribution in the field of teaching
- 27 faculty members were provided with financial support under Research promotion scheme
- 93 faculty members attended various Professional Development Programs
- 19 non-teaching staff participated in Staff Training Program

STUDENTS WHO BROUGHT THE LAURELS TO THE COLLEGE

UNIVERSITY RANK HOLDERS 2017-18 BATCH

RANK LIST 2017-18



SUBINA BHARATHAN
M.Sc Microbiology
Science



ASTHA KAWAN
M.Sc Bio chemistry
Science



POMAR HARSHA VARDHAN
M.Sc Applied Genetics
Science



NAZIA FARHEEN
Master of Computer Application
(Lateral Entry)



MOHAN BABU R
M.Sc Electronic
Science



SAAHITHYA MAHESH
M.Sc Microbiology
Science



KALYA ANKEET RAO
B.Sc (Bc,Gt,Mb)
Science

Department of Biochemistry

About the Department

The Department of Biochemistry was established in the year 2001 with combinations Biochemistry - Zoology - Microbiology, the PG course in Biochemistry was invented in the year 2001. Biochemistry includes both chemical & biological disciplines with exponential increase in information and understanding in the field of Life Science.

Departmental Activities

Industrial Visit 1	Add On Program 6	Workshop & EP 3	Guest Lecture 1	PBL 2
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Department fest / activity conducted

- Science Exhibition Biochemical Constellation and Bio galaxy
- Awareness Program on World Health Day and World Diabetes Day
- Community Outreach Program with Samarthana

Department Achievements

- University Rank: Astha Kawan 2nd Rank, M.Sc. Biochemistry: 2017-2018
- University Rank: Kalya Ankeet Rao 7th Rank, B.Sc. Biochemistry Genetics, Microbiology: 2017-2018

Title of the Program	
Add on Program	
1.	Natural Products for Oral Health
2.	Clean And Green Herbal Soap
3.	Forensic Toxicology
4.	Natural Dye From Vegetables
5.	Biological Membrane Damage Analysis
6.	Clinical Trials In Drug Discovery
Guest Lecture	
1.	Basics of pharmaceuticals and biopharmaceuticals and its application in present
Workshop	
1.	Role of HDAC in gene regulations.
2.	Polymerase Chain Reaction Technique
3.	Biosynthesis & photo catalysis activity of nanoparticles
PBL	
1.	Osteoporosis in young age: detection and Prevention
2.	How adult stem cells can be used for skin cell repair and regeneration
Industrial Visit	
1.	National Institute of Animal Nutrition and Physiology

Department of Biotechnology

About the Department

The Department of Biotechnology at the Oxford College of Science was established in the year 1998 to nurture young minds and to generate a pool of skilled manpower to cater to the ever-growing demands of this sector.

Departmental Activities

Industrial Visit 12	Add On Program 7	Workshop 2	Guest Lecture 1
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Department Activities

Sl.No	Title of the Program
Add-on Programs	
1.	Plant secondary metabolites.
2.	Gene transfer by electroporation
3.	RAPD for molecular characterization
4.	Bioremediation
5.	Biological databases
6.	Lyophilization
7	Enzyme linked immunosorbent assay (ELISA)
Guest Lecture	
7.	Guest Lecture on Forensic Science in Crime Investigation
Workshop	
8.	Lecture workshop on Entrepreneurship Development Program
9.	Workshop on "Chromosomal identification and staining techniques"
Industrial Visit	
1	Vipragen Biosciences, Mysore
2	Karnataka soap and detergent limited, Mysore
3	Defense food research laboratory (DFRL), Mysore
4	CSIR- National Institute of Oceanography, Goa
5	Vergo Labs, Goa
6	Institute of Excellence, Mysore University
7	KSIC (Karnataka silk industry and corporation)
8	KDSL (Karnataka detergent and soap limited)
9	CFTRI (Central food technology and research institution)
10	Kidwai memorial institute of oncology, Bengaluru
11	Bhat bio-tech Pvt. Ltd, Bengaluru
12	Beckmann coulter Pvt. Ltd, Bengaluru

Department of Chemistry

About the Department

The Chemistry Department of The Oxford College of Science started in 1994 with B.Sc. [CZBt, CGtBt, CZMb] combinations and M.Sc., Organic Chemistry in 2009 and has evolved in terms of academics, co-curricular and extracurricular activities.

Departmental Activities

Industrial Visit 2	Add On Program 4	Workshop 1	Guest Lecture 2
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Sl.No	Title of the Program
Add-on Programs	
1.	Modern analytical tools for phytochemical analysis
2.	Green methods in chemistry
3.	Kitchen as a medicinal box
4.	Pesticides chemistry
Guest Lecture	
1.	Functional material for science and technology of invisibility
2.	A refresher soft skill program on biochemistry paper
Workshop	
1.	Rasayana -2018
Industrial Visit	
1	Karnataka soaps and detergents limited and Karnataka silk industry corp. Ltd.
2	Poorna pragna institute of scientific research

Department of Computer Science

About the Department

Computer science department was incepted in 1995, now over's both UG and PG courses BCA, B.Sc (CS), M.Sc (CS) and MCA. The courses are eloquently carried to the student community such that it bridges the gap between IT industry requirements and the university curriculum. The department strives and provides industry ready professionals. The courses are delivered through lectures with excellent qualified faculty, (who are experienced both in academics and has hands on in industry), Practical sessions, Projects, Add-on courses and workshops. Course modules are assessed with assignments, presentations, and examinations.

Departmental Activities

Industrial Visit 1	Add On Program 7	Workshop & EP 10	Guest Lecture 3
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Department Achievements:

- Ms Nazia Farheen bagged University 4th Rank in MCA for the year 2017-18.
- Department is also recognized as Research Centre by the Bangalore University; Faculty of department are actively engaged in research and the articles are published in Peer Reviewed Journals.

Sl. No.	Title of the Program
Add on Program	
1.	4g Technology
2.	Android Application Development
3.	Digital Signature
4.	DNA Computing
5.	Java Card
6.	Security And Privacy In Social Network
7	Web Application using PHP
Enrichment Program	
1	Latest Trends & Development in IT Industry
2	Trending Opportunities for Creativity
3	Trending Opportunities for Creativity in IT
4	Cybersecurity and Malware Analysis
5	Cybersecurity and Malware Attacks
6	Enrichment programme on Machine Learning
7	Enrichment programme on Robotics
8	Enrichment programme on Big Data Project & Apache Hadoop EcoSystem
9	Workshop on Explore & Earn money from Internet
10	Workshop Rapid mobile App development
Guest Lecture	
1	Introduction to Microprocessor
2	Theory of Computation
3	Operation Research

Department of Electronics

About the Department

The Department of Electronics was established in the year 1994 with combinations Physics, Mathematics and Electronics (PME). A second combination of Electronics, Mathematics & Computer Science (EMCs) started in the year 2000. The PG course in was incepted in the year 2010.

Departmental Activities

Industrial Visit
5

Add On
Program
3

Workshop
2

Department Achievements:

Mr. Mohan Babu R. Secured 5th Rank in M.Sc. Electronics from Bangalore University for the year 2017-18, is an outstanding student of the Department. The holistic learning environment nurtured the student to attain this academic excellence and in turn made the College and the Department proud. This reflects the depth of guidance and efforts put forth by the team of faculty along with the commitment and hard work of the students

Department of Fashion & Apparel Design

About the Department

The Department of Fashion and Apparel Design was established in the year 1999, it is affiliated to Bangalore University. It is a 3-year full term undergraduate Fashion Designing course, where it covers the study of specialized field in the area of fashion costume designing, accessory and jewellery design, fashion illustrations, Textile designing, etc.

Departmental Activities

Industrial Visit 3	Add On Program 1	Workshop 2	Guest Lecture 3	Entrepreneur Development Program 1
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Department Activities

Sl. No.	Title of the Program
Add on program	
1.	Fashion Photography
Guest Lectures	
1.	Fashion Retail Management
2.	Carrier Opportunities in Gems & Jewellery Making
3.	Merchandising
Workshop	
1.	Fashion Illustration
2.	Fabric Painting
Industrial Visit	
1	Central Silk Board
2	National Gallery of Modern Art
3	Mysore Silk Factory
Entrepreneurship Development Program	
1	Setting up of Boutique

Department of Languages

About the Department:

The Department of Languages of The Oxford College of Science was started in the year 1994. The staff of the Department has taken keen interest in training students for intercollegiate competitions and regularly conduct assembly in the college. Counseling in academic and emotional matters and involving in administrative work of the college are the other responsibilities of the Department. Another addition to the Department of English is the Language Lab, which is functioning in full swing to hone the student's communication skills.

Department fest/activity conducted:

A program on the many societal groups and cultures is organized by the Department of Languages. With the help of these events, were able to educate individuals about the intrinsic value of the various traditions practiced by different communities and the wisdom that each tradition imparts.

Department of Mathematics & Statistics

About the Department:

The Department of Mathematics started in the year 1994. The UG course was started in the year 1994 and PG course in the year 2010. The Department of Statistics was inceptioned in the year 2005 in order to prepare professionals in statistics. The UG course was started in the year 2005 and PG course in the year 2010.

Departmental Activities

Industrial Visit
3

Add On
Program
3

Department fest/activity conducted:

ELMATICS, SIDDHANTIKA, GANITHALOKA and SANKHYA UTSAV are some of the departmental activities conducted by the department.

Sl. No.	Title of the Program
Add on program	
1.	Cryptography
2.	Advanced Complex Analysis
Industrial Visit	
1	Central Silk Board

Department of Microbiology

About the Department:

The Department of Microbiology since its inception in 1994 is committed to disseminating, inculcating and harvesting knowledge. Student centric approach and overall development of students are the vital strategy adopted in the department. Consistent University ranks and outstanding placement record are the key achievements. The Department is known for its constant innovations reflecting the creative potential with which the Department is well endowed.

Departmental Activities

Industrial Visit 6	Add On Program 2	Workshop 2	Guest Lecture 3
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Department Achievements:

Department was Talent and luck might happen to you by chance, but learning is a skill and practice that anyone can accomplish with diligence.

- Secured I and V Rank in M.Sc Microbiology
- Kalya Ankeet Rao 7th Rank, B.Sc. Biochemistry Genetics, Microbiology: 2017-2018

Sl.No	Title of the program
Add On Programs	
1.	Molecular DNA Technology
2.	Viral Cultivation
Guest Lecture	
1.	AIDS Awareness
2.	Soft skills
3.	Communication Skills and Goal setting
Workshop/Enrichment Program	
1.	Enrichment programme on Biogas Production and Analysis
2.	Enrichment programme on Molecular DNA Technology
Industrial Visit	
1	Paramount Nutrition
2	MANMUL Dairy
3	Prosetta Biosciences
4	DFRL
5	IACTS Academy

Department of Physics

About the Department:

The Department of Physics (UG) was established in the year 1994 with Physics, Mathematics, Computer Science (PMCs) and Physics, Mathematics, Electronics (PME) combinations, the PG course in Physics was incepted in the year 2014.

Departmental Activities

Add On
Program
2

Sl. No	Title of the program
Add On Programs	
1.	Stellar Spectrum
2.	Physics In Sports

Department of Zoology and Genetics

About the Department:

The Department of Zoology was incepted in 1994 for undergraduate program, with the aim of imparting quality education to young minds. The Department of Genetics was started with undergraduate program in the year 2000 and PG course in Applied Genetics in 2003. Presently, the two departments have amalgamated into “The Department of Zoology and Genetics”.

Departmental Activities

Add On
Program
6

Department fest/activity conducted:

Genesis is the departmental science fest conducted by the Department of Zoology and Genetics, it's a fun filled and thoughtful event that runs for almost a week with different events organized on each day where in students apply their knowledge to play the exciting activities. It not only enhances the ability of students but also give them an exposure to think and engage out of the curriculum. Every year this event is focused on a particular theme like Mendel's Legacy wherein 150th birthday of Gregory Mendel was celebrated. The fest brings in lot of science related games where students enthusiastically participate.

Department Achievements:

- University Ranks: Pomar Harshavathan bagged University 3rd Rank in M.Sc Applied Genetics for the year 2017-18.
- Kalya Ankeet Rao 7th Rank, B.Sc. Biochemistry Genetics, Microbiology: 2017-2018

Sl. No	Title of the program
Add On Programs	
1.	Blotting techniques
2.	Fruitfly Genetics
3.	Vermi composting
4.	Grafting and budding in plant propagation
5.	Next Generation Sequencing
6.	Lymphocyte culture and karyotyping

ABOUT IQAC

IQAC was established at TOCS in 2011 as a post-accreditation quality sustenance measure to channelize the efforts and measures of an institution towards academic excellence. IQAC adopts multifaceted integrated approach involving all the stakeholders for all the quality measures to fulfill the dream of achieving excellence. IQAC ensures quality literacy among all its stakeholders, prepares quality strategy for execution, conducts quality audit periodically, obtains 360° quality feedback from all the stakeholders, crafts quality policy, provides participative quality governance, delivers quality academics and performs quality research thus developing the quality culture of the institution that leads to quality quotient enhancement and thereby quality sustenance.

Accordingly, IQAC, regularly conducts conferences, seminars, inter/intra institutional workshops on quality related themes and faculty development programs, staff training programs, professional development programs to upgrade and update the professional skills of faculty and staff. During the Academic year 2017-18, the Iqac had organized 3 FDPs and 2 STPs . A total of 82 faculty and 19 Non-teaching staff took benefit of the program. An Overall of 74% participated in the program.

List of FDP, STP organized during 2017-18	
Faculty Development Program	
1.	FDP on New Generation Courses
2.	FDP on Fluorescence Imaging
3.	FDP on Pedagogical Techniques
Staff Training Program	
4.	Staff Training Program on Identification and Segregation of Electronic Components
5.	Staff Training Program on Standard Operating Procedure For Laboratory Instruments

Teaching-Learning-Evaluation

Highlights:

- 18 workshops and enrichment programs, 13 guest lectures, 22 industrial visits, 10 webinar and 2PBL were conducted as part of Curriculum supplementing programs.
- Co-curricular clubs, Toast masters Club, Literary club, Value Education Club, Joy of Giving club were floated.
- 45 Add-on Programs were offered and 1179 number of students successfully completed the course.
- 17 University ranks and 75.67% of students successfully graduated from respective courses.

Research Innovations

Highlights:

- Received Grant for establishing Biotechnology Skill Enhancement Program, Under K-Tech, Department of IT, BT, S&T.
- Bioprocess facility was set up under DST FIST support.
- 10 MoUs/ collaborations have been signed for research, internships and projects
- Stakeholders Meet was introduced wherein Students Quality Circle members were invited to provide key suggestions and inputs
- Quality Literacy initiative was introduced to create awareness among faculty, staff and students about institution's policies
- Quality Audit was introduced to Administrative Activities to review and provide suggestions for improvement
- Administrative Calendar was introduced to ensure all the major administrative, Research, HR, Pre-Placement activities are planned and executed
- Closure Meeting was introduced for the college events to collect the feedback and other necessary information about the program
- Annual Report was introduced for all the deaneries and cells exclusively apart from department reports

Carrier guidance - Placement

Highlights:

- Career Guidance Program on Succeed in Job Interview, Redefine in Recruitment Process and Success in Digital India and Overseas Opportunities were conducted. Competitive Exam Coaching, Career Guidance Program on Civil Service Examination were conducted as part of Career Counseling Program.
- An overall 78.6% Placement and progression rate.
- 3 Alumni activities were conducted and 48 students provided with TOCSAA Scholar

Administration

Highlights:

- Stakeholders meet was introduced.
- Annual Cultural fests- OXFOIGNITE, ATGC, MICROMANIA, were organized to maintain vibrant environment.
- Sports meet like Intramural Chess Competition, intramural Carom Competition and Intramural Shuttle Badminton competition were held as part of sports activities.
- 17 University ranks with 75.67% graduation rate
- 521 students provided with The Oxford Merit Scholarship
- 426 students provided with The Oxford Unnati Scholarship.
- 66 faculty members provided with Financial support under Research promotion scheme which includes participation in FDP, Conference, Seminar, Workshop, Symposium,
- Ms. Deepthi Varier, Department of Microbiology received the Best Teacher Award for outstanding contribution in the field of teaching.
- A total of 82 faculty attended FDP / Refresher course and 19 Non-teaching Staff participated in STP. An overall of 74% teaching and Non-Teaching staff benefitted from the program.
- Mr. Manche Gowda, Office staff received the Best Employee Award.

Extension, Outreach, Awareness & Sensitization:

Highlights:

- 09 Extension/Outreach Programs highlighting the importance of cleanliness, environmental concerns and human values were conducted by NSS and NCC unit of the College.
- Awareness programs on Environmental awareness like National Pollution Control Day, National Energy Conservation Day, and World Environment Day were organized.

Quality Enhancement-sustenance

Highlights:

- Quality literacy programs were conducted for faculty and students during the orientation.
- Internal and External audit for academic, administration as well as Green audit were conducted.
- Participated in India-Today, The WEEK and Ranking Survey and positioned at
- 6th in Karnataka and 32nd in India for B.Sc by The Week survey.
- 2nd in Karnataka and 8th in India for B.Sc, 5th in Karnataka and 25th in India for B.Sc FAD, 6th in Karnataka and 25th in India for BCA program respectively by India Today college survey.



INDUSTRIAL VISIT TO NDRI



ATGC2K17



WORLD WATER DAY



WORLD DRABIES DAY



MICROMANIA2017



FEST-GENESIS



EDUCATIONAL VISIT TO NIAP



DEPARTMENT FEST-TRANSIENT-17



INDUSTRIAL VISIT TO NDRI



ATGC2K17



WORLD WATER DAY



WORLD RABIES DAY



MICROMANIA2017



FEST-GENESIS