

DEPARTMENT OF SCIENCE AND HUMANITIES

FACULTY ACHEVEMENTS

Paper Publications in Journal

- H.N. Gayathri, Detection of intraerythrocytic stages of malaria parasite using one-dimensional Bragg mirror optical sensor, *Journal of Optics*, 2024, ISSN 2666-9501, <https://doi.org/10.1007/s12596-024-01669-5>.
- Gowda, R. B., **Gayathri, H. N.**, Mathias, R., Shreya, H. C., Veena, P. N., & Raju, R. K. (2024). Detection of intraerythrocytic stages of malaria parasite using one-dimensional Bragg mirror optical sensor. *Journal of Optics*, 1-8.
- Yashaswini, P. R., **Gayathri, H. N.**, Bahaddur, I., & Srikanth, P. C. (2023). Design and simulation of a highly sensitive one-dimensional photonic crystal for different chemical sensing applications. *Results in Optics*, 11, 100376.
- **Jinendra**, U., Nagabhushana, B. M., Bilehal, D., Iqbal, M., Amachawadi, R. G., Shivamallu, C., & Kollur, S. P. (2023). Encapsulated Co-ZnO nanospheres as degradation tool for organic pollutants: Synthesis, morphology, adsorption and photoluminescent investigations. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 299, 122879.
- **Jinendra**, U., Majani, S. S., Bilehal, D., Nagabhushana, B. M., Nadaf, Y. F., Iqbal, M., ... & Kollur, S. P. (2024). Investigations of adsorption and photoluminescence properties of encapsulated Al-ZnO nanostructures: Synthesis, morphology and dye degradation studies. *Heliyon*, 10(14).
- **Jinendra**, U., Bilehal, D., Nagabhushana, B. M., Kumar, A. P., Afzal, M., Shivamallu, C., ... & Kollur, S. P. (2024). Synthesis, characterization, and photoluminescence investigations of Al/Co-doped ZnO nanopowder. *Journal of Molecular Structure*, 1305, 137701.
- Daphedar, A.B., Majani, S.S., Kaddipudi, P.J., Hujaratti, R.B., Kakkalmeli, S.B., Shati, A.A., Alfai, M.Y., Elbehairi, S.E.I., Shivamallu, C., **Jinendra**, U. and Kollur, S.P., 2024. Evaluation of antioxidant and antibacterial activities of silver nanoparticles derived from Limonia acidissima L. fruit extract. *Current Research in Green and Sustainable Chemistry*, 8, p.100399.
- Deepa, G. T., **Jinendra**, U., Goroji, P. T., Khetagoudar, M. C., Chetti, M. B., & Bilehal, D. C. (2024). Multiresidue Pesticide Analysis in Onion Using GC-MS/MS Using Modified QuEChERS Method with Zirconium Oxide Nanoparticle. *Food Analytical Methods*, 17(5), 701-711.
- **Jinendra**, U., Nagabhushana, B. M., Bilehal, D., Iqbal, M., Amachawadi, R. G., Shivamallu, C., & Kollur, S. P. (2023). Molecular and Biomolecular Spectroscopy. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 299, 122879.
- Ganesh, A. C., Raju, H. P., Margret, L., & **Jinendra**, U. (2024). Rice Husk Ash based Sodium Silicate as the Alkali Activator in slag based Geopolymer Concrete. In *E3S Web of Conferences* (Vol. 559, p. 04003). EDP Sciences.
- **Soundhirarajan, P.**, Silambarasan, M., Gunganathan, L., Devanesan, S., AlSalhi, M. S., Dinesh, A., ... & Ayyar, M. (2024). Spectroscopic and non-spectroscopic analysis of Fe-substituted BaSO₄ nanoparticles by chemical precipitation method. *Journal of Materials Science: Materials in Electronics*, 35(19), 1288.
- Ramesh, K., Gunavarthini, S., **Soundhirarajan, P.**, Silambarasan, M., & Mehala, B. (2024). Hydrothermal Synthesis of Mn₂P₂O₇ Nanostructures and Their

Electrochemical Behavior in Organic Electrolyte. *International Journal of Nanoscience*, 2350085.

- **Mary, S.**, & Kattimani, M. B. (2024). The Status Gourava Indices of Middle Graphs of Some Standard Graphs. *Annals of Pure and Applied Mathematics*, 29(1), 41-50.
- Karthiga, R., Devi, C. B., Janaki, R., **Gayathri, C.**, Pandi, V. S., & Shobana, D. (2023, November). IoT Farm: A Robust Methodology Design to Support Smart Agricultural System Using Internet of Things with Intelligent Sensors Association. In *2023 7th International Conference on Electronics, Communication and Aerospace Technology (ICECA)* (pp. 1332-1337). IEEE.
- **Soundhirarajan, P.**, Silambarasan, M., Gunganathan, L., Devanesan, S., AlSalhi, M. S., Dinesh, A., ... & Ayyar, M. (2024). Spectroscopic and non-spectroscopic analysis of Fe-substituted BaSO₄ nanoparticles by chemical precipitation method. *Journal of Materials Science: Materials in Electronics*, 35(19), 1288.
- Ramesh, K., Gunavarthini, S., **Soundhirarajan, P.**, Silambarasan, M., & Mehala, B. (2024). Hydrothermal Synthesis of Mn₂P₂O₇ Nanostructures and Their Electrochemical Behavior in Organic Electrolyte. *International Journal of Nanoscience*, 2350085.
- **Kadar, C. A.**, Faisal, M., Maruthi, N., Raghavendra, N., Prasanna, B. P., Nandan, K. R., ... & Madhusudhan, C. K. (2023). Anticorrosive Polypyrrole/Barium ferrite (PPy/BaFe₁₂O₁₉) composites with tunable electrical response for electromagnetic wave absorption and shielding performance. *Journal of Electronic Materials*, 52(3), 2080-2093.
- MaruthiMaruthi, N., Muhammad Faisal, Narasimha Raghavendra, B. P. Prasanna, K. R. Nandan, C. K. Madhusudhan, **CH Abdul Kadar**, S. R. Manohara, and M. Revanasiddappa. "Polymer nanocomposite films and coatings for anticorrosion and antiwear applications." In *Polymer Nanocomposite Films and Coatings*, pp. 467-524. Woodhead Publishing, 2024.
- Moumita K Chatterjee* , Mallikarjun B Kattimani , Pavitra Kumbargoudra . Year of Publication : _2024_ , Title of Paper : _M polynomial and Topological indices of derived graphs of Ladder graph._ Journal : _Annals of Pure and Applied Mathematics_ .
Volume : _29_ , No. _1_ , Pg: _25-40_ . ISSN : _2279-087X(P), 2279-_0888(Online)_ . DOI: <http://dx.doi.org/10.22457/apam.v29n1a04923>
- Moumita K Chatterjee* , Mallikarjun B Kattimani , Pavitra P Kumbargoudra . Year of Publication : _2024_ , Title of Paper : _Accurate Degree Domination Number of a Graph_ Journal : _International Journal of Mathematics Trends and Technology._ .
Volume : _70_ , No. _5_ , Pg: _9-12_ . ISSN : _2231-5373_ . DOI: <https://doi.org/10.14445/22315373/IJMTT-V70I5P102>
- Sharan, S. C., **Dhruva**, H. K., Anitha, T. M., Roy, N., Sharan, P., & **Moudgalya**, R. M. (2024, February). FBG Sensor Design and Analysis for Early Detection of Cancer. In *2024 11th International Conference on Computing for Sustainable Global Development (INDIACom)* (pp. 843-849). IEEE.

Books published

- Dr.H.N.Gayathri, Photonic Sensors for Biomedical Applications,InternationalISBN: 9781779520012,academic press Co published with CRC press, Taylor and Francis group,24-25.
- Usha Jinendra, The Handbook of MEDICINAL PLANTS & HEALTH CARE SYSTEMS Chaoter 1 -Common Digestive Herbs Present in Indian Kitchen and 01, Integrity Media,01/05/2023, ISBN 13: 978-93-93636-73-7.
- Usha Jinendra, Futuristic Trends in Chemical Material Sciences & Nano Technology Volume 3 Book 17", Selfypage Developers Pvt. Ltd, e-ISBN: 978-93-5747-876-2
- Usha Jinendra, Rice Husk Ash based Sodium Silicate as the, ICSTCE 2024, ICSTCE 2024, <https://doi.org/10.1051/e3sconf/202455904003>. E3S Web of Conferences 559, 04003 (2024).
- Dr. Hemalatha N.C, Calculus: Concept of Mathematics, Shineekers, 979-8-89379-75(2024).

Patents granted

SLNo	Name of the Inventor	Department	Title of the Patent	Patent No	Applied Date	Granted
1	Dr.H.N.Gayathri	chemistry	Prosthetic for lower extremity	369332-001	18.8.2022	18/08/2022 Indian Granted
2	Dr.H.N.Gayathri	chemistry	Electricity generator from municipal wastewater using microbial fuel cells	6367812	23 May 2024	31 May 2024 UK granted
3	Dr.H.N.Gayathri	chemistry	Low Cost defloridation unit for ground water remediation	417305-001		17/05/2024 Indian Granted
4	Dr.Hemalatha NC	Maths	Smart device for teaching mathematics to the blind students	6355226	25 march 2024	4/04/2024 UK granted.

Guest lecturers Organized

Sl. No	Date	Title of the Guest Lecture	Resource Person
1.	16.04.2024	Design Thinking Opportunities Through Technology Transfer For Sustainable Future Under Green Chemistry	Dr. Girish Basavaraju, Head of Process Engineering, Process Safety Management, and Technology Transfer, Syngene International Ltd , Bangalore.
2.	23.04.2024 To 24.04.2024	Innovation And Design Thinking Opportunities Through Problem Soling Using Python Programming For Young Engineers- A hands on session.	Dr K Sushant Bairy, Assistant Professor Reva University.
3.	07.06.2024	Innovative industrial trends in artificial intelligence for engineers	Dr. Mithun Kumar S R Engineering Manager, Google Maps Team.

DESIGN THINKING OPPORTUNITIES THROUGH TECHNOLOGY TRANSFER FOR SUSTAINABLE FUTURE UNDER GREEN CHEMISTRY



PYTHON WORKSHOP

THE OXFORD COLLEGE OF ENGINEERING
 Children's Education Society
 THE OXFORD COLLEGE OF ENGINEERING
 Recognized by the Govt. of Karnataka. Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi, accredited by NAAC 'A' Grade & NBA New Delhi and Recognized by UOC
 Hosur Road, Bommanahalli, Bangalore -560068

Department of Science & Humanities
 Organizing
 Workshop on "Innovation and Design Thinking opportunities through Problem Solving using Python Programming for Young Engineers" - A Hands-on session
 From 22nd to 24th April-2024

In Association with
INSTITUTIONS INNOVATION COUNCIL
 The Oxford College of Engineering

Chief Patron
Sri S.N.V.L. Narasimha Raju
 President
 The Oxford Educational Institutions

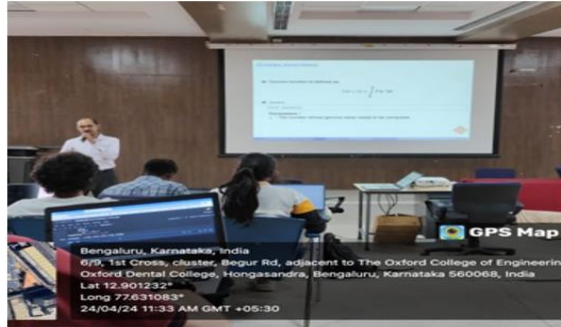
Dr. N. Kannan
 Principal & President IIC
 The Oxford College of Engineering

Dr. P. Bindhu Madhavi
 IIC Convener
 The Oxford College of Engineering

Dr. Gangavathi P.
 Head of the Department Science & Humanities
 The Oxford College of Engineering

Dr. K. Sushma Baiyy
 Assistant Professor
 Department of Mathematics
 Revs University

Dr. Pallavi G.
Prof. Selastina Mary A.
Dr. Madhvesha Moudgalya R.
 Coordinators
 The Oxford College of Engineering



AI WORKSHOP



Outreach programs organized by S&H

Sl. No:	Date	Activity
1.	10.11.2023	Science association in collaboration with institution innovation council organizing a programme on essay competition on the eve of world science day
2.	22/2/23 to 28/2/23.	National science day as Science week
3.	15-04-2024	Hygiene and Health in Prashanth charitable Trust, Maruthilayout , Hongasandraon Bengaluru
4.	17/5/2024	ROAD SAFETY WALKATHON to Bommanahalli (Begur) Signal, on 17 May 2024.
5.	29-05-2024	Cleaning drive in Madiwala Lake In collaboration with Environmental Management & Policy Research Institute (EMPRI),Bengaluru

WORLD SCIENCE DAY



NATIONAL SCIENCE DAY



HYGIENE AND HEALTH



ROAD SAFETY WALKATHON to Bommanahalli (Begur) Signal, on 17 May 2024.



Cleaning drive in Madiwala Lake



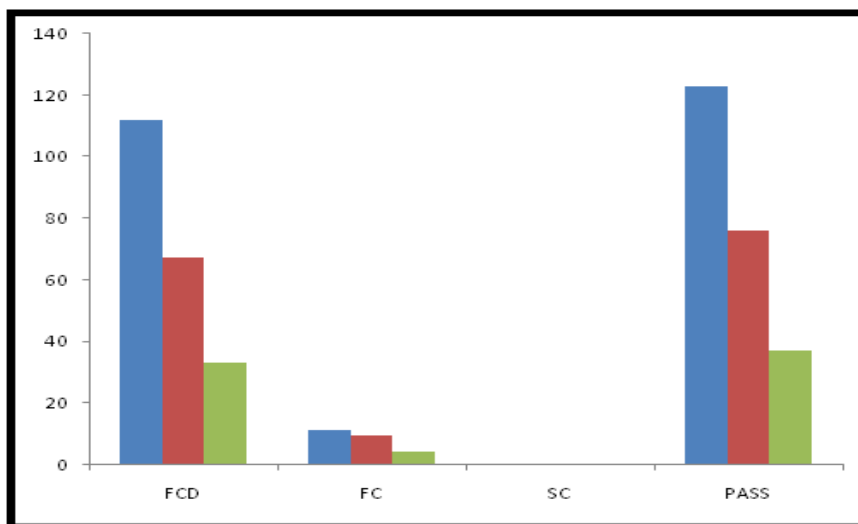
FDP/Workshop Attended

Sl. No	Faculty Name	National / International	Topic	Organizer	Date
1	Dr.H.N.Gayathri	National	Attended 7 days FDP on “recent innovations in green and sustainable energy” (Hybrid mode) from organized by	DayanandaSagar College of Engineering ,Bangalore	23-29 th Feb 2024
2	Dr.H.N.Gayathri	International	Attended a virtual FDP on “International faculty development programme - Innovating Environmental Protection: Integrating cutting –Edge chemical engineering practices for sustainable futures organized by department of	Chemical engineering, Hindustan college of engineering and technology, Coimbatore.	26/2/24 to 1/3/24
3	Dr.H.N.Gayathri	National	One week online FDP on1.Modeling , processing and characterization of composites .	NITK, Surathkal	17th September 23
4	Dr.H.N.Gayathri	National	Advances in Green technology and future oppurtunities.	Dr.D.Y.PATIL Institute of Engineering,	7th to 11 th August 23,
5	Dr.Usha Jinendra				
6	Dr.Usha Jinendra	National	Advanced Pedagogical Skills , design thinking and	Karnataka Skill Development Corporation	6 th -23 rd Sep-2023

			training of trainersfor 21 st century softskills		
7	Dr.Madhvesha Moudgalya R	National	Improving the Python Coding Skills of the Faculty	Konigtronics(OPC) Pvt. Ltd	16 th – 20 th Nov-2023.
8	Dr.Madhvesha Moudgalya R	National	Mathematical foundations for python programming and data science: hands on approach	BMSIT, Bangalore.	6 th – 10 th Nov-2023.
9	Dr.Madhvesha Moudgalya R	National	Advanced Pedagogical Skills , design thinking and training of trainersfor 21 st century softskills.	Karnataka Skill Development Corporation. Bangalore.	6 th -23 rd Sep-2023
10.	Prof. Varalakshmi L				
11.	Prof. Gayathri C				
12.	Prof. Manoj Kumar R				

ACADEMIC ACHIEVEMENTS:

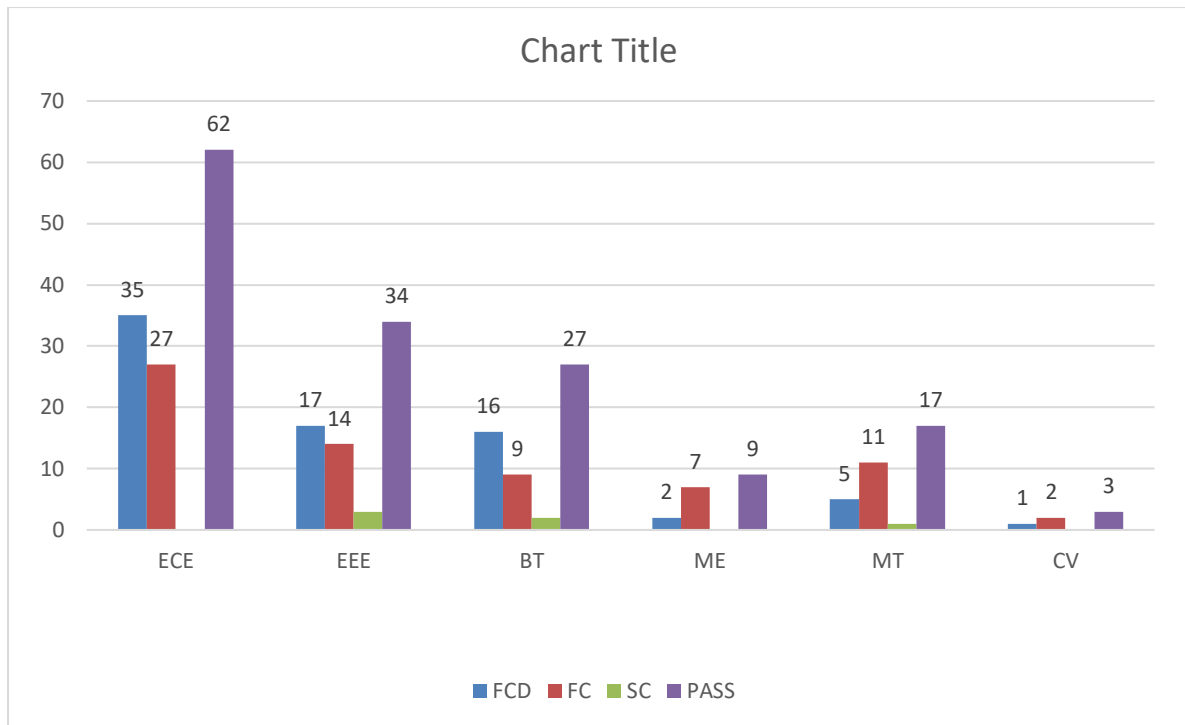
**Outstanding performance- Toppers of 2023-2024 Batch
CHEMISTRY CYCLE RESULT ANALYSIS**



BRANCH	TOTAL STUDENTS	APPEARED	FCD	FC	SC	PASS	FAIL	ABSENT	PASS%
CSE	166	165	112	11	0	123	42	1	74.5
ISE	106	106	67	9	0	76	30	0	71.7
AIML	58	57	33	4	0	37	20	1	64.9
OVERALL	330	328	212	24	0	236	92	2	72.0

PHYSICS CYCLE RESULT ANALYSIS

BRANCH	TOTAL STUDENTS	APPEARED	FCD	FC	SC	PASS	FAIL	ABSENT	PASS%
ECE	117	117	35	27	0	62	55	0	53.0
EEE	53	53	17	14	3	34	19	0	64.2
BT	44	44	16	9	2	27	17	0	61.4
ME	16	16	2	7	0	9	7	0	56.3
MT	32	32	5	11	1	17	15	0	53.1
CV	9	9	1	2	0	3	6	0	33.3
OVERALL	271	271	76	70	6	152	119	0	56.1





CHILDREN'S EDUCATION SOCIETY(Regd.)
The Oxford College of Engineering

Heartly congratulations
To our 1st -year, 2023 batch, 2nd-semester
class toppers



ASHITHA M G
CSE- 92.1



KRUTHIKA K
10X23CS062
CSE- 94.1



KHEERTHANA
10X23AI021
AIML-92.1



SHREESHA
10X23IS082
ISE - 92



SHARAN S C
10X23CS129
CSE- 91.6



RUCHITHA
10X23CS115
CSE - 91.5



MIRZA
10X23IS046
ISE-91.4



NIKHILA G
10X23CS085
CSE-91.45



Ridhi
10X23IS074
ISE-91.38



ROSHNA
10X23CS114
CSE-91.36



JAYASHREE
10X23CS050
CSE-91.25