Dr. M. JUNAID BUSHIRI
Senior Professor Department of Physics
Chairman Board of Studies in Physics
Vice Chancellor (i/c)
Cochin University of Science and Technology
Kochi, Kerala, INDIA.

Prof.M. Junaid Bushiri is working in the Department of Physics at Cochin University of Science and Technology. He has been a Professor since 24/10/2013 and served as the Head of the Department of Physics at CUSAT from 02/11/2016 to 01/11/2019. He is the Chairman of the Board of Studies in Physics at CUSAT from November 24, 2023. Professor Bushiri is has also been a member of the Senate of CUSAT since 2015, with his tenure spanning multiple terms from 2015-2016, 2019-20, and continuing into 2024.

Prior to joining CUSAT, he worked at Korea Advanced Institute of Science and Technology, Korea, Academia Sinica, Taiwan, Institute of Molecular Science, Okazaki, Japan and the Department of Physics at the University of Kerala. He also worked at the Department of Fisica Aplicada, University of Valencia, Spain. He also served as a Visiting Professor at the Tokyo University of Science in November 2022. Prof. Bushiri's research interests encompass crystal growth, 2D materials, semiconducting thin films for optoelectronic and luminescent applications, functional nanomaterials for electronic and catalytic applications, biological materials, and Raman spectroscopy. He has completed two research projects funded by KSCSTE, the Government of Kerala as Principal Investigator. Nearly forty, twelve students completed their Master project and M.Phil. degree respectively under his supervision. Twelve students were awarded Ph.D. degree under his guidance. One scholar has submitted Ph.D thesis. He has a total of 71 research publications in reputed peer-reviewed international journals. He has a commendable h-index of 20 and i10-index of 29. He is also reviewer of several international journals.

Major initiatives as Vice Chancellor (i/c)
Cochin University of Science and Technology

- Leadership in academic restructuring and starting new academic programmes like Integrated PG in Environmental Sciences and Executive MBA, M.Tech, Industry colabrated MTech program with Appolo Tyres, Synthite Industries etc
- Inititiated steps for starting Dual degree MBA programmes in colabration with John Hopkins University Australia and George Washington University USA and Dual degree MTech programme in colabration with St. Petersberg Univesity Russia.
- Initiated steps for modification of Ph.D regulation of the University to improve research quality.
- Higher Education conclave initiated by Government of Kerala was successfully convened in CUSAT campus during the month of January 2025.
- CUSAT got qualified for ANRF pair programme.
- Steps were taken for establishing a Science museum in the campus for the popularisation of Science.
- A web portal is introduced for linking analytical instruments and computational facility of the University for accesing the facility by both internal and external academic community. It also helps in improving the revenue of the University and support for industries.
- Started US corner in the campus, initiated several MOU,s with international academic institutions.
- Steps initiated for completing works under KIIFB programmes.
- Research Director was appointed for coordinating research and innovation activities of the University.
- Planning Committee in the University was re-constituted for the speedy and efficient execution of development activities of CUSAT.
- Steps were initiated for the speedy declaration of examination results.
- Initiated steps for mobilising funds from companies like Cochin shipyard Ltd. under CSR initiative for the research and development of the university.

Curriculum Vitae

(a). Name Dr.M.JUNAID BUSHIRI

(b).Designation Professor, Department of Physics,
Cochin University of Science and
Technology, Kerala,INDIA

(c).Date of birth 27-05-1968

(d). Address Department of Physics,
Cochin University of Science and Technology,
Kochi-682 022,
Kerala, INDIA.
Phone:09495348631
email: junaidbushiri@cusat.ac.in
junaidbushiri@gmail.com

Residence Sparrow's Nest,
University Colony- Pipeline Road,
Cochin University P.O, Kochi-682 022
Kerala, INDIA.

(e).Education

Degree	*Subject*	*University/College*	*University*	*Year*	*Class/Division*
B.Sc.	Physics (Main)	Christian College, Kattakada, Kerala, India.	University of Kerala, Thiruvananthapuram, Kerala, India.	1988	I
M.Sc.	Physics	S.S.L.Jain College,Vidisha, M.P, India.	Barkatullah University, Bhopal M.P, India.	1991	I
Ph.D.*	Physics	Department of Physics	University of Kerala, Thiruvananthapuram, Kerala, India.	2000	

*Thesis title:**Spectroscopic investigation of certain phosphates and bromates.***

Mentor :Prof.V.Unnikrishnan Nayar

(f). ***Research***

(i). Number of publications in journals:	72
(ii). Number of Ph.D.s. produced:	14+1
(iii). Number of M.Phil. dissertations guided:	12
(iv). Number of Master Projects guided	40
(v). h-index:	22
(vi). Other publications:	2
(vii) Invited talks in Seminar/ Conference/Institutions:	15
(viii). Number of Seminar/Conference Proceedings/abstracts:	79
(ix). Number of students working for their Ph.D. Degree:	7
(x). Number of Citations	1268
(xi). i10-index	37

(g). Experience in International Academic Institutions

1. Visiting Professor, Tokyo University of Science, Japan from 01-11-2022 to 25-11- 2022.
2. Worked at the Department of *FisicaAplicada*, University of Valencia, Valencia, **Spain** from 26-05-2009 to 25-05- 2010. (*Vicente Group*).
3. Worked at the Institute of Molecular Sciences (IMS), Okazaki National Research Institute of **Japan** from 1.4.03 to 20.3.04 (*Nishi Group*).
4. Worked at the Institute of Atomic and Molecular Sciences (IAMS) Academia Sinica, R.O.C, **Taiwan** from 01-05-2002 to 25-12- 2002. (*Prof.Yen Chu Hsu's Group*)
5. Worked as a temporary research scientist at the Korea Advanced Institute of Science and Technology (KAIST), **Korea,** from 29 -10-2001 to 25-12-2001
   (*Centre for Microscopic Quantum Field Lasers –Creative Research Initiative*)

(h) Ph.D. Guided

	Name of Candidates	***University***	***Title of the thesis***	***Year of awarding Ph.D***
1.	Haseena Koyakutty	Cochin University of Science & Technology	*Solution combustion synthesis of nickel-based nano, micro, and heterostructures for electrocatalytic oxygen evolution reaction and non-enzymatic glucose sensing*	Submitted 2025
2.	Angelin Abraham	Cochin University of Science & Technology	*Catalyzing Hydrogen Evolution Reaction as a Function of Crystallographic Phases of Tungsten Oxide (WO_3) and Strategies to Boost its Intrinsic Activity.*	2025
3.	Niranjana J.S.	Cochin University of Science & Technology	*Novel synthesis of multi-layered graphene/Fe_3O_4 nanocomposite for electrochemical and adsorption applications.*	2025
4.	Bini .B. Nair	Cochin University of Science & Technology.	*Crystal growth of pencil, interconnected and hexagonal pillar-shaped ZnO nanostructures for photocatalytic applications.*	2022
5.	Krishnasagar.C.K	Cochin University of Science & Technology.	*Photoluminescence studies of Europium doped ZnS microspheres and Zn_2SnO_4 nanostructures for bioimaging applications.*	2021
6.	Divya.N.G	Cochin University of Science &	*Zn^{2+} ion-assisted growth of α-Fe_2O_3 and*	2021

		Technology.	*electrochemical sensing of α-Fe_2O_3 and $ZnFe_2O_4$/α-Fe_2O_3-graphene hybrid nanomaterial.*	
7.	Abdul Rasheed.P	Cochin University of Science & Technology.	*Growth of Multifunctional Tin Oxide Nano-arrayed Thin Films by Chemical Spray Pyrolysis.*	2021
8.	Beena Mol	Cochin University of Science & Technology.	*Physical and optical properties of rf plasma polymerized thin films based on aniline, pyrrole, tea tree oil, eucalyptus oil and polymer-coated Fe_3O_4 nanoparticles for magnetic hyperthermia applications.*	2021
9.	Ganesh Chandra Prabhu. V	Cochin University of Science & Technology.	*Magnetic and photocatalytic studies of electrically conducting Ni/NiO nanocomposites in carbon matrix.*	2019
10.	Satheesh. M	Cochin University of Science & Technology.	*Magnetic properties of iron oxide and iron oxide in graphitic matrix*	2019
11.	Sajan. P	Cochin University of Science & Technology.	*Solvo-hydrothermal growth and photoluminescence studies of micro and nanostructured Zinc Sulfide for bio-imaging*	2017

			applications	
12.	Vinod. R	Cochin University of Science & Technology.	*Photoluminescence investigation of hydrothermally grown ZnO and 3d transition metal (Mn/Co/Ni/Cu) doped ZnO nanostructures.*	2017
13.	Kochuthresia.T.C.*	University of Kerala, Thiruvananthapuram, Kerala, India.	*Vibrational Spectroscopic Studies of a few Monometallic Iodates and Bromates*.	2014
14.	Gopakumar.V	University of Kerala, Thiruvananthapuram, Kerala, India.	*Synthesis, characterization and photoluminescence studies of ZnO micro and nanostructures*.	2012
15.	Antony C. J	University of Kerala, Thiruvananthapuram, Kerala, India.	*Spectroscopic studies of certain guanidinium metal sulphates and Nasicon phosphates*.	2010

**Co-guide:Prof.V.K.Vaidyan*

(i) M.Phil. Guided

In	***Name of Candidates***	***University***	***Title of the dissertation***	***Year***
1.	Saranya. A. S	Cochin University of Science & Technology.	*Solvothermal growth of cubic-shaped $CaCO_3$ and Gddoped $CaCO_3$ using Ca precursor from shells of Turritella Undulata Sp. for photocatalytic applications.*	2022
2.	Jincy. C.P	Cochin	*Structural, optical and electrical*	2020

		University of Science & Technology.	*properties of NiO thin films made of quantum-size particles grown by spray pyrolysis.*	
3.	Sachin Ajith	Cochin University of Science & Technology.	*Spectroscopic analysis of caries affectedhuman teeth.*	2017
4.	Sukanya.K.B	Cochin University of Science & Technology.	*Synthesis of broad visible light emitting nano ZnS co-doped with cerium and copper.*	2016
5.	Saranya. R. Menon	Cochin University of Science & Technology.	*Physical properties and dye adsorption efficiency of hydrogen storage material, ZnV_2O_4*	2015
6.	Paxy George	Cochin University of Science & Technology.	*Ethylene diamine assisted synthesis of tungstic acid and tungsten oxide nano and microrods by chemical precipitation.*	2014
7.	Reshmi.M	Cochin University of Science & Technology.	*Analytical characterization and Raman spectral studies of kidney stones*.	2013
8.	Ebitha Eqbal	Cochin University of Science & Technology.	*Raman and IR spectroscopic, structural investigations of SbV 0.5 In III 0.5 P_2O_7 and SbV0.5FeIII0.5 PO_7.*	2012
9.	Subash Gopi	Cochin University of Science & Technology.	*Investigation of dielectric properties of nanocrystalline MgO and Pb doped MgO synthesized by chemical precipitation method.*	2012
10.	Jayanthi .J.L	University of	*Photoluminescence*	2006

		Kerala.	*characterization of spray pyrolytically grown nanostructured ZnO crystals.*	
11.	Vinitha.V	University of Kerala.	*Temperature-dependentsheet resistance studies of ZnO thin films.*	2006
12.	Ajeendran.G	University of Kerala.	*Vibrational spectroscopic studies of environmental effects on "Centella asiatica".*	2005

(j) Postdoctoral Mentoring

In	***Name of Candidates***	***University***	***Period***
1.	Dr.Ebitha Eqbal	Cochin University of Science & Technology.	16/09/2022 to 15/09/2023.
2.	Dr.Sajan P	Cochin University of Science & Technology.	03/07/2019 to 02/07/2021.
3.	Dr. Girish	Cochin University of Science & Technology.	24/10/2017 to 22/02/2019.

(g). Research Projects

Sl.No.	***Title***	***Agency***	***Period***	***Grant/Amount Mobilized (Rs)***
1	Synthesis and characterization of Zn-based nanomaterials for	KSCSTE Government of Kerala, India.	2004-2006	8,41,500

	optoelectronic applications.			
2	Growth and characterization of tin oxide and doped tin oxide materials for optoelectronic applications.	KSCSTE Govt. of Kerala, India.	2012-2015	15,100,00/-
3	Strengthen the postgraduate teaching and research facilities *This project is granted to the department of Physics, CUSAT for the period 2013-2018.*	DST FIST* Coordinator as Head of the Department of Physics, CUSAT.	2016-18	
4	UGC-SAP, CAS I *This project is granted to the department of Physics, CUSAT for the period 2013-2018.*	UGC**	2017-18	
5	Conservation and Management of Forest Resources and Welfare of Tribal Populations in State of Kerala –RUSA (Co-Principal Investigator)	RUSA	Ongoing	8,50,000/-

* Coordinator of this project as Head of the Department of Physics,CUSAT from 2-11-2016.

** Coordinator of this project as Head of the Department of Physics, CUSAT from 1-04-2017.

(k). Fields of Major Scientific Interests

1. Synthesis of hybrid functional nanomaterials for photocatalytic, electrochemical, magnetic, luminescence, energy and biological applications.
2. Laser Raman spectroscopy and IR spectroscopy.
3. Spray pyrolytic synthesis ofsemiconducting thin films for optoelectronic applications.

4. Solvothermal crystal growth of nanostructures.
5. Combustion Synthesis of nanocrystals.
6. Electrochemical sensor, photocatalytic/electrochemical water splitting, development of fuel cell materials.
7. Structural modification of graphene.

(l). Research Achievements

1. Synthesis of graphite-coated Fe nanoparticles.
2. Growth of high index facet bounded α-Fe_2O_3 pseudo cubic nanocrystals.
3. Synthesize of Ni/NiO nanocomposites by one-step solution combustion method.
4. Synthesis of ZnS microspheres.
5. Growth of SnO_2 quantum clusters on hydrophobic surface.
6. Synthesis of highly intense UV emitting (349 nm) porous ZnS nanostructures.
7. UV emission from ZnO nanoflowers synthesized by the hydrothermal process.
8. Development of low-cost silver-capped tin oxide nano-obelisk arrays as highly sensitive SERS substrate.
9. Spray pyrolytic deposition of low dimensional structures on different substrates.
10. Development of multi-layered rGO/Fe_3O_4 nanocomposite in a single-step process.
11. Physics of electric field induced polarizability in KTP crystal by Raman spectroscopic method.
12. Radio frequency plasma-assisted synthesis of Fe_3O_4 nanoparticles using polyaniline/polypyrrole for bioimaging and magnetic hyperthermia applications.
13. Solution combustion synthesis of pencil-shaped ZnO.

(m). Membership in Professional/Academic Bodies and Others

1. Life Member, Materials Research Society of India.
2. Life Member, Indian Laser Association.
3. Life Member, Indian Physics Association.
4. Life Member, Kerala Academy of Sciences.
5. Founder Member Indian Association for Hydrogen Energy and Advanced Materials.
6. Member Board of Studies (PG-Physics) Calicut University from 2013-2018.
7. Member Board of Studies (PG-Physics) Mahatma Gandhi University

from 2014-16.

8. Member Faculty of Science, University of Kerala from 2014-16.
9. Member Board of Studies Photonics, Cochin University of Science and Technology from 2014-16.
10. Member Board of Studies (PG-Physics) University of Kerala from 2014-16.
11. Member Academic Committee, CUSAT from 2014-2023.
12. Member Expert for the evaluation of student project KSCSTE, Government of Kerala from 25/03/2015 for a period of three years.
13. Member Board of Studies Physics, Cochin University of Science and Technology from 2015 to 2023.
14. Member Board of Studies Nanoscience, Cochin University of Science and Technology from 2015-16.
15. Member Board of Studies Physics, Kannur University, Kannur, Kerala from 2015-17.
16. Member Senate, Cochin University of Science and Technology from 2015 to 2016, 2019-20 and 2023 February (Continuing).
17. Hon. Director, Centre for Enabling Technologies for the Aged, Cochin University of Science and Technology from 04-03-2014-16.
18. Member Grievance Redressal Cell for the election to the Cochin University Union 2014-2015.
19. As a member of university level (CUSAT) committee for conducting the inculculate-science propagation programme in the year 2013.
20. Member–Technical Paper Evaluation and Technical Committee of 26thKerala Science Congress.
21. Doctoral committee member of M.G university for scrutinising applications of candidates for Ph.D registration in Physics in the year 2018.
22. Head, Department of Physics, CUSAT from 02-11-2016 to 01-11-2019 (Three years).
23. Chairman Board of Studies in Physics, Cochin University of Science and Technology from 24/11/2023.
24. Chaired a session at the International Conference on Advanced Materials, Devices and Technologies (ICAMDT-2023), held on 6-7 November 2023 at the Department of Physics, S.V. University, Tirupati, A.P., India.
25. Member Academic Council Cochin University of Science and Technologyfrom 02-11-2016 to 01-11-2019and from 24/11/2023 (Continuinig).

(n). Special Skills

i Operation of Laser Raman Spectrometer.

ii. FTIR & UV-visible spectrometer and Fluorescence Spectrometer.

iii. Experiments with LASERS.

Nd:YAG Laser:	Optical second harmonic generation, Lasing experiments, Spectroscopy
Ar ion laser:	Raman spectral measurements
CO_2 laser:	For making silica microsphere
Excimer Laser, Dye:	Gas phase spectroscopy and photolysis

iv. Microsphere lasing experiments.

v. Microwave-assisted synthesis of nanomaterials.

vi. Operation of X-raydiffractometer.

vii. Thermal Analysis systems like DTA\TGA\DSC.

viii. Operation of SQUID Magnetometer (3Tesla and 7 Tesla).

ix. Crystal Growth Techniques.

(a) Solution Growth (b) Flux Growth (c)Gel Growth

(d) Hydrothermal

x. Thin film deposition

(a)Spray pyrolysis

(b). Vacuum evaporation

xi. Solvothermal synthesis of atmosphere-sensitive nanoparticles - (In side glove box).

xii. Preparation of nanomaterials by colloidal synthesis and spray pyrolysis method.

xiii. Ultra-High Vacuum (UHV) systems operation.

xiv. Experience in experiments in liquid nitrogen and liquid helium temperature.

xv. Protein crystallization by hanging drop, gel method.

xvi. Experiments using Synchrotron Source (EXAFS and XANES).

xvii. Analysis of Raman data of biologically important samples.

xviii. Knowledge of scientific software like Origin, Igor, MATLAB etc.

(o). Training Programmes/Workshops/Refresher courses attended.

In	*Name of the Program*	*Duration*	*Organizers*
1.	Refresher course(Nano Sciences*)*	03.01.2013 to 23.01.2013	U.G.C.Academic Staff College, University of Kerala,Trivandrum,Indi

			a.
2	34th Refresher Course on Experimental Physics	02.12.2011to 17.12.2011	Indian Academy of Science, Bangalore, India.
3.	First SERC School on nonlinear optical and laser materials	22.06.2000 to08.07. 2000	Indian Institute of Science, Bangalore, India.
4.	Worked as a summer fellow (two months) of Indian Academy of Science at the Indian Institute of Science, Bangalore.	18.05.1999 to19.07. 1999	Molecular Biophysics Indian Institute of Science, Bangalore, India.

(p).Training Programmes/Workshops/Seminar/Conference organized.

1. National Conference on "Functional Materials and Applications" (18-19th January 2024), Department of Physics, Cochin University of Science and Technology, Kochi, India -Convenor.
2. Workshop on Physics: Scope and Awareness for school children (April 4-8, 2016) - Cochin University of Science and Technology, Kochi, India -Convenor.
3. National workshop on recent trends in nanotechnology for age-old (RTNO-2016) March 10, 2016, Centre for Enabling Technology for the Aged-Cochin University of Science and Technology, Kochi, India –Convenor.
4. Fourth International Conference on Frontiers in Nanoscience and Technology (Cochin Nano -2016, February 20-23, 2016), Cochin University of Science and Technology, Kochi, India - (Member Local Organising Committee).
5. Workshop on Research Methodology in Physical Sciences- December 11, 2015-Cochin University of Science and Technology, Kochi, India -Convenor.
6. Workshop on Physics: Scope and Awareness, for school children (April 6 -10, 2015) - Cochin University of Science and Technology, Kochi, India -Convenor.
7. Seminar on "Material Characterization Tools and Techniques",19-21 March 2015, Centre for Advanced Materials (CAM) and Department of Physics, CUSAT-Member Organizing Committee.

8. National Workshop on Technologies for Aged (NWTA-2015), March 6 2015, Centre for enabling technologies for the aged and CUSAT- Convenor.
9. The international conference on "Energy Harvesting, Storage and Conversion IC-EEE 2015, 5-7, February 2015, Department of Physics, CUSAT, (Member Local Organising Committee).
10. Physics Open House; (16-17, January 2015), Cochin University of Science and Technology- Convenor.
11. National Workshop on "Energy Materials" (EM-2014), 04 December 2014, Department of Physics, CUSAT, Convenor (Organising Committee).
12. Workshop on Physics: Scope and Awareness, for school children (March 31-April 5, 2014)- Cochin University of Science and Technology, Kochi, India – Convenor.
13. National Workshop on "Advanced Materials" (AM-2013), 31st October 2013, Department of Physics, CUSAT, Convenor (Organising Committee).
14. Workshop on Physics: Scope and Awareness, for school children (April 01 – 06, 2013-)- Cochin University of Science and Technology, Kochi, India - Convenor.
15. The Second International Conference on Optoelectronic Materials and Thin Films For Advanced Technology, OMTAT 2013- Cochin University of Science and Technology, Kochi, India - (Member Local Organising Committee).
16. Workshop on Physics: Scope and Awareness, for school children (April 23 -28, 2012-)- Cochin University of Science and Technology, Kochi, India - Convenor.
17. Workshop on Physics: Scope and Awareness, for school children (April 25-30, 2011)- Cochin University of Science and Technology, Kochi, India - Convenor.
18. The Third International Conference on Frontiers in Nanoscience and Technology (Cochin Nano-2011) from 14-17 of August 2011, Department of Physics, Cochin University of Science and Technology, Cochin, India. (Member Local Organising Committee).
19. National Seminar on "Recent Trends in Theoretical Physics", at Department of Physics, CUSAT from 19-21 March 2011. - (Member Local Organising Committee).
20. Second International Conference on Frontiers in Nanoscience and Technology (Cochin Nano - 2009), Cochin University of Science and Technology, Kochi, India -

(Member Local Organising Committee).

21. International Conference on Solar Cells (IC-SOLACE 2008), Cochin, India, Jan 21-23,2008, Cochin University of Science and Technology, Kochi, India --(Member Local Organising Committee).
22. National Seminar on New Horizons in Theoretical and Experimental Physics - NHTEP 2007; Cochin, India. Oct. 8-10 (2007) - Cochin University of Science and Technology, Kochi, India - (Member Local Organising Committee).
23. Workshop on Physics: Scope and Awareness for school children; April 16-26, 2007, Cochin University of Science and Technology, Kochi, India. – Convenor.

(q). Courses Taught at PG/M.Phil/Ph.D

1. Atomic and Molecular Spectroscopy
2. Mathematical Physics
3. Electronics
4. Laboratory Courses
5. Lasers and Atomic and Molecular Spectroscopy
6. Nuclear Physics
7. Quantum Electronics
8. Optoelectronics
9. Research Methodology and Quantitative Techniques
10. Physics of Advanced Materials and Spectroscopy
11. Advanced Raman Spectroscopy

(r). Other Academic/Examination works

1. Ph.D. thesis adjudication of various universities.
2. M.Phil. dissertation adjudication in various universities.
3. Reviewer of research articles -For various scientific journals published by different publishing groups.
4. Taken classes for refresher courses at Calicut, Kerala and Kannur universities.
5. Question paper setting, External Examiner, etc., to various university examinations
6. As an expert in SCERT - related to granting equivalency status to various school level examination boards in India and abroad.
7. As expert in conducting interviews for the selection of Project fellow (Physics-Calicut University 2013).

(s).Chronological Research/Employment History

In.	*Organization/Institute*	*Position held*	*Date of Joining*	*Date of leaving*
1.	Cochin University of Science & Technology, Kochi, Kerala, India.	Vice Chancellor (i/c)	21.09.2024	Continuing
2.	Cochin University of Science & Technology, Kochi, Kerala, India.	Senior Professor	24.10.2023	Continuing
3.	Cochin University of Science & Technology, Kochi, Kerala, India.	Professor	24.10.2013	23.10.2023
4.	Tokyo University of Science, Japan.	Visiting Professor	01.11.2022	25.11.2022
5.	Cochin University of Science & Technology, Kochi, Kerala, India.	Associate Professor	24.10.2010	23.10.2013
6.	Cochin University of Science & Technology, Kochi, Kerala, India.	Reader	15.06.2010	23.10.2010
7.	Department of FisicaAplicada, University of Valencia, Valencia, Spain.	Tecnico Superior de Investigacion	26.05.2009	25.05.2010
8.	Cochin University of Science & Technology, Kochi, Kerala, India.	Reader	29.09.2006	25.06.2009
9.	University of Kerala, Thiruvananthapuram, Kerala, India.	TechnicalOfficerGr.II	06.09.2004	28.09.2006
10.	University of Kerala, Thiruvananthapuram, Kerala, India.	Technical Assistant	01.04.04	05.09.2004
11.	Institute of Molecular Sciences (IMS),Okazaki National Research Institute, Japan.	Postdoctoral Research Fellow	01.04.03	20.03.04
12.	Academia Sinica, R.O.C, Taiwan.	Postdoctoral Fellow	01.05.2002	25.12.2002
13.	University of Kerala, Thiruvananthapuram, Kerala, India.	Technical Assistant	18.01.2002	30.04.2002
14.	Korea Advanced Institute of	Temporary Research	29.10.2001	25.12.2001

	Science and Technology, Korea	Scientist		
15.	University of Kerala, Thiruvananthapuram Kerala, India.	Technical Assistant	12.07.1994	24.10.2001

(t). Administrative Experience

- Vice Chancellor (i/c) of the Cochin University of Science & Technology, Kochi, Kerala, India from 21.09.2024.
- Head, Department of Physics, Cochin University of Science and Technology from 02-11-2016 to 01-11-2019 (Three years).
  The general administration of the department. Initiated steps to purchase scientific equipment like EDX, Powder XRD, Electrochemical workstation, Glove box, etc.

(u). Awards

Best oral presentation in *National Conference on Nano photonics*, March 6-7, 2014, School of Physics, Bharathidasan University, Tiruchirappalli, Tamil Nadu, India.

v *Patent*

Registered for a patent (Indian) – Application No. 202441043027

IODIC ACID ASSISTED HYDROTHERMAL SYNTHESIS OF HEXAGONAL PHASE TUNGSTEN OXIDE NANORODS

(w). List of Publications-Journals

1. Anupama A, V. Hari Narayanan, M. Junaid Bushiri

   Kinetics and isotherm analysis of methylene blue adsorption onto layered tungsten disulfide for water purification
   *Chemistry Select;*10,43**,** e02815.2025.
2. Annet Anna Thomas, Anook Nazer Eledath, M. Junaid Bushiri,A.Muthukrishnan Trifunctional $GdCoO_3$ perovskite electrocatalysts for zinc–air battery and water electrolysis applications
   Material Advance;2025.

3. Angelin Abraham, Niranjan JS, Junaid Bushiri M
   Novel iodic acid assisted one-pot synthesis of WO_3/ iodinated graphene nanoplatelets for boosting electrocatalytic hydrogen evolution
   Colloids and Surfaces A: Physicochemical and Engineering Aspects, 709, 136117, 2025.
4. Angelin Abraham, Abhishek TK, M Junaid Bushiri
   Itaconic acid modified carboxylic-acid functionalized (002) faceted monoclinic WO_3 nanorods for electrochemical hydrogen evolution reaction
   Journal of Porous Materials. 31(2024)2241-2249.
5. Haseena Koyakutty, M. Junaid Bushiri
   Single step grown porous polycrystalline nickel microstructures with ultra-thin defect rich surface oxide for alkaline water oxidation
   Journal of Physics and Chemistry of Solids. (2024) 112219.
6. Annet Anna Thomas, Anook Nazer Eledath, JS Niranjana, Azhagumuthu Muthukrishnan, M Junaid Bushiri
   $FeMnO_3$/CNT as a synergistic bifunctional electrocatalyst for oxygen reduction and oxygen evolution reactions in alkaline medium
   Materials Chem. and Physics 324 (2024) 129695.
7. JS Niranjana, Angelin Abraham, M Junaid Bushiri
   Hybrid rGO/Fe_3O_4 magnetic nanocomposite for anionic and cationic dye removal application.
   Diamond and Related Materials 147 (2024) 111312.
8. Angelin Abraham, Aleena Eldho, Muhammed Anees P, M Junaid Bushiri
   $WO_3 \cdot 0.33H_2O$/carbon quantum dots hybrid nanostructures for efficient electrochemical hydrogen evolution reaction.
   Diamond and Related Materials 139 (2023) 110309.
9. Anupama A, V. Hari Narayanan, M. Junaid Bushiri
   Investigation of solvent-induced morphological evolution of WS_2 nanostructures with enhanced antibacterial and antioxidant activity.
   *Inorganic Chemistry Communications***157** (2023)111437.
10. Haseena Koyakutty, Niranjana J S, M Junaid Bushiri
    Defect-rich Ni/NiO-graphene heterostructures with oxygen bridges for enhanced electrocatalytic glucose oxidation towards selective sensing.

*Materials Chem. and Physics***309** (2023) 128330.

11. Niranjana J S, Haseena Koyakutty, Annet Anna Thomas,M Junaid Bushiri
Novel synthesis of multi-layered rGO/Fe_3O_4 nanocomposite in a single step and its efficient electrochemical sensing of vitamin C.
Materials Science and Engineering: B **290** (2023)116283.
12. R Vinod, M Junaid Bushiri
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2. N. Nishi, K.Kosugi,K. Hino **J.Bushiri** and T.Yokoyama
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(z). Invited Talks- Conference/Workshop/ Seminar/Institutions

1. M. Junaid Bushiri
Raman studies ofCarbonaceous systems
(Nov.73024), Sree Chitra Tirunal Institute for Medical Science and Technology, Trivandrum , Kerala.

2. M. Junaid Bushiri

   Morphological Tuning of Functional Materials

   Workshop and Skill training on "Functional Materials System for Environmental and Energy Applications: Pollution Reduction and Control"; February 23rd 2024, School of Environmental Studies CUSAT, Cochin-22, Kerala, India

3. M. Junaid Bushiri

   Hydrothermal Growth of Morphologically Beautiful Oxide and Sulphide Crystals for Functional Applications.

   Tokyo University of Science (TUS), Tokyo, Japan November 2022

4. M. Junaid Bushiri,

   Spray pyrolysis technique for the growth of nanostructured crystalline thin films on different substrates.

   International Workshop on Crystalline Materials and Applications 3-5th January 2019, Anna University, Chennai, India.

5. Junaid Bushiri

   National Conference on "Recent Trends in Applied Science and Technology" 2017

   -RTAST 2017- 26- 27th October 2017 (Technical talk) Alliance University, Bangalore.

6. Junaid Bushiri

   Raman Spectroscopy : A Unique Characterization Technique.

   TEQIP-II sponsored workshop on characterization of materials for advanced applications, August 4-6, 2016, NIT, Tiruchirappalli, India.

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   Crystalline Materials for Technological Applications.

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   Analytical Applications of Vibrational Spectroscopy.

   National seminar on vibrational spectroscopy, Feb.11- 12, 2016.

   St Xaviers college Vaikom, Kerala, India.

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   Identification of crystalline phases with Raman spectroscopy.

   National Seminar on Perspectives in Raman Spectroscopy, Oct.15-16, 2016.

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10. M. Junaid Bushiri

    Raman spectroscopy for the characterization of materials.

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    Govt. College for Women, Thiruvananthapuram, Kerala, India.

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    Raman spectroscopy for the analysis of oxide and sulphide semiconductors

    Sree Ayyappa College for Women

    8-9, Jan 2015,Chunkankadai, Kanya Kumari, Tamilnadu, India.

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    Synthesis of nanostructures by spray pyrolysis method - Challenges and Prospects

    International conference on recent trends in materials science and technology October 29-31(2010), IISTE, Thiruvananthapuram, Kerala, India.

15. M. Junaid Bushiri

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16. M. Junaid Bushiri

    Spray pyrolysis method for the deposition of metal oxide semiconducting thin films for optoelectronic applications.

    Second National Symposium on Nonlinear optical crystals and Modelling in crystal growth; March 26-27(2007) Anna University, Chennai, *India.*
