# DR.CHALANA.S.R

#### **Assistant Professor of Physics**

International Publications – 26 Conferences (International – 07) (National – 20)

Citation Indices	All	Since 2020
Citations	455	274
h-index	12	10
i10-index	13	10

#### **ADMINISTRATIVE DISTINCTION**

- Research Guide
- Co-ordinator of Human Rights Awareness club 2019-2024
- Chief Editor Iridescent Vision-2022-2023, 2024-2025
- IQAC Member 2022-2023
- Member, Energy conservation club, 2022-2024
- Member, Science club, 2021-2024
- Executive Editor, Research Journal, 2020-22
- Member, Book club and Library co-ordination committee, 2020-2021
- Member, Information Club, 2023-24
- Tutor, BSc Physics, 2019-2022 Batch
- Tutor, MSc Physics, 2022-2024 Batch
- Tutor, FYUGP Physics, 2025-26
- Admission committee member 2019-2020, 2025-26
- Chief Editor: Proceedings of National Conference on Optics and Photonics, NCOP-2K22
- Course coordinator: Certificate course on "Scientific waste management" conduted by PG Department of Physics in collaboration with Northamps Global Ecosolutions, Kochi
- Coordinator: Add-on course, Department of Physics, 2024-25
- Executive Member, Staff Association, 2024-25
- Centre coordinator, Academy of Physics Teachers (APT, 2024-25)
- Coordinator, World Ozone day Programme conducted by Department of Physics, 2021-2022
- Coordinator, DARSHAN '21 Multidisciplinary Seminar Series, Organized by IQAC and Department of Physics (2020-21)
- Coordinator, DARSHAN '21 Multidisciplinary Seminar Series, Organized by IQAC and Department of Physics (2021-22)
- Coordinator, Criterion III, NAAC SSR preparation, 2021-2023
- Co-ordinator, NCOP-2K22 National conference sponsored by KSCSTE
- Co-ordinator, RRR Exhibition of Crafts& Utility items using waste materials
- Co-ordinator, Inter-Departmental Debate competition on 25th January 2023





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**QUALIFICATION**M.Sc., B.Ed, M.Phil., Ph.D, PDF

**DATE OF JOINING** 10-01-2019

**EXPERIENCE IN YEARS** 6 years

AREA OF RESEARCH
Material science
Nano thin films
Nanophotonics

- Co-ordinator, Power Quiz, 2024-25
- Co-ordinator, India Space week Celebrations, 2024-25
- Co-ordinator, National Space Day celebrations, 2024-25
- Website co-ordinator, 2025-26
- Editorial Member of Edwin Group of Journal
- Life membership, Academy of Physics Teachers, Kerala

#### **AWARDS & ACHIEVEMENTS**

- ❖ Got Best Paper Award in the National conference on Nanophotonic Materials (NCNM-2008), October 10-12, Department of Physics, CUSAT for the paper entitled "Effect of Post deposition annealing on the microstructural and optical properties of laser ablated nanostructured zinc sulphide thin films"
- ❖ Got Best Oral Presentation Award in the National Seminar on Theoretical and Experimental Physics, October 24-26, 2018, Department of Physics, Government College For Women, Thiruvananthapuram for the paper entitled "Mn doped ZnS films: Outcome on the photoluminescence properties"

#### **PUBLICATIONS**

1. Substrate dependent hierarchical structures of RF sputtered ZnS films

S.R. Chalana and V.P.Mahadevan Pillai

Applied Surface Science 440 (2018) 1181–1195, ISSN: 0169-4332

2. Tailoring the visible emissions in ZnS:Mn films for white light generation

S.R. Chalana, V.S. Kavitha, R. Reshmi Krishnan, and V.P.Mahadevan Pillai

Journal of Alloys and Compounds 771 (2019) 721-735, ISSN: 0925-8388

- 3. Structural phase modification in Cu incorporated nanostructured zinc sulfide thin films
- **S.R. Chalana**, R. Jolly Bose, R. Reshmi Krishnan, V.S. Kavitha, R. Sreeja Sreedharan and V.P.Mahadevan Pillai

Journal of Physics and Chemistry of Solids 95 (2016) 24-36, ISSN: 0022-3697

- 4. Surface plasmon resonance in nanostructured Ag incorporated ZnS films
- S. R. Chalana, V. Ganesan, and V. P. Mahadevan Pillai

AIP Advances 5 (2015) 1072071-17, ISSN: 2158-3226

- 5. Influence of argon ambience on the structural, morphological and optical properties of pulsed laser ablated zinc sulfide thin films
- S. R. Chalana, R. Vinodkumar, I. Navas, V. Ganesan and V. P. Mahadevan Pillai.

Journal of Luminescence. 132 (2012) 944-952, ISSN: 0022-2313

- 6. Effect of RF power on the structural and optical properties of zinc sulfide films.
- S.R. Chalana, S.Sankararaman, Radhakrishna Prabhu, V P Mahadevan Pillai

JOM, Published online 27 July 2017, DOI: 10.1007/s11837-017-2459-7, ISSN: 1047-4838 (Print) 1543-1851 (Online).

7. Laser ablated nanostructured zinc sulphide thin films for optoelectronics device applications S. R. Chalana, R. Vinodkumar, A. P. Detty, I. Navas, K. S. Sreedevi and V. P. Mahadevan Pillai. *IEEE Xplore*, (2009), ISBN: 978-1-4244-3942-3, Digital Object Identifier: 10.1109/ICUMT.2009.5345562

## 8. Bright visible luminescence from highly textured, transparent Dy<sup>3+</sup> doped RF sputtered zinc oxide films

R. Sreeja Sreedharan, R. Reshmi Krishnan, G. Sanal Kumar, V.S. Kavitha, **S.R. Chalana**, R. Jolly Bose, S. Suresh, R. Vinodkumar, S.K. Sudheer, V.P. Mahadevan Pillai *Journal of Alloys and Compounds 721 (2017) 661-673, ISSN: 0925-8388* 

#### 9. Highly conductive and transparent laser ablated nanostructured Al: ZnO thin films

R. Vinodkumar, I. Navas, **S.R.Chalana**, K.G. Gopchandran, V. Ganesan, Reji Philip and V.P. Mahadevan Pillai .

Applied Surface Science, 257(2010)708-716, ISSN: 0169-4332.

10. Pulsed laser ablation of zinc selenide in nitrogen ambience: Formation of zinc nitride films S.Simi, I.Navas, R.Vinodkumar, **S.R.Chalana**, Mohan Gangrade, V.Ganesan and V.P.Mahadevan Pillai *Applied Surface Science* 257(2011)9269-9276, ISSN: 0169-4332.

## 11. Effect of Nb doping on the structural, morphological, optical and electrical properties of RF magnetron sputtered In2O3 nanostructured films

R. Reshmi Krishnan, **S. R. Chalana**, S. Suresh, S. K. Sudheer, C. Sudarsanakumar, M. C. Santhosh Kumar and V. P. Mahadevan Pillai *Phys. Status Solidi C*, 1–15 (2016), ISSN: 1610-1642.

#### 12. Study on the Structural, Morphological and Optical Properties of RF-Sputtered Dysprosium-Doped Barium Tungstate Thin Films

S. Hridya, V.S. Kavitha, **S.R. Chalana**, R. Reshmi Krishnan, R. Sreeja Sreedharan, S. Suresh, V.P.N. Nampoori, S. Sankararaman, Radhakrishna Prabhu and V.P. Mahadevan Pillai *JOM, Published online 27 April 2017, DOI: 10.1007/s11837-017-2360-4ISSN: 1047-4838 (Print) 1543-1851 (Online)* 

## 13. Study on the structural, morphological and optical properties of RF sputtered gallium doped zinc oxide thin films

V.M. Vimuna, R. Sreeja Sreedharan, R. Resmi Krishnan, V.S. Kavitha, **S.R. Chalana**, S. Suresh and V.P. Mahadevan Pillai

Materials Today: Proceedings 4 (2017) 4417–4433, ISSN: 2214-7853

**14. Laser ablated nanostructured tin oxide thin films for optoelectronic device applications** K. S. Sreedevi, R. Vinodkumar, A. P. Detty, **S. R. Chalana**, I. Navas and V. P. Mahadevan Pillai. *IEEE Xplore*, (2009), ISBN: 978-1-4244-3942-3, Digital Object Identifier: 10.1109/ICUMT.2009.5345557

# 15. Luminescent Ta doped WO3 thin films as a probable candidate for excitonic solar cell applications

V.S. Kavitha, S. Suresh, **S.R. Chalana**, V.P. Mahadevan Pillai *Applied Surface Science 466 (2019) 289–300, ISSN: 0169-4332* 

# 16. Effect of Oxygen pressure on the structural and optical properties of BaSnO3 films prepared by pulsed laser deposition method

Jibi John, **S.R.Chalana**, Radhakrishna Prabhu, V.P. Mahadevan Pillai *Applied Physics A, (2019) 125:155, ISSN: 0947-8396 (print), 1432-0630 (online)* 

# 17. High quality, highly transparent Cu incorporated WO3 thin films suitable for blue LED application

V.S. Kavitha, **S.R. Chalana**, R. Reshmi Krishnan, K.G. Gopchandran, V.P. Mahadevan Pillai *Vacuum 172 (2020) 109044* 

## 18. Effect of silver incorporation on the structural and morphological characteristics of RF sputtered indium oxide films

Silpa Satheesh , KavithaV.S, Reshmi Krishnan, **Chalana S.R**, Suresh S, RadhakrishnaPrabhu, V.P. MahadevanPillai

IOP Conf. Series: Materials Science and Engineering 499 (2019) 012001, doi:10.1088/1757-899X/499/1/01200

# 19. Effect of substrate temperature, laser energy and post-deposition annealing on the structural, morphological and optical properties of laser-ablated perovskite BaSnO<sub>3</sub> films Jibi John, S. Suresh, S. R. Chalana, V. P. Mahadevan Pillai

Applied Physics A 125:743, (2019) ISSN:

#### 20. Effect of Tungsten Doping on the Properties of In<sub>2</sub>O<sub>3</sub> Films

R. Rshmi krishnan, V.S. Kavitha, **S.R. Chalana**, Radhakrishna Prabhu, V..P. mahadevan pillai *JOM*, **7**, *No.* 5 (2019), doi.org/10.1007/s11837-019-03426-7

### 21. Influence of argon pressure on the crystalline phase formation of RF sputtered zinc sulfide thin films

**S.R. Chalana**, V.S. Kavitha, P. Srinivasan, S. Rafi Ahamed c, Gargi Tiwari, V.P.Mahadevan Pillai *Materials Today Proceedings*, 29, June 2020, doi: 10. 1016/j. matpr. 2020.05. 347

## 22. Characterization and optical limiting behavior of BaSnO3 powder prepared by the conventional solid state method

Jibi John, **S.R. Chalana**, V.P. Mahadevan Pillai, Jaison Joseph, S. Muthunatesan, V. Ragavendran, Gargi Tiwari,

Materials Today Proceedings, 29, June 2020, Pages 1091-1097, <a href="https://doi.org/10.1016/j.matpr.2020.05.118">https://doi.org/10.1016/j.matpr.2020.05.118</a>

## 23. Effect of silver incorporation on the structural and morphological characteristics of RF sputtered indium oxide films

VS Kavitha, R Krishnan, **SR Chalana**, S Suresh, P Radhakrishna Prabhu IOP Conference Series: Materials Science and Engineering 499 (1), 012001

#### 24. Laser ablated nanostructured niobium oxide doped indium oxide thin films

R Reshmi Krishnan, R Sreeja Sreedharan, **SR Chalana**, R Jolly Bose, Vinodkumar, R. Sudheer, S.K, V.P Mahadevan Pillai

Proceedings of the international conference on thin films and applications: book of abstracts

# **25.** Effect of tin oxide doping on the properties of laser ablated nanostructured indium oxide films R Reshmi Krishnan, R Sreeja Sreedharan, **SR Chalana**, R Jolly Bose, R Vinodkumar, SK Sudheer, VP

Mahadevan Pillai, V Ganesan Proceedings of the DAE-BRNS seventh national symposium on pulsed laser deposition of thin films and nanostructured materials

# 26. Effect of praseodymium incorporation on the structural and optical properties of ZnO thin films by RF magnetron sputtering

R Vinodkumar, I Navas, **SR Chalana**, VP Mahadevan Pillai

Proceedings of the thirty fifth international conference on contemporary trends in optics and optoelectronics: conference digest-extended abstracts

#### PAPERS PRESENTED IN INTERNATIONAL CONFERENCES

1. Microstructural and optical properties of laser ablated nanostructured zinc suplhide thin films by post deposition annealing

S.R. Chalana, R. Vinodkumar, A.P. Detty, I. Navas, V.P. Mahadevan Pillai

International conference on Anti-counterfeiting Technology (ICAT-2009), May 28-29, Mascot Hotel, Trivandrum

2. Laser ablated silver doped nanostructured zinc sulphide thin films

S.R. Chalana, V.P. Mahadevan Pillai

Indo German Conference on Laser Applications and Nanoscience, December 5-7, 2013, Thiruvananthapuram

3. Effect of Cu incorporation on the structural, morphological and optical properties of nanostructured zinc sulfide thin films

S.R. Chalana and V.P. Mahadevan Pillai

International Conference on Photonic Applications and Nanomaterials (ISPAN-2015), October 28-30, 2015, Sree Chitra Tirunal Institute for Medical Sciences and technology (SCTIMST), Thiruvananthapuram

## 4. Alteration of visible emissions of ZnS films by Mn incorporation S.R. Chalana

International Conference on Recent Advances in Materials Science (ICRAMS 2020) during 22<sup>nd</sup> 23<sup>rd</sup> of January, organized by Research Committee and Post-graduate & Research Departments of Physics and Chemistry, Mahatma Gandhi College, Thiruvananthapuram.

## 5. ZnS hierarchical structures for potential applications S.R. Chalana

International Multidisciplinary Symposium on climate crisis and consciousness (BODHI-IMSD-2025) organized by IQAC in association with all departments of KSMDB College, Sasthamkotta from 28 31 January 2025

## 6.Green route to synthesize zinc sulfide nanoparticles using leaf extracts of strobilanthes alternate S.R. Chalana

International conference on Emerging Materials for Sustainable development-2025 (ICEMSD-2025) organized by PG and Reserch Department of Chemistry, Fatima Mata National College, Kollam from 20-22 February 2025.

#### 7. ZnS hierarchical structures for potential applications

S.R. Chalana

3rd International Conference on Recent Trends in Materials Science & Devices (ICRTMD-2025) held at JVMGRR College, Charkhi Dadri, Haryana, India from 24-26 March 2025

#### **NATIONAL CONFERENCES**

• Effect of Post deposition annealing on the microstructural and optical properties of laser ablated nanostructured zinc sulphide thin films

S.R. Chalana, R. Vinodkumar, A.P. Detty, I. Navas, V.P. Mahadevan Pillai National conference on Nanophotonic Materials (NCNM-2008), October 10-12, Department of Physics, CUSAT.

Got Best Paper Award

Mn doped ZnS films: Outcome on the photoluminescence properties

S.R. Chalana, V.P. Mahadevan Pillai

National Seminar on Theoretical and Experimental Physics, October 24-26, 2018, Department of Physics, Government College For Women, Thiruvananthapuram

Got Best Oral Presentation Award

Microstructural and optical properties of laser ablated nanostructured zinc suplhide thin films

S.R. Chalana, R. Vinodkumar, A.P. Detty, I. Navas, V.P. Mahadevan Pillai National Seminar on Photonic Materials (NSPM-2009), February-28-29, Department of Optoelectronics, University of Kerala.

Microstructural and optical properties of laser ablated nanostructured zinc sulphide thin films

S.R. Chalana, R. Vinodkumar, A.P. Detty, I. Navas, V.P. Mahadevan Pillai DAE-BRNS 5th National Symposium on Pulsed Laser Deposition of Thin Films and Nanostructured Materials (PLD-2009), December 02 – 04, IIT Madras, Chennai.

 Microstructural and luminescence properties of laser ablated nanostructured zinc sulphide thin Films

S.R. Chalana, R. Vinodkumar, A.P. Detty, I. Navas, V.P. Mahadevan Pillai 97th Indian Science Congress, January 03 - 07, 2010, University of Kerala, Karyavattom, Thiruvananthapuram

- Attended The National Workshop on Optoelectronics And Optical Communivation (NWOOC-2011 organized by Department of Optoelectronics, University of Kerala, Kariavattom, Thiruvananthapuram during 5-6 January 2011.
- Preparation and characterization of pulsed laser ablated silver doped nanostructured zinc sulphide thin films

S.R. Chalana, V.P. Mahadevan Pillai

DAE-BRNS National Laser Symposium-22 (NLS-22), January 8-11, 2014, Manipal

 Surface plasmon related quenching of visible emission from silver doped zinc sulfide thin films prepared by pulsed laser deposition

S.R. Chalana and V.P. Mahadevan Pillai

National Conference on Material Science and Technology (NCMST-2014), July 28-30, 2014, IIST Valiyamala, Thiruvananthapuram

• Effect of Au incorporation on the structural phase transition of nanostructured zinc sulfide thin films prepared by RF magnetron sputtering

S.R. Chalana, S. K. Sudheer and V.P. Mahadevan Pillai

DAE-BRNS National Laser Symposium-23 (NLS-23), December 3-6, 2014, Tirupai, Andhra Pradesh.

Structural and optical properties of Au incorporated Zns Films

S.R. Chalana and V.P. Mahadevan Pillai

National Seminar on Nanoscience and Nanotechnology, Marh 19-20, 2015, Department of Biotechnology, University of Kerala, Kariavaom, Thiruvananhapuram

 Structural and optical properties of silver doped zinc sulfide thin films prepared by pulsed laser deposition

S.R. Chalana and V.P. Mahadevan Pillai

National Seminar on Spectroscopic Techniques and its applications for material characterization (NSST 2013), October 3- 4, 2013, Department of Optoelectronics University of Kerala.

 Influence of Cu incorporation on the microstrucural, luminescence and nonlinear properties of nanostructured ZnS films

S.R. Chalana and V.P. Mahadevan Pillai

National Seminar on Photonics and its Applicaions (NSPA-2015), December 9-11, 2015, Department of Optoelectronics University of Kerala

Light emission properties of RF sputtered ZnS:Mn films

S.R. Chalana and V.P. Mahadevan Pillai

National Seminar on Functional Materials For Future, September 27-28, 2018, Post Graduate Department of Physics, Assumption College, Changanacherry

- Participated in the 20th National Conference on Atomic and Molecular Physics (NCAMP-XX) organized by Indian Society of Atomic and Molecular Physics (ISAMP) at Indian Institute of Space Science and Technology (IIST), Valiamala, Thiruvananthapuram from 9th-12th December 2014
- Has participated in the four day National Multi-Disciplinary Annual Research Conference organized by the Internal Quality Assurance Cell & Various Schools of the University of Kerala from 15th-18th November 2015 International Conference on Photonic Applications and Nanomaterials (ISPAN-2015), October 28-30, 2015
- Nanotechnology for energy harvesting

EMC sponsored seminar on materials for energy efficiency and conservation (MEEC 2019) at TKMM College, Nangirkulangara on 12 &13, March-2019

Modification of emission properties in ZnS films by Mn incorporation
 National Conference on Advances in Nanomaterials& Nanotechnology (6, 7 August 2019),
 organized by the Department of Physics, Mar Thoma College, Thiruvalla

 Synthesis and characterization of Dy doped zinc sulfide thin films for light emitting applications

National Seminar on Spectroscopic Techniques: Present Scenario (NSST 2020), organized by Post graduate Department of Physics, TKMM College, Nangiarkulangara, Alappuzha, on 31st January 2020

 Study on the structural and optical properties of silver nitrate doped bismuth ferrite nanoparticles

National Conference on Optics and Photonics (NCOP-2K22) organized by PG Department of Physics, TKMM College, Nangiarkulangara, Alappuzha, on 14 & 15 November 2022

 Study on the structural and optical properties of zinc oxide doped bismuth ferrite nanoparticles

National Conference on Optics and Photonics (NCOP-2K22) organized by PG Department of Physics, TKMM College, Nangiarkulangara, Alappuzha, on 14 & 15 November 2022

Intense orange emission from Mn doped ZnS films

National Conference on Advanced Functional Materials (NCAFM 2023) organized by VTM NSS College, Dhanuvachapuram sponsored by KSCSTE, Thiruvananthapuram on 23rd March 2023

#### ORIENTATION/REFRESHER/SHORT TERM COURSES ATTENDED

- Participated in the one-month Induction training programme for teachers organized by MHRD & PMMMNMTT from 23rd September to 22nd October, 2019 at Central University of Kerala
- Completed refresher course on 'Recent Advances in Physics' organized by UGC-STRIDE, Mahatma Gandhi University, Kottayam in association with Marthoma College for Women, Perumbavoor from 10th July to 24th July, 2021
- Attended FDP on "Quality Science Education in India in the 21st Century" jointly organized by GAD TLC, SGTB Khalsa College, University of Delhi (MHRD) under PMMMNMTT of Ministry of Education & Christ College, Irinjalakkuda, from 03/11/2020 to 09/11/2020.
- Attended FDP on "Innovative Teaching and Learning Methods" organized by Post Graduate Department of commerce and Research Centre, St. Xaviers College for Women, Aluva on 20th and 21st, May 2020
- Faculty Development Programme at Sree Sankara College, Kalady (online) from 21/06/2021 to 25/06/2021, UGCMHRD- STRIDE
- Attended the UGC sponsored Short Term Course on Soft Skills Development for Assistant / Associate Professors conducted by the UGC – Human Resource Development Centre, University of Calicut from 17.08.2023 to 23.08.2023 in online mode.
- Has completed the NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission, (UGC) Organized by UGC-MMTTC, University of Kerala, Kariavattom, Thiruvananthapuram from 04-11-2024 to 14-11-2024

#### **INVITED LECTURES**

 Invited talk on "ZnS hierarchical structures for potential applications" in 3rd International Conference on Recent Trends in Materials Science & Devices (ICRTMD-2025) held at JVMGRR College, Charkhi Dadri, Haryana, India from 24-26 March 2025

#### WEBINARS ATTENDED

- Participated in the virtual symposium on "International Day of Light-IDL-2020" organized by IEEE Photonics society and SPIE Student Chapters, Department of Physics, IIT Guwahati on May 16, 2020
- Participated in the "International Webinar on Photonics-2020" organized by the Department of Physics, Christ Nagar College, Maranalloor, Trivandrun on 3rd June 2020.
- Attended Webinar on "Magnetic materials for energy and storage devices" Dhaanish Ahmed Institute of Technology, Coimbatore on 11th July 2020.
- Participated in the 3 Day International Webinar on "Advances in Functional Materials-IWAFM" organized by Department of Physics, Mar Ivanios College, Thiruvananthapuram, India from 26th June to 28 th June 2020.
- Attended a Webinar on "Quantum Magnetism in Honeycomb Lattices" organized by Department of Physics, Mar Thoma College for women, Perumbavoor on 16th June 2020.
- Participated in the "International Multidisciplinary Webinar-CONVERGENCE-2020" on the topic "Nano-micro electromechanical resonators based on nanowires, nanotubes and grapheme"

- organized by the IQAC and Department of Physics, SES College, Sreekandapuram, Kannur on 9th June 2020
- Participated in the "International Webinar-DOCTRINA-7" organized by IQAC and Department of Physics, Sir, Syed College, Taliparambu, Kannur on the topic "Equations as a tool to develop an integrated education" on 29th May 2020.
- Attended the International Webinar on "A Glimpse on Electromagnetism" organized by Department of Physics, Sree Sankara college, Kilimanoor on 3rd July 2020.
- Participated in the National Webinar on the topic "Classroom Management tools" organized by Department of Commerce, SCMS School of Technology and Management, Muttom, Aluva on 23rd July 2020.
- Participated in the Al-Haj P K Kunju Sahib Memorial Webinar Series 2020-2021 on "Sources of Funding for Research Activities" organized by, IQAC, Milad-E-Sherief Memorial College, Kayamkulam on 13th August 2020.
- Participated in the 3 Day International Webinar on "Material Science" organized by the Department of Physics, St. John's College, in association with IQAC and sponsored by DBT Star college Scheme, from 23rd September to 25th September, 2020.
- Participated in the Webinar entitled "Search for the fundamental constituents of matter "jointly organized by the Department of Physics and Internal Quality Assurance Cell, TKM College of Arts and Science on 25th September 2020.
- Participated in the Raman Optronics Webinar Series 2020-Virtual International Conference organized by Department of Optoelectronics, University of Kerala as part of the silver Jubilee Celebration of the department on 15th October 2020.
- Participated in the Webinar on "Research Ethics" organized by Departments of Zoology, Chemistry & IQAC, TKMMC on 5th February 2021.
- Participated in the Webinar on "Advanced Ceramics for Functional Applications" organized by Department of Physics, TKMMC on the eve of National Science Day on 27th February, 2021.
- Participated in the Raman Optronics Webinar Series 2024-Virtual International Conference on "When AI Meets Spectrum: Recent Advancement in Hyperspectral Imaging Based Nondestructive Inspection & Characterisation" organized by Department of Optoelectronics, University of Kerala on 7th November 2024
- Participated in the Raman Optronics Webinar on "Near-field spectroscopy of molecular aggregates" organized by Department of Optolelectronics and Raman International Optronics Society (RIOS) on 21st November 2022.