
CURRICULUM VITAE

Dr. B. M. Krishna Mariserla
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Objectives

To develop and concrete the research in Ultrafast spectroscopy, Nonlinear Optics and Higher harmonic generation in India.

Employment

- **2018 - Continuing:** Assistant Professor, Central University of Karnataka, Karnataka, India.
- **2013 - 2018:** Post-doctoral researcher, Femtosecond Spectroscopy Unit, Okinawa Institute of Science & Technology Graduate University, Japan.

Education

- **2007 - 2013:** Doctoral student, Dissertation advisor: Prof. D. Narayana Rao, Laser lab, School of Physics, University of Hyderabad, India.
- **2003-2005:** M.Sc., Physics, Andhra University, Visakhapatnam, India.
- **2000-2003:** B.Sc., Andhra University, Visakhapatnam, India.

Awards & Recognitions

- **2012-2013:** CSIR-Senior Research Fellowship
- **2009-2012:** UGC-Meritorious Fellowship

Doctoral Thesis Title:

“Nonlinear optical studies of graphene based hybrid materials, bio-reduced silver nanoparticles and organic molecules towards optical limiting”

Research Journal publications:

1. C. P. Weber, L. M. Schoop, S. S. Parkin, R. C. Newby, Alex Nateprov, Bettina Lotsch, **Bala Murali Krishna Mariserla**, J. Matthew Kim, Keshav M. Dani, Hans A. Bechtel, Ernest Arushanov, and Mazhar Ali,
“Directly Photoexcited Dirac and Weyl fermions in ZrSiS and NbAs ”,
[Applied Physics Letters](#). 113 (22), 221906, 2018. Impact Factor (I.F)=3.5
2. **M. Bala Murali Krishna**, Julien Madeo, Joel Perez Urquizo, Xing Zhu, Soumya Vinod, Chandra Sekhar Tiwary, Pulickel M. Ajayan, and Keshav M. Dani,
“*Terahertz photoconductivity and photocarrier dynamics in few-layer hBN/WS2 van der Waals heterostructure laminates*”,
[Semicond. Sci. Technol.](#), 33, 084001, 2018. Impact Factor (I.F) = 2.28.
3. Shukai Yu, C. Dhanasekhar, Venimadhav Adyam, Skylar Deckoff-Jones, Michael K. L. Man, Julien Madeo, E. Laine Wong, Takaaki Harada, **M. Bala Murali Krishna**, Keshav M. Dani, and Diyar Talbayev
“*Terahertz-frequency magnetodielectric effect in Ni-doped CaBaCo4O7*”
[Physical Review B](#), 96, 094421, 2017. I.F =3.84. Citations: 1.
4. M.K.L. Man, A. Margiolakis, S.D. Jones, T. Harada, E Laine Wong, **M. Bala Murali Krishna**, J. Madéo, A. Winchester, S. Lei, R. Vajtai, P. M. Ajayan, K. M. Dani.
“*Imaging electrons in motion across semiconductor heterojunctions*”,
[Nature Nanotechnology](#), 12, 36, 2017. I.F = 35.27. Citations: 44.
5. C.E. Petoukhoff, **M. Bala Murali Krishna**, D. Voiry, I. Bozkurt, S. Deckoff-Jones, M. Chhowalla, D.M. O’Carroll, Keshav M. Dani.
“*Ultrafast Charge Transfer and Enhanced Absorption in MoS₂–Organic van der Waals Heterojunctions Using Plasmonic Metasurfaces*”,
[ACS Nano](#), 10 (11), 9899, 2016. I. F = 13.33. Citations: 28.
6. R. Ulbricht, S. Dong, I-Ya Chang, **M. Bala Murali Krishna**, K.M. Dani, K.H. Deuk, Zhi-Heng Loh,
“*Jahn-Teller-induced femtosecond electronic depolarization dynamics of the nitrogen-vacancy defect in diamond*”,
[Nature communications](#), 7, 13510, 2016. I. F = 11.33. Citations: 13.
7. Christopher E. Petoukhoff, Catherine Antonicka, **Bala Murali Krishna M.**, Keshav M. Dani and Deirdre M. O’Carroll,
“*Oxidation of Planar and Plasmonic Ag Surfaces by Exposure to O₂/Ar Plasma for Organic Optoelectronic Applications*”,
[MRS Advances](#), 1 (14), 943, 2016. Citations: 1.
8. **M. Bala Murali Krishna**, Michael K. L. Man, Soumya Vinod, Catherine Chin, Takaaki Harada, Jaime Taha-Tijerina, Chandra Sekhar Tiwary, Patrick Nguyen, Patricia Chang, Tharangattu N. Narayanan, Angel Rubio, Pulickel M. Ajayan, Saikat Talapatra and Keshav M. Dani,

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- “Engineering Photophenomena in Large, 3D Structures Composed of Self-Assembled van der Waals Heterostructure Flakes”,
[Advanced Optical Materials](#), 3, 1551, 2015. *I.F* = 6.87. Citations: 13.
9. S. Ghosh, A. Winchester, B. Muchhaarla, M. Wasala, S. Feng, A. L. Elias, **M. Bala Murali Krishna**, T. Harada, C. Chin, K. M. Dani, S. Kar, M. Terrones, and S. Talapatra,
 “Ultrafast intrinsic photoresponse and direct evidence of sub-gap states in liquid phase exfoliated MoS₂ thin films”,
[Scientific Reports](#), 5, 11272, 2015. *I.F* = 5.58. Citations: 27.
 10. T. Nakano, C. Chin, D. M. A. Myint, E. W. Tan, P. J. Hale, **Bala Murali Krishna M.**, John N. J. Reynolds, J. Wickens and K. M. Dani,
 “Mimicking subsecond neurotransmitter dynamics with femtosecond laser stimulated nanosystems”,
[Scientific Reports](#), 4, 5398 (1-6), 2014. *I.F* = 5.58. Citations: 5.
 11. **M. Bala Murali Krishna**, N. Venkatramaiah and D. Narayana Rao,
 “Optical transmission control in graphene oxide and its organic composites with ultra-short pulses”,
[Journal of Optics](#), 16, 015205 (1-6), 2014. *I.F* = 2.059. Citations: 9.
 12. **M. Bala Murali Krishna**, D. Narayana Rao,
 “Influence of solvent contribution on nonlinearities of NIR absorbing croconate and squaraine dyes with ultrafast laser excitation”,
[Journal of Applied Physics](#), 114, 133103 (1-8), 2013. *I.F* = 2.2. Citations: 12.
 13. **M. Bala Murali Krishna**, N. Venkatramaiah, R. Venkatesan and D. Narayana Rao,
 “Synthesis, Structural, Spectroscopic and nonlinear optical measurements of graphene and its organic composites”,
[Journal of Materials Chemistry](#), 22, 3059, 2012. *I.F* = 6.1. Citations: 110.
 14. **M. Bala Murali Krishna**, L. Giribabu and D. Narayana Rao,
 “Nanosecond, Picosecond, and Femtosecond nonlinear optical properties of a water soluble zinc octacarboxy phthalocyanine”,
[Journal of Porphyrins and Phthalocyanines](#), 16, 1015, 2012. *I. F* = 1.3. Citations: 7.
 15. K. Shadak Alee, **M. Bala Murali Krishna**, B. Ashok and D. Narayana Rao,
 “Experimental verification of enhanced electromagnetic field intensities at the band edge of 3D polystyrene photonic crystals using Z-Scan technique”,
[Photonics and nanostructures](#), 10, 236, 2012. *I. F*: 2.75. Citations: 3.
 16. Prakash C. Srivastava, Shrinkhal Dwivedi, Vikas Singh, Tripurari Pujan, Arun K. Bhuj, Ray J. Butcher, **M. Bala Murali Krishna** and D. Narayan Rao,
 “Supramolecular assemblies of organotellurium (IV) dithiocarbamates and third order nonlinear optical susceptibility ($\chi^{(3)}$) of C₄H₇(CH₃)Te[S₂CN(C₂H₅)₂]₂”,
[Inorganica chimica acta](#), 388, 175, 2012. *I. F*: 1.899. Citations: 4.

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17. Prakash C. Srivastava, Vikas Singh, Shrinkhal Dwivedi, Tripurari Pujan, Arun K. Bhuj, Ray J. Butcher, **M. Bala Murali Krishna** and D. Narayana Rao, “*Synthesis, crystal structure, supramolecular associations and third-order nonlinear optical (NLO) properties of some organotellurium (IV) derivatives*”, *Polyhedron*, **42**, 36, 2012. I.F: 2. Citations: 4.
18. **M. Bala Murali Krishna**, V. Praveen Kumar, N. Venkatramaiah, R. Venkatesan and D. Narayana Rao. “*Nonlinear optical properties of covalently linked graphene-metal porphyrin composite materials*”, *Applied Physics Letters*, **98**, 081106, 2011 (appeared in *Virtual Journal of Nanoscale Science & Technology*, Volume 23, Issue 9, 2011). I.F = 3.84. Citations: 83.
19. R. Sathyavathi (post.doc), **M. Bala Murali Krishna** and D. Narayana Rao, “*Biosynthesis of silver Nanoparticles using Moringa Oleifera leaf extract and its application to optical limiting*”, *Journal of Nanoscience and Nanotechnology*, **11**, 2031, 2011. I.F= 1.5. Citations: 33.
20. Prabhakar, Ch., Bhanuprakash, K. Rao, V.J., **Bala murali krishna, M.**, Rao, D.N. “*Third Order Nonlinear Optical Properties of Squaraine Dyes Having Absorption below 500 nm: A Combined Experimental and Theoretical Investigation of Closed Shell Oxyallyl Derivatives*”, *The Journal of Physical Chemistry C*, **114**, 6077, 2010. I.F= 4.8. Citations: 38.
21. **M. Bala Murali Krishna**, N. Venkatramaiah, R. Venkatesan and D. Narayana Rao. “*Nonlinear optical properties of graphene-(OH, Sn) porphyrin composites in picosecond regime*” *AIP Conf. Proc.* **1391**, 680, 2011. Citations: 5.
22. K. Shadak Alee, **M. Bala Murali Krishna**, B. Ashok, D. Narayana Rao, “*Optical limiting studies of 3D polystyrene photonic crystals with the central band gap at 536 nm at normal incidence in reflection geometry*”, *AIP Conf. Proc.* **1391**, 260, 2011. Citations: 1.
23. R.Sathyavathi, **M. Bala Murali Krishna**, S.VenugopalRao, R.Saritha, and D.Narayana Rao. “*Biosynthesis of Silver Nanoparticles Using Coriandrum Sativum Leaf Extract and Their Application in Nonlinear Optics*”, *Advanced Science Letters*, **3**, 138, 2010. I. F: 1.253. Citations: 464.
24. Kiran, P.P., Rao, S.V., Ferrari, M., **Krishna, B.M.**, Sekhar, H., Alee, S., Rao, D.N. “*Enhanced optical limiting performance through nonlinear scattering in nanoparticles of CdS, co-doped Ag-Cu, and BSO*”, *Nonlinear Optics Quantum Optics*, **40**, 223, 2010. Citations: 15.

25. Rao, S.V., Kiran, P.P., Giribabu, L., Ferrari, M., Kurumurthy, G., **Krishna, B.M.**, Sekhar, H., Rao, D.N.
 “Anomalous nonlinear absorption behavior in an unsymmetrical phthalocyanine studied near 800 nm using femtosecond and picosecond pulses”,
[Nonlinear Optics Quantum Optics](#), 40, 183, 2010. Citations: 9.

Invited talks in Conferences/workshops:

1. **M. Bala Murali Krishna**, Fascinating Light and so on...
 Refresher course in experimental physics, Central university of Karnataka, Kalaburagi, India, Jun 1st-16th, 2018.
2. J. Madeo, A. Margiolakis, Z.-Y. Zhao, P. J. Hale, M. K. L. Man, Q.-Z. Zhao, W. Peng, W.-Z. Shi, K. M. Dani and **M. Bala Murali Krishna**, Optoelectronic Properties in the Terahertz of Femtosecond-laser-ablated GaAs,
 PIERS 2016, Shanghai, China, Aug 8th -11th, 2016.
<https://doi.org/10.1109/PIERS.2016.7734980>
3. **Bala Murali Krishna M**, M. M. Man, S. Vinod, Catherine. Chin, T. Harada, Taha-Tijerrina. J, C. C. Tiwary, P. Nguyen, P. Chang, N. T. Narayanan, A. Rubio, P. M. Ajayan, S. Talpatra and K. M. Dani, “Novel photophenomena in self-assembled h-BN/Graphene 3D hybrid structures”,
 EMN ultrafast 2015, Las Vegas, US, Nov 16-19th, 2015.

International Conferences:

1. **M. Bala Murali Krishna**, S. Jayaram, S. Kasthuri, N. Venkatramaiah, D.Narayana Rao, “Graphene oxide with TiO₂ nanoparticles for optical limiting”,
 ICONN 2019, SRM University, Chennai, Tamil Nadu, India, Jan 28-30 (2019)
2. Pareek, V., Berggren, B., Harada, T., Weber, C., Winchester, A., **M Bala Murali Krishna**, Madeo, J., Dani, K. M., “Ultrafast dynamics in atomically thin black phosphorus”,
 APS March Meeting 2018, Los Angeles, CA, USA, Mar 5-9 (2018)
3. **M Bala Murali Krishna**, M. K L Man, J. Madéo, S. Vinod, C. Chin, T. Harada, Jaime Taha-Tijerina, Chandra Sekhar Tiwary, Patrick Nguyen, Patricia Chang, T. Narayanan, Angel Rubio, P. Ajayan, S. Talapatra, Keshav Dani. “Self-assembled 3D van der Waals heterostructures and its novel photophenomena”,
 Photonics-2016, International Conference on Advanced Nanomaterials and Nanotechnology, ICANN-2017 Dec18th-21th, 2017.
4. Vivek, P., Berggren, B. S., Harada, T., Weber, C. P., Winchester, A., Mariserla, **M Bala Murali Krishna**, Madeo, J., Dani, K. M., Ultrafast carrier dynamics in atomically thin black phosphorus, Poster Presentation,
 ICANN 2017, Guwahati, India, Dec 18-21 (2017).

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5. Dani, K. M., Man, K. L., Margiolakis, A., Deckoff-Jones, S., Harada, T., Wong, E., **M Bala Murali Krishna**, Madeo, J., Winchester, A., Lei, S., Vajtai, R., Ajayan, P. M., “*Time-resolved photomission electron microscopy of a type-II semiconductor heterojunction*”, Invited Talk, ICANN 2017, Guwahati, India, Dec 18-21 (2017)
 6. Petoukhoff, C., **M Bala Murali Krishna**, Bozkurt, I., Chhowalla, M., O’Carroll, D. M., Dani, K. M., Charge Transfer in Conjugated Polymer, “*MoS₂ – Metasurface Mixed – Dimensional Heterojunctions*”, Poster Presentation, MRS Fall 2017, Boston, MA, USA, Nov 26- Dec 1 (2017).
 7. Petoukhoff, C., **M Bala Murali Krishna**, Bozkurt, I., Chhowalla, M., O’Carroll, D. M., Dani, K. M., “*Ultrafast Charge Transfer in Mixed-Dimensional van der Waals Heterostructures*”, Poster Presentation, IONS Okinawa 2017, Okinawa, Japan Oct 25-27 (2017).
 8. Christopher Petoukhoff, **M Bala Murali Krishna**, Damien Voiry, Ibrahim Bozkurt, Skylar Deckoff-Jones, Manish Chhowalla, Deirdre M. O’Carroll, and Keshav Dani, “*Charge Transfer and Enhanced Absorption in MoS₂ - Organic Heterojunctions Using Plasmonic Metasurfaces*”, CLEO 2017, San Jose, US, 14-19 May 2017. https://doi.org/10.1364/CLEO_AT.2017.JTh2A.98
 9. Michael K. Man, Skylar Deckoff-Jones, Takaaki Harada, E Laine Wong, Athanasios Margiolakis, **M Bala Murali Krishna**, Julien Madéo, Andrew Winchester, Sidong Lei, Robert Vajtai, Pulickel M. Ajayan, and Keshav Dani, “*Imaging electron motion in 2D semiconductor heterojunctions*” CLEO 2017, San Jose, US, 14-19 May 2017. https://doi.org/10.1364/CLEO_QELS.2017.FTh4F.2
 10. **M. Bala Murali Krishna**, Julien Madéo, Soumya Vinod, Chandra Sekhar Tiwary, Pulickel M Ajayan, Keshav M Dani, “THz transient dynamics and photoconductivity in liquid exfoliated van der Waals insulator-semiconductor heterostructure laminates”, Photonics-2016, IIT, Kanpur, INDIA, Dec 4th-8th, 2016. <https://doi.org/10.1364/PHOTONICS.2016.W4A.4>
 11. Man, M. K. L., Margiolakis, A., Deckoff-Jones, S., Harada, T., **M. Bala Murali Krishna**, Wong, E., Madeo, J., Winchester, A., Lei, S., Vajtai, R., Ajayan, P. M., Dani, K. M. “*Visualization of Electron in motion in 2D Semiconductor Heterojunctions*”, Oral Presentation, LEEMPEEM-10, Monterey, CA, USA, Sep 11-15 (2016)
 12. Winchester, A., Man, M. K. L., Deck-off Jones, S., Harada, T., Wong, E., Margiolakis, A., **M. Bala Murali Krishna** Madeo, J., Lei, S., Vajtai, R., Ajayan, P. M., Dani, K. M., “*Visualizing electrons flow in 2D semiconductor heterojunctions*”, Poster Presentation, LEEMPEEM-10, Monterey, CA, USA, Sep 11-15 (2016)

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13. Man, M. K. L. Margiolakis, A., Deckoff-Jones, S., Harada, T., **M. Bala Murali Krishna**, Wong, E., Madeo, J., Winchester, A., Lei, S., Vajtai, R., Ajayan, P. M., Dani, K. M. “*Visualization of Electron in motion in 2D Semiconductor Heterojunctions*”, Oral Presentation, Ultrafast Phenomena 2016, Santa Fe, NM, USA, Jul 17-22 (2016)
 14. Dani, K. M., Man, M. K. L., Margiolakis, A., Deckoff-Jones, S., Harada, T., Wong, E., **M. Bala Murali Krishna**, Madeo, J., Winchester, A., Lei, S., Vajtai, R., Ajayan, P. M. “*Into the rabbit hole - tracking electrons through energy momentum, space and time*”, Invited Talk, UDN 2016, Okinawa Institute of Science and Technology Graduate University Okinawa, Japan, July 13-16 (2016)
 15. Bryan, B., Harada, T., Weber, C., Renaud, D., Winchester, A., Deckoff-Jones, S., Hu, J., Liu, X., Mao, Z., Wei, J., Talbayev, D., **M. Bala Murali Krishna**, Madeo, J., Dani, M. K. Ultrafast Properties of Atomically Thin Black Phosphorus, Poster Presentation, UDN 2016, Okinawa Institute of Science and Technology Graduate University Okinawa, Japan, July 13-16 (2016)
 16. Dani, K. M., Man, M. K. L., Deckoff-Jones, S., Harada, T., Wong, E., Margiolakis, A., **M. Bala Murali Krishna**, Madeo, J., Winchester, A., Lei, S., Vajtai, R., Ajayan, P. M. “*Time Resolved Photoemission Electron Microscopy of Nanoscale Semiconductor Heterojunctions*”, Invited Talk, TERAMETANANO-2016, Cartagena, Colombia, Apr 03-10 (2016).
 17. Christopher E. Petoukhoff, **M. Bala Murali Krishna**, Damien Voiry, Ibrahim Bozkurt, Skylar Deckoff-Jones, Manish Chhowalla, Deirdre M. O’Carroll, Keshav M. Dani, “Using MoS₂-metasurface heterostructures to improve absorption in polymer:fullerene thin films”, MRS Spring 2016, Phoenix, Arizona, US, Mar 28th-Apr 1st, 2016.
 18. Man, M. K. L., Deckoff-Jones, S., Harada, T., Wong, E., Margiolakis, A., **M. Bala Murali Krishna**, Madeo, J. “*Imaging the flow of electrons in 2D semiconductor heterojunctions*”, Oral Presentation, Graphene Week 2016, Warszawa, Poland, Jun 13-17 (2016)
 19. **M Bala Murali Krishna**, M. K L Man, S. Vinod, C. Chin, T. Harada, Jaime Taha-Tijerina, Chandra Sekhar Tiwary, Patrick Nguyen, Patricia Chang, T. Narayanan, Angel Rubio, P. Ajayan, S. Talapatra, Keshav Dani. “*Engineering photophenomena in self-assembled 3D van der Waals heterostructures*”, ICMAT 2015, Singapore, 28th June-3rd July 2015.
 20. **Bala Murali Krishna M**, M. M. Man, S. Vinod, Catherine. Chin, T. Harada, Taha-Tijerrina. J, C. C. Tiwary, P. Nguyen, P. Chang, N. T. Narayanan, A. Rubio, P. M. Ajayan, S. Talpatra and K. M. Dani, “*Emergent photophenomena in three dimensional van der Waals heterostructures*”, CLEO 2015, San Jose, US, 10-15 May 2015.
https://doi.org/10.1364/CLEO_QELS.2015.FM3B.5

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21. Ronald Ulbricht, Shuo Dong, Julian Schwartz, Hyeon-Deuk Kim, Yoshitaka Tanimura, **Bala Murali Krishna Mariserla**, Keshav M. Dani, Zhi-Heng Loh, “*Ultrafast Photo-Excitation Dynamics of Nitrogen-Vacancy Defects in Diamond*”, CLEO 2015, San Jose, US, 10-15 May 2015.
https://doi.org/10.1364/CLEO_QELS.2015.FTu4B.7
 22. **Bala Murali Krishna M**, M. M. Man, S. Vinod, Catherine. Chin, T. Harada, Taha-Tijerrina. J, C. C. Tiwary, P. Nguyen, P. Chang, N. T. narayanan, A. Rubio, P. M. Ajayan, S. Talpatra and K. M. Dani, “*Novel opto-electronic functionality in 3D van der Waals solids*”,
MRS Fall Meetings, Boston, US, 30 NOV-5th Dec 2014
 23. **Bala Murali Krishna M**, Catherine C, T. Harada, Soumya V, J. Taha-Tijerrina, P. Nguyen, P. Chang, P. M. Ajayan, T. N. Narayanan, K. M. Dani, “*Optical pump-THz probe measurements of self-assembled h-BN/G heterostructures*”,
APS meetings, Denver, Colorado, USA, March 3-7, 2014.
 24. **M. Bala Murali Krishna**, N. Venkatramaiah, R. Venkatesan, D. Narayana Rao, “*Graphene oxide (GO)-semiconductor (ZnO, TiO₂) nanoparticles for broadband optical limiting*”,
PHOTONICS, IIT Madras, Chennai, India, Dec 09-12, 2012. [Poster presentation]
<https://doi.org/10.1364/PHOTONICS.2012.TPo.42>
 25. V. Sreeramulu, A. Chiasera, **M. Bala Murali Krishna**, S. Varas, D. Narayana Rao, M. Ferrari, G.C. Righini, “*Nonlinear enhancement in 1-D photonic crystal with ZnO defect fabricated by rf sputtering*”,
PHOTONICS, IIT Madras, Chennai, India, Dec 09-12, 2012.
<https://doi.org/10.1364/PHOTONICS.2012.W1C.2>
 26. K. Shadak Alee, **M. Bala Murali Krishna**, B. Ashok, D. Narayana Rao, “*Optical limiting studies of 3D polystyrene photonic crystals with the central band gap at 536 nm at normal incidence in reflection geometry*”,
OPTICS 11, NIT, Calicut, Kerala, India, may 23-25, 2011.
(AIP Conf. Proc. 1391, 260-262 (2011); doi: 10.1063/1.3646850).
 27. **M. Bala Murali Krishna**, V. Praveen Kumar, N. Venkatramaiah, R. Venkatesan and D. Narayana Rao, “*NLO studies of Graphene and its composites*”,
PHOTONICS, IIT Guwahati, India, Dec 11-15, 2010.
 28. **M. Balamurali Krishna**, R. Sathyavathi, S. Venugopal Rao, R. Saritha, D. Narayana Rao. “*Nonlinear optical properties of silver nanoparticles synthesized using coriander leaves*”,
ICANN, IIT Guwahati, India, Dec. 9th- Dec. 12th 2009.
 29. **B. M. Krishna Mariserla**, D. Narayana Rao, R. Sai Santosh Kumar, L. Giribabu, S. Venugopal Rao. “*Nanosecond, Picosecond, and Femtosecond Nonlinear Optical*

Properties of a Zinc Phthalocyanine studied using Z-scan and DFWM techniques”, ICOP-2009, CSIO, Chandigarh, India, Oct. 30th- Nov. 1st 2009.

30. D. Narayana Rao, **B.M. Krishana**, H. Sekhar, K. Shadak Alee, P. Prem Kiran, S. Venugopal Rao “*Optical Limiting studies in BSO nanocrystals dispersed in solution and a polymer matrix*”, International Conference on Optics & Photonics (ICOP-2009), CSIO, Chandigarh, India, Oct. 30th- Nov. 1st 2009.
31. Kiran, P.P., Rao, S.V., Ferrari, M., **Krishna, B.M.**, Sekhar, H., Alee, S., Rao, D.N. “*Enhanced optical limiting performance through nonlinear scattering in Nanoparticles of CdS, co-doped Ag-Cu, and BSO*”, 5th International Symposium on Materials and Devices for Nonlinear Optics (ISOPL5). Porquerolles (France), June 26th - July 1st 2009.
32. Rao, S.V., Kiran, P.P., Giribabu, L., Ferrari, M., Kurumurthy, G., **Krishna, B.M.**, Sekhar, H., Rao, D.N. “*Anomalous nonlinear absorption behavior in an unsymmetrical phthalocyanine studied near 800 nm using femtosecond and picosecond pulses*”, 5th International Symposium on Materials and Devices for Nonlinear Optics (ISOPL5). Porquerolles (France), June 26th - July 1st 2009.

National Conferences:

1. **M Bala Murali Krishna**, M. K L Man, J. Madéo, S. Vinod, C. Chin, T. Harada, Jaime Taha-Tijerina, Chandra Sekhar Tiwary, Patrick Nguyen, Patricia Chang, T. Narayanan, Angel Rubio, P. Ajayan, S. Talapatra, Keshav Dani. “*Ultrafast dynamics of van der Waals heterostructured laminates*”, Ultrafast Dynamics at the Nanoscale 2016, Okinawa, Japan, July 13th-16th.
2. Christopher E. Petoukhoff, **M. Bala Murali Krishna**, Damien Voiry, Ibrahim Bozkurt, Skylar Deckoff-Jones, Manish Chhowalla, Deirdre M. O’Carroll, and Keshav M. Dani, “*Ultrafast Charge Transfer in MoS₂ - Organic van der Waals Heterojunctions using Plasmonic Metasurfaces*”, Ultrafast Dynamics at the Nanoscale 2016, Okinawa, Japan, July 13th-16th.
3. Michael K.L. Man, Athanasios Margiolakis, Skylar Deckoff-Jones, Takaaki Harada, E Laine Wong, **M Bala Murali Krishna**, Julien Madéo, Andrew Winchester, Sidong Lei, Robert Vajtai, Pulickel M. Ajayan, Keshav M. Dani, “*Into the rabbit hole – tracking electrons through energy, momentum, space and time*”, Ultrafast Dynamics at the Nanoscale 2016, Okinawa, Japan, July 13th-16th.
4. Takaaki Harada, Bryan S. Berggren, Skylar Deckoff-Jones, Dylan Renaud, Andrew Winchester, Jin Hu, Xue Liu, Zhiqiang Mao, Jiang Wei, Diyar Talbayev, Christopher Weber, **M. Bala Murali Krishna**, Julien Madéo, and Keshav M. Dani, “*Ultrafast Properties of Atomically Thin Black Phosphorus*”,

Ultrafast Dynamics at the Nanoscale 2016, Okinawa, Japan, July 13th-16th.

5. **Bala Murali Krishna M**, Catherine C, T. Harada, Soumya V, J. Taha-Tijerrina, P. Nguyen, P. Chang, P. M. Ajayan, T. N. Narayanan, K. M. Dani, “*Novel opto-electronic behavior of hBN/G van der waals hetrostructures*”, ISSP-OIST symposium, Okinawa, Japan, March 10-11, 2014
6. **M. Bala Murali Krishna**, “*Novel Graphene hybrid materials for NLO and Optical limiting Studies*”, OSA Student Conference, HCU, India, Jan 8th 2012.
7. **M. Bala murali Krishna**, N. Venkatramaiah, R. Venkatesan and D. Narayana Rao, “*Optical nonlinearities of graphene-(sn, OH) porphyrin composites in ns region*”, Workshop on “Physics at small scales”, school of physics, university of Hyderabad, Hyderabad, India, March 18th-19th, 2011.
8. **M. Bala Murali Krishna**, V. Praveen Kumar, N. Venkatramaiah, R. Venkatesan and D. Narayana Rao, “*Enhanced optical nonlinearities of covalently linked Graphene-Zinc porphyrin composite materials*”, NLS-19, RRCAT, Indore, India, Dec 1-4, 2010.
9. **M. Balamurali Krishna**, R. Sathyavathi, D. Narayana Rao. “*Nonlinear optical properties of Au/Ag Bimetallic nanoparticles*” ISJPS 2010, HCU, India, February 19-21st, 2010.

Presentations at Institutions

1. “Ultrafast studies in two dimensional (2D) materials” Indian Institute of Technology, Hyderabad, India (Dec 21st 2016)
2. “Ultrafast dynamics in novel 2D materials” Indian Institute of Technology, Madras, India (Dec 15th 2016)
3. “Photocarrier dynamics in novel two-dimensional (2D) materials” IISER Thiruvananthapuram, India (Dec 13th 2016)
4. “Ultrafast photocarrier dynamics in two dimensional materials” Indian Institute of Technology, Kharagpur, India (Dec 9th 2016)
5. “Electronic properties of self-assembled hBN/G heterostructures studied by optical pump terahertz probe technique”, Indian Institute of Technology, Indore (Jan 10th 2014)

Chair for Conference/Symposium Sessions

1. Session: “Playing a "light" role in energy, materials, and devices”, ISSP-OIST symposium: Lighting Up New Frontiers – From Tokyo to Okinawa, From Materials to Neurons, Okinawa, Japan, March 10-11, 2014

Workshop and Schools attended

1. Workshop practice school on machine drawing and machining, June 17-23, 2008, Science complex workshop, University of Hyderabad, Hyderabad.
2. SERC School on laser spectroscopy held at BARC, Mumbai, Dec 2008.
3. Indo-French workshop on Modern organic nonlinear optics - March 12 - 16, 2012 in SSCU, Indian Institute of Science, Bangalore, India

Teaching Assistance ship:

2009-2010	Teaching assistantship for M.Sc., Nonlinear optics course.
2010-2011	Teaching assistantship for Integrated M.Sc., Optics Laboratory.
2011-2012	Teaching assistantship for M.Sc., Computational Laboratory.
2014-2017	Teaching assistantship for Ph.D., Ultrafast laser laboratory.

Teaching

2005-2007		Worked as a physics teacher for IIT foundation courses.
2018-2019	PY 1.4 CT	Computational Physics (3 credits).
	PY 1.6 CL	General Physics Lab-I (2 credits).
	PY 1.7 CL	General Physics Lab-II (2 credits).
	PY 1.4 CT	Atomic, Molecular and Laser Physics (3 credits).
	PY 2.5 E	Nanoscience and Nanotechnology (3 credits)
	PY 2.6 CL	Electronics Lab-1(2 credits)
	PY 2.7 CL	Electronics Lab-2 (2 credits)

Reviewer Services

➤ Nanotechnology	IOP publishing group (United Kingdom)
➤ RSC advances	Royal Society of Chemistry (United Kingdom)
➤ Indian Journal of Physics	Springer Science and Business Media
➤ Journal of Physics: Cond. Mat.	IOP Publishing (United Kingdom)
➤ Canadian Journal of Physics	NRC Research Press (Canada)