Curriculum-vitae

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3. Academic Qualifications :

(a) B. Sc. **:** (Mathematics, Physics, Electronics)
Andhra University, India (1992)

(b) M. Sc. **:** (Physics with Quantum Optics and Lasers as Specialization)
University of Hyderabad, Hyderabad, India (1994)

(c) Ph. D. **:** (Physics) Solid State Electronics Group,
Tata Institute of Fundamental Research, Mumbai, India (2000)

Thesis Title **: Study of dimensionality dependence of exciton dynamics using time resolved nonlinear optical spectroscopy in GaAs based nanostructures**

(d) Ph. D. **:** (Electronics) Department of Electrical and Electronics Engineering,
Tokyo University, Tokyo, Japan, 2006

Thesis Title **: Intersubband transitions in Sb-based quantum wells for all-optic switching**

4. Positions Held:

(1) Reader, Department of Condensed Matte Physics and Material Science, Tata Institute of Fundamental Studies, Homi Bhabha Road, Colaba, Mumbai 400 005 July 2006 to December 2011.
(2) Fellow, Department of Condensed Matte Physics and Material Science, Tata Institute of Fundamental Studies, Homi Bhabha Road, Colaba, Mumbai 400 005 October 2004 to June 2006.
(3) Japan Science and Technology Agency (JST) Fellow
JST Fellow at Quantum Information Technology Group,
NEC Corporation, 34, Miyukigaoka, Tsukuba 305 8501, Japan.
April 2003 to September 2004.
(4) New Energy and Industrial Technology Development Organization (NEDO) Fellow
NEDO Industrial Researcher at the Femtosecond Technology Research Association (FESTA) Labs, 5-5 Tokodai, Tsukuba, Japan
July 2000-March 2003.

5. Memberships :

(1) Senior Member of IEEE
(2) Member of Optical Society of America
(3) Member of Optical Society of India

6. Research Experience :

(a) Exciton dynamics in lower dimensional structures – dimensionality dependence of carrier-carrier scattering.
(b) Intersubband transition based all-optical switch- design, fabrication and demonstration.
(c) Photonic crystals – microcavities with quantum dots, all-optical switch and modulators,
(d) Nano fabrication –home built holographic lithography, electron beam lithography, wet and dry etching techniques, all-optical assembly of 2-d and 3-d structures
(e) Plasmonics and Metamaterials – design, fabrication and characterization of plasmonic crystals, plasmonic quasicrystals, metamaterials, metasurfaces, all-dielectric metamaterials. Magnetoplasmonics and Broadband plasmonics are two areas where he has extensive contributions.
(f) Ultrafast spectroscopy and far-field and near-field spectroscopy.

7. External Projects :

1. National Institute of Information and Communications Technology, Japan funded project with Prof. Y. Masumoto of University of Tsukuba, Japan (May 2006 to Mar 2010).
2. Department of Science and Technology (DST), India and Russian Foundation for basic Research (RFBR) funded project with Prof. Vladimir Belotelov and Prof. A. K. Zvezdin, Moscow State University, Russia (Mar 2009 – Mar 2011).
3. Department of Science and technology (DST), India and UK-India Education and Research Inititative (UKIERI) funded project with Dr. Andrew Ramsay and Prof. Maurice Skolnick, University of Sheffield, UK (June 2008- May 2012).
4. Swedish Research Council (Swedish Research Links) funded project with Dr. S. Anand, KTH, Sweden (Jan 2008 - Dec 2010).
5. Department of Science and technology (DST), India funded project with Dr. Gopi Sharma Kanya Mahavidyalaya (Jan 2014- Dec 2016).
6. Department of Science and Technology (DST), India and Russian Foundation for basic Research (RFBR) funded project with Prof. Vladimir Belotelov and Prof. A. K. Zvezdin, Moscow State University, Russia (Sep 2013 – Aug 2015).
7. Department of Science and technology (DST), India funded project with Dr. Niraj Joshi, Mangalore (Jan 2015- Dec 2017).

8. Administrative duties :

(a) Institute Activities :

1. Visiting Students Research Program (VSRP) co-coordinator 2006 and VSRP coordinator 2007
2. Course Coordinator for Subject Board Physics from 2009-2013
3. Member of the institute Safety committee

(b) Department Activities :

4. Setting up and looking after the day to day operation of Department cleanroom
5. Organizing committee member of IVW10, TIFR-Cambridge Interaction Meeting 2008

(c) Teaching : Taught various courses (Electronics – 2008 and 2009; Solid State Physics (partly) - 2010), Semiconductor Physics – 2006 and shared in 2009, Ultrafast processes in Semiconductors – shared in 2009, Modern Optics (shared in 2011) and Experimental Techniques in Condensed Matter Physics (shared in 2011, 2013-2016), Photonics (2012 and 2013) in the graduate school program.

9. Outreach and work outside scope of official duties:

a) Popular lectures at various colleges like Vishwesharayya Institute of Technology (VIIT), Pune; Ruparel College, Mumbai to inaugurate their Science Club; Terna Engineering College, Nerul.
b) Training students from various institutes like IISc, University of Pune, IIT, Kanpur, IISER, Kolkata on spectroscopic techniques and on lithographic techniques to students from IIT,Kanpur, IISER, Kolkata, among others.
c) Taught at various schools including the SERC school on Nanophotonics at Hamirpur, Himachal Pradesh (2010) and SERC preparatory school on Optics at IIT, Guwahati (2010).
d) Organized School on Plasmonics and ICTS Discussion Meeting on Emerging Themes in Plasmonics, Hyderabad, 24th June to 3rd July 2012. A 7-day school with about 70 students and postdocs from around the world followed by a 3-day ICTS Discussion meeting was held with about 100 participants from India and abroad. School covered from basics to emerging topics in nanophotonics. Discussion meeting was at an advanced level to discuss the current and future trends in the field with speakers chosen from leading experts in the field.
e) Organized Discussion Meeting on emerging themes in nanophotonics during 2-4 December 2015 in Goa, India. There were about 90 participants mostly students and early career researchers from within India. 16 eminent speakers from India and around the world participated to cover wide ranging topics in Physics as well as Chemistry and Biology. The speakers were chosen to have a right mix of theoretical and experimental researchers active in the field.

10. Editorial Duties:

1. Editorial Board member of journal Scientific Reports
2. Review editor of Frontiers in Optics and Photonics which is part of journals Frontiers in Physics and Frontiers in Astronomy published by EPFL, Switzerland.

11. List of Publications :

(a) Published Papers: For updated list please visit www.tifr.res.in/~Foton

[91.] "Quasiperiodic air hole arrays for broadband and omnidirectional suppression of reflection", Anuradha Patra, Ajith P. Ravishankar, Arvind Nagarajan, Somendu Maurya, and Venu Gopal Achanta, J. Appl. Phys. 119, 113107 (2016).
[90.] "Multi-channel programmable power supply with temperature compensation for Silicon sensors", R. Shukla, Venu Gopal Achanta, S. Dugad, J. Freeman, C. S. Garde, S. Gupta, P. Khandekar, A. Kurup, S. Lokhandwala, S. Los, S. S. Prabhu, and P. Rakshe, Rev. Sci. Instrum. 87, 015114 (2016).
[89.] "Observation of giant Goos-hanchen and angular shifts at designed interfaces", V. J. Yallapragada, A. P. Ravishankar, G. J. Mulay, G. S. Agarwal, and V. G. Achanta, Sci. Rep. 6, 19319 (2016).
[88.] "Broadband linear and nonlinear optical response of plasmonic quasicrystals", A. P. Ravishankar, V. J. Yallapragada, S. Kasture, A. Nagarajan, and V. G. Achanta, Opt. Comm. 366, 57-60 (2016).
[87.] "Photonic crystals with plasmonic patterns: novel type of the heterostructures for enhanced magneto-optical activity", N. E. Khokhlov, A. R. Prokopov, A. N. Shaposhnikov, V. N. Berzhansky, M. A. Kozhaev, S. N. Andreev, Ajith P. Ravishankar, Venu Gopal Achanta, D. A. Bykov, A. K. Zvezdin, V. I. Belotelov, J. Phys. D: Appl. Phys. 48, 095001 (2015).
[86.] "Plasmonic Quasicrystals", Venu Gopal Achanta, Prog. Quant. Electron. 39, 1-23 (2015). (Invited Review).
[85.] "Influence of lead and cadmium fluoride variation on white light emission characteristics in

oxyfluoride glasses and glass ceramics", Gopi Sharma, Ruchika Bagga, Nancy Mahendru, Mauro Falconieri, Venu Gopal Achanta, Ashutosh Goel, Shaik Nayab Rasool, Navooru Vijaya, Journal of Luminescence 159, 38-46 (2015).
[84.] "Transformation of mode polarization in gyrotropic plasmonic waveguides", A N Kalish, O. Ignatyeva, V. I. Belotelov, L. E. Kreilkamp, I. A. Akimov, A. V. Gopal, M. Bayer, A. P. Sukhorukov, Laser Phys. 24, 094006 (2014).
[83.] "Optical reflectionless potentials for broadband, omnidirectional antireflection", L. V. Thekkekara, Achanta Venu Gopal, and S. Dutta Gupta, Opt. Express 22, 17382 (2014).
[82.] "Magnetophotonic intensity effects in hybrid metal-dielectric structures", V. I. Belotelov, L. E. Kreilkamp, A. N. Kalish, I. A. Akimov, D. A. Bykov, S. Kasture, V. J. Yallapragada, Achanta Venu Gopal, A. M. Grishin, S. I. Khartsev, M. Nur-E-Alam, M. Vasiliev, L. L. Doskolovich, D. R. Yakovlev, K. Alameh, A. K. Zvezdin, and M. Bayer, Phys. Rev. B 89(4), 045118 (2014).
[81.] "Optical properties of serrated GaN nanowires", Anuradha Patra, Zheng Ma, Latika Menon, and Achanta Venu Gopal, Opt. Mat. Express. 4, 1373 (2014).
[80.] "Plasmonic quasicrystals with broadband transmission enhancement", Sachin Kasture, Ajith P R, V J Yallapragada, Raj Patil, Nikesh V. V., Gajendra Mulay, and Achanta Venu Gopal, Sci. Rep. 4, 5257 (2014).
[79.] "Fabrication of large-area two-dimensional array of air holes with different hole shapes for optical and terahertz wavelength regions", Raj Patil, S. Lan, and Achanta Venu Gopal, J. Nanophoton. 8, 083896 (2014).
[78.] "Photonic-crystal-based polarization selector for planar architectures", Richa Goel, A. Tulapurkar, and Achanta Venu Gopal, J. Nanophoton. 8, 083891 (2014).
[77.] "Physical, optical and nonlinear properties of InS single crystal", Pallavi Kushwaha, Anuradha Patra, E. Anjali, Harshad Surdi, C. Gurada, S. Ramakrishnan, S. S. Prabhu, Achanta Venu Gopal, and A. Thamizhavel,Opt. Materials 36, 616 (2014).
[76.] "A micron resolution optical scanner for characterization of silicon detectors", R. A. Shukla, S. R. Dugad, C. S. Garde, Achanta Venu Gopal, S. K. Gupta, and S. S. Prabhu, Rev. Sci. Instrum. 85, 023301 (2014).
[75.] "Fabrication of large area 2-d array of air holes with different hole shapes for optical and THz wavelength regions", Raj Patil, Sheng Lan, Achanta Venu Gopal, J. Nanophotonics 8(1), 083896 (2014).
[74.] "Semiconductor waveguide circuit for coupling an InGaAs quantum dot spin to a path encoded photon." I. J. Luxmoore, N. A. Wasley, A. J. Ramsay, A. C. T. Thijssen, R. Oulton, M. Hugues, S. Kasture, Achanta Venu Gopal, A. M. Fox, M. S. Skolnick, Phys. Rev. Lett. 110 037402 (2013).
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[72.] "Polarization dependent color switching by extra-ordinary transmission in H-slit plamsonic metasurface", P. Mandal, S. Anantha Ramakrishna, Raj Patil, and Achanta Venu Gopal, J. Appl. Phys. 114(22), 224303 (2013).
[71.] "Tuning of the transverse magneto-optical Kerr effect in magnetoplasmonic crystals", M. Pohl, L. E. Kreilkamp, V. I. Belotelov, I. A. Akimov, A. N. Kalish, N. E. Khokhlov, V. J. Yallapragada, A. V. Gopal, M. Nur-E-Alam, M. Vasiliev, D. R. Yakovlev, K. Alameh, A. K. Zvezdin and M. Bayer, New Journal of Physics 15, 075024 (2013).
[70.] "Plasmon mediated magneto-optical transparency", V. I. Belotelov, L .E. Kreilkamp, I. A. Akimov, A. N. Kalish, D. A. Bykov, S. Kasture, V. J. Yallapragada, Achanta Venu Gopal, A. M. Grishin, S. I. Khartsev, M. Nue-E-Alam, M. Vailiev, L L. Doskolovich, D. R. Yakovlev, K. Alameh, A. K. Zvezdin, and M. Bayer, Nature Commun. 4, 2128 (2013).
[69.] "Luminescence study of mixed valence Eu-doped nanocrystalline glass-ceramics", R. Bagga, Venu Gopal Achanta, A. Goel, J. M. F. Ferreira, N. P. Singh, D. P. Singh, V. Contini, M. Falconieri, and G. Sharma, Opt. Materials 36, 198 (2013).
[68.] "Strong localization of terahertz wave and significant enhancement in electric field achieved in U-shaped resonators with a large aspect ratio", Rong-Rong Lin, Ye-Bin Xu, Hai-Ying Liu, Sheng Lan, and Achanta Venu Gopal, Appl. Phys. Lett. 103, 123505 (2013).
[67.] "Tuning of the transverse magneto-optical Kerr effect in magnetoplasmonic crystals", M. Pohl, L. E. Kreilkamp, V.I. Belotelov, I.A. Akimov, A.N. Kalish, N.E. Khokhlov, V.J. Yallapragada, A.V. Gopal, M. Nur-E-Alam, M. Vasiliev, D.R. Yakovlev, K. Alameh, A.K. Zvezdin and M. Bayer, New Journal of Physics 15, 075024 (2013).
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[64.] "Goos-Hanchen shifts in harmonic generation from metals", V. J. Yallapragada, Achanta Venu Gopal, G. S. Agarwal, Opt. Express **21**, 10878 (2013).
[63.] "Semiconductor waveguide circuit for coupling an InGaAs quantum dot spin to a path encoded photon." I. J. Luxmoore, N. A. Wasley, A. J. Ramsay, A. C. T. Thijssen, R. Oulton, M. Hugues, S. Kasture, Achanta Venu Gopal, A. M. Fox, M. S. Skolnick, Phys. Rev. Letts.**110** 037402 (2013).
[62.] "Strong coupling of in-plane plasmon modes and their control", S. Kasture, P. Mandal, S. Dutta Gupta, Achanta Venu Gopal, Opt. Express **21**, 13187 (2013).
[61.] "Structural and optical investigation of rare earth doped oxyfluoride glasses", R. Bagga, M. Falconieri, Achanta Venu Gopal, J. M. Ferreira, A. Goel, N. P. Singh, N. Sharma, and G. Sharma, Trans. Indian Ceramic Soc. **72**, 18 (2013).
[60.] "Dy^{3+} -doped nano-glass ceramics comprising $NaAlSiO_4$ and $NaY_9Si_6O_{26}$ nanocrystals for white light generation", R. Bagga, Achanta Venu Gopal, A. Goel, J. M. F. Ferreira, N. P. Singh, D. P. Singh, M. Falconieri, and G. Sharma, Mat. Sci. Engn. B **178**, 218 (2013).
[59.] "Studying periodic nanostructures by probing the in-sample optical far-field using coherent phonons", C. Bruggemann, J. Jager, B. A. Galvin, V. I. Belotelov, I. A. Akimov, S. Kasture, Achanta Venu Gopal, A. S. Vengurlekar, D. R. Yakovlev, A. V. Akimov, and M. Bayer, Appl. Phys. Letts. **101**, 243117 (2012).
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[57.] "Proximity error correction method for continuous moving stage electron beam writing", S. Kasture, Nikesh V.V., Gajendra Mulay, Achanta Venu Gopal, J. Vac. Sci. Technol. B **30**, 050602 (2012).
[56.] "Modulation of a surface plasmon-polariton resonance by subterahertz diffracted coherent phonons", C. Bruggemann, A. V. Akimov, B. A. Glavin, V. I. Belotelov,I. A. Akimov, J. Jager, S. Kasture, Achanta Venu Gopal, A. S. Vengurlekar, D. R. Yakovlev, A. J. Kent, and M. Bayer, Phys. Rev. B **86**, 121401R (2012).
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[54.] "Selective appearance of several laser-induced periodic surface structure patterns on a metal surface using structural colors produced by femtosecond laser pulses", J. Yao, C. Zhang, H. Liu, Q. Dai, L. Wu, Achanta Venu Gopal, V. A. Trofimov, T. M. Lysak, Sheng Lan, Appl. Surf. Sci. 258 7625-7632 (2012).
[53.] "Dy3+ -doped nano-glass ceramics comprising NaAlSiO4 and NaY9Si6O26 nanocrystals for white light generation", R. Bagga, Achanta Venu Gopal, A. Goel, J. M. F. Ferreira, N. P. Singh,, D. P. Singh, M. Falconeri, G. Sharma Mat. Sci. Engn B **178** 218-224 (2013).
[52.] "Plasmonic crystals for ultrafast nanophotonics: optical switching of surface plasmon polaritons", M. Pohl, V. I. Belotelov, I. A. Akimov, A. S. Vengurlekar, A. V. Gopal, A. K. Zvezdin, D. R. Yokovlev, M. Bayer, Phys. Rev. B. **85**, 081401(R) (2012).
[51.] "Fabry-Perot plasmonic structures for nanophotonics", V. I. Belotelov, A. N. Kalish, A. K. Zvezdin, Achanta Venu Gopal, A. S. Vengurlekar, JOSA B **29**, 294 (2012).
[50.] "High spatial frequency periodic structures induced on metal surface by femtosecond laser pulses", J.-W. Yao, C.-Y. Zhang, H.-Y. Liu, Q-F. Dai, L.-J. Wu, S. Lan, Achanta Venu Gopal, V. A. Trofimov, T. M. Lysak, Opt. Expr. **20**, 905 (2012).
[49.] "Femtosecond laser micromachining of ZnO nanorods for efficient two-photon-pumped random lasing and optical data storage", Zhi-Cheng Fu, Jun Dai, Tao Li, Hai-Ying Liu, Qiao-Feng Dai, Li-Jun Wu, Sheng Lan, Xia Wan, Shao-Long Tie, Achanta Venu Gopal, Vyacheslav A. Trofimov, and Tatiana M. Lysak, Appl. Phys. B **108**, 61 (2012).
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N. Kalish, S. Kasture, A. S. Vengurlekar, Achanta Venu Gopal, V. A. Kotov, D. Yakovlev, A. K. Zvezdin, and M. Bayer, J. Phys: Conf. Series **303**, 012038 (2011).
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[24.] "Ultrafast all-optical switching and modulation using intersubband transitions in coupled quantum well structures", H. Yoshida, T. Simoyama, Achanta Venu Gopal, J. Kasai, T. Mozume, and H. Ishikawa, IEICE Trans. Electron., **E87-C**, 1134-1141 (2004).
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(b) Presented in conferences and visits:

[95.] "Light modulation in photonic and plasmonic metamaterials", Venu Gopal Achanta, Ultrafast Spectroscopy (UFS2015), SNBCBS, Kolkata, December 2015 (Invited).
[95.] "Metamaterials with broadband response", Venu Gopal Achanta, International Workshop on Physics of Semiconductors (IWPSD2015), IISC, Bangalore, 7-10 December 2015 (Invited).
[95.] "Broadband, near dispersionless plasmonic structures", Venu Gopal Achanta, International Conference on Microwave and Photonics (ICMAP2015), ISM, Dhanbad, 11-13 December 2015 (Invited).
[94.] "Broadband, dispersionless plasmonic and dielectric metamaterials", Venu Gopal Achanta, Colloquium IISER Bhopal, 21 August 2015 (Invited).
[93.] "Dielectric and metal-dielectric metamaterials", Venu Gopal Achanta, META2015, New York, August 2015 (Invited).
[92.] "Dielectric and metallo-dielectric structures for broadband response", Venu Gopal Achanta, Center for Nanoscale Science and Technology (CNST)-NIST, Gaithersberg, MD, USA, August 2015 (Invited).
[91.] "Light manipulation with metal-dielectric and dielectric nanostructures", Venu Gopal Achanta, IIT, Madras (Invited).
[90.] "Metasurfaces for light harvesting", Venu Gopal Achanta, International Conference RAINSAT2015, Satyabhama University, Chennai, 6-8 July 2015 (Invited).
[89.] "Enhancement of Goos-Hänchen Shifts in Dielectric Gratings on a Metal Surface", Venkata Jayasurya Yallapragada, Arvind Nagarajan, Ajith Padyana Ravishankar, Gajendra Mulay, Venu Gopal Achanta, Surface Plasmon Polariton (SPP7), Jerusalem 31 May - 5 June 2015.
[88.] "Enhanced Magneto-Optical Activity in Photonic Crystals with Plasmonic Patterns", Olga Borovkova, Nikolai Khokhlov, Mikhail Kozhaev, Anatoliy Prokopov, Alexander Shaposhnikov, Vladimir Berzhansky, Ajith Ravishankar, Venu Gopal Achanta, Anatoly Zvezdin, Vladimir Belotelov, Surface Plasmon Polariton (SPP7), Jerusalem 31 May -5 June 2015.
[87.] "Linear and Non-linear Optical Properties of Plasmonic Quasi Crystals", Ajith Padyana Ravishankar, Venkata Jayasurya Yallapragada, Sachin Kasture, Arvind Nagarajan, Gajendra Mulay, Venu Gopal Achanta, Surface Plasmon Polariton (SPP7), Jerusalem 31 May -5 June 2015.
[86.] "The longitudinal magneto-photonic intensity effect in plasmonic crystals", Vladimir Belotelov, Andrey Kalish, Lars Kreilkamp, Ilya Akimov, Dmitry Bykov, Sachin Kasture, V. J. Yallapragada, Achanta Venu Gopal,

Alex Grishin, Sergey Khartsev, Mohammad Nur-E-Alam, Mikhail Vasiliev, Leonid Doskolovich, Dmitry Yakovlev, Kamal Alameh, Anatoly Zvezdin, Manfred Bayer, META2014, Singapore 20-24 May 2014.
[85.] "Plasmonic quasicrystals for designable spectral response", Sachin Kastre, Ajith P. R., Venu Gopal Achanta, META2014, Singapore 20-24 May 2014.
[84.] "Light control using sub-wavelength structures", Achanta Venu Gopal, QANSAS2014, Agra 27-30 November 2014 (Invited).
[83.] "Near dispersionless, Broadband Transmission Enhancement in Plasmonic Quasicrystals", Achanta Venu Gopal, PIERS 2014, Guangzhou, China, 25-28 August 2014. (Invited).
[82.] "Nanostructured materials for controlling light", Russian Quantum Center, Moscow Russia 26th May 2014 (Invited).
[81.] "Plasmonic Quasicrystals for nonlinear plasmonics", Achanta Venu Gopal, RAOS Conference, Hyderabad, India, 26th April 2014 (Invited).
[80.] "Nanostructured materials for photonics and plasmonics", Achanta Venu Gopal, National Laser Symposium, 8-11 January 2014 (Invited).
[79.] "Electromagnetic field localization and control in nanostructures", Achanta Venu Gopal, Regional Conference on Radio Science (RCRS2013), Pune 2-5 Janaury 2014 (Invited).
[78.] "Plasmonic crystals for enhancing optical properties and light harvesting", Achanta Venu Gopal, IUMRS, Bangalore, 18-20 Dec 2013 (Invited).
[77.] "Realizing plasmonic crystals designed for specific applications", Achanta Venu Gopal, ICMAP 2013, Dhanbad, 13-15 December 2013 (Invited).
[76.] "Plasmonic crystals and quasicrystals", Achanta Venu Gopal, IISER, Kolkata, 12th December 2013 (Invited).
[75.] "Nanofabrication for information processing", Achanta Venu Gopal, 37th Optical Symposium of India, Pondicherry University, Pondicherry, 23-25 January 2013. (Invited)
[74.] "Dielectrics and metal-dielectrics for nanophotonics", Achanta Venu Gopal, One Day workshop on Nano-Photonics and Meta-Materials, Pondicherry University, Pondicherry, 22nd January 2013. (Invited)
[73.] "Metal-dielectric structures for energy harvesting", Achanta Venu Gopal, 1st national Seminar on Standardization for Nanoscience and Nanotechnology, CSIR-NPL, New Delhi, 25-26 February 2013.(Invited)
[72.] "Light propagation in coupled waveguides", Vaishnavi GVS, Sushrut Modak, S. Dutta Gupta, Achanta Venu Gopal, in *International Conference on Fiber Optics and Photonics*, OSA Technical Digest (online) (Optical Society of America, 2012), paper MPo.22, 2012.
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[70.] "Information Processing: Material Science Perspective", Achanta Venu Gopal, QANSAS2011, Agra, India 29th November to 2nd December 2012. (Invited)
[69.] "Plasmonic crystals for enhancing optical properties", Achanta Venu Gopal, DAE Solid State Physics Symposium, SRM University, Kattankulathur, India 19th-23rd December 2011. (Invited)
[68.] "Photonic crystal based polarization splitter", Richa Goel, A. S. Vengurlekar, Andrew Ramsay, Achanta Venu Gopal, International Conference on Nano Science, Technology & Societal Implications (NSTSI11), Bhubaneshwar, India, 8th – 10th December 2011.
[67.] "Metal nanoparticle chains as light couplers", Sushrut Modak, Aniket Patil, Raj patil, C. S. Garde, R. G. Purandare, A. S. Vengurlekar, Achanta Venu Gopal, International Conference on Nano Science, Technology & Societal Implications (NSTSI11), Bhubaneshwar, India, 8th – 10th December 2011.
[66.] "Towards optical computing", Achanta Venu Gopal, QANSAS2011, Agra, India 1st-4th December 2011. (Invited)
[65.] "Silicon based taper waveguides for near field coupling", Sushrut Modak, Aniket Patil, Raj Patil, C. S. Garde, R. G. Purandare, A. S. Vengurlekar, Achanta Venu Gopal, IEEE Photonics 2011 Conference, Arlington, Virginia, USA, 9th -13th October 2011.
[64.] "Plasmonics and photonics and their applications", National Conference, Terna Engineering College, Nerul, 28th-29th September 2011. (Invited)
[63.] "Metal-dielectric nanostructures", Achanta Venu Gopal, HCU-TIFR Discussion Meeting on Modern

Optics, University of Hyderabad, Hyderabad, 1st-3rd August 2011.
[62.] "Magneto-plasmonic crystals for enhancing magneto-optical effects", Achanta Venu Gopal, Brain Storming Session on Plasmonics and Applications, NPL, Delhi, 22nd-23rd July 2011. (Invited)
[61.] "Metal-dielectric nanostructures for enhancing magneto-optical effects", S. Kasture, A. S. Vengurlekar, Achanta Venu Gopal, V. I. Belotelov, V. A. Kotov, A. K. Zvezdin, I.A. Akimov, M. Pohl, M. Bayer, D. Yokovlev, MORIS 2011, Nijmegen, The Netherlands, 21-24 June 2011.
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[59.] "Optical field mediated assembly of micro- and nano-particles for photonics", Achanta Venu Gopal, Colloquium at IIT, Kanpur, 8th April 2011. (Invited)
[58.] "Plasmonic nanostructures for magneto-optic studies", Achanta Venu Gopal, International Conference on Functional Materials, HRI, Allahabad, 2-3 April 2011. (Invited)
[57.] "Extraordinary Kerr effect in transmission in magnetoplasmonic nanostructured films", V. I. Belotelov, I. A. Akimov, M. Pohl, V. A. Kotov, A. S. Vengurlekar, A. V. Gopal, D. Yakovlev, A. K. Zvezdin, and M. Bayer, PIERS 2011, Marrakesh, Morocco, March 2011.
[56.] "Periodic Nanostructures for Plasmonic and Photonic Applications", Achanta Venu Gopal, QANSAS 2010, Agra, India, December 2010. (Invited)
[55.] "Design and fabrication of H1 photonic crystal cavities with QD defects", Sachin Kasture, Amandev Singh, Andrew Ramsay, Isaac Luxmoore, A. S. Vengurlekar, Achanta Venu Gopal, Photonics 2010, Guwahati, India, December 2010.
[54.] "Metallo-dielectric nanostructures for plasmonic studies", Achanta Venu Gopal, IIT, Bombay 16th October 2010. (Invited)
[53.] "Periodic metallo-dielectric nanostructures for plasmonics", Achanta Venu Gopal, National Conference "EQUINOX 2010" on "Nascent Trends In Information And Communication Technologies", September 17th to 18th 2010, Terna Engineering College, Mumbai.
[52.] "Surface plasmon dispersion in dielectric-metal-dielectric structures with a pattern on top", P.Mandal, Amandev Singh, A. S. Vengurlekar, Achanta Venu Gopal, Nanophotonics 2010, Tsukuba, Japan, 30th May 2010 to 4th June 2010.
[51.] "Studies on metallo-dielectric nanostructures with periodic modulation", Achanta Venu Gopal, Kobe University, Kobe, Japan, June 2010 (Invited).
[50.] "Surface plasmon polariton wave and plasmonic flat band in 2D metallo-dielectrc grating structures with square arrays of holes and pilalrs", P. Mandal, Amandev Singh, A. S. Vengurlekar, and Achanta Venu Gopal, TIFR-ANL Interaction Meeting, Mumbai, India January 2010
[49.] "Fabrication and characterization of metallo-dielectric structures", Sachin Kasture, Gaurav Jaiswal, Akshata Mohan, A. S. Vengurlekar, Achanta Venu Gopal, TIFR-ANL Interaction Meeting, Mumbai, India, January 2010.
[48.] "Studies on metallo-dielectric nanostructures", Achanta Venu Gopal, TIFR-Argonne National Laboratory Interaction Meeting, Mumbai, India January 2010
[47.] "Acoustic phonon mediated excitation induced dephasing in single quantum dots", Achanta Venu Gopal, 54th Solid State Physics Symposium, Vadodara, India, December 2009. (Invited)
[46.] "Controlling light using nanostructures", Achanta Venu Gopal, ISNM, Jalandhar, India, October 2009. (Invited)
[45.] "Ultrafast laser laboratory and applications", Achanta Venu Gopal, TIFR-Cambridge University Interaction Meeting, Mumbai, September 2008. (Invited)
[44.] "Solid state quantum information processing", Achanta Venu Gopal, South China Normal University, Guangzhou, China, April 2008. (Invited)
[43.] "Resonant excitation of surface plasmons at metal-dielectric interfaces", Achanta Venu Gopal, KTH, Stockholm, Sweden, June 2008. (Invited)
[42.] "Surface plasmon dispersion in Gold layer with dielectric gratings", Shailesh Mishra, et al, Photonics 2008, New Delhi, India, December 2008.
[41.] "Designing photonic crystal microcavity structures for quantum gates", Achanta Venu Gopal, Invited talk at Soft, Quantum and Nano Computing (SQUAN), Agra, February 2007. (Invited)

[40.] “Ultrafast lasers for physics and application”, Achanta Venu Gopal, Invited talk at Progress on tunable lasers for ultrafast processes and applications (PTLUPA6), IIT, Chennai, December 2006. (Invited)
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[31.] “All-optical switch with low switching energy using intersubband transition in InGaAs/AlAs/AlAsSb coupled quantum wells”, T. Simoyama, H. Yoshida, J. Kasai, T. Mozume, A. Venu Gopal, and H. Ishikawa, 10th International Workshop on Femtosecond Technology (FST2003), July 2003, Chiba, Japan.
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[19.] “Theoretical evaluation of intersubband saturation intensity in InGaAs/AlAsSb quantum wells”, A. Venu Gopal, H. Yoshida, T. Simoyama, T. Mozume, N. Georgiev, and H. Ishikawa, 63rd Autumn Meeting of The Japan Society of Applied Physics, September 2002, Niigata, Japan.
[18.] "Intersubband transitions with very low (fJ/μm^2) switching energy for all-optic switches: Design and realization", A. Venu Gopal, T. Simoyama, H. Yoshida, T. Mozume, and H. Ishikawa, European conference on Optical Communications (ECOC), September, 2002, Copenhagen, Denmark.
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