

# Dr. Smijesh N.

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Mahatma Gandhi University, Kottayam  
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Institute of Physics, Czech Academy of Sciences  
Czech Republic

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R<sup>e</sup> <https://www.researchgate.net/profile/SmijeshNadarajanAachary> Smijesh N

Full-time faculty at the School of Pure and Applied Physics, Mahatma Gandhi University, Kerala India. A versatile researcher with more than 10 years experience in the field of intense light-matter interaction, including laser produced plasmas, high harmonic generation, instrumentation and attosecond physics.

## Education

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| 2014 | Doctor of Philosophy (Ph.D.) in Physics, National Institute of Technology Calicut, Kerala, India  |
| 2009 | Master of Technology (M. Tech.) in Electronics and Communication (Optoelectronics and Optical Communication), University of Kerala, Thiruvananthapuram, Kerala, India |
| 2006 | Master of Science (M. Sc.) in Physics, Mahatma Gandhi University Kottayam, Kerala, India  |
| 2004 | Bachelor of Science (B.Sc.) in Physics, University of Kerala, Thiruvananthapuram, Kerala, India   |

## Research Interests and Skills

**Research Interests :** Intense Light-Matter Interaction, Ultrafast optical physics, High order Harmonic Generation, Attosecond Physics, Pump-probe Spectroscopy, Imaging, Nonlinear Optics, Laser Produced Plasmas & Diagnostics

**Skills :** Ultrafast laser systems (Regenerative& Multipass), Pulse shaping and few-cycle pulses, pump-probe spectroscopy, fast imaging, Instrumentation, Attosecond pulse generation and characterization, EUV spectrometers and Velocity Map Imaging Spectrometers, Time of Flight Spectrometers

**Softwares :** MATLAB, SIMION, AutoCAD, LabVIEW

## Research Experience

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<b>Current</b> January 2022	<b>Postdoctoral Fellow, Extreme Light Infrastructure, Dolni Brezany, Czech Republic</b> <ul style="list-style-type: none"><li>&gt; Development and implementation pump-probe experiments in XUV and X-ray science within the Department of Structural Dynamics of the ELI Beamlines</li><li>&gt; Operation and development of laser beam transport and diagnostics in the E1 hall and its supporting laboratories</li><li>&gt; Operations and maintenance of the laser sources in the department of Structural Dynamics</li><li>&gt; Support users during user operation and user assisted commissioning</li><li>&gt; Participate in the development of the general experimental capabilities of ELI Beamlines Department of Structural Dynamics</li><li>&gt; Participate in the procurement of ELI Beamlines Department of Structural Dynamics experimental equipment</li><li>&gt; Coherent Diffractive Imaging and broadband ptychography.</li></ul>
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XUV-NIR pump probe

XUV-X-Ray pump probe

Ultrafast laser systems

October 2019	Postdoctoral Researcher, Relativistic Attosecond Physics Laboratory, Department of Physics, Umeå University, Sweden
January 2018	<ul style="list-style-type: none"> <li>&gt; Attosecond XUV-XUV pump-probe spectroscopy at 120 eV photon energies</li> <li>&gt; Simulation and Design of Velocity Map Imaging Spectrometer (VMI)</li> <li>&gt; Multi-photon processes using attosecond pulses</li> </ul> <div style="display: flex; gap: 5px;"> <span>Attosecond science</span> <span>Extreme-light matter interaction</span> <span>VMI design</span> </div>
November 2017	Postdoctoral Research Fellow, Australian Attosecond Science Facility, Centre for Quantum Dynamics, Griffith University, Australia
March 2015	<ul style="list-style-type: none"> <li>&gt; Design and development of system for laser-produced plasma based high-harmonic generation</li> <li>&gt; Re-designing custom-made XUV spectrometer</li> </ul> <div style="display: flex; gap: 5px;"> <span>High-harmonic generation</span> <span>Laser-produced plasma</span> <span>Optical emission spectroscopy</span> <span>Plume imaging</span> <span>XUV spectroscopy</span> </div> <div style="display: flex; gap: 5px;"> <span>Vacuum systems</span> </div>
February 2015	Postdoctoral Fellow, Light and Matter Physics (LAMP), Raman Research Institute, Bangalore, India
October 2014	<ul style="list-style-type: none"> <li>&gt; Experiments on laser plasmas from solid targets</li> <li>&gt; Lab and laser system management</li> </ul> <div style="display: flex; gap: 5px;"> <span>Intense light-matter interaction</span> <span>Laser produced plasmas</span> <span>Technical writing</span> </div>
July 2011	Project Assistant, Ultrafast and Nonlinear Optics lab, Light and Matter Physics Group, Raman Research Institute, Bangalore, India
May 2010	<ul style="list-style-type: none"> <li>&gt; Experiments on laser plasmas from solid targets</li> <li>&gt; Z-scan set up and LabView Program to run the experiment</li> </ul> <div style="display: flex; gap: 5px;"> <span>intense light-matter interaction</span> <span>laser produced plasmas</span> <span>Z-scan</span> <span>LabView</span> </div>

## Teaching Experience

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Ongoing	Assistant Professor, School of Pure and Applied Physics, Mahatma Gandhi University, Kottayam, Kerala, India-(On leave)
October 2019	<ul style="list-style-type: none"> <li>&gt; Teaching : Nuclear Physics, Electrodynamics, Laser Physics</li> <li>&gt; Research : Intense light-matter interaction</li> </ul> <div style="display: flex; gap: 5px;"> <span>Academia</span> <span>Teaching</span> <span>Research</span> </div>
Ongoing	Adjunct Faculty, Institute for Integrated programs and Research in Basic Sciences (IIRBS), Mahatma Gandhi University, Kottayam, Kerala, India
July 2020	<ul style="list-style-type: none"> <li>&gt; Teaching : Solid-state physics, Non-linear optics</li> </ul> <div style="display: flex; gap: 5px;"> <span>Academia</span> <span>Teaching</span> </div>
November 2007	Lecturer (Full-time Guest), Department of Physics, Catholicate College, Pathanamthitta, Kerala, India
January 2007	<ul style="list-style-type: none"> <li>&gt; Teaching UG and PG students</li> </ul> <div style="display: flex; gap: 5px;"> <span>Subjects :</span> <span>Mathematical physics</span> <span>Electronic instrumentation</span> <span>Electrodynamics</span> <span>Modern physics</span> <span>Electronics</span> </div>

## Professional Membership

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- Life Member Plasma Science Society of India (PSSI)
- Life Member Indian Laser Association (ILA)

## Responsibilities held

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October 2021	<i>Student advisor</i> , OPTICA students chapter of Mahatma Gandhi University, Kerala, India
12 - 17 July 2021	<i>Co-Ordinator</i> , Lecture Series on "History and philosophy of science" by Prof. Rajan Gurukkal, organized by the Internal Quality Assurance Cell (IQAC) of the Mahatma Gandhi University, Kottayam, India
June 2020-ongoing	E-bulletin (in-charge), Mahatma Gandhi University, Kottayam, Kerala, India
October 2020	Department coordinator (School of Pure & Applied Physics) for Internal Quality Assurance Cell

(IQAC), Mahatma Gandhi University, Kottayam, Kerala, India

- October 2020** Examination overseer, S. N. College, Kannur, Kerala, India.
- August 2020** Research consultancy and extension committee for NAAC assesment, Internal Quality Assurance Cell (IQAC), Mahatma Gandhi University, Kottayam, Kerala, India
- 2019-2020** Hackathon officer, Mahatma Gandhi University, Kottayam, Kerala, India
- July 2017** Local organizing committee member, International Symposium on Intense Short Wavelength Processes in Atoms and Molecules (ISWAP-2017),Brisbane.
- Ongoing** Reviewer : Science Direct, Optica (formerly OSA) and American Institute of Physics journals

## Theses Supervision

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- April 2026 (tentative)** **Ph.D.**, “Intense light-matter interaction in laser produced plasmas” (*Ongoing*)
- April 2025 (tentative)** **Ph.D.**, “Polarization rotation of ultrafast laser pulses on propagation through plasma” (*Ongoing*)
- December 2021** **M. Phil Project**, “Analysis of optical emission spectra obtained from laser produced plasmas” (*Completed*)
- September 2021** **Masters Project**, “Plume analysis of laser produced plasma for morphological studies” (*Completed*)
- August 2021** **Masters Project**, “Optical emission spectroscopy of laser produced plasma - Analysis using MATLAB” (*Completed*)
- September 2020** **Masters Project**, “Analysis of Optical Emission Spectroscopy of Laser Produced Plasmas” (*Completed*)
- September 2020** **Masters Project**, “Review on Tunneling times” (*Completed*)
- June 2020** **Masters Project**, “Analysis of Closed Aperture Z-scan - A numerical study” (*Completed*)
- June 2020** **Masters Project**, “Study of nonlinear properties of Indium oxide using Z-scan” (*Completed*)
- December 2018** **Masters Project**, “Contrast improvement of few cycle laser pulses” (*Completed*)

## Achievements/Awards

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- 2021 Mobility of Researchers of Institute of Physics of the Czech Academy of Sciences 2 (MOBILITY FZU 2) : No.CZ.02.2.69/0.0/0.0/18-053/0016627
- 2015 Griffith University Postdoctoral Fellowship (**GUPF**) grant
- 2013 Best poster award Fifth SERB school on Tokamaks and magnetized Plasma Fusion, held during at the Institute for Plasma Research, Gandhinagar, India
- 2007 Qualified **GATE** (Graduate Aptitude Test in Engineering)

## Invited Talks

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- 08/03/2023 *Ultra-sensitive high harmonic spectroscopy*, Institute of Physics of the Czech Academy of Sciences, ELI-Beamlines, Dolni Brezany.
- 10/01/2023 *Ultrafast and attosecond AMO science*, Raman Research Institute, Bangalore, India
- 02/07/2022 *Introduction to attosecond physics*, St. Joseph's College Devagiri, Calicut, Kerala, India
- 28/06/2022 *Contrast improvement of sub-4 fs laser pulses using nonlinear elliptical polarization rotation*, Institute of Physics of the Czech Academy of Sciences, ELI-Beamlines, Dolni Brezany.
- 19/11/2021 *Ultrafast lasers in physics*, Recent trends in photonics, International webinar series, CMS college, Kottayam, Kerala, India.
- 07/10/2021 *High Harmonic Generation*, RICERCA 2021-National Conference, St. Joseph's College for Women, Alappuzha, Kerala, India
- 15/09/2021 *Femtoseconds to Attoseconds*, National Level Faculty Development Programme on Advanced Science and Technology - 2021, St. Berchmans College, Changanachery, Kerala, India
- 13/11/2020 *Ultrafast Science and its Opportunities*, International Webinar on Advances in Materials and nanostructures -IWAM - 2020, NSS Hindu College, Changanachery, Kerala, India
- 16/09/2020 *Femtoseconds to attoseconds*, Webinar, Catholicate College, Pathanamthitta, Kerala, India
- 24/02/2020 Walk with a scholar program, T. K. Madhava Memorial College, Nangiarkulangara, Haripad, Kerala State, India
- 13/01/2020 Walk with a scholar program, Devamatha College, Kuruvilangad, Kottayam, Kerala, India
- 16/11/2019 Information session for higher secondary students, Government Girls Higher Secondary School, Vaikom, Kerala, India
- 21/02/2018 *Optimisation of laser produced plasma for high-order harmonic generation*, Department of Physics, Umeå University, Umeå, Sweden
- 14/11/2018 *High-order harmonic generation and Attosecond Physics*, Department of Optoelectronics, University of Kerala, Thiruvananthapuram, Kerala, India
- 10/09/2014 *Spectroscopy and optical time of flight studies of laser produced metal plasmas : short pulse and ultrafast excitations*, Raman Research Institute, Bangalore, India

## Training undertaken

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| 06 Sept 2021<br>05 October 2021      | <b>171st Induction Programme, Kerala University, Thiruvananthapuram, Kerala, India</b><br>> Organized by UGC-HRDC, Kerala University, Kerala.   |
| 03 February 2020<br>07 February 2020 | <b>Workshop on Outcome based education, Mahatma Gandhi University, Kottayam, Kerala, India</b><br>> Organized by Internal Quality Assurance Cell (IQAC), Mahatma Gandhi University with the technical support of Teaching and Learning Centre, Indian Institute of Technology (IIT), Madras |
| 20 January 2020<br>24 January 2020   | <b>Workshop on Research Methodology for the college/University teachers, College Development Council, Mahatma Gandhi University, Kottayam, Kerala, India</b><br>> Short-term workshop (5 days)  |

- 2023 High-intensity attosecond beamline for XUV pump – XUV probe measurements with photon energies up to 150 eV, A. A. Muschet, **N. Smijesh**, A. De Andres, P. Fischer, R. Salh and L. Veisz, Manuscript preparation underway
- 2022 A comprehensive review on amplification of laser pulses via Stimulated Raman Scattering and Stimulated Brillouin Scattering in plasmas, Renju Miriam Cheriyan, Nikhil Varghese, R. S. Sooraj, Kavya H. Rao, **N. Smijesh**, Plasma **5** (4), 499-539
- 2022 An easy technique for focus characterization and optimization of XUV and soft x-ray pulses, A.A. Muschet, A. De. Andres, **N. Smijesh**, L. Veisz, Applied Sciences **12**, 5652,2022
- 2020 Effect of double pulse irradiation on the morphology of a picosecond laser produced chromium plasma, Kavya H. Rao, **N. Smijesh**, D. Chetty, I. V. Litvinyuk, R. T. Sang, Phys. Plasmas **27**, 083518
- 2019 Contrast improvement of sub-4 fs laser pulses using nonlinear elliptical polarization rotation, **N. Smijesh**, X. Zhang, P. Fischer, A. A. Muschet, R. Salh, A. Tajalli, U. Morgner, L. Veisz, Optics letters, **44** (16), 4028-4031
- 2018 Plasma plumes produced by laser ablation of Al with single and double pulse schemes, **N. Smijesh**, Kavya H. Rao, D. Chetty, I. Litvinyuk, R. T. Sang, Optics Letters, **43** (24), 6081
- 2018 Time-resolved optical emission spectroscopic studies of a picosecond laser produced Cr plasma, Kavya H. Rao, **N. Smijesh**, N. Klemke, R. Philip, I. Litvinyuk, R. T. Sang, Phys. Plasmas **25** (6), 063505
- 2017 Optical emission and dynamics of aluminum plasmas produced by ultrashort and short laser pulses, Praritha Sankar, Jijil. JJ Nivas, **N. Smijesh**, G. K. Tiwari, R. Philip, J. Anal. At.Spectrom. **32**, 1177
- 2016 Spatio-temporal optimization of a laser produced Al-plasma : Generation of highly ionized species, **N. Smijesh**, Kavya H. Rao, N. Klemke, R. Philip, I. Litvinyuk and R. T. Sang, Phys. Plasmas **23**, 113104
- 2016 Ultrafast laser produced zinc plasma : Stark broadening of emission lines in nitrogen ambient, Kavya H. Rao, **N. Smijesh**, J.J.J. Nivas, Reji Philip, Phys. Plasmas **23**, 043503
- 2016 Influence of pulse width on the laser ablation of Zinc in nitrogen ambient, **N. Smijesh**, Kavya H. Rao, Reji Philip, Appl. Phys. A **122**(4), 460
- 2015 Dynamics of neutrals and ions in an ultrafast laser produced Zn plasma, **N. Smijesh**, Kavya H. Rao and Reji Philip, Phys. Plasmas **22**, 033509
- 2014 Acceleration of neutrals in a nanosecond laser produced nickel plasma, **N. Smijesh**, K. Chandrasekharan, R. Philip, Phys. Plasmas **21**, 123507
- 2014 Time of flight emission spectroscopy of a laser produced expanding nickel plasma : short pulse and ultrafast excitations, **N. Smijesh**, K. Chandrasekharan, J. C. Joshi, R. Philip, J. Appl. Phys. **116**, 013301
- 2013 Emission dynamics of an expanding ultrafast laser produced Zn plasma under different ambient pressures, **N. Smijesh**, R. Philip, J. Appl. Phys. **114**, 093301
- 2013 Organic dye impregnated poly(vinyl alcohol) nanocomposite as an efficient optical limiter : structure, morphology and photophysical properties, S. Sreeja, S. Sreedhanya, **N. Smijesh**, R. Philip, C. I. Muneera, J. Mater. Chem. C **1**, 3851
- 2013 Size-dependent optical properties of Au nanorods, S.L Smitha, K.G. Gopchandran, **N. Smijesh**, R. Philip, Progress in Natural Science Material International **23** (1), 36
- 2012 Nonlinear optical properties of composite naphthalocyanine thin films with nanocrystalline morphology, N. S. Panicker, **N. Smijesh**, R. Philip, C.S. Menon, Mat. Lett. **89**, 188
- 2012 Electrochemical and Nonlinear Optical Studies of new DA Type pi-Conjugated Polymers Carrying 3, 4-Benzyloxythiophene, Oxadiazole, and 3, 4-Alkoxythiophene Systems, M. S. Sunitha, A. V. Adhikari, K. A. Vishnumurthy, **N. Smijesh**, R. Philip, Chem. Lett. **41**, 234
- 2010 Synthesis, characterization and nonlinear optical properties of 2-[(E)-2-(4-ethoxyphenyl) ethenyl]-1-methylquinolinium 4-substituted benzene sulfonate compounds, P. Ruanwas, T. Kobkeatthawin, S. Chantrapromma, H. Fun, R. Philip, N. Smijesh, M. Padaki, A. M. Isloor, Synthetic Metals **160** (7), 819
- 2010 Two-Photon Absorption and optical limiting in Trithiurea Cadmium Sulphate, S. Dhanuskodi, T. C. Sabari Girisun, **N. Smijesh**, R. Philip, Chem. Phys. Lett. **486**, 8083

## Conference Publications

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- February 7-8, 2020 Sub-10 nm metal oxide nanoparticles for non-linear applications, P. K. Nideesh, Hari Krishnan A. P., Kavya H. Rao, N. Kalarikkal, **N. Smijesh**, *National Conference on Recent Advances in Chemical Sciences (RACS-2020)*, Mahatma Gandhi University, Kottayam, Kerala, India
- October 6-11, 2019 Contrast improvement of few cycle laser pulses using nonlinear ellipse rotation, **N Smijesh**, X. Zhang, P. Fischer, A. A. Muschet, R. Salh, A. Tajalli, U. Morgner, L. Veisz, *Ultrafast Optics XII*, Bol, Croatia
- December 9-13, 2018 Angle resolved X-ray emission spectroscopy of laser produced metal plasmas and alloys, Kavya H. Rao, **N. Smijesh**, P. Sankar, R. Philip, I. V. Litvinyuk and R. T. Sang, *23<sup>rd</sup> Australian Institute of Physics Congress (AIP Congress 2018)*, Perth, Western Australia
- July 28-August 4, 2018 Changes in the morphology of a picosecond laser produced plasma by single and double pulse irradiations, Kavya H. Rao, **N. Smijesh**, D. Chetty, I. V. Litvinyuk and R. T. Sang, *Siegman International School on Lasers*, Island of Hven, Backafallsbyn, Sweden
- November 26-December 01, 2017 Characterization of laser produced plasma using fast imaging, Kavya H. Rao, **N. Smijesh**, I. V. Litvinyuk and R. T. Sang, *Conference on Optics, Atoms and Laser Applications (IONS KOALA 2017)*, The University of Queensland, Queensland, Australia
- July 26-August 1, 2017 Optimization of laser plasma dynamics towards high order harmonic generation applications, **N. Smijesh**, Kavya H. Rao, D. Chetty, R. T. Sang, I. V. Litvinyuk, *30<sup>th</sup> International Conference on Photonic Electronic and Atomic Collisions (ICPEAC XXX)*, Cairns, Queensland, Australia
- July 26-August 1, 2017 Plume dynamics of a laser produced plasma : Single and double pulse schemes, Kavya H. Rao, **N. Smijesh**, D. Chetty, I. V. Litvinyuk and R. T. Sang, *30<sup>th</sup> International Conference on Photonic Electronic and Atomic Collisions (ICPEAC XXX)*, Cairns, Queensland, Australia
- December 4-8, 2016 Characterization of nanosecond laser produced aluminium plasma for high-order harmonic generation, Kavya H. Rao, **N. Smijesh**, N. Klemke, R. Philip, I. Litvinyuk and R. T. Sang, *Joint 13<sup>th</sup> Asia Pacific physics conference and 22<sup>nd</sup> Australian Institute of Physics congress*, Brisbane Australia
- December 4-8, 2016 Optimization of picosecond laser generated micro-plasma towards the generation of bright, coherent EUV source, **N. Smijesh**, Kavya H. Rao, R. T. Sang and I. Litvinyuk, *Joint 13<sup>th</sup> Asia Pacific physics conference and 22<sup>nd</sup> Australian Institute of Physics congress*, Brisbane Australia
- December 4-8, 2016 Comparative study of single and double pulse laser generated plasma, Dashavir Chetty, **N. Smijesh**, Kavya H. Rao, Robert Sang, Igor Litvinyuk, *Joint 13<sup>th</sup> Asia Pacific physics conference and 22<sup>nd</sup> Australian Institute of Physics congress*, Brisbane Australia
- November 27-December 2, 2016 Investigation of ps laser produced Cr plasma : Single vs double pulse method, D. Chetty, Kavya H. Rao, **N. Smijesh**, R. T. Sang, I. V. Litvinyuk, *Conference on Optics, Atoms and Laser Applications (IONS KOALA 2016)*, Melbourne, Australia
- November 7-9, 2016 Laser produced highly ionized Aluminum plasma for high harmonic generation, **N. Smijesh**, Kavya H. Rao, N. Klemke, R. Philip, I. Litvinyuk and R. T. Sang, *International Workshop on EUV and Soft X-Ray Sources (2016 Source Workshop)*, Amsterdam, The Netherlands
- November 7-9, 2016 Optimization of Laser-produced Plasma towards the Generation of High-order Harmonics, **N. Smijesh**, Kavya H. Rao, D. Chetty, R. T. Sang and I. Litvinyuk, *International Workshop on EUV and Soft X-Ray Sources (2016 Source Workshop)*, Amsterdam, The Netherlands
- November 23-27, 2015 Optical emission spectroscopic studies of a picosecond laser produced plasma : Single pulse and double pulse method, Dashavir Chetty, **N. Smijesh**, N. Klemke, Kavya H. Rao, D. Laban, JamesWood, D. Kielpinski, R. T. Sang, I. V. Litvinyuk, *Conference on Optics, Atoms and Laser Applications (IONS KOALA 2015)*, Auckland, New Zealand

- October 12-16, 2015 A coherent x-ray source from plasma using high-order harmonic generation, Dane Laban, **Smijesh Achary**, Nicolai Klemke, James Wood, Dashavir Chetty, David Kielpinski, Igor Litvinyuk, Robert Sang, *Bulletin of the American Physical Society 60, 68th Annual Gaseous Electronics Conference/9th International Conference on Reactive Plasmas/33rd Symposium on Plasma Processing*, Honolulu, Hawaii
- October 12-16, 2015 Spectroscopic studies of Cr VI species in a laser produced plasma, Nicolai Klemke, **Smijesh Nadarajan**, Dane Laban, James Wood, Dashavir Chetty, David Kielpinski, Igor Litvinyuk, Robert Sang, *Bulletin of the American Physical Society 60, 68th Annual Gaseous Electronics Conference/9th International Conference on Reactive Plasmas/33rd Symposium on Plasma Processing*, Honolulu, Hawaii
- December 20-22, 2014 Ultrafast laser-induced plasmas for nanoparticle generation : comparison with conventional chemical routes, **N. Smijesh**, Kavya H. Rao, P. Sreekanth, Reji Philip, *International Conference on Frontiers in Nano Science, Technology and Applications (FINSTA 2014)*, Sri Sathya Sai Institute of Higher Learning Prashantini-layam, Andhra Pradesh, India
- December 8-11, 2014 Expansion dynamics of laser produced Zn plasma : Short pulse and ultrafast excitation, **N. Smijesh**, Anitta R. Thomas, Kavya H. Rao, Reji Philip, *29<sup>th</sup> National Symposium on plasma science and Technology (Plasma 2014)*, M. G University, Kottayam, Kerala, India.
- December 8-11, 2014 Short and ultrafast laser produced Aluminum plasma : A fuence dependent study, Pranitha Sankar, Jijil JJ Nivas, **N. Smijesh**, Reji Philip, *29<sup>th</sup> National Symposium on plasma science and Technology (Plasma 2014)*, M. G University, Kottayam, Kerala, India.
- November 6-8, 2014 Optical Time of flight measurements of laser produced metal plasmas : Short pulse and ultrafast excitations, **N. Smijesh**, K. Chandrasekharan, Reji Philip, *24th Swadeshi Science Congress*, Tirur, Kerala, India.
- October 30-November 1, 2014 Acceleration of neutrals in an expanding laser produced Zn plasma, **N. Smijesh**, Kavya H. Rao and Reji Philip, *DAE-BRNS Theme meeting on ultrafast science (UFS)- 2014*, Manipal University, Karnataka, India.
- March 19-21, 2014 Time-resolved spectroscopy of CI and CII line emissions from an ultrafast laser produced solid graphite plasma, **N. Smijesh**, K. Chandrasekharan, R. Philip, *AIP conf. Proc. 1620, 517 (2014), Light and its interactions with matter*, Calicut, Kerala, India.
- January 8-11, 2014 Influence of laser pulse width on the emission dynamics of laser produced Zn plasma in nitrogen ambient, **N. Smijesh**, K. Chandrasekharan, Reji Philip, *National Laser Symposium- 22*, Manipal, Karnataka, India.
- May 23-25, 2011 Indigo carmine dye polymer nanocomposite films for optical limiting applications, S. Sreeja, S. Mayadevi, S. R. Suresh, P. G. L. Frobel, **N. Smijesh**, R. Philip, C. I. Muneera, *AIP Conf. Proc. 1391, 618 (2011), Optics: Phenomena, Materials, Devices, and Characterization : OPTICS 2011 : International Conference on Light*, Kerala, India.
- November 25-28, 2007 Thermal diffusivity measurements of dental resin using photo-acoustic effect, **N. Smijesh**, L. K. Joseph, A. Kurien, V. P. N. Nampoore, *IEEE-ICIAS-2007 (DOI:10.1109/ICIAS.2007.4658397), International Conference on Intelligent and Advanced Systems*, Kuala Lumpur, Malaysia.

## References

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