Dr. Kamlesh Mukundrao Alti

Personal Information

Date of Birth: 12/07/1979 Nationality: Indian Marriage status: Married Children: 01



Home Address	Flat No: 504 A Wing Lotus Garden Apartment, Visava Colony, Old Bypass Road, Amravati-444602, Maharashtra, India	E-mail: <u>kamleshalti@gmail.com</u> <u>kamleshalti@sgbau.ac.in</u> Ph. No: +91-9373599394 (<i>Mobile</i>)

Current Position	• Assistant Professor, Dept. of Physics (PGTD), Sant Gadge Baba Amravati		
	University (SGBAU), Amravati. Duration: 25 th Jan. 2012 onwards		
Previous	• Assistant Professor, Dept. of Physics, St. Vincent Pallotti College of		
Positions	Engineering and Technology, Nagpur. Duration: 10th June 2011-24th Jan. 2012		
	• Assistant Professor, Centre for Atomic and Molecular Physics, Manipal		
	University, Manipal. Duration: 5 th Oct 07- 28 th Feb 2011		
	• Post Doctoral Fellow, NRC, National Institute for Nanotechnology and		
	Department of Electrical and Computer Engineering, University of Alberta,		
	Edmonton Canada. Duration: 1 st August 2006 – 31 st July 2007		
	• Visiting Fellow, Tata Institute of Fundamental Research, Colaba, Mumbai,		
	India. Duration: 1 st Dec. 2005 – 31 st July 2006		
Education	Ph.D (Physics), Nov. 2005		
	Indian Institute of Technology Guwahati (IITG), India		
	• Dissertation Topic: Novel Configurations of atomic beam and laser beam for		
	micro and nanolithography		
	• Supervisor: Prof. Alika Khare		
	M.Sc (Physics), 2001		
	Department of Physics, RSTM Nagpur University		
	• Class: 1 st Division		
	• Project title: Remote sensing of atmospheric refractivity near ground level using		
	laser beam scintillations		
	• GATE 2001		
	B.Sc (Physics), 1999		
	M P Deo Dharampeth Science College affiliated to RSTM Nagpur University		
	Class: 1 st Division		

Duration	Organization	Area(s)
25 th Jan 2012 onwards	Dept. Of Physics, Sant Gadge	Photonics, Mathematical modeling and
	Baba Amarvati University	simulation, Electro-wetting, Speckle
		interferometer
10 th June 2011-24 th Jan	St. Vincent Pallotti College of	Innovative teaching methodology
2012	Enginnering	
Oct. 2007- Feb 2011	Manipal University	Laser Induced Breakdown spectroscopy for
3 Yrs and 4 month		trace element detection and quantification
		(Non destructive technique)
		Femtosecond Micromachining (lithography)
		applications in fabrication of
		photonics/optoelectronic devices,
		Mathematical Modeling
Aug. 2006- July 2007	NRC NINT and University of	Modeling and Development of 3D simulation
1 year	Alberta	software for Electron beam lithography (EBL)
		using kinetic theory approach.
Dec. 2005- July 2006	Tata Institute of Fundamental	Femtosecond Micromachining for waveguide
8 Months	Research, Mumbai	fabrication, Pulse width characterization of
		Ti-Sap laser by SPIDER, Single Shot
		Autocorrelator, White Light Generation
		Visualization and Study of Filamentation
		inside bulk media

Research Experience (excluding research done for M.Sc/Ph.D. Degrees)

Sponsored Projects/Contribution to Development of Innovative Courses

Period	Sponsoring	Title of Project	Amount of	Role
	Organisation		Grant	
2013-18	University Grant	P G Diploma in Photonics	57 Lakh + 2	Deputy
	Commission		Assistant	Coordinator
			Prof. post for	
			5 years	
2007-2010	Board of Research in	Laser Induced Breakdown	~42 Lakh	Principal
	Nuclear Sciences	Spectroscopy for trace element		investigator
		analysis of Biological,		_
		Environmental and Radioactive		
		samples, No. 2007/34/14-BRNS		
2008-2011	Principal Scientific	Fabrication and submicron	~3.5 Crores	Co-investigator
	Advisor, Government	tailoring of materials for photonics		-
	of India	applications with ultrafast lasers,		
		Prn.SA/Photonics-UFL/2008		
		(Ultra Fast Photonics Cluster)		

Current research Interest

- ♦ Quantitative study of deformation using Electronic Speckle Pattern interferometer
- Electro-Wetting: Fundamental and Application
- Atom optics (Simulation)

Google citation link of Dr. Kamlesh Alti

Teaching Experience (UG and PG)

Duration	Organisation	Area(s)
July 2001- July 2005,	Indian Institute of Technology	B.Tech Laboratory course
alternate semester, 4 Yrs.	Guwahati	
Oct. 2007- Feb 2011	Manipal University	Mathematical Physics and Numerical
		Methods, Micro and Nano Photonics,
		Nonlinear Optics, Femtosecond
		Photonics, General Photonics Laboratory
		Course, Advanced Photonics Laboratory
		Course-I, Mathematics, Bioquantitation
		and Analytical chemistry, Biophysics
June 2011- Jan. 2012	St. Vincent College of	Engineering Physics (1 st Year)
	Engineering and Tech., Nagpur	
Jan. 2012-present	Dept. of Physics, Sant Gadge	Quantum Mechanics-I and II, Condensed
	Baba Amravati University	Matter Physics, Nuclear and Particle
		Physics, Laser and its applications,
		Electrodynamics-II, Photonics-I and
		Photonics-II

Thesis (UG/PG/Ph.D) Supervision

Ph.D

SN	Name of the student	Title of Synopsis	Registration No/Date	Status	Name of the University Host/outside
1	Prafull Padghan	Quantitative study of deformations using electronic speckle pattern interferometer (ESPI)	Synopsis submitted (15 th Jan. 2015)	Applied for registration	SGB, Amravati University
2	Divita Saroagi	Design and Fabrication of Electrowetting Based Optical Components/Systems	Synopsis submitted (15 th Jan. 2015)	Applied for registration	SGB, Amravati University

UG/PG

S.N.	Name	Year of	Title of Thesis/project name	UG/PG
		Completion		/Ph.D
1	Ms. Palak U Shroff	2015	Droplet Actuation by Electrowetting	PG
2	Ms. Shweta O	2015	Effect of electric field on the dynamics of oil-water	PG
	Waware		interface and its possible applications in optics	
3	Ms. Khushabu L	2015	Extraction of laser diode out of E-waste	PG
	Chouhan			
4	Ms. Prajakta D	2015	Detection of food adulteration by using emission	PG
	Dhawade		spectroscopy	
5	Ms. Madhuri K	2015	Fabrication and Application of Spatial Filter	PG
	Chaudhary		Assembly	
6	Ms. Rima Gopal	2015	Qualitative study of dynamic deformation using	PG
	Bora		electronic speckle pattern interferometer (ESPI)	

7	Mr. Prafull Padghan	2014	Fabrication of array illuminator for simultaneous realization of multiple universal and non-universal optical logic gates	PG
8	Ms Divita Saraogi	2014	Fundamental study of electro-wetting effect and its potential applications	PG
9	Mr. Abdul Shafique	2014	Electric spark gap: Fabrication and characterization	PG
10	Mr. Mohammad Aqueel	2014	Two dimensional electron beam and refractive index change profiles of electric spark using Michelson Interferometer	PG
11	Mr. Vinod Shinde	2014	Emission spectroscopy and material modification using electric spark gap	PG
12	Ms Vrushali Kharat	2013	Temporal pulse shaping of diode laser	PG
13	Mr. Srikrushna Raut	2013	Sculpting of optical fiber tip	PG
14	Mr. Shariq Ansari	2008	In-vivo fluorescence study of water stressed Ocimum sanctum (Tulsi) leaves	UG

Academic Honors/Achievements/Highlights

- Played instrumental role in getting funding from P G Diploma in Photonics course from UGC. Funds amounts to 57 lakh and two Assistant Professor Positions got sanctioned for the same purpose for five years.
- As a convener Organized one day workshop on "Nuclear Waste Management" in Saint Vincent Pallotti College of Engineering and Technology, Gavasi Manapur, Nagpur
- Project on Ultrafast Photonics got cited in Nature Photonics review article titled "Photonics in India" authored by Dr. Bishnu Pal of IIT Delhi.
- Board of Studies member of M.Sc (Photonics) course at Manipal University during 2009-2011.
- Successfully completed two government funded research project of total worth more than Rs 4 Crores.
- Editorial Board Member of International Journal of Innovative Research and Studies IJIRS, India, Journal of Physics, STM Journals, International Journal of Optical Sciences, Journals Pub, New Delhi, International Journal of Laser Science and Technology, Journals Pub, New Delhi, International Journal of Plasma Physics and nuclear fusion, Journals Pub, New Delhi
- Regular Reviewer/Referee of European Physics Letters, Optics and Laser Technology and Analyst-Royal Society of Chemistry
- Awarded with outstanding reviewer by Editors of Optics and Laser Technology, Elsevier
- Google citations: 272 (all) and 215 (since 2010), h index: 9 (all) and since 2010: 8, i10index: 8 (all) and since 2010: 6

Extracurricular Activities/ Workshop/ Symposium organized (last five years)

Event	Role	Year
Physics Society 2012-13 Inauguration Dept. of Physics, Sant	Professor-in-	2012-
Gadge Baba Amravati University	charge	2015
National Conference on Lasers and Advanced Materials-2012,	Organizing	2012
Dept. of Physics, Sant Gadge Baba Amravati University on 29-30 th	Member	
May 2012		
One day ISTE workshop on "Nuclear Waste Management" 19th	Convener	2011
Nov. 2011 in St. Vincent Pallotti College of Engineering and		
Technology, Nagpur		
One-Day Symposium on Laser Technology and Photonics" on	Treasurer	2010
20th March 2010 in Manipal University		
Discussion meeting on Recent Advances in Photonics on 11 th	Secretary	2009
April 2009 in Manipal University		

Workshop/Schools/Training attended:

Workshop title	Date	Venue
Refresher course in IT Application	14-09-2015-	UGC-HRDC SGB
	05-10-2015	Amravati University
30 th Orientation Program: UGC-ASC SGB Amravati	05-01-2015-	UGC-ASC SGB
University	31-01-2015	Amravati University
One day workshop on Syllabus upgradation of B.E First	12 th Sept.	Bapurao Deshmukh
Year Applied Physics	2012	College of
		Engineering, Wardha
Preparation of Question papers	$5^{\text{th}} - 22^{\text{nd}}$	Manipal University
	May 2009	
nanoFAB Orientation Seminar based training	Sept. 2006	University of Alberta
Awareness Workshop on The facilities of inter university	Feb. 20-21,	IIT Guwahati
consortium for D A E Facilities at Indore	2004	
SERC School on Precision Spectroscopy of atoms,	Feb. 20-	IISC Bangalore
molecules and Bose condensates	March 12	
	2003	

Recent Invited Talks

Recent invited Taiks			
Title of Talk	Place	Date	
Two lecture on "Photonics science	Academic Staff College, Sant Gadge Baba	14/11/2014	
and Technology – Part 1 and 2"	Amravati University (Refresher course in		
	Basic science, 27th Oct 2014 - 15th Nov.		
	2014)		
One Lecture on "Laser Fusion"	Academic Staff College, Sant Gadge Baba	13/02/2014	
	Amravati University (Short Term Course in		
	Energy Conservation (10 th Feb. – 15 th Feb.		
	2014))		
One Lecture on "How to write a	Academic Staff College, Sant Gadge Baba	11/02/2014	
research article"	Amravati University (26 th Orientation		
	Program $(10^{th} \text{ Feb.} - 18^{th} \text{ March } 2014))$		
One Lecture on "Introduction to	Physics Department, Rashtrasant Tukdoji	27/7/2013	
Photonics"	Maharaj Nagpur University (Organized by		
	Physics Society, Physics Dept. RSTM		
	Nagpur University)		
Two Lectures on Simulation:	Physics Department, Rashtrasant Tukdoji	13/2/2012	
Introduction and Examples	Maharaj Nagpur University (Refresher		
	course in IT applications)		
Why to make career in pure sciences?	Vimaltai Tidke Convent & Junior College,	30/07/2012	
and Recent major discovery in	Nagpur		
science (Higgs Bosons)			

Societal activities

Activity				Institute	Year
Member	of	School	Management	Vimaltai Tidke Convent & Junior College,	2013-till
Committee	e (SMC	C)	-	Nagpur	date

Computer Skills

- Langauges: C
- Applications: Latex, Common Windows database, presentation softwares, linux applications, Matlab
- Algorithms: Numerical programming in C
- Operation systems: Linux, Windows

List of Publication (International Journal only): Other than Ph.D Research Topic
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S.N.	Title of the Paper and Authors	Name of the Journal, Vol. No. Page	Impact Factor Citations If any and Year
1.	"Micro-patterning of Indium thin film for generation of micron and submicron particles using femtosecond laser- induced forward transfer," Kamlesh Alti , Sudhanshu Dwivedi, Santhosh Chidangil, Deepak Mathur and Alika Khare	Laser and Particle Beams, Vol. 33, pp 449 - 454, 2015	Impact Factor: 1.701 Citation: Nil
2.	"Quantitative Study of Deformations using Electronic Speckle Pattern Interferometer (ESPI)," P.P. Padghan and K.M. Alti	Research & Reviews: Journal of Physics , Vol. 4(2), 1-7, 2015	Impact Factor: NA Citation: Nil
3.	"Simple inexpensive plasma generation set up using high voltage television plate," A Shafique, V Shinde, M Aqueel, K Alti	International Journal of Pure and applied research in Engineering and Technology, 2(9), 312-318, 2014	Impact Factor: NA Citation: Nil
4.	"Experimental realization of multiple all optical universal logic gates using array illuminator," Prafull Padghan and Kamlesh Alti	International Journal of Pure and applied research in Engineering and Technology, 2(9), 238-245, 2014	Impact Factor: NA Citation: Nil
5.	"Femtosecond Laser Induced Forward Transfer of Indium thin films," John Thomas, Rodney Bernard, John T. Thomas, Kamlesh Alti , C. Santhosh, S. Kumari, Alika Khare and Deepak Mathur	Laser and Particle Beams Vol. 32(1), pp 55-61, 2014.	Impact Factor: 1.701 Citation: 01
6.	"Pattern formation in transparent media using ultrashort laser pulses," John Thomas; Rodney Bernard; Kamlesh Alti ; Aditya K Dharmadhikari; Jayashree A Dharmadhikari; Anuj Bhatnagar; Chidangil Santhosh; Deepak Mathur	Optics Communications Vol. 304, 1 September 2013, Pages 29–38	Impact Factor: 1.542 Citation: 5
7.	"Simultaneous realization of multiple NAND optical logic gates using four beam interferometer," Kamlesh Alti , Prafull Chapate and Kamal Singh	International Journal of Basic and Applied Research, (special issue 103-105) ISSN-2249-3352, pg. 103-105 (2012)	Impact Factor: NA Citation: Nil
8.	"Calibration-free laser-induced breakdown spectroscopy for quantitative elemental analysis of materials," V K Unnikrishnan, K Mridul, R Nayak, K Alti, V B Kartha, C Santhosh, G P Gupta and B M Suri	Pramana - Journal of physics, August Vol. 79, No. 2, 2012 pp. 299–310.	Impact Factor: 0.720 Citation: 2
9.	"White Light Generation in Human Saliva," C. Santhosh, A. K. Dharmadhikari, J. A. Dharmadhikari, K. Alti , D. Mathur	AIP Conf. Proc., Vol. 1349, pp. 218 (2011).	Impact Factor: 0.132 Citation: Nil
10.	"Trace Element Analysis Using Laser Induced Breakdown Spectroscopy	AIP Conf. Proc., Vol. 1349, pp. 475 (2011).	Impact Factor: 0.132

	(LIBS) Technique		Citation: Nil
11.	"Quantitative elemental analysis of nickel alloys using calibration-based laser-induced breakdown spectroscopy", G.P. Gupta, B.M. Suri, A. Verma, M. Sundararaman, V.K. Unnikrishnan, K. Alti, V.B. Kartha, C. Santhosh.	Journal of Alloys and Compounds, Volume 509, Issue 9, 3 March 2011, Pages 3740- 3745.	Impact Factor: 2.726 Citation:26
12.	"Spectroscopy of Laser-Produced Plasmas: Setting up of High Performance Laser-Induced Breakdown Spectroscopy (LIBS) System," V. K. Unnikrishnan, Kamlesh Alti , Rajesh Nayak, Rodney Bernard, V. B. Kartha, C. Santhosh, G. P. Gupta and B. M. Suri	Pramana- Journal of Physics, Vol. 75(6), 1145 (2010).	Impact Factor: 0.720 Citation: 1
13.		Journal of Vacuum Science and Technology B, Vol. 28 (6), C6C48 (2010)	Impact factor: 1.358 Citation: 20
14.	"Measurements of plasma temperature and electron density in laser-induced copper plasma by time-resolved spectroscopy of neutral atom and ion emissions" V K Unnikrishnan, K Alti , V B Kartha, C Santhosh, G P Gupta and B M Suri	Pramana: Journal of Physics, Vol. 74 (6), 983 (2010)	Impact Factor: 0.720 Citation: 44
15.	"Supercontinuum Generation in Macromolecular Media," C. Santhosh, A. K. Dharmadhikari, J. A. Dharmadhikari, K. Alti , D. Mathur	Applied Physics B - Lasers and Optics, Vol. 99 (3), 427 (2010).	Impact Factor: 1.634 Citation: 8
16.	"Optimized LIBS setup with echelle spectrograph for multi elemental analysis," V. K. Unnikrishnan, K Alti , Rajesh Nayak, Rodney Bernard, Niyati Khetarpal, V. B. Kartha, C. Santhosh, G. P. Gupta and B. M. Suri	Journal of Instrumentation, Vol. 5 (4), P04005 (2010)	Impact Factor: 1.526 Citation: 12
17.	<u>^</u>	Phy. Rev. A, Vol. 76, 033811, (2007). Also selected for the October 2007 issue of Virtual Journal of Ultrafast Science	Impact Factor: 2.991 Citation: 11
18.	"Suppression of ultrafast supercontinuum generation in a salivary protein," C. Santhosh, A. K. Dharmadhikari, K. Alti , J. A. Dharmadhikari and D. Mathur	Journal of Biomedical Optics Letters, Vol. 12 (2), 020510, 2007	Impact Factor: 2.752 Citation: 14
19.	"Suppression of white light generation (supercontinuum) in biological media: a pilot study using human salivary proteins," C. Santhosh, A. K. Dharmadhikari, K. Alti , J. A. Dharmadhikari and D. Mathur	Proceedings of SPIE Volume 6439 Optics in Tissue Engineering and Regenerative Medicine, Sean J. Kirkpatrick, Ruikang K. Wang, Editors, 64390Q (Feb. 8, 2007)	Impact Factor: 0.333 Citation: 1

20.	"Femtosecond laser written channel waveguides in tellurite glass," P. Nandi, G. Jose, C. Jayakrishnan, S. Debbarma, K. Chalapathi, K. Alti , A. K. Dharmadhikari, J. A. Dharmadhikari, and D. Mathur,		Impact Factor: 3.525 Citation: 78
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List of Publication (International Journal only): On Ph.D Research Topic

S.N.	Title of the Paper and Authors	Name of the Journal, Vol. No. Page	Impact Factor Citations If any and Year
1	"Response to comment on Generation of cold low divergent atomic beam of indium by laser ablation", Kamlesh Alti and Alika Khare	Review of scientific instrument, Vol. 80, 047102, (2009)	Impact Factor:1.584 Citation: Nil
2	"Two dimensional periodic potentials via multiple beam interferometry for atom lithography," Kamlesh Alti , Ardhendu Sekhar Patra and Alika Khare	Journal of Microlithography, Microfabrication, and Microsystems, Vol. 5 (2), 023005, 2006	Impact Factor: 1.205 Citation: 2
3	"Simulated lithographic patterns for periodic arrays of atomic beams focused with a single atomic lens," Kamlesh Alti and Alika Khare	International Journal of Nanoscience, Vol. 5, (1), 145- 156, (2006)	Impact Factor: 0.25 Citation:1
4	"Sculpted pulsed Indium atomic beams via selective laser ablation of thin film," Kamlesh Alti and Alika Khare,	Laser and Particle Beams, Vol. 24, 469-473, 2006	Impact Factor: 1.701 Citation: 8
5	"Low-energy low-divergence pulsed indium atomic beam via laser ablation," Kamlesh Alti and Alika Khare	Laser and Particle Beams, Vol. 24 (1), 47-53, 2006	Impact Factor: 1.701 Citation: 15
6	"Arrays of discrete atomic beams for sub- $\lambda/2$ lithography via dipole force," Kamlesh Alti and Alika Khare	Microelectronic Engineering, Vol. 83 (10), 1975-1980, 2006.	Impact Factor: 1.338 Citation:1
7	``Generation of cold low divergent atomic beam of indium by laser ablation," Kamlesh Alti and Alika Khare	Review of Scientific Instruments, Vol. 76, 113302, 2005.	Impact Factor:1.584 Citation: 7
8	"Application of laser matter interaction for generation of small sized materials", Alika Khare, Kamlesh Alti , Susanta Das, Ardhendu Sekhar Patra and Monisha Sharma	J. Radiation Physics and Chemistry, Vol. 70 (4-5), 553, 2004	Impact Factor: 1.189 Citation: 8

Publication in Book Chapters (on Ph.D topic)

- 1. **Kamlesh Alti** and Alika Khare, "Maneuvering atoms for lithography using near resonant spatially varying laser field," Progress in Nonlinear Optics Research, Nova Publisher, pg. 63-84, Edi. by Miyu Takahashi and Hina Gotô (2008).
- 2. **Kamlesh Alti**, A. S. Patra and Alika Khare, "A Novel Single Shot Technique of Micro-Nano Patterning in Single Step via Selective Laser Ablation," Advances in Laser and Optics Research, Volume 5, Nova Publishers, pg. 215-221 Editors: William T. Arkin, (2008).

<u>Publications In Proceedings, National and International Conferences (on Ph.D topic</u> <u>and other than Ph.D topic)</u>

- 1. Prafull P Padghan and **K Alti**, "Imaging the refractive index change in air plasma using electronic speckle pattern interferometer (ESPI)," in the proceedings of National conference on novel synthesis of advanced materials and their applications (NSAMA-2015) Organized by Department of Physics, Arts, Commerce and Science College, Maregoan, Feb. 16, 2015 (p.g. 296-298, ISBN No: 978-81-930894-1-5).
- 2. Prafull P Padghan, M Aqueel and **K Alti**, "Two dimensional electron beam and refractive index change profiles of electric spark using Michelson's Interferometer," in the proceedings of UGC Sponsored National conference on Novel synthesis of Advanced Materials Organized by Dhote Bandhu Science College, Gondia, 20th Dec. 2014 (p.g. 216-221, ISBN No: 978-93-82962-51-9).
- 3. A Shafique, V Shinde, M Aqueel and **K Alti**, "Water vapor detection using electric arc spectroscopy," in the proceedings of National Conference on 'Recent Trends in Mathematics, Physics and their Applications' (NCRTMPA 2014), organized by the departments of Mathematics and Physics, Shankarlal Khandelwal Arts, Science and Commerce College, Akola (MS) on Wednesday, 19th March, 2014 (p.g. 73-75, ISBN: 978-81-929160-2-6).
- 4. V Shinde, A Shafique, M Aqueel and **K Alti**, "Emission spectroscopy using electric spark gap," in the proceedings of National Conference on 'Recent Trends in Mathematics, Physics and their Applications' (NCRTMPA 2014), organized by the departments of Mathematics and Physics, Shankarlal Khandelwal Arts, Science and Commerce College, Akola (MS) on Wednesday, 19th March, 2014 (p.g. 117-119, ISBN: 978-81-929160-2-6).
- Divita D. Saraogi and Kamlesh Alti, "Application of electrowetting effect in degassing," in the proceedings of National Conference on 'Recent Trends in Mathematics, Physics and their Applications' (NCRTMPA - 2014), organized by the departments of Mathematics and Physics, Shankarlal Khandelwal Arts, Science and Commerce College, Akola (MS) on Wednesday, 19th March, 2014 (p.g. 79-82, ISBN: 978-81-929160-2-6).
- 6. Prafull P Padghan and Kamlesh Alti, "Fabrication of array illuminator," in the proceedings of National Conference on 'Recent Trends in Mathematics, Physics and their Applications' (NCRTMPA 2014), organized by the departments of Mathematics and Physics, Shankarlal Khandelwal Arts, Science and Commerce College, Akola (MS) on Wednesday, 19th March, 2014 (p.g. 69-72, ISBN: 978-81-929160-2-6).
- 7. Shrikrushna Raut and **Kamlesh Alti**, "Molding of optical fibre for various applications," in the proceedings of DAE-BRNS National Laser Symposium NLS-22, Manipal University, Manipal Udupi, Karnataka, Jan. 8-11, 2014 (ISBN: 9788190332149).
- 8. **Kamlesh Alti** and Alika Khare, "Isotopic separation using dipole force," presented in International Conference on Mathematical Sciences ICMS-2012, S.S.E.S. Amravati Science College, Nagpur, Dec. 28-31, 2012.

- Kamlesh Alti, Prafull Chapate and Kamal Singh, "Simultaneous Realization of Multiple OR and XOR optical logic gates using two beam interferometer," in the proceedings of National conference on Lasers and Advanced Materials NCLAM-2012, Department of Physics, SGB Amravati University, 29-30 May 2012.
- 10. J. A. Dharmadhikari, A K Dharmadhikari, D Mathur, Anuj Bhatnagar, K Alti, John Thomas, Rodney Bernard, C. Santhosh, "Laser written waveguides using kHz and MHz repetition rate femtosecond pulses," oral presentation in the 10th International Conference on Fibre Optics and Photonics: PHOTONICS-2010", Indian Institute of Technology Guwahati (IIT), India, December 12-15 2010.
- 11. K. Mridul, V.K. Unnikrishnan, Rajesh Nayak, **Kamlesh Alti**, V.B. Kartha and C. Santhosh, B.M. Suri and G.P. Gupta, "Remote Laser-Induced Breakdown Spectroscopy using echelle spectrograph: A pilot study," poster presentation in DAE-BRNS National Laser Symposium (NLS-19), Raja Ramanna Centre for Advanced Technology, Indore, India, Dec.1-4, 2010.
- 12. M. Stepanova, T. Fito, Zs. Szabó, **K. Alti**, P. Ade, K. Koshelev, M. Aktary and S.K. Dew, "Simulator for electron beam lithography of nanostructures," oral presentation in The 54th International Conference on Electron, Ion and Photon Beam Technology and Nanofabrication EIPBN-2010, Anchorage, Alaska, June 1-14 (2010).
- Sudhanshu Dwivedi, M Prem Prasad, Kamlesh Alti, V. K. Unnikrishnan, C. Santhosh, Aditya Dharmadhikari, Jayashree Dharmadhikari and Deepak Mathur, "Micromachining with Femtosecond and Nanosecond lasers," poster presentation in 9th DAE-BRNS National Laser Symposium (NLS-2009), BARC, Mumbai, Jan 13-16 (2010).
- 14. V. K. Unnikrishnan, Kamlesh Alti, Rajesh Nayak, Rodney Bernard, V. B. Kartha, C. Santhosh, G. P. Gupta and B. M. Suri, "Spectroscopy of Laser-Produced Plasmas: Setting up of High Performance Laser-Induced Breakdown Spectroscopy (LIBS) System", poster presentation in 9th DAE-BRNS National Laser Symposium (NLS-2009), BARC, Mumbai, Jan 13-16 (2010).
- 15. G. P. Gupta, B. M. Suri, V. K. Unnikrishnan, Ajeetkumar Patil, Kamlesh Alti, V. B. Kartha, and C. Santhosh, "Characterisation of laser-induced copper plasma by time resolved spectroscopy of neutral atom and ion emissions", poster presentation in 24th National Symposium on Plasma Science & Technology, NIT Hamirpur, 10th Dec. (2009).
- 16. V. K. Unnikrishnan, Kamlesh Alti, Rajesh Nayak, Rodney Bernard, V. B. Kartha, C. Santhosh, G. P. Gupta and B. M. Suri, "Setting up of a Sensitive Laser-Induced Breakdown Spectroscopy (LIBS) System with Echelle Spectrograph A Method for Surface Analysis of Materials", poster presentation in International Conference on Recent Trends in Material and Characterisation RETMAC- 2010, NITK, Surathkal, Feb. 14-15 (2010).
- 17. M Prem Prasad, Sudhanshu Dwivedi, Kamlesh Alti, V. K. Unnikrishnan, C. Santhosh, Aditya Dharmadhikari, Jayashree Dharmadhikari and Deepak Mathur, "Segmented Microstructures Written by Femtosecond and Nanosecond Lasers," oral presentation in International Conference on Recent Trends in Material and Characterisation RETMAC-2010, NITK, Surathkal, Feb. 14-15 (2010).
- 18. D Mathur, A K Dharmadhikari, F A Rajgara, J A Dharamadhikari, K Alti, C Santhosh, "Interaction of intense ultrashort light with condensed media: Applications in the life sciences and biomedical engineering," Presented at 2nd International Symposium on Filamentation 22-25th Sept. 2008, ENSTA, 32 Boulevard Victor, 75015 Paris, France.
- Prahlad Kumar Baruah, Arpita Nath, Alika Khare, Rodeny Bernard and Kamlesh Alti, "Sculpting of optical fiber tip for microlens formation," poster presentation in Photonics 2008, International Conference on Fibre Optics and Photonics, Habitat World Convention Center, New Delhi, Dec. 13-17 (2008).
- 20. V.K. Unnikrishnan, Ajeetkumar Patil, Kamlesh Alti, V.B. Kartha, C. Santhosh, G.P. Gupta and B.M. Suri, "Development of a Laser-Induced Breakdown Spectroscopy (LIBS) system for remote sensing applications" poster presentation in 8th DAE-BRNS National Laser Symposium (NLS-2008), Laser Science and Technology Centre (LASTEC), Delhi, Jan 7-10 (2009).

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