

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

Curriculum Vitae



Dr. S. Manivannan received his Ph.D., from Bharathidasan University, Tiruchirappalli, India in the year 2006. He completed postdoctoral research in the Department of Information Display & Advanced Display Research Center, Kyung Hee University, Seoul, South Korea from January 2007 to November 2008. His research area of interest includes on carbon nanotubes (purification, functionalization, dispersion, fabrication of transparent conducting films for display, optoelectronics and solar cell applications), graphene, gas sensors, organic and semi-organic nonlinear optical (NLO) materials and polymer composites. He joined as a faculty in the Department of Physics, National Institute of Technology, Tiruchirappalli on December 2008.

To his credit, Dr.Manivannan published around 40 papers in peer reviewed international journals and about 55 papers in national and international conference proceedings and abstracts and successfully completed sponsored research project. He also received Junior and Senior Research Fellowships from DST and CSIR. He is the recipient of Brain Korea 21 postdoctoral fellowship during the year 2007-2008. He won the best paper award from European Materials Research Society in the year 2008. He received Young Scientist Research Grant of Rs.20.00 lakhs from DST, India in the year 2010. He acquired American Society for Nondestructive Testing (ASNT)- Level -2 certification in Ultrasonic Testing.

Dr.Manivannan guided one Ph.D, 24 M.Tech and 13 M.Sc students for their projects. Currently 05 Ph.D, 01 M.S, 04 M.Tech/M.Sc students are working under his guidance. He has organized around 06 conferences/workshops/courses at NIT Trichy. He is the member of Indian Society for Non-destructive Testing, Photonics Society of India, SPIE-USA. Dr.Manivannan traveled extensively, interacted with experts, and participated in various academic programmes in South Korea, Japan, Poland, United States of America, Singapore, China and delivered more than 20 invited talks. He is serving as reviewer in many international journals.

Dr.Manivannan also served as admission co-ordinator, course co-ordinator for Ph.D, M.Tech (NDT), B.Tech programmes and he is also serving as a member in various committee at NIT, Trichy.

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1. Name : Dr.S.Manivannan
2. Designation : Assistant Professor
3. Office Address : Department of Physics
National Institute of Technology
Tiruchirappalli-620 015
Tamil Nadu, India.

4. Telephone (Direct) (Optional):
Telephone : 0431-2503616
Mobile (Optional) :

5. Email (Primary) : ksmani@nitt.edu

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:ksmaniphysics@yahoo.com

6. Field (s) of Specialization: Carbon nanotubes (*purification, functionalization, dispersion*), fabrication of transparent conducting films for display, optoelectronics and energy storage/conversion, graphene, organic and semi-organic nonlinear optical (*NLO*) materials, display materials, gas sensors and polymer nanocomposites.

7. Employment Profile

Job Title	Employer	From	To
Assistant Professor	National Institute of Technology, Tiruchirappalli, India	December 2008	Till date
Postdoctoral Researcher	Kyung Hee University, Seoul, South Korea	January 2007	December 2008
CSIR-Senior Research Fellow	Bharathidasan University, Tiruchirappalli, India	April 2004	December 2006
DST-Senior Research Fellow	Bharathidasan University, Tiruchirappalli, India	April 2003	March 2004
DST-Junior Research Fellow	Bharathidasan University, Tiruchirappalli, India	October 2001	March 2003

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8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	Bharathidasan University, India	2006		Physics
M.Phil.	Bharathidasan University, India	2001		Physics
B.Ed.	University of Madras, India	2000		Physical Science
M.Sc.	Bharathidasan University, India	1999		Physics
B.Sc.	Bharathidasan University, India	1997		Physics
HSC	Board of Higher Secondary, Tamil Nadu, India	1994		Tamil, English, Mathematics, Physics, Chemistry & Biology
SSLC	Board of Secondary Education, Tamil Nadu, India	1992		Tamil, English, Mathematics, Science & Social Science

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre /Institution	From	To
Hospital Committee Member	NITT	2016	Till Date
B.Tech Course Co-ordinator	Physics/NITT	Dec. 2015	Till Date
Stock Verification Officer	NITT	2015	2016
Stock Verification Officer	NITT	2014	2015
All-India Inter-NIT Sports Meet' 14 -Committee Member	NITT	2014	2014
M.Tech.Course co-ordinator	Physics/NITT	2013	2014
Stock Verification Officer	NITT	2013	2013
All-India Inter-NIT Sports Meet' 14 -Committee Member	NITT	2013	2013
M.Tech.Course co-ordinator	Physics/NITT	2012	2013
Member in Academic Interface Cell	NITT	2012	2016
M.Tech.Course co-ordinator	Physics/NITT	2011	2012
M.Tech.Admission co-ordinator	Physics/NITT	2011	2012
M.Sc., M.Tech. and Ph.D. Department weekly seminar (FRIDAY PHYSICS) co-ordinator	Physics/NITT	2009	2010
Ph.D. Admission co-ordinator	Physics/NITT	2009	2010
Ph.D.Admission co-ordinator	Physics/NITT	2008	2009

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10. Academic/Administrative Responsibilities outside the University **NOT APPLICABLE**

Position	Institution	From	To

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2008	Best Paper Award	European-Materials Research Society, Warsaw, Poland
2011	International Travel Grant	Department of Science & Technology, New Delhi, India.
2010	Young Scientist Research Grant of Rs.20.00 lakhs	Department of Science & Technology, New Delhi, India

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
2007	Brain Korea 21 – Postdoctoral Research Fellowship	Govt. of South Korea	Jan. 2007	Dec.2008
2003	Senior Research Fellowship	Council of Scientific & Industrial Research, New Delhi, India	2003	2006
2001	Junior Research Fellowship	Department of Science & Technology, New Delhi, India	2001	2003

13. Details of Academic Work

(i) Curriculum Development

Sl.No.	Course	Paper & code	Year	Role
01	M.Tech.	Practicals & PH606	2009, 2010 & 2011	Introduced liquid penetrant testing and magnetic particle inspection experiments using standard specimens.
02	M.Sc.	Physics Laboratory –I	2009	Introduced analysis of powder X-ray diffraction pattern and FT-IR spectrum of materials.

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03	M.Tech.	Practicals & PH607	2009, 2010 & 2011	Introduced more than five fundamental experiments using ultrasonic flaw detector .
04	Ph.D.	Research Laboratory	2010, 2011	Purification and dispersion of carbon nanotubes. Fabrication of transparent conducting films.
05	B.Tech.	Physics I & II, PH 101 & 102	2013 & 2014	Demonstration of Laser based refractive index measurement set up, electrical measurement set up, nanomaterials synthesis.
06	M.Sc.& Ph.D.	Project and Research	2015	Electrical property measurement of thin materials

(ii) Courses taught at Postgraduate and Undergraduate levels

Sl. No.	Course	Paper & code	Academic Year/ Session
01	M.Tech.	Ultrasonic Testing & PH602	2008-09
02	B.Tech.	Physics –I & PH101	2009-10
03	M.Tech.	Surface NDE Methods & PH605	2009-10
04	B.Tech.	Physics –II & PH102	2009-10
05	M.Tech.	Ultrasonic Testing & PH602	2009-10
06	M.Tech.	Practicals -II & PH606	2009-10
07	M.Sc.	Physics Laboratory –I & PH659	2009-10
08	M.Tech.	Practicals –I & PH607	2009-10
09	B.Tech.	Physics –I & PH101	2010-11
10	M.Tech.	Surface NDE Methods & PH605	2010-11
11	B.Tech.	Physics –II & PH102	2010-11
12	M.Tech.	Practicals -II & PH606	2010-11
13	M.Tech.	Practicals -I & PH607	2010-11
14	B.Tech.	Physics –I & PH101	2011-12
15	M.Tech. & M.S.	Surface NDE Methods & PH605	2011-12
16	M.Tech.	Practicals –II & PH606	2011-12
17	Ph.D.	Electrical, magnetic and optical properties of materials & PH610 (shared by two faculty members)	Nov.2011
18	M.Tech.	Surface NDE Methods & PH605	Nov.2012
19	M.Tech.	Practical -I & PH607	Nov.2012
20	B.Tech.	Physics –I & PH101	Nov.2012
21	M.Tech.	Practicals –II PH 606	May 2013
22	M.Tech.	Field Work & PH604	May 2013
23	B.Tech.	Physics –II & PH102	May 2013
24	M.Tech.	Practicals –I PH 607	Nov. 2013
25	M.Tech.	Basic Metallurgy & Fracture Mechanics	Nov.2013
26	B.Tech.	Physics – I & PH101	Nov.2013

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27	B.Tech.	Physics – II & PH102	May 2014
28	M.Tech.	Practicals –II & PH606	May 2014
29	M.Tech.	Field Work & PH604	May 2014
30	M.Tech.	Basics of Engineering Materials & PH613	Nov.2014
31	M.Sc.	Basics of Engineering Materials & PH613	Nov.2014
32	B.Tech.	Physics –I & PH101	Nov.2014
33	B.Tech.	Physics- II & PH102	May 2015
34	Ph.D.	Carbon Nanomaterials and Their Applications & PH812	May 2015
35	M.Tech.	Basics of Engineering Materials & PH613	Nov.2015
36	M.Sc.	Basics of Engineering Materials & PH613	Nov.2015
37	B.Tech.	Physics –I & PHIR 11	Nov.2015
38	B.Tech.	Physics- II & PHIR12	May 2016
39	M.Tech.	Basics of Engineering Materials & PH613	Nov.2016
40	M.Sc.	Basics of Engineering Materials & PH613	Nov.2016
41	M.S.	Basics of Engineering Materials & PH613	Nov.2016
42	B.Tech.	Physics –I & PHIR 11	Nov.2016

(iii) Projects guided at Postgraduate level

M.S (by research)			
Sl. No.	Name of the Student	Year	Title of the project (proposed)
01	Sobhanan M B	February 2015	Nondestructive Testing of Composite Materials

M.Tech (Non-Destructive Testing)			
Sl. No.	Name of the Student	Year	Title of the project/dissertation
01	T.Naganjaneyulu	2009 (Phase I)	Electromagnetic acoustic transducers (EMATs) for various applications
02	T.Naganjaneyulu	2010 (Phase II)	Electromagnetic acoustic transducers (EMATs) for aerospace applications
03	P.Rajendher	2010 (Phase I)	Defect characterization of AISI 304L stainless steel and AISI 1080 carbon steel weldments using ultrasonic signal processing
04	Gorla Venkateswarlu	2010 (Phase I)	Honeycomb sandwich structures inspection using air coupled ultrasonics
05	P.Rajendher	2011 (PhaseII)	Characterization of weld defects using ultrasonic signal processing technique
06	Gorla Venkateswarlu	2011 (PhaseII)	Lamb wave excitation in sandwich structure using PZT and debond detection by shearography
07	Katta Somakirankumar	2011 (Phase I)	Higher Order Guided Waves for Inspection of Air Craft Structure
08	Sambhu R	2011 (Phase I)	Study of Precipitation Behaviour of Materials for Ultra Super Critical Boilers Using Ultrasonics

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09	Sambhu R	2012 (PhaseII)	Study of Precipitation Behaviour of Materials for Ultra Super Critical Boilers Using Ultrasonics
10	Katta Somakirankumar	2012 (PhaseII)	Study on Higher Guided Waves in Aluminum Plates
11	Praveen S	2012 (Phase I)	Imaging of Inclined Defects Using Ultrasonic Immersion Techniques
12	Nikhil	2012 (Phase I)	Inspection of Weld in Hexcan Using Phased Array Ultrasonic Testing
13	Praveen S	2013 (PhaseII)	Imaging of Inclined Defects Using Immersion Synthetic Aperture Technique
14	Nikhil	2013 (PhaseII)	Inspection of Seal Weld in Hexagonal Wrapper Tube Using Phased Array Ultrasonic Testing
15	Shabeer Ali M K	2013 (Phase I)	Defect Depth Prediction in Aluminium Plates by Pulsed Thermography
16	Arun S	2013 (Phase I)	Acoustic Emission and Infrared Thermography Studies During Tensile Deformation of Pure Copper
17	Shabeer Ali M K	2014 (PhaseII)	Defect Characterization by Pulsed Thermography
18	Arun S	2014 (PhaseII)	Characterization of Tensile Deformation of 2.25Cr-1Mo Steel and Pure Copper Using Acoustic Emission and Infrared Thermography Techniques
19	Deepak Kumar Morwal	Dec -2014 (Phase I)	Quantification of Inclusion and Pitting Corrosion of Micro and Semimicro size using Ultrasonic Immersion Imaging Technique
20	K. Natraj	Dec -2014 (Phase I)	Non-Destructive Evaluation of Residual Stresses in Carbon Steel Weld Joints made by Sequential Welding Passes
21	Deepak Kumar Morwal	May 2015 (Phase-II)	Quantification of Inclusion and Pitting Corrosion of Micro and Semimicro size using Ultrasonic Immersion Imaging Technique
22	K. Natraj	May 2015 (Phase-II)	Development of 3D Ultrasonic Ray Tracing Tool for Weld Inspection
23	S. Karthik Kumar	Dec -2015 (Phase I)	Study on Tensile Behavior of HSLA Steel Using Acoustic Emission Technique
24	S. Karthik Kumar	May 2016 (Phase-II)	Study on Tensile Behavior of HSLA Steel Using Infrared Thermography Technique

M.Sc (Physics)			
Sl. No.	Name of the Student	Year	Title of the project/dissertation
01	J. Nithya Devi	May 2010	Multiwalled carbon nanotubes for fiber optic gas sensor
02	A.M. Saranya	May 2010	Single walled carbon nanotubes for gas sensing applications

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03	S. Mohanapriya	May 2011	Fabrication of single walled and multiwalled carbon nanotube films by dip coating technique
04	K.K.Jagadesh	May 2012	Fabrication of Transparent Conductive Films Using Multi-walled Carbon Nanotubes
05	U. Nithiyantham	May 2012	Synthesis and Characterization of Copper Nanowires
06	Perla Sreekoti Subha Pujitha	May 2013	Fabrication of Multi-Walled Carbon Nanotube Incorporated Polymer Free Standing Films
07	T. Rajaguru	May 2013	Fabrication of Multi-walled Carbon Nanotubes Transparent Conductive Films
08	Boopalan. T	May 2014	Synthesis and Characterization of Copper Nanostructure
09	Bharathidason. J	May 2014	Fabrication of Silver Nanoparticles Incorporated Polymer Free Standing Films
10	Gowtham. E	May 2015	Synthesis and Characterization of Nickel Oxide Nanowires
11	Vibhu Darshan	May 2015	Synthesis and Characterization of Silver Sulfide Nanoparticles
12	Nivedha.M	May 2016	Electrical and Optical Properties of Silver Nanowires Thin Films
13	Rameez.P.P	May 2016	Investigation on Dielectric Properties of Photo-Irradiated Graphene Oxide

(vi) Other contribution(s): --

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Fabrication of Single-Walled Carbon Nanotube Transparent Conducting Electrodes for Display, Solar Cells and Optoelectronics	DST, New Delhi, India	2010	2013	Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
L.R. Shobin	Carbon Nanotubes and Silver Nanowires for Gas Sensors and Transparent Devices	Supervisor	2016
T. Kavinkumar	Synthesis and characterization of Graphene Oxide and Graphene	Supervisor	Doing

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V. Mydhili	Conducting Polymer Nanocomposites	Supervisor	Doing
N.Ambikeswari	Synthesis and characterization of 2D Nanomaterials and composites	Supervisor	Doing
D. Prakash	Nanomaterials and their Energy Storage Applications	Supervisor	Doing
K. Lakshmanamoorthy	Functional carbon nanomaterials and their applications	Supervisor	Doing

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
Oct 9-11, 2014,	SPIE Photonics	International	Paper presenter	SPIE Photonics Asia,	Beijing, China.
Dec 7-10, 2011	National Seminar & Exhibition on Non-Destructive Evaluation (NDE 2011)	National	Paper presenter	Chennai Convention Centre.	Chennai, India.
Dec 7-10, 2011	National Seminar & Exhibition on Non-Destructive Evaluation (NDE 2011)	National	Paper presenter	Chennai Convention Centre.	Chennai, India.
Jan 22-27, 2011	OPTO - Integrated Optics: Devices, Materials, and Technologies XV	International	Paper presenter	SPIE-Photonics	San Francisco, California, USA,
Jun 26 to Jul 01, 2011	International Conference on Materials for Advanced Technologies (ICMAT)	International	Paper presenter	Suntec	Suntec Singapore.

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Dec 3-5, (2008)	The 15th International Display Workshops (IDW'08)	International	Paper presenter	----	Niigata, Japan.
Nov 6-8, (2008)	The Korean Institute of Electrical and Electronic Material Engineers (KIEEME) Annual Autumn Conference 2008	International	Paper presenter	----	South Korea
Oct 13-17, (2008)	8th International Meeting on Information Display (IMID 2008)	International	Paper presenter	----	South Korea
Sep 15-19, (2008)	The 2008 E-MRS Fall Meeting (E-MRS),	International	Paper presenter	----	Poland
Aug 11-13, (2008)	11th Field Emission Workshop'08 (FEW 2008),	International	Paper presenter	----	Seokcho, South Korea.
Jul 20-25, (2008)	Third International Conference on Optical, Optoelectronic and Photonic Materials and Applications (ICOOPMA08)	International	Author	----	Edmonton, Canada.
May 18-23, (2008)	Society for Information Display (SID'08),	International	Author	----	Los Angeles, California, USA.
Feb 18-21, (2008)	International Conference on Advanced Materials (ICAM 2008)	International	Paper presenter	----	Kottayam, India.
Dec 12-14,	The 5th International	International	Author	----	Jeju, Korea.

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(2007)	Conference on Advanced Materials and Devices (ICAMD 2007)				
Dec 5-7, (2007)	The 14th International Display Workshops (IDW '07)	International	Paper presenter	-----	Sapporo, Japan.
Aug 27-31, (2007)	7th International Meeting on Information Display (IMID 2007)	International	Paper presenter	EXCO	Daegu, Korea.
Jan 23-25, (2006)	National Seminar on Materials for Advanced Technologies (NASMAT-2006)	National	Author	Shivaji University,	Kolhapur (MS), India,
Jan 10-13, (2005)	Fourth DAE-BRNS National Laser Symposium (NLS-4)	National	Paper presenter	Bhabha Atomic Research Centre (BARC)	Mumbai, India.
Mar 8-9, (2004)	Regional Conference on Photoacoustics in Condensed Matter Physics and NDT (PAC 2004)	Local	Paper presenter	School of Physics, Madurai Kamaraj University.	Madurai, India.
Dec 22 – 24, (2003)	DAE–BRNS National Laser Symposium– 2003 (NLS-2003)	National	Paper presenter	IIT, Kharagpur.	IIT Kharagpur, India.
Dec 7-12 (2003)	International Conference on Materials for Advanced Technologies (ICMAT-2003)	International	Author	Materials Research Society, Singapore.	Singapore
Jan 25-	International	International	Author	----	San Jose,

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31, (2003)	Conference on Laser Crystals, Glasses and Nonlinear Materials Growth and Characterization (LASE 2003)				California, USA,
Nov 14-16,(2002)	DAE-BRNS National Laser Symposium (NLS-2002)	International	Paper presenter	Sree Chitra Tirunal Institute for Medical Sciences and Technology	Trivandrum, India,

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
National Seminar on Non-destructive Evaluation (NDE)	National	10-12 December, 2009	Organizing committee member	National Institute of Technology, Tiruchirappalli.
Workshop on Electron Microscopy (WEM)	National	03-05 November, 2011	Technical Co-ordinator	National Institute of Technology, Tiruchirappalli
National Level Technical Symposium –Quality 2012	National	13 March, 2012	One of the Co-ordinators	National Institute of Technology, Tiruchirappalli.
National Level Technical Symposium –Quality 2013	National	19-20 March, 2013	One of the Co-ordinators	National Institute of Technology, Tiruchirappalli.
National Level Technical Symposium –Quality 2014	National	26 March, 2014	One of the Co-ordinators	National Institute of Technology, Tiruchirappalli.
Course on Carbon Nanotubes (under self-finance)	National	06-07 November, 2014	Sole Teacher & Co-ordinator	National Institute of Technology, Tiruchirappalli.

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18. Invited Talks delivered

Topic	Date	Inviting Organization
UGC sponsored (Autonomous grant) special lecture series on World of Carbon Nanotubes - Lecture – I & II	11 th March, 2009	Jamal Mohamed College, Tiruchirappalli
Carbon Nanotubes and Applications	11 th September 2009	Sacred Heart College, Tiruppattur
Carbon Nanotubes	18 th February, 2011	Department of Physics, Sarah Tucker College, Tirunelveli
Carbon Nanotubes	February, 2012	Department of Physics, Urumu Dhanalakshmi College
Research Opportunities in Carbon	28 th February, 2012	Muthayammal Engineering College, Rasipuram
Incredible Carbon	28 th February, 2013	Arignar Anna Government Arts College, Musiri
Carbon Nanomaterials	9 th March, 2013	Jamal Mohamed College, Tiruchirappalli
Carbon Nanomaterials in Photonics (UGC Sponsored Lecture Series on Photonics)	11 th March, 2013	Bharathidasan University, Tiruchirappalli
Trends in Carbon Research (AICTE Sponsored Faculty Development Programme on Recent Developments in Nanomaterials and Nanotechnology)	4 th July 2013.	Muthayammal Engineering College, Rasipuram
Wonders in Carbon	21 st September, 2013	M.A.M School of Engineering, Tiruchirappalli
Carbon Nanomaterials	8 th October, 2013	Seethalakshmi Ramaswami College, Tiruchirappalli
Materials for Future Technology	10 th January 2014	Selvam Arts and Science College, Namakkal
Materials for Flexible Transparent Conducting Coatings	March 6 th – 7 th , 2014	Bharathidasan University Tiruchirappalli, India
Carbon Nanomaterials- Lecture I & II (UGC Sponsored Refresher Course in Physics)	21 st November 2014	UGC-Academic Staff College, Bharathidasan University Tiruchirappalli-23
Carbon Nanomaterials	24 January 2015	Vivekanandha College of Arts & Science for Women, Thiruchencode, Namakkal, Tamil Nadu, India
Carbon Nanomaterials Research	6 th February, 2015	St.Joseph's College, Tiruchirappalli

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Flexible Electronics: Materials and Applications	11-18 May, 2015	Bishop Heber College, Tiruchirappalli
Recent Developments in the Field of Nanotechnology	24 th March, 2016	Gnanamani College of Technology, A.K.Samuthiram Namakkal
Carbon Materials and Applications	03 August, 2016	Holy Cross College, Tiruchirappalli

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life Member	Photonics Society of India	2004
Regular Member (annual)	SPIE, USA	January 2005 & ID No.789628
Life Member	Indian Society for Non-Destructive Testing (ISNT)	October 2009 & LM-8452-TC

20. Academic Foreign Visits

Country	Duration of Visit	Programme
South Korea	January 2007- December 2008	Post-doctoral research, Kyung Hee University, Seoul, South Korea
Japan	05-07 December, 2007	The 14 th International Display Workshops (IDW '07), Sapporo
South Korea	11-13 August, 2008	11th Field Emission Workshop '08 (FEW 2008), Seokcho
Poland	15-19 September, 2008	The 2008 E-MRS Fall Meeting (E-MRS), Warsaw
South Korea	13-17 October, 2008	8 th International Meeting on Information Display (IMID 2008)
South Korea	06-08 November, 2008	The Korean Institute of Electrical and Electronic Material Engineers (KIEEME) Annual Autumn Conference 2008
United States of America	21 January -01 February 2011	SPIE Photonics West 2011, OPTO-Integrated Optics:Devices, Materials and Technologies '15 & Visited Molecular Modeling Laboratory, Dept. of Geosciences, Pennsylvania State University, USA.
Singapore	26 June to 01 July, 2011	International Conference on Materials for Advanced Technologies" (ICMAT), Suntec
China	09-11 October, 2014	SPIE Photonics Asia Conference, Beijing

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21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page No.	Year	Impact Factor (Optional)
Mydhili .V and S. Manivannan	Effect of microstructure on the dielectric behaviour and ferroelectric like P-E response in Poly(vinyl alcohol)/Poly(3,4-ethylenedioxythiophene) doped with Poly(styrenesulfonate) composite films”	Communicated				
S.Manikandan, A. Sundari and S. Manivannan	Optical and Mechanical Properties of Pure and Copper Doped Glycinium Oxalate Crystals	Communicated				
T.Kavinkumar, P. Senthilkumar, S. Dhanuskodi and S.Manivannan	Dielectric transition and ferroelectric properties of graphene oxide-barium titanate nanocomposites	Journal of European Ceramics Society			2016	
T. Kavinkumar and S. Manivannan	Thermal and Dielectric Properties of Multi-Walled Carbon Nanotube-Graphene Oxide Composite	J. Mater Sci: Mater. Electron.			2016	
M. B. Sobhanan and S. Manivannan	Automation of Pulsed Thermography using Computer Numerical Controlled Manipulator for CFRP Circular Parabolic Honeycomb Structures	International Journal of Scientific and Engineering Research	7(2)	137-141	2016	
T. Kavinkumar and S. Manivannan	Synthesis, Characterization and Gas Sensing Properties of Graphene Oxide-	Journal of Materials Science and Technology	32	626-632	2016	

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	Multi Walled Carbon Nanotube Composite					
T.Kavinkumar and S. Manivannan	Uniform decoration of silver nanoparticle on exfoliated graphene oxide sheets and its ammonia gas detection”	Ceramics International	42	1769 - 1776	2016	
L.R. Shobin and S. Manivannan	Optically Transparent, Electrically Conducting Single Walled Carbon Nanotubes Random Networks for Room Temperature Ammonia Vapor Sensing	Materials Science in Semi-conducting Processing	40	931-938	2015	
L.R. Shobin and S. Manivannan	Carbon nanotubes on paper: Flexible and disposable chemiresistors	Sensors and Actuators B: Chemical	220	1178 - 1185	2015	
T. Kavinkumar, D. Sastikumar and S. Manivannan	Effect of functional groups on dielectric, optical gas sensing properties of graphene oxide and reduced graphene oxide at room temperature	RSC Advances	5	10816-25	2015	
L.R.Shobin and S. Manivannan	One Pot Rapid Synthesis of Silver Nanowires Using NaCl Assisted Glycerol Mediated Polyol Process	Electronic Materials Letters	6	1019 - 1023	2014	
S. Manikandan, T. C. Sabari Girisun, R. Mohandoss, S. Dhanuskodi, and S.Manivannan	Third_Order NLO Properties of Solution Grown Methyl_p_Hydroxy Benzoate Single Crystals”	Optics and Spectroscopy	117,3	469-473	2014	
L.R.Shobin, D.Sastikumar and S. Manivannan	Silver nanowires coated fiber optic sensors for ammonia sensing application	Sensors and Actuators A : Physical	214	74-80	2014	
L.R.Shobin, B.Renganathan, D.Sastikumar, Kyu Chang Park,	Pure and Iso-butyl Methyl Ketone Treated Multi-walled Carbon Nanotubes Coated Fiber Optic Ethanol and	IEEE Sensors Journal	14,4	1238 - 1243	2014	

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S. Manivannan	Methanol Vapor Sensor					
T.Seethalakshmi, S.Manivannan, S.Dhanuskodi, Daniel E Lynch, S. Thamotharan	4-Hydroxy-1,2,6-trimethyl-pyridinium bromide monohydrate	Acta Crystallogr Sect E	69	0941 - 0942	2013	
T.Seethalakshmi, S.Manivannan, S.Dhanuskodi, Daniel E Lynch, S. Thamotharan	4-Hydroxy-1,2,6-trimethyl-pyridinium chloride monohydrate	Acta Crystallogr Sect E	69	0835 - 0836	2013	
S. Manivannan, A.M. Saranya, B. Renganathan, D. Sastikumar, G. Gobi, Kyu Chang Park	Single-walled carbon nanotubes wrapped poly-methyl methacrylate fiber optic sensor for ammonia, ethanol and methanol vapors at room temperature	Sensors and Actuators B: Chemical	171-172	634-638	2012	
S. Manivannan, Je Hwang Ryu, Jin Jang, Kyu Chang Park	Fabrication and effect of post treatment on flexible single-walled carbon nanotube films”	J. Mater Sci: Mater Electron	21	595-602	2010	
S. Manivannan, Je Hwang Ryu, Han Eol Lim, M. Nakamoto, Jin Jang, Kyu Chang Park	Properties of surface treated transparent conducting single walled carbon nanotube films”	J. Mater Sci: Mater Electron	21	72-77	2010	
S. Manivannan, Il Ok Jeong, Je Hwang Ryu, Chang Seok Lee, Ki Seo Kim, Jin Jang, Kyu Chang Park	Dispersion of single-walled carbon nanotubes in aqueous and organic solvents through a polymer wrapping functionalization	J. Mater Sci: Mater Electron	20	223-229	2009	
Chang Seok Lee, Je Hwang Ryu, Han Eol Lim, Kyung Woo Min, Il Ok Jeong, S. Manivannan, Ki Seo Kim,	Electron Emission from Robust CNTs Grown by Resist-Assisted Patterning	J. Korean Physical Society	5	2735 - 2738	2008	

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Jin Jang and Kyu ChangPark						
S. Manivannan, Il Ok Jeong, Je Hwang Ryu, Chang Seok Lee, Ki Seo Kim, Jin Jang and Kyu Chang Park	Purification and Preparation of Single-Walled Carbon Nanotube Films	<i>J. Korean Physical Society</i>	5	2549 - 2553	2008	
S. Manivannan, S. Dhanuskodi, S.K. Tiwari, J. Philip,	Laser induced surface damage, thermal transport and microhardness studies on certain organic and semiorganic NLO crystals	Appl. Phys. B	90	489-496	2008	
S. Dhanuskodi, S. Manivannan, J. Philip	Synthesis, spectral, optical and thermal studies of 1-methyl-2,6-dimethyl-4-hydroxy pyridinium chloride monohydrate and bromide monohydrate	Spectrochimica Acta Part A	69	1207 - 1212	2008	
T. Seethalakshmi, S. Manivannan, Daniel E. Lynch, S. Dhanuskodi and P. Kaliannan,	1-Ethyl-4-hydroxy-2,6-dimethylpyridinium bromide dihydrate	Acta Cryst	E63	o559 - o601	2007	
A.Pricilla Jeyakumari, S. Manivannan and S. Dhanuskodi,	Spectral and Optical Studies of 2-amino-5-nitropyridinium dihydrogen phosphate: A Semiorganic Nonlinear Optical Material"	Spectrochimica Acta Part A	67	83-86	2007	
S. Dhanuskodi, A. Pricilla Jeyakumari, S. Manivannan, J. Philip and S.K. Tiwari	Semiorganic nonlinear optical material for frequency doubling: Preparation and properties of sodium <i>p</i> -nitrophenolate dihydrate (SPNP)	Spectrochimica Acta Part A	66	318-322	2007	

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S.Manivannan, S. Dhanuskodi, K. Kirschbaum and S.K. Tiwari	Role of anions in inducing noncentrosymmetry in 4-dimethylaminopyridinium salts for quadratic nonlinear optics	Crystal Growth & Design	6	1285 - 1290	2006	
S. Dhanuskodi, S. Manivannan and K. Kirschbaum	Synthesis, structural, thermal and optical studies of 1-ethyl-2,6-dimethyl-4-hydroxy pyridinium halides	Spectrochimica Acta Part A	64	504-511	2006	
S. Dhanuskodi, S. Manivannan, K. Kirschbaum, J. Philip and S. Selladura	Structural, thermal and dielectric studies on a new solution grown 4-dimethylaminopyridinium dihydrogen phosphate crystal	J. Crystal Growth	290	548-553	2006	
A. Pricilla Jeyakumari, S. Dhanuskodi and S. Manivannan	Phase matchable semiorganic NLO material for frequency doubling L-arginine tetrafluoroborate	Spectrochimica Acta Part A	63	91-95	2006	
S. Dhanuskodi, A. Pricilla Jeyakumari and S. Manivannan	Semiorganic NLO material for short wavelength generation 2-amino-5-nitropyridinium bromide	J. Crystal Growth	282	72-78	2005	
S. Manivannan, S.K. Tiwari and S. Dhanuskodi	Spectral, thermal and SHG studies on phase matchable organic NLO material EDMP for blue-green laser generation	Solid State Communications	132	123-127	2004	
S. Manivannan and S. Dhanuskodi	Synthesis, growth, structural, optical and thermal properties of a new semiorganic crystal: 4-dimethylaminopyridinium dihydrogen phosphate	Crystal Growth & Design	4	845-850	2004	
S. Dhanuskodi, S. Manivannan and J. Philip	Growth, structural, thermal and optical properties of organic NLO crystal: N-	J. Crystal Growth	265	284-289	2004	

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	methyllutidone trihydrate					
S. Manivannan and S. Dhanuskodi	Synthesis, crystal growth, structural and optical properties of an organic NLO material	J. Crystal Growth	263	473-478	2004	
S. Dhanuskodi and S. Manivannan	Quadratic organic nonlinear optical material: bis-2,7-diethylaminohepta-2,5-dien-4-one	J. Crystal Growth	262	395-398	2004	
S. Manivannan and S. Dhanuskodi	Growth and characterization of a new organic nonlinear optical crystal: semicarbazone of p-dimethylamino benzaldehyde	J. Crystal Growth	257	305-308	2003	

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
S. Dhanuskodi and S. Manivannan	Crystal growth and characterization of a novel organic nonlinear optical material: semicarbozone of p-dimethylamino benzaldehyde	Proceedings of SPIE	137-149	International Conference on Laser Crystals, Glasses and Nonlinear Materials Growth and Characterization (LASE 2003)	San Jose, California, USA,	2003
S. Manivannan, L. R. Shobin, A. M. Saranya, B. Renganathan, D. Sastikumar and Kyu Chang Park	Carbon nanotubes coated fiber optic ammonia gas sensor	Proceedings of SPIE, Vol. 7941	79410M-1	Integrated Optics: Devices, Materials, and Technologies XV	San Francisco, California, USA	2011
T. Kavinkumar, D. Sastikumar and S. Manivannan	Reduced graphene oxide coated optical fiber for methanol and ethanol vapor	Proceedings of SPIE, Vol. 9270	92700U1-92700U6	Optoelectronic Devices and Integration V	Beijing, China.	2014

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	detection at room temperature					
L.R.Shobin and S.Manivannan	Room temperature ammonia vapor sensing properties of transparent single walled carbon nanotube thin film,	Proceedings of SPIE, Vol.9270	92701M-1-92701M-7	Optoelectronic Devices and Integration V	Beijing, China.	2014
T.Kavinkumar and S.Manivannan	Dielectric and ammonia vapor sensing properties of partially reduced graphene oxide-multi walled carbon nanotube composite	Abstract from the book	ISBN978-93-85477-46-1	International Conference on Recent Advances in Materials and Chemical Sciences (ICRAMCS-2015),	Gandhi gram Rural University, Dindigul, India.	2015
V.Mydhili and S.Manivannan	Dielectric and optical studies on Poly(vinyl alcohol)/Poly(3,4-ethylenedioxythiophene):Poly(styrenesulfonate) transparent freestanding films	Abstract from the book	ISBN978-93-85477-46-1	International Conference on Recent Advances in Materials and Chemical Sciences (ICRAMCS-2015),	Gandhi gram Rural University, Dindigul, India.	2015
N.Ambikeswari and S.Manivannan	Rapid synthesis of reduced graphene oxide-cobalt hydroxide composite and their dielectric properties	Abstract from the book	ISBN978-93-85477-46-1	International Conference on Recent Advances in Materials and Chemical Sciences (ICRAMCS-2015),	Gandhi gram Rural University, Dindigul, India.	2015

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
Chang-Seok Lee, Je-Hwang Ryu, Han-Eol Im, Sellaperumal Manivannan, Didier Pribat, Jin Jang and Kyu-Chang Park	Growth Mechanism of Nitrogen Incorporated Carbon Nanotubes with RAP Process	Springer	2008	ISBN 978-3-540-85190-5