


Name	DINAKARAN. K	
Designation	Associate Professor	
Mailing Address	Department of Chemistry Thiruvalluvar University Vellore – 632115.	
Academic Qualifications	M.Sc, Ph.D	
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Teaching Experience: **7** years

Research Experience: **14** years (post Ph.D)

Research area: Polymer Chemistry, Nanohybrids, Sensors

Research guidance / supervision:

Programmes of Study	Completed	in Progress
Ph.D	2	6
M.Phil	4	3
M.Sc	9	4

Research Papers

Published in International Journals	Published in National Journals	Presented in International Conferences	Presented in National Conferences
50	2	19	20

Funded Research Projects (Completed)

S.No	Agency	Period		Title	Budget (in Rs. lakhs)
		From	To		
1	DST-SERB	2010	2013	Ordered Nanostructured materials based Biosensor	15.23
2	UGC	2010	2013	Synthesis and self assembly of ...block copolymers	5.65
3	CSIR	2013	2015	Nanonetwork embedded carbon matrix..... biosensor	7.14

Funded Research Projects (Ongoing)

S.No	Agency	Period		Title	Budget (in Rs. lakhs)
		From	To		
1	DST-SERB	2017	2020	Development of Advanced Nanobiosensor for Pathogenic Microorganisms detection	30.64

Number of Seminar / Conference / Workshops / Events attended : 34

Number of Seminar / Conference / Workshops / Events organized : 1

Number of Invited / Special Lectures delivered : 5

Number of Book Chapters written : 2

Achievements / Awards / Honours

JSPS postdoctoral fellowship awarded by JSPS, Japan, 2006.

Brianpool invited scientist awarded by KRF, Govt of South Korea, 2008.

Membership in Professional National / International bodies

Member in Materials Research Society of India (IISC, Bengaluru)

Additional responsibilities

-Nil-

Countries visited:

Countries visited	Period	Purpose
Taiwan	2003-2005	Postdoctoral Fellow in National Chaio Tung University
Japan	2005-2006	Postdoctoral Fellow in Nagoya University
Canada	2006-2007	Postdoctoral Fellow in Queens University
South Korea	2008-2009	Research Professor in Ewha Womans University, Seoul.
Singapore	June 2009	Attended international conference on Materials and Advanced Technologies (ICMAT) during 28 th June to 2 nd July 2009.

Patents filed : 1

Korean Patent No: 10-1060200, **2011**. Dong Ha Kim, **Dinakaran K**, Min-Ah Cha, “The Preparation Method of Hybrid Ag/TiO₂ Nanoparticle Array using Diblock Copolymer and Hybrid Ag/TiO₂ Nanostructure with Improved Photocatalytic Activity”.

Book Chapter published:

Title : Unsaturated Polyester resin Clay Hybrid Nanocomposites
Author : **K. Dinakaran**, S.Devaraju and M.Alagar
Book Name : Thermoset Nanocomposites
Editor & Publisher : Prof.Vikas Mittal., Wiley-VCH, Germany
Year : 2013
Pages : 129-146
ISBN No : 978-3-527-33301-1

Title : Natural fibre reinforced Epoxy and UP resin composites
Author : **K. Dinakaran** and M.Kesava
Book Name : Spherical and Fibrous Filler Composites
Editor & Publisher : Prof.Vikas Mittal., Wiley-VCH, Germany
Year : 2016
ISBN : 978-3-527-33457-5

List of Publications

	SCI journals
50	Srinivasan K, Rajasekar A, Subramanian K, Murugan K, Benelli G, Dinakaran K . A Sensitive Optical Sensor Based on DNA Labeled Si@SiO ₂ Core–Shell Nanoparticle for the Detection of Hg ²⁺ ions in aqueous solution. Bulletin of Materials Science 2017. Inpress-[Springer] (impact factor 1.1)
49	Banupriya C, Srinivasan K, Rajasekar A, Murugan K, Benelli G, Dinakaran K . (2017) Metal enhanced fluorescence mediated assay for the detection of Hg(II) ions in aqueous solution from rhodamine B and Silver nanoparticle embedded silica thin film. Chinese Chemical Letters, [Elsevier] (impact factor 2.0) – Inpress.
48	Hariharan A, Kumar S, Dinakaran K , Subramanian K. Tetra aryl substituted Imidazole Based Polyimides: Synthesis, Photophysical and Electrochemical Properties. Polymer Bulletin, 2017 –Inpress.
47	Srinivasan K, Subramanian K, Murugan K, Dinakaran K . (2016) Sensitive fluorescence detection of mercury(II) in aqueous solution by the fluorescence quenching effect of MoS ₂ with DNA functionalized carbon dots. Analyst, 141, 6344 - 6352, [RSC] (impact factor 4.03).
46	Kumaran R, Dinesh kumar S, Balasubramanian N, Alagar M, Subramanian V, Dinakaran K . (2016) Enhanced Conductivity and Electromagnetic Interference shielding in an Au-MWCNT dispersed PVDF flexible thin films. Journal of Physical Chemistry C, 120 (25), pp 13771–13778 [ACS] (impact factor 4.7)
45	Hariharan A, Subramanian K, Alagar M, Dinakaran K Synthesis and photoluminescence properties of 3-Cyano-2-Indolyl Quinoline Derivatives. Indian Journal of Chemistry: Sec B – 2017 accepted.
44	Kumaran R, Alagar M, Dinesh Kumar S, Subramanian V, Dinakaran K (2015) Ag induced EMI shielding of Ag-graphite/PVDF flexible nanocomposites thin films. Applied Physics Letters 107: 113107 [AIP] (Impact factor: 3.5).
43	Hariharan A, Subramanian K, Alagar M, Dinakaran K (2015) Conjugated Donor-Acceptor copolymers derived from Phenylenevinylene and Tri Substituted Pyridine units: synthesis, optical and electrochemical properties. High Performance Polymers 27(6): 724–733 [Sage] (Impact factor: 1.1).
42	Selvi N, Sankar S and Dinakaran K (2015) Effect of ZnO shell on the structure and optical property of TiO ₂ core@shell hybrid nanoparticles. Journal of Materials Science: Materials Electronics 26(4): 2271-2277 [Elsevier] (Impact factor: 1.9).
41	Devi V, Ashok Kumar A, Sankar S and Dinakaran K (2015) Palladium nanoparticle anchored Polyphosphazene nanotubes: Preparation and catalytic activity on aryl coupling reactions. Bulletin of Materials Science 38(3): 607-610 [Springer] (Impact factor: 1.0).
40	Selvi N, Sankar S and Dinakaran K (2015) Interfacial effect: magnetism in pure ZrO ₂ , ZnO and SiO ₂ coated core/shell/shell hybrid nanoparticles. Journal of Materials Science: Materials Electronics 26: 273-279 [Elsevier] (Impact factor: 1.9).
39	Selvi N, Sankar S and Dinakaran K (2015) Annealing temperature dependent on the synthesis and characterization of ZrO ₂ @ ZnO coated ZrO ₂ core-shell microspheres. High Temperatures--High Pressures 44(4): 285-296. (impact factor: 0.52)
38	Srinivasan K, Thirupathiraja C, Saroja V, Kamatchiammal S, Dinakaran K (2014) Dual labeled Ag@SiO ₂ Core-Shell nanoparticles based Optical immuno sensor for Sensitive

	detection of <i>E. Coli</i> . Materials Science and Engineering – C 45: 337-342 [Elsevier] (Impact factor: 3.08).
37	Selvi N, Sankar S and Dinakaran K (2014) Interfacial effect on the Structural and Optical Properties of Pure SnO ₂ and Dual Shells ZnO; SiO ₂ Coated SnO ₂ Core-Shell Nanospheres by Co-precipitation Method. <i>Superlattices and Microstructures</i> 76: 277–287 [Elsevier] (Impact factor: 1.9).
36	Srinivasan K, Thiruppathiraja C, Kathavarayan Subramanian, Dinakaran K (2014) Sensitive Detection of <i>C.parvum</i> using Near Infrared emitting Ag ₂ S@silica core-shell nanospheres. <i>RSC Adv.</i> 4 (107): 62399 – 62403 [RSC] (Impact factor: 3.8).
35	Selvi N, Padmanaban N, Sankar S and Dinakaran K (2014) Effect of ZnO, SiO ₂ dual shells on CeO ₂ hybrid core–shell nanostructures and their structural, optical and magnetic properties. <i>RSC Adv.</i> 4: 55745-55751[RSC] (Impact factor: 3.8).
34	Selvi N, Sankar S and Dinakaran K (2014) Synthesis, Structural and Optical characterization of ZrO ₂ and ZrO ₂ /ZnO/SiO ₂ core/shell/shell nanostructures. <i>Journal of Materials Science: Materials Electronics</i> 25(11): 5078-5083 [Elsevier] (Impact factor: 1.9)
33	Selvi N, Sankar S, Dinakaran K (2013) Surfactant assisted synthesis and multifunctional features of Fe ₃ O ₄ @ZnO@SiO ₂ core–shell nanostructure. <i>Journal of Materials Science: Materials. Electronics</i> 24: 4873-4880 [Elsevier] (Impact factor: 1.9).
32	J-M Jiang, M-C Yuan, Dinakaran K , Hariharan A and K-H .Wei (2013) Crystalline donor–acceptor conjugated polymers for bulk heterojunction photovoltaics. <i>Journal of Materials Chemistry – A</i> 1: 4415-4422 [RSC] (Impact factor: 7.4).
31	Vengatesan M.R, Devaraju S, Dinakaran K and Alagar M (2013) Ultrasound-assisted synthesis of benzoxazine monomers: Curing studies of benzoxazine monomers, thermal and mechanical properties of polybenzoxazines, <i>Polymer International</i> 62: 127-133 [Wiley] (Impact factor: 2.4).
30	Chandramohan A, Mandhakini M, Dinakaran K and Alagar M (2013) Thermal, electrical and morphological properties of DGEBA/DDM and TGDDM/ DDM epoxies modified by a flexible diepoxide and octaphenylamine-POSS. <i>Journal of Reinforced Plastics and Composites</i> 32: 602-611[Sage] (Impact factor: 1.18)
29	Chandramohan A, Vengatesan MR, Devaraju S, Dinakaran K , Alagar M (2013) Organoclay-filled vinyl ester monomer toughened epoxy-intercrosslinked matrix materials, <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> 62(6): 301-308 [Taylor & Francis] (impact factor: 1.66)
28	Chandramohan A, Mandhakini M, Dinakaran K , Alagar M (2013) Synthesis and characterization of bismaleimide modified vinyl ester monomer-unsaturated polyester intercrosslinked hybrid matrices. <i>Polymers & Polymer Composites.</i> 21(4): 233-241 [Taylor & Francis] (impact factor: 0.35)
27	Chandramohan A, Dinkaran K , Ashok Kumar A, and Alagar M (2012) Synthesis and characterization of epoxy modified cyanate ester POSS nanocomposites. <i>High Performance Polymers</i> 24: 405-417 [Sage] (Impact factor: 1.10)
26	Chandramohan A, Mandhakini M, Dinakaran K and Alagar M (2012) Preparation and Characterization of Vinyl Ester Monomer–Toughened Epoxy-Clay Hybrid Nanocomposites: Thermal and Morphological Properties. <i>International Journal of Polymer Analysis and Characterization</i> 17: 477-484 [Taylor & Francis] (Impact factor: 1.23)

25	Vengatesan MR, Devaraju S, Dinakaran K and Alagar M (2012) Benzoxazine Functionalized SBA-15(BZ-SBA-15) filled polybenzoxazine nanocomposites for low-k dielectric application. <i>J. Mater. Chem</i> 22: 7559-7566 [RSC] (Impact factor: 7.4)
24	Dinakaran K , Chandramohan I, Venkatesan M.R, Alagar M (2011) Surface Plasmon enhanced photoluminescence of rhodamine B confined in SBA15. <i>Bull. Korean. Chem. Soc</i> 32: 3861-3864 [KCS] (Impact factor: 0.8)
23	Venkatesan M.R, Dinakaran K , Devaraj V, Alagar M (2011) Studies on thermal and dielectrical properties of organoclay and POSS filled novel Polybenzoxazine (PBZ) hybrid nanocomposites. <i>Polymer composites</i> 32: 1701–1711 [Wiley] (Impact factor: 1.6)
22	Dinakaran K , Yoon Hee Jang, Min-Ah Cha, Saji Thomas Kochuveedu, Dong Ha Kim (2010) Arrays of Hybrid Silica-Titania Nanodots/Nanowires with Enhanced Photophysical Properties via Co-assembly of Block Copolymers and Sol-Gel Precursors. <i>Polymers</i> 2: 490-504 [MDPI] (Impact factor: 3.6)
21	Dinakaran K , Eynhee Kim, Nayoun Won, Kang Wook Kim, Yoon Hee Jang, Min ah Cha and Dong Ha Kim (2010) On the synergistic coupling of TiO ₂ - CdS Hybrid Nanostructures in Self-assembled PS- <i>b</i> -PEO/TiO ₂ /CdS Hybrid Thin Films. <i>J. Mater Chem</i> . 20: 677-682 [RSC] (Impact factor: 7.4)
20	Dinakaran K , Min-Ah Cha, Yoon Hee Jang, Dong Ha Kim (2009) Efficient Photocatalytic Hybrid Ag/TiO ₂ Nanodot Arrays Integrated into Nanopatterned Block Copolymer Thin Films. <i>New J. Chem</i> . 33: 2431-2436 [RSC] (Impact factor: 3.08)
19	Min-Ah Cha, Changhak Shin, Dinakaran K , Yoon Hee Jang, Saji Thomas Kochuveedu, Du Yeol Ryu, Dong Ha Kim (2009) A versatile approach to the fabrication of TiO ₂ nanostructures with reverse morphology and mesoporous Ag/TiO ₂ thin films <i>via</i> co-operative PS- <i>b</i> -PEO self-assembly and a sol-gel process. <i>J. Mater. Chem</i> . 19: 7245 – 7250 [RSC] (Impact factor: 7.4)
18	Dinakaran K and Toyoko Imae (2009) pH dependant encapsulation of pyrene in PPI-core PAMAM shell dendrimer. <i>Langmuir</i> 25: 5282-5285. [ACS] (Impact factor: 4.46)
17	Dinakaran K , Chaio Hung Chou, So-Lin Hsu and Kung-Hwa Wei (2005) Synthesis and characterization of an efficiently fluorescent polyphenylenevinylene possessing pendant dendritic phenyl groups, <i>Macromolecules</i> 38: 10429-10435 [ACS] (Impact factor: 5.8)
16	C-H Chou, S-L Shu, Dinakaran K , Kung-Hwa Wei (2005) Synthesis and characterisation of luminescent polyfluorenes incorporating side-chain tethered polyhedral oligomeric silsesquioxane units (POSS). <i>Macromolecules</i> 38: 745-751 [ACS] (Impact factor: 5.8)
15	Dinakaran K and Alagar M (2005) Bismaleimides (N,N'-bismaleimido-4,4'-diphenylmethane and N,N'-bismaleimido-4,4'-diphenylsulphone) modified Bisphenol dicyanate - epoxy matrices for Engineering Applications. <i>Materials and Manufacturing Processes</i> 20: 299-315 [Taylor & Francis] (Impact factor: 1.6).
14	Dinakaran K , Chaio Hung Chou, So-Lin Hsu and Kung-Hwa Wei (2004) Synthesis and Characterization of Fluorescent Poly(fluorene-co-phenylene- 1-(di-2-pyridylamine)) Copolymer and its Ru(II) Complex- <i>J. Polym. Sci. Chem Ed</i> . 42: 4838-4846 [Wiley] (Impact factor: 3.1)
13	Dinakaran K and Alagar M (2004) Synthesis and Characterisation of 1,1'-bis (3-methyl -4-cyanatophenyl) cyclohexane epoxy - bismaleimide matrices. <i>High Performance polymers</i> 16: 359-379 [Sage] (Impact factor: 1.0)
12	Dinakaran K and Alagar M (2004) Mechanical Properties of Bismaleimide (N,N'-bismaleimido-4,4'- diphenylmethane)-Vinyl ester Oligomer modified unsaturated Polyester

	intercrosslinked Matrices for Advanced Composites. Int. J. Polymeric Materials 53: 11-19 [Taylor & Francis] (Impact factor: 3.5)
11	Dinakaran K and Alagar M (2003) Studies on thermal and morphological properties of 1,1'-bis(3-methyl-4-cyanato phenyl) cyclohexane modified epoxy interpenetrating matrices. Polymers for Advanced Technologies 14: 544-556 [Wiley] (Impact factor: 2.0)
10	Dinakaran K and Alagar M (2003) Synthesis and Characterization of cyanate ester -epoxy Intercrosslinked Matrices / organoclay nanocomposites. Polymers for Advanced Technologies 14: 574-585 [Wiley] (Impact factor: 2.0)
9	Dinakaran K and Alagar M (2003) Development and Characterization of Vinyl ester Oligomer (VEO) modified Unsaturated polyester Intercrosslinked Matrices and Composites. Int. J. Polymeric Materials 52: 957-966 [Taylor & Francis] (Impact factor: 3.5)
8	Dinakaran K and Alagar M and Ashok Kumar A (2003) Thermal and morphological properties of Bisphenol dicyanate - Epoxy - bismaleimide Intercrosslinked Matrices. J. Macromol. Sci. Pure and Applied Chemistry A40: 847-861 [Taylor & Francis] (Impact factor: 0.8)
7	Dinakaran K , Suresh Kumar R and Alagar M (2003) Preparation and Characterization of bismaleimide / 1,3-dicyanatobenzene modified - Epoxy Matrices. Euro. Polym. J. 39: 2225-2233 [Elsevier] (Impact factor: 3.2)
6	Ashok Kumar A, Dinakaran K and Alagar M (2003) Preparation and Characterization of Siliconized Epoxy - 1,2-bis(maleimido)ethane Intercrosslinked matrix materials. J. Appl. Polym. Sci. 89: 3808-3817 [Wiley] (Impact factor: 1.6)
5	Dinakaran K , Alagar M and Suresh Kumar R (2003) Preparation and Characterization of Bisphenol dicyanate - Epoxy - bismaleimide Matrices. J. Appl. Polym. Sci. 90: 1596-1603 [Wiley] (Impact factor: 1.6)
4	Dinakaran K and Alagar M (2002) Preparation and Characterization of Bismaleimide (N,N'-bismaleimido-4,4'-diphenyl methane) - Unsaturated polyester modified Epoxy Intercrosslinked Matrices. J. Appl. Polym. Sci. 85: 2853-2861 [Wiley] (Impact factor: 1.6)
3	Dinakaran K and Alagar M (2002) Preparation and Characterization of Bismaleimide (N,N'-bismaleimido-4,4'-diphenyl methane) – Vinyl ester Oligomer (VEO) modified Unsaturated polyester Interpenetrating Matrices for advanced composites. J. Appl. Polym. Sci. 86: 2502-2507 [Wiley] (Impact factor: 1.6)
2	Alagar M, Ashok Kumar A, Mahesh K.P.O and Dinakaran K (2000) Studies on thermal and morphological characteristics of E glass/Kevlar 49 reinforced siliconized epoxy composites. Euro. Polym. J. 36: 2449-2454 [Elsevier] (Impact factor: 3.2)
1	Dinakaran K and Perumal P.T (2000) Microwave induced formation of 3-chloro-5-aryl-penta-2,4-dien-1-als and 3-chloro-(5-formylaryl)penta- 2,4-dien-1-als by Vilsmeier reaction. Ind. J. Chem. Sec B. 18: 135-136 [NISCAIR, India] (Impact factor: 0.4)