



ARULMIGU PALANIANDAVAR COLLEGE OF ARTS AND CULTURE
(Reaccredited With 'A' Grade by NAAC)
(Run by Arulmigu Dhandayuthapani Swamy Thirukkoil, H.R & C.E (Admin) Dept. Government of Tamilnadu)
(A Government Aided College – Affiliated to Madurai Kamaraj University, Madurai)
DINDIGUL ROAD, PALANI - 624601

Department of Chemistry

Name	A.ASHOK KUMAR	
Designation	Assistant Professor	
Qualification	M.Sc., M.Phil., Ph.D.,	
Email id	ashokmuthu@gmail.com	
Alternative email id	ashokapac@gmail.com	
Experience	15 years	
Date of joining	28-06-2004	
No. Of Journal Publication (International)	23	
No. Of Journal Publication (National)	1	
No. Of Conference Attended (International)	3	
No. Of Conference Attended (National)	20	

Academic Credentials

Level	Degree	Specialization	University	Year of Completion
UG	B.Sc	General chemistry	Madurai Kamaraj University, Madurai	1990
PG	M.Sc	General chemistry	Madurai Kamaraj University, Madurai	1992
M.Phil.,	M.Phil	Catalysis	Anna University, Chennai	1995
Ph.D.,	Ph.D	Organic-Inorganic hybrids - Composites	Anna University, Chennai	2001
Other1	Postdoctoral programme	Organic-Inorganic hybrids - nanomaterials	Kyoto University, Japan	2003
Other2				

****Details of Journal Publications:**

1. International : 23
2.National : 1

****Details of Conference/Seminar Attender:**

- 1.International : 3
2.National : 20

**** Attach Separate Sheet**

i) Refresher Courses / Orientation / Summer Schools:

	Orientation / Refresher Courses	Name of the Funding Agency	Place and Duration
1	Orientation course	UGC	16-05-2008 and 12-06-2008 Academic Staff College, Bharathidasan University, Tiruchirappalli.
2	Refresher course on “Recent advances in chemistry”	UGC	03-11-2009 and 23-11-2009 Academic Staff College, Madurai Kamaraj University, Madurai.
3	Refresher Course on “Nanomaterials for future technologies”	UGC	20-11-2017 and 10-12-2017 UGC : Human Resource Development Centre, Saurashtra University, Rajkot, Gujarat.

ii) Seminars, Conferences, Symposia, Workshops etc. Attended / Presented Paper :

Sl.No.	Name of the Seminar / Conference / Symposia Workshop, etc.	Name of the Sponsoring Agency	Place	Date
1	one day national level seminar on “Applications of quantum mechanics and nanomaterials for energy storage” held at on.	Management A.P.A. College of arts and culture, Palani	A.P.A. College of arts and culture, Palani	24-01-2018
2	Faculty Enrichment Program	UGC : Human Resource Development Centre, Saurashtra University and Shree ManibhaiVirani& SMT NavalbenVirani Science college Rajkot, Gujarat	Atmiya Group of Institutions, Rajkot, Gujarat.	28-11-2017
3	A two day science academies Lecture Workshop on “Recent Trends in Advanced Materials Science”	Indian Science Academies (IASc, INSA, NASI)	Department of Physics, A.P.A. College of arts and culture, Palani.	01-09-2017 and 02-09-2017
4	Delivered a special lecture on “Synthesis of Nanomaterials by chemical methods”	Management of Rev. Jacob Memorial Christian College	Department of Bio-Chemistry, Rev. Jacob Memorial Christian College, Santhipuram, Ambilikkai.	02-08-2017
5	Delivered a special lecture in two weeks faculty development programme on “Multi-Disciplinary Approaches in Chemical Sciences (MACS’ 2016)”	TEQIP-II.	Department of Chemistry, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli	18-07-2016 to 31-07-2016
6	International conference on “Engineering trends and science & humanities”	Seventh sense research group	Imayam College of Engineering, Kannanur, Trichy.	March 30, 2015

7	National science day awareness programme on "Fostering scientific temper"	Management of A.P.A. College of arts and culture, Palani.	Department of chemistry, A.P.A. College of arts and culture, Palani.	February 28, 2014.
8	One day National level seminar on "Recent advances in Chemistry"	UGC	Department of chemistry, A.P.A. College of arts and culture, Palani.	August 11, 2014.
9	National level seminar on "Catalysis and catalyzed reactions"	UGC	Department of natural products chemistry, Madurai Kamaraj University, Madurai.	March 28, 2014.
10	Participated in the National conference on "Atomic energy for socio economic development of the country"	Organized by the Department of Futures Studies	Madurai Kamaraj University, Madurai.	September , 2, 2013
11	Delivered a special lecture in the national conference on "Recent Advancement in nanoscale research"	DRDO, CSIR, ISTE	Anna University, Madurai region.	24-08-2012 and 25-08-2012
12	National level seminar on "Recent trends in Chemistry"	UGC	HajeeKaruthaRowtherHowdia College, Uthamapalayam.	March 15 and 16, 2012
13	National level seminar on "Indigenous Nanomaterials Development for Industrial Applications (INDIA)"	Association of Nanoscience and Technology Aspirants (India)	Centre for Nanoscience and Technology, Anna University, Chennai.	February 27 and 28, 2012
14	A two day national seminar on "Action research for teachers in arts and science colleges"	Madurai Kamaraj University	Center for educational research, MaduraiKamaraj University, Madurai.	September 29 and 30, 2011
15	state level workshop on "Microscale Experiment in chemistry"	Management of A.P.A. College of arts and culture, Palani.	Department of chemistry, A.P.A. College of arts and culture, Palani.	December 15, 2011
16	National seminar on "Modern trends in chemistry"	Management of A.P.A. College of arts and culture, Palani.	Department of chemistry, A.P.A. College of arts and culture, Palani.	December 20, 2011
17	Presented research article entitled "Synthesis of polystyrene-silica hybrid nano-materials at sponsored National seminar on "Emerging Trends in Chemistry"	UGC, CSIR and DST	Cardamom Planters Association College, Podinayakanur	September 23 and 24, 2010.
18	Participated workshop on "ETV/e-content production"	UGC	Educational Multimedia Research Centre, Anna University, Chennai	January 29 and 30, 2010.
19	Participated in the one day State Level Workshop on "Chemistry of Nano Materials and Medicinal plants"	Management of A.P.A. College of arts and culture, Palani.	Department of Chemistry, Arulmigu Palani Andavar College of Arts and Culture, Palani.	March, 12, 2008
20	Presented research article entitled "Synthesis and Characterization of Siliconized Epoxy - 1,2-	Polymer Association	University of Madras, Chennai - 600 025	26-27th July, 26 and 27 2001

	bis(maleimido)ethane Intercrosslinked matrix materials" in the National Seminar on Polymers for New Millennium,.			
21	Presented research article entitled "A comparative study on the preparation and characterization of aromatic and aliphatic bismaleimide modified siliconized epoxy matrices"	ASM International Materials Solutions – Conference Exposition – 2000,	America's Center, St.Louis, Missouri, USA.	October 10-12, 2000
22	Presented research article entitled "Mechanical properties of kevlar fiber reinforced siliconised epoxy composites" - Macro 98, IUPACConference,	IUPAC	CLRI, Chennai – 600 036.	January, 5-9, 1998
23	Presented research article entitled "Vapour phase alkylation of benzene with alcohols over modified and unmodified ZSM-5 zeolites"	Indo-British seminar	IICT , Hyderabad, India	January 30-31, 1995

PUBLICATIONS

: 24

(a) Articles Published

1.	S. Jothibas, A. Chandramohan, A. Ashok Kumar & M. Alagar "Polyhedral oligomeric silsesquioxane (POSS) reinforced-unsaturated polyester hybrid nanocomposites: Thermal, thermomechanical and morphological properties" Journal of Macromolecular Science, Part A, Pure and Applied Chemistry., Vol 55, pp. 433-439 (2018).
2.	V Devi, M.Selvaraj, P.Selvam, A Ashok Kumar , S Sankarand K Dinakaran "Preparation and characterization of CNSR functionalized Fe ₃ O ₄ magnetic nanoparticles: An efficient adsorbent for the removal of cadmium ion from water" Journal of Environmental Chemical Engineering. Vol. 5, pp. 4539-4546, (2017).
3.	V Devi, A Ashok Kumar , S Sankarand K Dinakaran "Palladium nanoparticle anchored polyphosphazene nanotubes: preparation and catalytic activity on aryl coupling reactions" Bull. Mater. Sci., Vol. 38, pp. 607–610, (2015).
4.	S.Devaraju, M.R. Vengatesan, M.Selvi, A.Ashok Kumar , Ian Hamerton, J.S.Go and MutukaruppanAlagar "Low surface free energy cyanate ester–silica hybrid (CE– SiO ₂) nanomaterials for low k dielectric applications" RSC Advances Vol.3, pp. 12915-12921, (2013).
5.	S. Jothibas, S. Devaraju, M. R. Vengatesan, A. Chandramohan, A.Ashok Kumar and M. Alagar

	Thermal, thermomechanical and morphological behavior of Octa (maleimido phenyl) silsesquioxane (OMPS)/cyanate ester nanocomposites High Performance Polymers. August 2012; vol. 24, 5: pp. 379-388., first published on May 18, (2012).
6.	A. Chandramohan, K. Dinkaran, A. Ashok kumar and M. Alagar Synthesis and characterization of epoxy-modified cyanate ester POSS nanocomposites High Performance Polymers. August 2012; vol. 24, 5: pp. 405-417., first published on June 3, (2012).
7.	M.R.Vengatesan, S.Devaraju, A. Chandra Mohan, M.Selvi, A.Ashok Kumar and M.Alagar “Photolysis and thermal active polymerization of bis (benzylidene) based benzoxazine monomers” Molecular Structure. Vol.1027, pp. 162-166, (2012).
8.	SubramaniDevaraju, MuthukumarasamyRangarjuVenkatesan, Mohan Selvi, Achimuthu Ashok Kumar and MutukaruppanAlagar “Synthesis and characterization of Bisphenol-A Ether Diamine Based Polyimide POSS Nanocomposites for Low K Dielectric and Flame-retardant Applications” High Performance Polymers. Vol. 24, pp. 85-96, (2012).
9.	S. Jothibas, A.Ashok Kumar and M. Alagar “A facial synthesis of cyanate ester silica hybrid nanocomposites by in-situ sol-gel method” High Performance Polymers. Vol. 23, pp. 11–21, (2011).
10.	S. Devaraju, M. R. Vengatesan , A. Ashok Kumar and M. Alagar “Polybenzoxazine–silica (PBZ–SiO ₂) hybrid nanocomposites through in situ sol–gel method” Journal of Sol-Gel Science and Technology. Vol. 60, pp. 33–40, (2011).
11.	M. R. Vengatesan , S. Devaraju, A. Ashok Kumar and M. Alagar “Studies on thermal and dielectric properties of Octa (maleimido phenyl) silsesquioxane (OMPS) – polybenzoxazine (PBZ) hybrid nanocomposites” High Performance Polymers. Vol. 23, pp. 441–456, (2011).
12.	S. Jothibas, A.Ashok Kumar and M. Alagar Synthesis of maleimide substituted polystyrene-silica hybrid utilizing Michael addition reaction. Journal of Sol-Gel Science and Technology – Vol. 43, pp. 337-345, (2007).
13.	A.Ashok Kumar , K.Adachi and Y.Chujo Synthesis and characterization of stereoregular poly(methyl methacrylate)-silica hybrid utilizing stereocomplex formation Journal of Polymer Science, Chemistry Edition – Vol. 42, pp. 785-794, (2004).
14.	K.Adachi, A.Ashok Kumar and Y.Chujo Synthesis of organic-inorganic polymer hybrids controlled by Diels-Alder reactions Macromolecules- Vol. 37, pp. 9793-9797, (2004).
15.	A.Ashok Kumar , K.Dinakaran and M.Alagar Preparation & Characterization of Siliconized Epoxy - 1,2-bismaleimido)ethane Intercrosslinked Matrices materials Journal of Applied Polymer Science - Vol. 89, pp.3808-3817, (2003).
16.	K. Dinakaran,M.Alagar and A.Ashok Kumar Thermal and morphological properties of bisphenoldicyanate-epoxy-bismaleimideintercrosslinked matrix materials, J. Macromolecular Science - Pure & Applied Chemistry, Vol. A 40 (8), pp. 847-862, (2003).
17.	A.Ashok Kumar , M.Alagar, R.M.V.G.K.Rao

	Synthesis and characterisation of siliconized epoxy–1,3–bis(maleimido)benzene intercrosslinked matrix materials Polymer, Vol.43, pp.693-702, (2002).
18.	A.Ashok Kumar ,M.Alagar, R.M.V.G.K.Rao A comparative study on the preparation and characterization of aromatic and aliphatic bismaleimides modified siliconized epoxy intercrosslinked matrices Materials & Manufacturing Processes, Vol. 16, pp.561-576, (2001).
19.	A.Ashok Kumar , M.Alagar, R.M.V.G.K.Rao. Preparation & Characterization of Siliconized Epoxy/Bismaleimide (N,N'-bismaleimido-4,4'-diphenyl methane) Intercrosslinked Matrices for Engineering Applications Journal of Applied Polymer Science, Vol. 81, pp.38-46, (2001).
20.	A.Ashok Kumar ,M.Alagar, R.M.V.G.K.Rao Studies on thermal & morphological behavior of siliconized epoxy bismaleimide matrices Journal of Applied Polymer Science, Vol. 81, pp.2330-2346, (2001).
21.	M.Alagar, A.Ashok Kumar , A.AnandPrabu and A.Rajendran Modification Of Siliconized Epoxy Resin Using Multifunctional Silanes. International Journal of Polymeric Materials – Vol.53, pp.45-58, (2004).
22.	M.Alagar, T.V.Thanikaivelan& A.Ashok Kumar Mechanical properties of E-glass fibre reinforced siliconized epoxy polymer composites Polymer Composites, Vol. 21, pp. 739-744, (2000).
23.	M.Alagar, A.Ashok Kumar , K.P.O.Mahesh&K.Dinakaran. Studies on Thermal & Morphological Characteristics of E-glass/Kevlar 49 Reinforced Siliconized Epoxy Composites European Polymer Journal, Vol. 36, pp. 2449-2454, (2000).
24.	M.Alagar, T.V.Thanikaivelan, A.Ashok Kumar &V.Mohan Synthesis & Characterization of High Performance Polymeric Hybrid Siliconized Epoxy Composites for Aerospace Applications Materials & Manufacturing Processes, Vol. 14(1), pp. 67-83, (1999).