

**ANNA UNIVERSITY
Chennai 600 025**

FORMAT FOR ANNUAL REPORT FOR THE YEAR 2015-2016 - MAY TO JUNE

(Period from 01.05.2015 to 30.06.2016)

Name of the Department: DEPARTMENT OF RUBBER & PLASTICS
TECHNOLOGY

1. Detailed List of Professors, Associate Professors and their specialization during the period (01.05.2015 to 30.06.2016)

Sl. No.	Name of the Professor	Date of Superannuation	E-mail Address	Field of Specialization
1.	Dr.B.Kothandaraman Professor	August 2023	bkraman@mitindia.edu	Rubber modified thermosets
2.	Dr.V.Subrahmanian Professor	April 2021	vsubbu@mitindia.edu	Elastomer Engineering, Carbon black, Rubber-Textile composites
3.	Dr.N.Natchimuthu Professor	April 2025	nmuthu@mitindia.edu natchimuthu@annauniv.edu	Rubber Technology, Polymer blends, Polymer Recycling
4.	Dr.K.Ravichandran Professor	June 2025	ravi@mitindia.edu	Polymer Blends and Composites ,Polymer Processing, Conductive Elastomers, Organic-Inorganic Hybrid nano composites, Reinforcement of bioplastics, Latex processing
5	Dr.L.S.Jayakumari Associate Professor	February 2033	jaya@mitindia.edu jayakumari@annauniv.edu	Polymer Synthesis, Polymer Composites & Nano composites

2. List of Degrees awarded during the period (01.05.2015 to 30.06.2016):

(i) **Ph.D. : NIL**

Sl. No.	Title of the Thesis	Name of the Scholar	Name of the Supervisor	Month & Year of Viva-voce conducted
	NIL			

(ii) **M.Phil : NIL**

Sl. No.	Title of the Thesis	Name of the Scholar	Name of the Supervisor	Month & Year of Viva-voce conducted
	NIL			

(iii) **M.E./M.Tech/M.Arch /./M.Plan./MBA./M.S. (by Research): M.Tech.**

Sl. No.	Title of the Thesis	Name of the Scholar	Name of the Supervisor	Month & Year of Viva-voce conducted
1	Design and Development of Rubber Based Composite as Fluid Container	DINESH KUMAR C	Dr.V.Subrahmanian	06.05.2016
2	Degradation Behavior of Rubber / Leather Composites	KARTHIKEYAN E B	Dr.N.Natchimuthu	06.05.2016
3	Rubber Compounding for High Voltage Insulation	MOHAMMED RIZWAN C	Dr.B.Kothandaraman	06.05.2016
4	The effect on Thermal Aging of Nitrile Rubber (NBR) and Polyacrylate Rubber (ACM) in Brake Fluid for Sealing Application	MOHAMMED RIZWAN S	Dr.K.Elangovan	06.05.2016
5	Preparation and Characterization of Organoclay Reinforced Natural Rubber / Polybutadiene Rubber Nano Composites	MOHAMMED SALEEM R	Dr. K. Ravichandran	06.05.2016
6	Compression set properties of silica filled EPDM Vulcanizates	MURALI R	Dr.N.Natchimuthu	06.05.2016
7	Studies on Functionalization of Rubber	PRABUKUMAR S	Dr.V.Subrahmanian	06.05.2016
8	Mold Release Agent Based on Vegetable Oil for Polymer Application	RANJITHDOSS R	Dr.V.Subrahmanian	06.05.2016
9	Studies on Effect of Scrap PVC on Properties of EPDM Rubber	SELVAM B	Dr. L.S.Jayakumari	06.05.2016
10	A study on Effect of a Polymeric Surfactant in Dispersion of Sol-Gel derived Silica and Precipitated Silica in SBR Vulcanizates	SRISH KUMAR S R	Dr.B.Kothandaraman	06.05.2016
11	Effect of Glass Microspheres on the Mechanical Characteristics of NR/SBR Blends	VIGIL NESON A	Dr.B.Kothandaraman	06.05.2016

(iv) M.Sc. (2 years) / M.Sc.(5 years) programme : NIL

Sl. No.	Title of the Thesis	Name of the Scholar	Name of the Supervisor	Month & Year of Viva-voce conducted
	NIL			

3. Sponsored Research Projects during the period: (01.05.2015 to 30.06.2016): NIL

Sl. No.	Name of the Project	Name of the Coordinator	Rs.	Sponsoring Agency
1.	Development of Infrastructure	Dr.B.Kothandaraman, Professor Dr.K.Ravichandran, Professor	1.71 crores	DST, FIST

4. Industrial Consultancy and Testing undertaken during the period: (01.05.2015 to 30.06.2016):

Sl. No.	Title of the Consultancy	Name of the Co-ordinator	Rs. in lakhs	Sponsoring Agency
1.	Evaluation of Rubber processing oil	Dr.V.Subrahmanian	45,550.00	M/s. Chennai Petroleum Corporation Ltd.
2.	Evaluation of Rubber processing oil	Dr.V.Subrahmanian	81,092.00	M/s. Chennai Petroleum Corporation Ltd.

5. a) Continuing Education Programmes / Training Programmes / Short-term courses conducted during the period (01.05.2015 to 30.06.2016):

Sl. No.	Title of the Programme	Duration	No. of Participants	Name of the Co-ordinator	Sponsoring Agency
1.	Training Programme on Advanced Polymers	25.06.2015 to 27.06.2015	21	Dr.B.Kothandaraman	Rane Institute of Employee Development
2.	Training Programme on Advanced Polymers	19.11.2015 to 21.11.2015	15	Dr.B.Kothandaraman	Rane Institute of Employee Development

5. b) Continuing Education Programmes / Training Programmes Short-term courses **attended** by the Faculty members in other institutions during the period (01.05.2015 to 30.06.2016):

Sl. No.	Name of the Faculty Member	Designation	Name of the Continuing Education Programme /Training Programme attended	Venue & Date
	NIL			

6. a) Conferences / Seminars / Symposia / Workshops **conducted** by the Department / Centre / Institute during the period (01.05.2015 to 30.06.2016):

Sl. No.	Names of the Conferences / Seminars / Symposium / Workshop conducted	Duration	No. of participants	Venue	Sponsoring Agency
1.	NIL				

6. b) Conferences / Seminars / Symposia / Workshops **attended** by the Faculty Members during the period (01.05.2015 to 30.06.2016)

Sl. No.	Name of the Staff and Designation	Names of Conferences / Seminars / Symposia / Workshops attended	Duration	Venue
1.				

7. Foreign visits by the Faculty Members during the period (01.05.2015 to 30.06.2016):

Sl. No.	Faculty Name and Designation	Name of the Country visited	Duration	Purpose / Programme
1.	Dr.K.Ravichandran, Professor	Kuwait	15.01.2016 to 16.01.2016	International Education Exhibitions
2	Dr B.Kothandaraman, Prof	Italy	09.02.2016 to 13.02.2016	Part of an Indian Trade delegation to Italy

8. Invited lectures delivered by the Faculty members during the period (01.05.2015 to 30.06.2016) :

Sl. No.	Name and Designation of the Faculty members	Department of Faculty members	Organized by the Institute with Address	Month & Year	Name of the Programme
1.	Dr. L.S. Jayakumari, Associate Professor	RPT	Dr. MGR Research Institute, Chennai	29.09.2015	Two day National Level Technical Symposium
2.	Dr. L.S. Jayakumari, Associate Professor	RPT	K.S. Rangasamy College of Technology, Thiruchengode	11.09.2015	National Seminar on Composite Materials
3.	Dr. K. Elangovan, Assistant Professor	RPT	NIT Trichy	31.03.2016	Recent Developments in Polymers, Composites and Rubber

9. Honours / Awards received from State / National / International bodies by the AU Faculty Members during the period (01.05.2015 to 30.06.2016):

Sl. No.	Name of the Faculty Member	Designation	Name of the Honours / Awards	Name of the Institution/Organization
	NIL			

10. Details of Visitors to the Departments/Centres/Institute during the period: (01.05.2015 to 30.06.2016):

Sl. No.	Name of the Visitors	Full Address	Purpose of Visit	Date of Visit
1	Dr Jiby Isaac and Mr Dhanapal Ganesan, Apollo Tyres	Apollo Tyres, Chennai	For exploring the possibility of initiating Training programmes for their staff	25-11-2015
2.	Mr P.K.Mohammed, Chief Advisor, Research and Technology	Apollo Tyres, Kochi	to explore the possibility of setting up a regional centre for Indian Rubber Institute-American Chemical Society for Training activities for South Asia	06.05.2016

11. New Equipment / Instruments purchased costing more than **Rs.1.00 lakh** during the period (01.05.2015 to 30.06.2016):

Sl. No.	Name of the Equipment /Instrument purchased	Features of Equipment/Instrument	Purchase cost (Rs. in Lakhs)
1.	Canon IR ADV 4225 Photocopying Machine-	Functions: Print/Copy/Colour scan/scan to folder and e mail	1,52,250/-
2.	Dell optiplex 3020 MP Computers (9 Nos)	Intel core i5-4570 Processor 3.2 GHz, 6Mb Cache	3,51,216/-

12. Research Papers **Presented** in the **National** Conferences / Seminars / Symposia / Workshops during the period (1.05.2015 to 30.06.2016):

Sl.No.	Title	Author's Name	Venue	Month & Year
1.	NIL			

13. Research Papers **Presented** in the **International** Conferences / Seminars / Symposia / Workshops during the period (01.05.2015 to 30.06.2016):

Sl.No.	Title	Author's Name	Name and Addresses of Venue	Month & Year
1.	Microwave heating assisted functionalisation of rubber and rubber additives	Dr. V.Subrahmanian	International Rubber Conference 2015 Hotel ITC Grand Chola, Chennai	March 2016

14. Books / Journals Published during the period (01.05.2015 to 30.06.2016):

14 a) Books Published: NIL

Sl.No.	Title	Author's Name	Name of the Publisher	Year

14 b) Journals Published : (01.05.2015 to 30.06.2016):

Sl. No.	Title	Author's Name	Name of the Publisher	Year
1..	pH and temperature responsive hydrogels of poly(2-acrylamido-2-methyl-1-propanesulfonic acid-co-methacrylic acid): Synthesis and swelling characteristics	I. Clara, R.Lavanya & N. Natchimuthu	Journal of Macromolecular Science, Part A: Pure and Applied Chemistry	Volume 53, Issue 8, pp 492-499, 2016
2.	Surface treated fly ash filled modified epoxy composites	D. Uma, D.Meenakshi, B. Kothandaraman and K.Ravichandran	Polimeros Cienciae Technologia	Vol.25, No.6, p.540-546, 2015
3.	Modification of Epoxy resin with Silicone Rubber and In-situ generated Alumina Silicates	D. Uma, D.Meenakshi, B. Kothandaraman and K.Ravichandran	Journal of Polymer Materials	March 18, 2016
4.	A facile green synthesis of silver nanoparticles using Piper betle biomass and its catalytic activity toward sensitive and selective nitrite detection	K. Ramachandran, D. Kalpana, Y. Sathishkumar, Yang Soo Lee, K. Ravichandran, G.Gnana Kumar	Journal of Industrial and Engineering Chemistry	Vol.35, pp 29-35 March, 2016.
5.	Novel bio-based epoxidized cardanolo/cenospherer syntactic foams thermal, hygrothermal and compression characterization	M Kaur L S Jayakumari	High Performance Polymers,	DOI No. 09540083166 56923
6.	Enhanced amperometric detection of metronidazole in drug formulations and urine samples based on chitosan protected tetrasulfonated copper phthalocyanine thin-film modified glassy carbon electrode	S Meenakshi K Pandian L S Jayakumari S Inbasekaran	Materials Science and Engineering: C	Vol. 59 pp: 136-144
7.	Analyzing the mechanical behavior of E-glass fibre-reinforced interpenetrating polymer network composite pipe	G Suresh L S Jayakumari	Journal of Composite Materials	doi:10.1177/0021998315615408 November 2015



**DEPARTMENT OF RUBBER & PLASTICS TECHNOLOGY
MIT CAMPUS, ANNA UNIVERSITY
CHROMEPET, CHENNAI – 600 044**

**Dr.B.KOTHANDARAMAN
PROFESSOR & HEAD**

Ref.No. MIT/RPT/Annual Report/2015-16

Dated: 26.07.2016

To

The Professor
Planning and Development
Anna University
Chennai 600 025

Sir,

Sub: Annual Report for 2015-2016 – Particulars furnished – Reg.

I am furnishing here with the Annual Report Particulars for the period from 1.5.2015 to 30.06.2016 for your kind information.

Thank you,

Yours faithfully,

HOD, RPT